



Título artículo / Títol article:

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Revista:

Higher Education, Skills and Work-Based Learning

Versión / Versió:

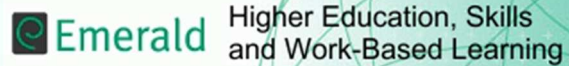
Postprint

Cita bibliográfica / Cita bibliogràfica (ISO 690):

DEVINS, David; FERRANDEZ-BERRUUECO, Reina; KEKALE, Tauno.
Educational orientation and employer influenced pedagogy: Practice and policy insights from three programmes in Europe. *Higher Education, Skills and Work-Based Learning*, 2015, vol. 5, no 4, p. 352-368..

url Repositori UJI:

<http://hdl.handle.net/10234/149310>



**Educational orientation and employer influenced pedagogy:
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Journal:	<i>Higher Education, Skills and Work-Based Learning</i>
Manuscript ID:	HESWBL-03-2015-0010.R3
Manuscript Type:	Research Paper
Keywords:	Educational orientation, work based learning , pedagogy, curriculum, Europe , Plurality

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Educational orientation and employer influenced pedagogy; practice and policy insights from three higher education programmes in Europe

Abstract

Purpose - This paper explores the relationship between educational orientation and employer influenced pedagogy and considers some implications for work-based learning (WBL) higher education (HE) policy and practice in Europe

Design/Methodology/Approach - The paper draws on purposefully selected case studies to describe the key attributes of WBL related pedagogy associated with three HE programmes in Finland, Spain and the UK.

Findings – The national regulatory environment has a key role to play in issues associated with WBL pedagogy. The case studies also demonstrate a pluralistic approach to pedagogy and the key role that employers play in both providing regular intelligence to inform curriculum design and contributing to pedagogy.

Research Limitations/Implications - The small number of case studies limits the opportunity for generalisation and the level of analysis masks subtle and interesting differentiations in pedagogy worthy of further exploration.

Practical implications – The paper highlights implications for government to provide the vision and regulatory environment to encourage WBL and for universities and academics to design and implement innovative, pluralist pedagogies.

Originality/value – The paper provides a new framework and a unique analysis of programme level case studies from three European countries

Key words Work based learning, pedagogy, curriculum, plurality, knowledge, Europe

Paper type Case Study, Research

Introduction

Reforms of Higher Education (HE) and the integration of industry and labour market interests in the curriculum are seen as a key to achieving the goals of smart, sustainable and inclusive growth outlined in the Europe 2020 strategy. Across Europe, the knowledge economy brings new challenges for higher level skills and demographic changes forecast a future European labour market which will be simultaneously confronted by an ageing population and shrinking cohorts of young people. This presents a dynamic context for HE where young people need relevant knowledge and skills to successfully enter and progress in the labour market and older workers are increasingly called upon to update and broaden their higher-level knowledge and competencies. Helyer (2011) notes that HE was originally for the young (who are increasingly demanding) but its culture of developing the whole person has led it to attracting students of all ages and backgrounds and these developments present further challenges for HE.

Public policy prescription identifies a requirement for more work relevant education, flexible modes of delivery, and new forms of validation of learning (EC 2012). The European Commission have been encouraging the development of work-based learning (WBL) in HE for a number of years, most noticeably since the economic crisis and the development of the Europe 2020 strategy. There have been several communiqués from the European Commission calling for the use of innovative and evolving pedagogies to support workforce development and innovation. Many of the Flagship Initiatives and European Funding Instruments are actively supporting

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3 innovation in Education systems and the development of the links between HE
4 Institutions (HEIs) and industry. WBL has been recognised as one of the best ways
5 of smoothing the transition between education and work and there is little doubt that
6 well designed and implemented WBL provides an opportunity to reconcile academic
7 knowledge with practice and to reflect on different forms of knowledge (Gibbons et al
8 1994). However, a wide range of terms is used to refer to the concept of WBL
9 across Europe including internships, work-integrated learning, placements,
10 practicums, work-related learning, flexible learning and problem solving or
11 simulations (Ferrández-Berrueco et al. 2015). For the purposes of this article we use
12 a definition of WBL adapted from Garnett (2005):
13

14 [work-based learning] is a learning process which focuses on university level
15 thinking upon work (paid or unpaid) in order to facilitate the recognition,
16 acquisition and application of individual and collective knowledge, skills and
17 abilities to achieve specific accredited outcomes of significance to the learner,
18 their employer and the university.
19

20 Whilst placements play a key role in many WBL programmes, it is important to
21 recognize that there is considerable diversity in their duration, frequency,
22 assessment and workplace context amongst many other characteristics.
23 Furthermore, WBL is not solely limited to placement activity as it can draw on
24 learners working in full time employment (as illustrated in the third case study below)
25 or include campus-based (work-related learning) activity (Moreland, 2005).
26

27 There remain many pedagogical questions to explore and this article seeks to
28 examine the relationship between educational orientation (Miller and Seller, 1990),
29 types of WBL programme and different forms of pedagogy (Costley and Dikerdem,
30 2011). In-depth programme level case studies, drawn from an Erasmus Lifelong
31 Learning Programme (LLP) project Work-Based Learning as an Integrated
32 Curriculum (WBLIC), provide an empirical foundation for the analysis in this paper.
33 The case studies demonstrate close connections with the interests of industry and
34 reflect the pluralistic nature of curriculum development and delivery involving multiple
35 stakeholders. The case studies draw on semi-structured interviews with students,
36 academic tutors, company tutors, placement organisers and careers advisers to
37 ensure that the role played by industry in the design, development, delivery and
38 assessment of teaching and learning is a key element of our analysis.
39

