**WBL as an integrated Higher Education Curriculum in Europe**

**Introduction**

This paper draws on research funded by the European Union (EU) Lifelong Learning (ERASMUS) programme to improve accredited higher education provision of work based learning (WBL) through the development and implementation of an integrated curriculum which matches the planning and delivery of learner experiences with employer and labour market needs.

The European Strategy 2020 sees high quality education and training systems which respond to the labour market needs of today and tomorrow as critical to making a successful transition towards a more competitive, sustainable and inclusive society. Work-based Learning as an Integrated Curriculum (WBLIC) directly supports this vision, improving the employability of people seeking to enter, adapt and progress in a changing labour market whilst at the same time developing the higher level skills that are often viewed as a key driver of current and future prosperity.

WBL has a long tradition in many European countries and is an emerging concept in others. It has been a central element of higher education programmes in areas such as medicine and education for many years. It is also well established in several Western European countries, where WBL has been associated with various types of apprenticeships and effective employer-education partnerships for many years. However in several European countries, WBL is not reflected in the existing education system to any significant degree.

This paper draws on a review of the literature to identify the characteristics of WBL as an integrated curriculum and its adoption in the European context. It introduces the concept of WBL as an integrated curriculum and draws on the available evidence to explore its adoption in Europe and some of the factors that influence this. The paper concludes that if the
curriculum reform envisaged by policy makers is to be realised, there is a pressing need for a common framework to capture the incidence of the essential characteristics of a range of forms of WBL as an integrated curriculum which should be used to inform curriculum development at the national and pan European levels.

**Methodology**

The paper is largely based on a review of the literature. This is supplemented by discussions with partners in the WBLIC project drawn from 7 European countries (Austria, Czech, England, Finland, Germany, Poland and Spain). The data collection was based on a three stage approach. The first stage involved partners drawing on evidence to develop a summary outline of the state of WBL in Higher Education their own country. This summary included a discussion of issues associated with definition of the concept, an assessment of its prevalence and the identification of potential case studies to explore good practice. The second stage of data collection involved the discussion of these reports by all project partners in Leeds (UK) to bring some conceptual clarity to the WBLIC project and to provide a forum for knowledge exchange. A further stage involved a more systematic and comprehensive approach to searching for relevant literature and evidence of the incidence of WBL as an integrated curriculum in Europe. This search was based on the identification of key terms by members of the WBLIC team. The terms were used to search several sources of literature including bibliographic databases, journals, publication indexes and grey literature. Two key themes underpinned the search of the literature (i) conceptualisation of an integrated curriculum and (ii) empirical evidence of the incidence of WBL as an integrated curriculum. The narrative summary of the literature review outcomes and their implications provide the basis for this paper.
Towards WBL as an integrated curriculum

A wide range of terms is used interchangeably for the concept of WBL in Higher Education across Europe. These include cooperative education, work integrated learning, workplace learning, work-related learning, vocational learning, flexible learning, experiential learning, situated learning, competence-based learning, problem-based learning and problem solving (see for example Van Gyn, 1996, Dewey, 2000, Boud and Solomon 2001, Brennan and Little 2006, Helle et al 2006, Illeris 2011). This leads to some confusion associated with what WBL means in certain contexts and the form that WBL should take to achieve its learning outcomes.

The way in which curriculum is understood and theorised is also contested and has altered over many years. The concept of curriculum has become broader, increasingly changing from a static document indicating the subject knowledge to be acquired at the completion of an academic year, towards a dynamic comprehensive framework embracing for example, occupational standards and defining learning outcomes, assessment procedures and teaching and training methods. This evolution explains why today there is little agreement on where curriculum ends and education, learning and training begin (Psifidou 2009 in Cedefop 2010a. However curriculum is increasingly seen by stakeholders as a dynamic framework guiding teaching and learning processes and as a steering mechanism for quality and it features in key European policy documents as a new consensus for contributing to Europe 2020 (Cedefop 2010a). To promote creativity and innovation in European societies, the European Council recommends using curricula as an instrument to foster more learner-centred approaches in education and training and to successfully match education and training provision to labour market needs (European Council 2008). However the concept of an integrated curriculum is open to multiple interpretation and definition. For example, it may be seen as a means of supporting student mobility as a key element of the Bologna process (Com 2012); it may
relate to the use of evidence from a variety of stakeholders to inform the design and
development of a curriculum (Bowers 2006, Carlsson et al 2010) or it may be seen as an
innovative method of education with a broad-based, multidisciplinary, organisation-centric
approach (Athavale et al 2008).

Within the WBLIC project context, an integrated curriculum is viewed as a means of
improving the match between the supply of learners graduating through the higher education
system and the labour market. In UK and elsewhere, Higher Education Institutions (HEIs)
are increasingly being asked by national governments to engage employers in curriculum
development (Com 2010) and the partnership between employers (or representative
organisations) and HEIs is at the heart of WBLIC. HEIs are being asked by the government
to benchmark their curricula and syllabuses against employer standards (e.g. those
established by employers’ associations or professional bodies) to improve employability and
to meet employer needs (Bennett and Kane 2009).