40 **Theoretical underpinnings and a conceptual framework**

41 Learning theories are embedded explicitly or implicitly in all programmes, but how
42 those theories are applied depends on the larger social, cultural, economic and
43 political contexts within which higher education is situated. These broader socio-
44 economic and cultural contexts privilege some theories at the expense of others,
45 determining what knowledge, which methods of instruction, assessments and
46 learning objectives will dominate. The contexts and pedagogies show some
47 similarities and variations within and between institutions at both the national and
48 European levels.
49

50 Whilst complex questions related to how learning theories translate into educational
51 practice are not the focus of this article, we will start by very briefly outlining the
52 major theories that have influenced and continue to influence pedagogical practice in
53 Europe. To do this we draw on the framework proposed by Miller and Seller (1990)
54 that identifies three general orientations implemented by educational systems to
55 support learning. These orientations are classified as transmission, transaction and
56 transformation and each has implications for the pedagogical approaches that are
57 developed and applied by Higher Education Institutions. These orientations have
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3 implications for the type of knowledge created, the roles played by students,
4 academics and employers, the goal and focus of learning, and methods of teaching
5 and assessment.

6
7 The primary purpose of education from the transmission perspective is to ensure that
8 knowledge, skills and values are transmitted from academy to the student body. The
9 learner has a largely passive role as a recipient of knowledge provided by the
10 academy. Through this transmission lens, learning focuses on the content of the
11 curriculum that the student must master (Fink 2003) and the educators function is to
12 design the learning environment and pedagogy to enforce correct behaviour (Van
13 Gyn and Grove White, 2004).

14
15 In contrast to the emphasis on acquiring necessary knowledge which lies at the heart
16 of transmission, the transaction perspective emphasizes the development of skills
17 needed to acquire knowledge. Integral to this perspective is an emphasis on
18 intellectual and rational activities associated with problem solving and the
19 development of cognitive skills to support further knowledge acquisition. Garrison
20 and Archer (2000) suggest that this approach also relies on an assumption that
21 learning outcomes include personal meaning and public knowledge. From this
22 perspective, both educators and students are partners in the learning process and
23 this reciprocal relationship means that students must become active learners and
24 that they must understand what they do (Fink, 2003). The perspective is heavily
25 influenced by the pragmatic philosophy of Dewey (2009), first published in the early
26 1900s, which supports a collaborative rational problem solving approach as a critical
27 education methodology. Through this lens, the educator remains responsible for
28 structuring the learning environment although the associated pedagogy differs
29 radically from that envisaged by the transmission models. Collaborative learning with
30 other students and group processes are encouraged, teachers remain the content
31 experts but they also model the cognitive problem-solving skills their students are
32 expected to develop by addressing with them the ambiguities and dilemmas inherent
33 in the subject matter as a means of teaching students how to construct knowledge
34 for themselves.

35
36 The transformation perspective in education is a rich intersection of views and
37 traditions drawn from humanistic psychology, philosophy and from post-modern and
38 post-colonial theory (Van Gyn and Grove White, 2004). Mezirow (1991) argues that
39 the role of the transformational educator is to assist the learner in identifying and
40 examining assumptions that underlie his or her feelings, beliefs and actions while
41 remaining at all times conscious of how their teaching practice aligns with their
42 learner's personal and social location. The educator acts as an 'empathetic
43 provocateur, gently creating dilemmas by encouraging learners to face up to
44 contradictions between what they believe and what they do' (p366).

45
46 Higher education systems in Europe are often philosophically grounded in the
47 transmission orientation but show clear evidence of both transaction and to a lesser
48 extent transformation approaches in their policies and practices. In his influential
49 examination of the integration of knowledge, interests and beliefs in the learning
50 process Habermas (1984), provides a persuasive assessment of the continuing and
51 cumulative value of these various perspectives. He suggests that no one
52 methodology or source is adequate to account for the various forms of human
53 learning and he outlines three cognitive vectors that constitute knowledge that he
54 describes as technical, practical and emancipatory. Each vector invokes and builds
55 upon different forms of inquiry for learning and the three parallel the transmission,
56 transaction and transformation perspectives outlined above. This is a timely
57 reminder of the complexity of learning and of the challenges facing educators in
58 interpreting and applying learning theories to everyday educational practice.
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3 When we consider where WBL pedagogies fit within Miller and Seller's framework we
4 have to take into account that WBL can occur in a variety of forms and many
5 contexts. Amongst EU countries, the UK has a long history of WBL in Higher
6 Education and has the largest number and most elaborate arrangements for WBL,
7 whilst in many European countries examples of WBL in HE tend to be quite rare
8 (Ferrández-Berrueco et al. 2015). In a review of the literature and professional
9 practice in the United Kingdom, Costley and Dikerdem (2011) use a typology
10 outlining three WBL learning perspectives to discuss pedagogical inflections and
11 differences in the delivery of WBL programmes. The typology includes firstly,
12 discipline centred programmes delivered as part of a subject-based approach to be
13 found in areas such as health, engineering and education. Secondly a learner-
14 centred approach where the programme is not specifically located in an academic
15 discipline but which uses the workplace as the principal context for learning as a
16 value for life experience (Zabalza, 2011). Thirdly an employer-centred approach
17 where disciplinary knowledge is combined with more business-oriented approaches
18 and an emphasis on capability based learning.
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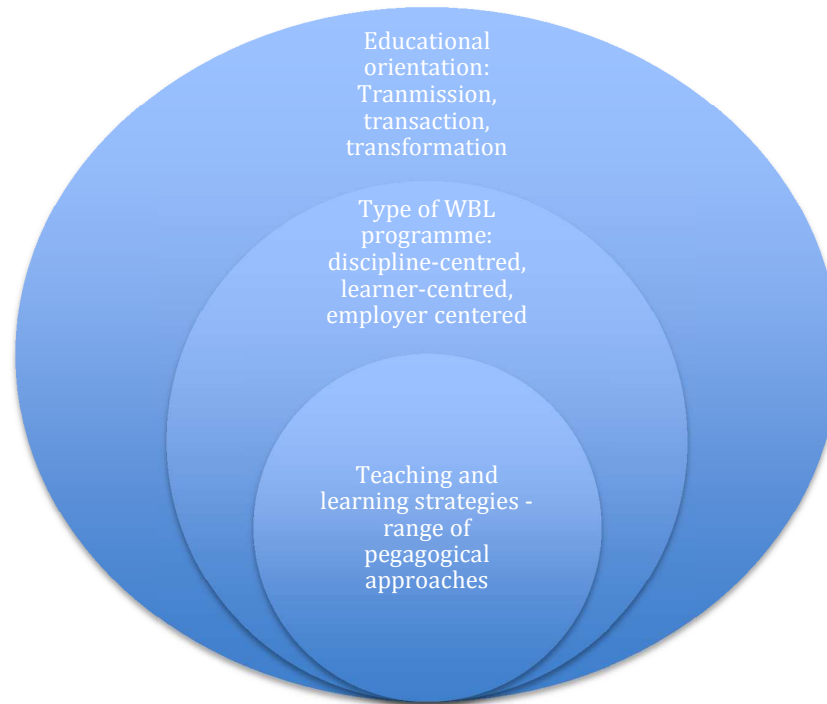
20 Educational orientation influences the WBL curriculum and the learning and teaching
21 strategies adopted to underpin it. In the transmission orientation, discipline centred
22 curriculum content defines the knowledge that the student must acquire and
23 educators can articulate very specific learning outcomes and predetermine and
24 standardise pedagogy based on instructional strategies that will lead to these
25 outcomes. Assessment mainly requires reproduction of the prescribed curriculum
26 content with a low level of application (Fink, 2003). Whilst in some contexts this may
27 appear to be outdated, pedagogies most closely associated with this perspective
28 such as rote learning, direct instruction and programmed learning continue to
29 influence mainstream HE practice in the 21st Century in many European countries.
30

31 By way of contrast, a transaction-oriented curriculum is often based on resolving
32 authentic problems in a discipline- or multi-disciplinary field of study with academics
33 performing roles as facilitators, advisors or expert resource as opposed to working in
34 a more traditional academic role (Boud, 2001). This learning centred orientation
35 addresses students' ability to demonstrate higher-order thinking skills including their
36 ability to assess a problem, their capacity to draw upon resources including the
37 knowledge they have constructed over the course of their learning, their creativity in
38 providing solutions and their ability to make informed choices among various
39 possible options. This perspective emphasises learning rather than teaching, and
40 learner-centred outcomes such as critical thinking, self-directed learning or reflective
41 practice are highly valued in contemporary educational systems (Boud, 2006,
42 Workman, 2009). Pedagogical approaches associated with this perspective include
43 the recognition of prior-learning (RPL), problem-based or inquiry-based learning,
44 collaborative learning, reflective practice and life-long learning that are the foundation
45 of many WBL programmes (Van Gyn and Grove White, 2004). Curriculum from the
46 transformation perspective is integrated and interdisciplinary, allowing for significant
47 input from learners as knowledge holders and recognising their role as agents of
48 change with teaching, learning and workplace practice underpinned by pedagogical
49 practices such as critical dialogue, interdisciplinary study, communities of practice
50 and critical pedagogy and with assessment practices tending to be holistic and
51 qualitative in nature (Miller and Seller, 1990). However, as we illustrate through the
52 three case studies below, distinctions between educational orientation, type of WBL
53 programme and pedagogical approach become blurred in practice.
54

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56 Further exploration of pedagogical approaches within the context of the educational
57 orientation and the type of WBL programme provide the focus for our analysis of the
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case studies from Spain, Finland and the United Kingdom (UK) that follow. Our analytical framework is summarised in Figure 1.

Figure 1: A framework for case study analysis



Applying this lens to the case studies enables us to explore the mix of teaching and learning strategies and pedagogical approaches underpinning WBL and to analyse how the role of the employer influence in the curriculum can affect/change the traditional academic focus (Whittington and Ferrández-Berruenco, 2007).

The Case Studies

The case study is an established method of empirical investigation of a prevailing situation or phenomenon within its actual context (Yin, 2014, Saunders et al, 2009). The case studies in this paper are ideally suited to describe and explore WBL pedagogical practice, to generate new insights and to consider transferability to different national contexts. Three case studies of higher education programmes underpin our empirical analysis in this paper. The cases were purposefully selected in order to explore the orientation, type of WBL and teaching and learning strategies adopted at different levels (under and post graduate) in various sectors (technical and social) and different national contexts (United Kingdom, Finland and Spain). They draw on data collected through semi-structured interviews with students, employers, teaching staff, programme leaders, administrators, HE strategic planners and labour market intermediary organisations. The individual case studies provide illustrations of the role that employers and industry play in programme development and delivery which provides a basis for the discussion of the educational orientation underpinning each of the programmes and the employer influence on various aspects of WBL pedagogy.

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3 Case 1: Innovation engineering in processes and products (Undergraduate
4 Diploma/Bachelor, Spain)

5
6 This case study is interesting from a number of perspectives including the role that
7 the national regulatory environment plays in enabling WBL and the degree to which
8 industry and individual companies influence the design and implementation of
9 teaching and learning strategies.

10
11 This case is based on a programme at undergraduate level that results in a Bachelor
12 in Industrial Engineering. The catalyst for programme development came from a
13 business led Engineering Foundation (Instituto de MaquinaHerramienta (IMH)) in the
14 Basque area of Spain which identified a need for higher level skills training of
15 engineers. IMH first identified this need in 1995 and the programme initially drew on
16 the French model of 'dual education' through alternating placements in industry with
17 campus-based provision that was recognised by the French Educational System.
18 After a considerable period of negotiation with the National Agency responsible for
19 the quality assurance of HE programmes in Spain, the programme was recognised in
20 2012.

21
22 The current programme reflects the ability of HE to respond to the requirements of
23 industry on a regular basis. A cornerstone of this approach is the collection and
24 analysis of labour market and industry needs to inform the development of the
25 programme each year. This is achieved by a representative of the university
26 personally contacting individual members of IMH to ascertain their skills needs and
27 this intelligence is used to identify potential work opportunities for students. In this
28 way the curriculum is flexed in terms of content to support the current needs of
29 companies. The programme attracts about 40 students a year with some learners
30 being existing employees of IMH affiliated companies. However, in most instances
31 they are young undergraduates recruited straight from education onto the course.

32
33 A key element of the delivery of the programme, not part of the teaching and learning
34 strategy in many forms of more traditional HE programmes, is the role of a company
35 tutor. This tutor is an employee of the company and is provided with special training
36 in order to understand the academic programme and the learning activities that
37 students have to carry out in the company. Students also take part in this process to
38 ensure that expectations are shared between the academic, student and company
39 tutor. A learning contract is negotiated between the university, the company and the
40 student and key competencies to be developed are identified at the beginning of
41 each module. In addition a pedagogic tutor works closely with the company tutor to
42 coordinate content and to assess the course. They will decide how much time is to
43 be spent on specific competencies and how this is to be delivered and assessed.
44 Once a term, the pedagogic tutor will interview the student to assess their activity
45 and performance and the student will write a reflection and record it in a notebook
46 which becomes a key source of evidence and a basis for assessment of student
47 learning.

48
49 The curriculum consists of three main blocks that adopt a variety of pedagogical
50 approaches and reflect the transmission, transaction and to a lesser extent
51 transformational approaches. The first block contains conventional classroom
52 modules where the student acquires all the contents required by the National
53 Regulations in terms of Basic Science and Technology. However it also includes
54 simulations or joint activities with companies so that the connection between
55 academic knowledge and practical knowledge is established at an early stage in the
56 programme. The second block is based on work carried out in a company alternated
57 with some periods in the classroom. An academic tutor is in charge of the student
58 cohort and coordinates the placements and liaises with the companies (establishes
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3 and manages the learning contract). The student is employed on a part-time basis by
4 the company to reflect the balance of the hours that they work and learn. Typically
5 this will include three days in the company and two days in the classroom. Once per
6 month the student spends three days in the classroom and two days in the company
7 to reflect a shift in emphasis towards theory.
8

9 A curriculum framework provides the guidelines to support teaching and learning
10 strategies in each of the years of study. For example a 1st year student will be
11 expected to demonstrate an understanding of the company's key features and to
12 identify specific technical opportunities to be considered. A written report and
13 presentation includes an assessment by company representatives and academic
14 tutors. A 2nd year student is expected to undertake a structured research project to
15 address a specific problem (assessed by two external experts with accredited
16 competency in the issue and a member of faculty). A 3rd year student undertakes a
17 substantial project to conform to student competences associated with leading a
18 project and analysing and solving a problem. To achieve a balance between the
19 assessment of academic and practical knowledge, a panel is convened including two
20 engineers and an external professional with an academic as Chair. The final year of
21 the programme includes a 12-week work placement in a company outside Spain and
22 the completion of an Individual Training Project. The placement is usually in
23 companies that are subsidiaries of the learners placement company or a member of
24 their supply chain. These companies pay students' accommodation, subsistence and
25 travel costs. If the company does not provide access to such learning opportunities
26 the onus falls on IMH and the student to find an appropriate placement opportunity.
27 This part of the programme is assessed by the student producing a written report and
28 a presentation (both in English) to their peers and an assessment panel comprising
29 representatives from the placement companies and the academy. Transaction and
30 transformation orientations are apparent through the demonstration of English
31 language skills and the production of a reflective report that includes the experience
32 of living and working in another country. The Individual Training project encourages
33 students to self-assess their progress and learning and the extent to which their
34 knowledge and competencies have been enhanced.
35

36 **Case 2. Company Clinic (Undergraduate/Finland)**

37
38 This case study reflects a very different regulatory environment and, whilst there are
39 some similarities in the learning and teaching strategies employed in the previous
40 case, there are also some differences. One of the key differences is that the
41 'Company Clinic' model is applied to several different programmes offered by the
42 university. Its pedagogical foundation is based on the principle of learning by
43 developing which is found to underpin many WBL programmes in HE in Finland.
44

45 In Finnish Universities of Applied Science (UAS), learning must (by law) consist of
46 both theory and worklife practice. In this case, the Company Clinic approach was
47 developed as an opportunity to connect academic and workplace knowledge and
48 practice and to satisfy the regulatory requirements for WBL across a range of UAS
49 programmes. Through the Company Clinic, students have the opportunity to relate
50 theory to the real life problems and challenges that companies face with a particular
51 emphasis on supporting the sustainability and development of small and medium
52 sized enterprises (SMEs).
53

54 The development of the Company Clinic started in 2006 and was completed in 2011.
55 The programme academics identified key topics that must be taught, and then
56 allocated teachers (academics) to each block, empowering the teacher to decide
57 what the learning and teaching strategy would be. During the 5-year curriculum
58 development process, the curricula were divided into half-year long blocks and an
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3 academic team (typically 3-5 teachers) planned and described the scope and
4 teaching/learning activity associated with each block to ensure topics interacted and
5 complemented each other and so that each module included an element of WBL.
6

7 In order to manage the connections between the University and the SMEs, a full time
8 coordinator was required to liaise with the companies, to collect work-related tasks
9 and to evaluate and accept them as appropriate learning opportunities for the
10 students. In each instance, the coordinator draws up a learning agreement between
11 the company and the university and following this, the academics gather more
12 information and hold further discussions about the task to be completed with the
13 company.
14

15 The nature of the tasks that are identified through the contacts of the coordinator are
16 twofold: smaller specific tasks that can be integrated into modules, and larger tasks
17 that are suitable for a whole module project (thesis) that students are required to
18 complete at the end of a 4-year programme. Currently, the company clinic is included
19 in numerous programmes, and the teachers' descriptions of what kind of practical
20 tasks would align with the focus of the course are formulated into "product cards" that
21 the coordinator gives to companies during visits, so that companies know what (and
22 when during the academic year) kind of tasks they can suggest. When the company
23 sees that they have a task that suits a programme, and after the teacher has
24 accepted the task as suitable for the theory dimension of the programme, the
25 company and the Company Clinic coordinator (on behalf of the UAS) sign an
26 agreement on when and how (research methodologies) the task should be
27 completed and, eventually, how much the company must pay for the solution.
28

29 The annual planning process of the curriculum starts with a discussion with the
30 employers. Every department has a discussion forum where the department staff
31 meet a selection of company representatives from the region and discuss their needs
32 and future plans. Currently, any teacher can decide on how much such company
33 problem-solving they want to include in any given course (up to 50 % of credits).
34

35 The learning and teaching strategy includes an additional dimension to the traditional
36 role of the academic in that s/he ensures that the company and the student group
37 understand the link between theory and practice. Thus, the programme combines a
38 transmission orientation associated with learning theory and discipline related to
39 knowledge transfer and a transaction orientation where the learning goal is based on
40 understanding the practical problems and the role of theory in addressing them.
41 Traditional pedagogical challenges associated with teaching in HE are extended to
42 involve reconciling the interests of students, companies and universities and
43 determining and evaluating appropriate learning goals that reflect these interests.
44

45 Whilst embedding the student in the workplace is a preferred mode of WBL, some of
46 the problem-solving and project work takes place in the learning laboratories
47 at UAS. This is the case especially when working with some SMEs where resources
48 such as rooms and appropriate hardware and software may not be available.
49 Wherever the learning takes place, there is frequent tri-partite communication
50 between the teacher, the student and the company to reflect on progress. Most forms
51 of WBL undertaken through the Company Clinic are assessed through reflective
52 assignment, written report and oral feedback where the teacher and department
53 head along with the company representative assess the project.
54

55 *Case 3: Post Graduate Diploma/Masters in Strategic Communication (UK)*

56 This case study from the UK provides an example of a responsive, innovative
57 discipline centred Masters programme with content negotiated by the employer,
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3 learners and academic representatives. The programme was designed in response
4 to a request from the largest employer in the UK, the National Health Service (NHS)
5 to provide a series of short courses to develop the capability of professionals
6 involved in a variety of strategic communications roles in the organisation. During
7 initial discussions with the NHS, it became apparent that the executive education
8 required was suitable for a programme at Masters level which met the interests of
9 both the professionals recruited onto the programme as students and the employer
10 who required a more proactive and strategic response to the range of initiatives and
11 challenges facing the organisation. In this way it reflected both a learner- and an
12 employer-centred approach. One aspect of the employer-emphasis of the
13 programme was articulated through an imperative for assessment to support work
14 activity as well as academic requirements to be integrated into the programme.
15

16 The overall structure of the programme was agreed between the University and the
17 NHS based on three stages lasting eighteen months in total. A contained award (PG
18 Dip) was designed into the programme for those students who completed stages one
19 and two but for some reason may not be able to complete the full Masters
20 programme (all three stages). The programme was only available to students
21 employed by the NHS. The students were expected to have a first degree in any
22 subject plus a minimum of one year's Communications/ Public Relations Experience.
23 Students able to demonstrate the relevant level of knowledge and satisfy the
24 recognition of prior learning (RPL) requirements of the Institution were also admitted.
25

26 Stage one exhibited some elements of the transmission perspective and was
27 content-oriented and covered what was identified as core knowledge (for example
28 Strategic Communication Planning, Brand Management, Strategic Leadership).
29 However, time was also allocated for student-requested sessions to address specific
30 issues arising from the core content. This stage of the programme was taught in
31 three one-day blocks using fairly traditional methods including lectures. However, it
32 was supplemented by facilitated workshops and action learning pedagogies more
33 closely aligned with the transactional orientation. Students were encouraged to use
34 their own organisations as examples and case studies for discussion and reflection.
35 Assessments were undertaken using reflective assignment that provided an
36 opportunity for the students to contextualise the knowledge they had gained and
37 apply it in the workplace. The assessment was built on the student's experiential
38 knowledge and also demanded the incorporation of theory that had been introduced
39 in the lectures or indicated in extensive reading lists. Assessment methods included
40 reflective learning journals, assignments and presentations. In addition, a session
41 was allocated in each teaching block for students to share how they applied their
42 learning. This proved to be particularly valuable in helping to reinforce shared and
43 individual learning and to surface issues linked to the practical relevance and impact
44 of the programme's content.
45

46 An innovative part of the learning and teaching strategy at the end of stage one
47 informed the co-creation element of the programme. This consisted of a one-day
48 session where students were asked to consider their learning so far and to review
49 this in the light of the current and future challenges facing their organisations. This
50 provided an opportunity to identify key areas to be considered in stage two of the
51 programme. The students, in groups of three, then chose one of these topics and
52 became responsible for the delivery of a day long 'master-class' on the issue. The
53 criteria applied to guide this master-class included the need to meet postgraduate
54 standards of scholarship, to be contextualised for their own organisations and to be
55 relevant to their peers. A presentation was delivered to tutors and the rest of the
56 cohort and an associated workbook produced with a supporting wiki that featured
57 material for sharing with other public relations practitioners. These workbooks were
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3 structured in a format that allowed them to become working reference documents
4 within the NHS system.

5
6 Stage three involved a comprehensive work-based project equivalent to a Masters
7 dissertation in complexity, length and rigour. The project concept had to be
8 negotiated with course tutors, directly relevant to the student and their work context
9 and assessed as a research proposal before being approved. Where this differed
10 from other less employer-centred forms of WBL was encapsulated in the work-based
11 project proposal approval process where assessment was undertaken by the
12 academic tutor and the student's Chief Executive in the workplace and in the regular
13 points of reflection which provided opportunities for students, the academic team and
14 the senior manager in the workplace to discuss issues and share ideas and
15 solutions.

16
17 The programme pedagogy reflected the learning into action orientation of the
18 programme. Co-production of the curriculum ensured that it was relevant to the
19 individual student and their working context. The mature, professional nature of the
20 students and their multi-faceted lives influenced the learning and teaching support
21 throughout the programme. As the students moved towards a greater emphasis on
22 the workplace as the location for learning, the need for academic and pastoral
23 support reflected this and whilst virtual learning environments played a key role, the
24 availability of tutors 'outside office hours' and personal contact, coaching, counselling
25 and mentoring was a key element of the academic and pastoral support provided
26 through the programme. This support was not limited to the students alone and
27 strategies to engage and communicate with the representative of the employer
28 interests frequently influenced the overall learning pedagogy through effective
29 account management based on an understanding of evolving employer needs and a
30 responsive HE offering developed through co-creation of the curriculum.

31 32 **Discussion**

33
34 Issues of WBL pedagogy and educational orientation are intertwined with the social
35 and historic contexts of universities and the wider world in which they are situated.
36 Government reports, leaders in industry and others in wider society urge that the
37 world is one of change. Often the observation is a preliminary remark to the
38 suggestion that students should be better prepared for the world that they are going
39 to encounter and that success for the student should be measured in terms of their
40 progress in the labour market and their subsequent salary and influence (Reich,
41 2000). The implication, and it is often asserted outright, is that HE have insufficiently
42 taken account of the character of the wider world and need to be redesigned so that
43 they address the challenges that it brings (Barnett and Coate, 2005). WBL and its
44 associated pedagogies are one response to this challenge and are at the core of
45 approaches to integrate the worlds of education and work.

46
47 The case studies suggest that rather than the three distinct educational orientations
48 implied by the framework proposed by Miller and Seller (1990), individual learning
49 programmes can reflect more than one orientation and this influences the
50 development and use of a mix of pedagogies that are influenced by employers to
51 varying degrees. These pedagogies, seeking to manage the growing complexity
52 associated with the development and application of new knowledge, collaboration
53 across academic disciplines and across different domains of practice require
54 proactive engagement with external stakeholders including those from the public,
55 private and third sectors and professional bodies (Costley and Dickerdem, 2011). For
56 many educators, disciplines are at the core of academic activity and the main role of
57 pedagogy is to transmit the knowledge that students are to master. However Parker
58 (2002) argues that a discipline requires socialisation into tacit values developed
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3 through immersion in communities that can provide intended learning outcomes.
4 These learning outcomes are themselves increasingly determined by external policy
5 agendas such as graduate employability and the need for innovation in industry.
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7 When considering WBL from a European perspective, an important point to note is
8 the national context and the regulatory framework for HE and WBL. For example the
9 Finnish case illustrates that Universities of Applied Science (UAS) are required by
10 law to provide WBL experiences as part of the curriculum for all learning
11 programmes. The Company Clinic is a variable part of wider programme curriculum
12 that is influenced by the traditional transmission orientation to varying degrees,
13 contingent upon a disciplinary (or multi disciplinary) focus and the pure or applied
14 nature of the course (amongst other factors). The Spanish and English programmes
15 contain pedagogical elements influenced by the transmission orientation although
16 one way in which they differ from a more traditional approach is through the use of
17 professionals from industry to play the role of the expert, either replacing or
18 complementing the input of academic teachers with high-level qualifications (usually
19 PhD). The national requirements for teaching staff to be qualified to PhD level was
20 one of the hurdles that the case study programme had to overcome in Spain where,
21 after a considerable time, the requirements of the regulations were flexed in order to
22 accommodate a greater professional input to the teaching of the programme to make
23 it more reflective of industry interests and the world of work. In the UK, universities
24 have far greater local autonomy and there has been considerable scope to employ
25 professionals in a teaching capacity providing they can demonstrate a
26 commensurate level of practical knowledge. However a trend in the UK towards the
27 professionalization of the workforce in higher education has seen an increased
28 emphasis on the requirement for teachers to possess a PhD and there is a balance
29 to be optimised in terms of the use of academic and professional experts in the case
30 of all programmes seeking to connect to the labour market.
31

32 The case studies also reveal a blurring of the boundaries of the analytical construct
33 associated with a typology of WBL that views it as discipline centred, learner centred
34 or employer centred (Costley and Dikerdem, 2011). The case studies suggest that in
35 practice, programme designers and developers seek to integrate the elements to
36 varying degrees. For example, the Company Clinic (Finland) is appropriate to both
37 'pure' and 'applied' disciplines and flexed to accommodate the interests of the
38 academy, student and employer to varying degrees contingent upon the
39 requirements of each learning programme within which the WBL element exists. On
40 the other hand, the UK case reveals a programme based on a specific discipline with
41 content influenced by the learner and the employer that is subject to negotiation as
42 the programme progresses. This results in a dynamic curriculum to accommodate
43 new or emerging workplace priorities generated by the employer and their operating
44 context and reflects both learner- and employer centred dimensions. At the same
45 time, space is afforded in the curriculum to reflect on the application of learning in the
46 workplace which provides an opportunity to share individual learning and to surface
47 issues related to the practical relevance and impact of the learning on the individual's
48 performance in the workplace. A key characteristic of each of the case studies is the
49 programme development cycle that contains space for external stakeholders to
50 contribute to the further development of pedagogy and curriculum on a regular basis.
51

52 The transaction orientation generally exerts a powerful influence on WBL research
53 methodologies underpinned by constructivist concepts of knowledge generation. The
54 methodologies used in WBL programmes are not specifically different to those that
55 might be used in conventional academic research in similar contexts although there
56 is an understandable tendency to use action based methods. These include problem-
57 based learning, action research, action learning, inquiry-based learning, case study,
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3 ethnography, cooperative learning, critical thinking and reflective practice (Van Gyn
4 and Grove White 2004; Costley and Armsby, 2007). These are variously apparent in
5 each of the case studies where students are expected to play a more active role in
6 their learning experience, often addressing 'real world' problems and contributing to
7 'solutions' to be applied in the workplace. In Finland UAS, Learning by Developing is
8 a dominant characteristic of pedagogy where the opportunities for learning are
9 systematically co-created and centred on a new innovation or a specific development
10 objective defined by students, teachers and working life partners. This approach lies
11 at the heart of the Company Clinic and also features in a different guise in the
12 Spanish and UK case studies where co-creation and innovation are central to the
13 programmes in different ways and to different degrees. In each case the student is
14 expected to deal with practical problems often set by the employer or work context
15 and to apply high-level skills such as problem-solving and critical reflection to
16 demonstrate relevant academic learning. Each of the case studies reveals
17 pedagogical issues associated with a tri-partite where the teacher, student and
18 employer play various and complementary roles in the development, delivery and
19 evaluation of the programme.
20

21 The Finnish and Spanish cases are illustrative of the increasingly prevalent role that
22 placement projects play in many higher education programmes in Europe
23 (IES/IRS/BIBB, 2012). However, it is important to recognise that placements are not
24 homogenous and there is considerable diversity in their duration, repetition,
25 assessment, degree of employer/student influence and workplace context amongst
26 many other characteristics. The scale of the placement projects underpinning WBL
27 programmes can range from relatively small investigations mainly influenced by a
28 transactional orientation to major pieces of work that form the basis of
29 doctorates/PhD's and result in significant organisational or professional change
30 which are more reflective of a transformational orientation. The case studies illustrate
31 examples of a version of the flipped classroom (Lage et al, 2000) where the majority
32 of the programme curriculum is delivered in the workplace with students problem
33 solving whilst in work and the university campus playing a relatively small role as a
34 site of learning. Each case study programme was designed in a way that
35 acknowledged that work-based learners had limited access to campus based
36 learning opportunities but still needed a space to discuss and explore ideas with
37 peers and teachers. For example, the UK case highlights the importance of on-line
38 learning support to explore ideas and obtain pastoral support that are often key
39 elements of effective WBL pedagogy (Naish, 2010; McClenaghan and Young 2010).
40

41 Reflection and reflexivity are central to WBL pedagogy and feature strongly in all
42 three case studies. The literature has grown around Schön's (1983) formulations that
43 argue that what is embodied as knowledge is revealed through reflection and
44 deliberation either in action or after action. Much of the feedback from students
45 contributing to the case study research centred on the value of being able to observe
46 and experiment with tacit understandings in practice. This form of reflection in action,
47 which attempts to discover how and what contributed to an expected or unexpected
48 outcome, taking into account the interplay between theory and practice lies at the
49 heart of the WBL pedagogy in each of the case studies. However, whilst critical
50 reflection formalised into reports, essays, journals, logs, diaries or professional
51 artefacts is often a valuable and central part of WBL (Nottingham and Akinleye,
52 2014; Eastman, 2013, Helyer, 2010), it should be recognised that challenges
53 associated with grading and evaluation of such artefacts remain (Crème, 2008).
54

55 Learning agreements are a key element of WBL pedagogy and these have
56 traditionally been formal written agreements between a learner and a supervisor
57 usually detailing what is to be learnt, the resources and strategies available to assist
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3 it, what will be produced as evidence of the learning having occurred and how that
4 output will be assessed (Anderson et al 1998). The case studies highlight a further
5 dimension as a tripartite agreement with the inclusion of the employer in the
6 development and implementation of these agreements. Each of the case studies
7 illustrates various aspects of an often-complex negotiation process between the
8 employer, student and university. The development and implementation of
9 pedagogical approaches are often led by university academics with the expectations
10 of employers and students exerting a powerful influence on learning outcomes and
11 how they are to be delivered and assessed.
12

13 A final point to emphasise is the important role that the external stakeholder plays in
14 the development of WBL programmes and the challenges that this provides for HE
15 identified by a range of authors including Boud (2001), Garnett et al. (2009) and
16 Zabalza-Beraza (2011). The case studies provide an indication of different
17 pedagogies that incorporate an enhanced role for the employer in setting the context
18 for the learning, supporting the learning and assessing the learning. As a
19 consequence, the academic teacher role changes from transmitting academic
20 knowledge to helping to formulate learning outcomes, provide relevant knowledge
21 and facilitate learning. In addition, there is often a need for a multi-disciplinary
22 approach that challenges some academics with a strong single disciplinary
23 orientation. The teacher is also required to specify the assessment criteria and
24 negotiate a pluralistic assessment process in collaboration with the employer and the
25 student. These developments pose some awkward questions in that there are no
26 definitive answers – which academic topics should be included in the curriculum?
27 What is the balance between theory and practice? What credit weightings and
28 assessment processes are to be used? What are the relative pedagogical
29 responsibilities of academic tutors, workplace tutors, lecturers, employers and others
30 involved in the student experience? Where do they begin and end? What does it
31 mean to be critical and what is the relative value of practical and academic
32 knowledge? Which pedagogies have the greatest impact on firm productivity? How
33 can we measure this? How much influence over the curriculum and pedagogy should
34 be ceded to learners and employers? For many academics this presents a
35 challenging environment and raises questions associated with whether and how
36 universities acquire the new capabilities and skill sets to develop and deliver WBL
37 pedagogies effectively in HE systems across Europe (see for example Carswell et al
38 2013 in the UK).
39

40 **Conclusion**

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42 This article has explored the relationship between educational orientation, different
43 types of WBL and forms of pedagogy in three European countries. Providing what
44 the world wants is a relatively new and dramatic reshaping of academic knowledge
45 that remains contested to varying degrees in the education systems of each
46 European country. Demands for specialist knowledge and skills emerge from policy
47 makers and industry and universities are increasingly expected to respond with new
48 modules, new areas of specialism and new programmes that connect with the
49 interests of industry and the labour market. Whilst we are reluctant to generalise from
50 just three case studies at the programme level, the case studies demonstrate the
51 ability of HE to respond to this challenge in each country and provide an insight into
52 the rich and complex pedagogies that underpin this response.
53

54 The cases illustrate learning and teaching strategies that join the worlds of academia
55 and work and the different levels of influence that the two worlds exert on WBL
56 pedagogy. The influences provoke deeper transformations in curriculum, as
57 academics implement more active methods of teaching, research, learning and
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3 assessment to integrate student, employer and policy interests. The findings have
4 implications for pedagogic practitioners most notably in terms of the relationships
5 established between the employer, university and learner and the application of
6 knowledge and skills in the workplace. Firstly, the tri-partite relationships become a
7 key element of a pluralist pedagogy that makes dynamic learning and the integration
8 of the worlds of work and education possible. This requires all the stakeholders
9 engaged in the process; learners, company tutors, academic staff and those
10 providing administrative or pastoral support to share the beliefs and behaviours that
11 contribute towards successful WBL development and delivery. Secondly, whilst
12 knowledge and skills such as critical thinking are a central element of HE learning, it
13 is their application in the workplace that assumes greater importance as WBL seeks
14 to support in-company innovation and improved organisational performance. This
15 requires pedagogical innovation to ensure that learners not only use the right skill in
16 an appropriate context but also recognise when knowledge is needed and that
17 mental effort is required to apply it (Halpern, 1999).
18

19 At a European level, the Bologna Process has provided a framework for common
20 efforts to reform and modernise HE systems but challenges remain associated with
21 the need to strive for continued improvements in quality, mobility and relevance for
22 labour markets (EC, 2012). Development of a global perspective is increasingly a key
23 element of graduate employability and whilst the UK and Finish case studies focus
24 on national and regional labour market needs, the Spanish case provides insights
25 into WBL opportunities for learner mobility and international curriculum by tapping
26 into trans-national company networks and international supply chains which may
27 bring profound pedagogical challenges worthy of further exploration.
28

29 Whilst there are many opportunities to collaborate with large and small, local and
30 multinational employers, the case studies also imply a number of risks for WBL
31 pedagogies. To design, develop and deliver the learning and teaching strategies
32 underpinning WBL requires considerable investment on behalf of HE. However
33 demand can be uncertain and threaten the sustainability of such programmes. For
34 example, large employers may fall into difficulties that result in job losses or cutting
35 back investment in human capital or SME human resource requirements may be
36 difficult to predict and satisfy. In more prosperous times, demand for WBL may
37 increase dramatically as organisations face skills gaps and shortages as product-
38 markets expand and HEIs are expected to respond to these industry needs in a
39 timely manner. The development of learning and teaching strategies need to take
40 these factors into account with good labour market intelligence, flexible and robust
41 quality assurance systems and suitably trained academic staff lying at the core of
42 successful approaches that are able to adapt to changes in demand in a timely and
43 innovative manner.
44

45 The findings have some implications for policy makers at the National and European
46 levels. Not least the need for national support and incentives to encourage the
47 development of innovative WBL pedagogy including co-creation and collaborative
48 delivery, assessment and evaluation to reflect a shift in emphasis towards
49 transaction and transformational educational orientations that actively engage
50 industry and employers in higher level learning. European HE policy is devolved to
51 member states and the case studies illustrate the key role that a national regulatory
52 framework plays in the development of WBL pedagogies. In each of the nations,
53 there is considerable in-country variation where the policies and practices of
54 individual universities or the national regulatory framework inhibit and enable the
55 development and delivery of WBL related pedagogies to varying degrees. In the UK,
56 the development of WBL has been supported by a regulatory framework that enables
57 individual universities to accredit programmes and to develop pedagogical
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3 approaches within the quality parameters established by national guidelines. In
4 Spain, where WBL is largely an emergent form of HE and a more centralised system
5 of governance exists, Individual HEI's have less flexibility to respond to the interests
6 of industry. By way of contrast in Finland, a country that regularly features amongst
7 lists of the most innovative countries in the world, actively promotes the WBL
8 pedagogy adopted by the UAS through three Government Ministries and exports it
9 internationally through Future Learning Finland.

10
11 The case studies disclose similarities and variations in WBL pedagogies associated
12 with for example, the use of professionals as experts, action oriented research
13 methodologies, the heterogeneity of placements, reflection and reflexivity. They also
14 highlight the pluralistic nature of WBL pedagogy and the roles that the
15 employer/labour market plays in the design and importantly, the on-going
16 development, delivery and assessment of learning programmes. However, the level
17 of analysis in this paper may mask subtle and interesting differentiation in
18 pedagogical approaches that contribute to the unique integration of employer-
19 learner-university interests in each programme. This provides fertile ground for
20 further research.

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