Overall, a work based integrated curriculum can be developed and implemented using a
variety of approaches. For some this means that skills and knowledge should first be learned
at university through for example, comprehensive case studies based on a real world industry
setting that can be supported by appropriate software packages (Sassan et al 2003). For
others it means that university-based simulated learning should then be followed up through
experiences while on placement in real life situations (Markulis 2005). Martin et al. (2010)
suggest that integration involves the student taking what he or she has learned in the
workplace, and relating it to, or incorporating it into, the next phase of academic learning
when they return to the university after completing a work placement. For Korhonen-
Yrjänheikkia et al (2007) it is about programme content delivered mainly by real-life project
work, which is supported with lectures, selected readings, examples from industry, group
work and special workshop sessions. For others, an integrated curriculum follows the
entrepreneurial path for new product development where for example, students develop a comprehensive business plan for a new consumer product idea (Athavale et al 2008). Information and communications technology and a virtual learning environment with for example applied wiki pages and blogs provide the possibility for co-creation and peer-to-peer sharing during the programme and can be a feature of an integrated curriculum (Korhonen-Yrjänheikkia et al 2007). All of these characteristics of curriculum pose challenges to traditional approaches to curriculum design and delivery and those seeking to research them.

The literature suggests that the dominant approach to achieve integration is through work placement and ‘reflection’ using for example, reflective journals, projects and assignments (Bowers 2006). The incorporation of work experience into any curriculum requires students to receive learning support throughout a programme of study so that they might engage in the process of ‘reflective learning’ (Fidgeon, 2010). An integrated curriculum needs to balance vocational interests in terms of, for example skills, attitudes and knowledge that are judged to be important for the world of work and the higher level critical thinking skills associated with academic learning. Adopting a ‘learning outcomes’ or competencies based approach when developing curricula, valuing what a learner knows, understands and is able to do on completion of a learning process is seen by many European countries as an effective way to enhance employability and promote active learning and inclusive teaching.

Two major trends are apparent in curriculum reform across Europe (Cedefop 2010a). The first is ‘enrichment’ of curricula, meaning that the number of parameters addressed by curricular is increasing. Whereas curricula traditionally tended to be similar to syllabuses, reflecting in an objective way the body of knowledge to be transmitted, they are now increasingly perceived as policy instruments setting the framework for education and training stakeholders, including not only lecturers and learners but other stakeholders in society. A key aspect of WBLIC is the direct involvement of employers in curriculum design,
development and implementation. Employer involvement can range from hosting a period of work experience to delivery of higher level programmes in the workplace. Costley and Dickerdem (2011) identify a range of models of work-based learning which illustrate the development of an integrated curriculum to varying degrees (Table 1)

**Table 1 Different models of work-based learning**

<table>
<thead>
<tr>
<th>Model</th>
<th>Typical attributes</th>
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<tbody>
<tr>
<td>Work-based studies degree</td>
<td>Content negotiated with learner (which may have some employer input), part-time degree whilst in full time employment</td>
</tr>
<tr>
<td>Degree in cohorts with thesis based on work project</td>
<td>Content designed with contribution of employer and learner, part-time degree, full time employment</td>
</tr>
<tr>
<td>US/Canadian model</td>
<td>1st year in HEI and subsequent years in work with content negotiated with employer and individual</td>
</tr>
<tr>
<td>Sandwich year, work-placement, work experience, project-based, internship within programme of study</td>
<td>Content designed with employer, full time degree, temporary work with employer (variable duration)</td>
</tr>
<tr>
<td>In-house training/education</td>
<td>Accredited short courses influenced by employer/professional standards</td>
</tr>
<tr>
<td>Conventional degree programme to support work role (e.g. MBA)</td>
<td>Content designed by HEI, often part-time degree, full-time employment</td>
</tr>
<tr>
<td>Enterprise/business start-up</td>
<td>Full time students create and register a company</td>
</tr>
<tr>
<td>Change management partnerships</td>
<td>Content largely negotiated with employer</td>
</tr>
</tbody>
</table>

Adapted from Costley and Dickerdem (2011)

The second trend is enhanced flexibility, which is often intended to open up more individualised learning paths contributing to a more learner-centred system. In relation to employers, flexibility often relates to the response times and influence on content that employers are able to bring to bear on curriculum development. Modularisation and an emphasis on learning outcomes increase the flexibility of curricula. Research by Cedefop (2010a) reveals a trend towards a more demand-driven VET system, in which modularisation is a key element in increasing learner opportunity to select learning pathways and
programmes according to their preferences and needs. Besides this institutional dimension of a learner-centred system, changes in teaching and learning methods also reveal a tendency to put the learner at the centre of the learning process. Active learning methods and the use of various information and communications technologies are increasingly promoted through written curricula. This shift from teaching to learning is supported through the prescription of compulsory learning arrangements (e.g. interdisciplinary projects, work-based learning periods) through regulations concerning assessment methods, and through guidance and support materials for lecturers and trainers. However the pace of change towards this type of employer or labour market-led provision of accredited higher education is gradual and mixed within and between countries.

The current state of WBL as an integrated curriculum in EU

Research by Cedefop (2008) suggests that the evidence base to assess the progress of WBL in Europe and vocational education more generally is in need of considerable development. Whilst there are lots of examples of HEI engagement with WBL (e.g. Cedefop 2011a), baselines and benchmarks are difficult to establish at the European and national levels. Auzinger et al (2012) draw on information provided by partners in the WBLIC project to review the state of play of Work-based learning in Europe. They conclude that WBL in Higher Education is at very different levels throughout Europe and that it is difficult to quantify both within and between member states.

The incidence of part-time students is taken as a proxy measure of work-based and flexible learning in some instances (Eurydice 2012). Comparisons between nations should be undertaken with caution however Eurostudent (2011) research identifies several countries with few if any part time students and a small number of countries with more than a quarter of students reported as being part-time. In terms of WBL as a means of access to Higher Education it would seem that WBL plays a minor role in most European countries.
Alternative pathways into higher education generally account for a small proportion of all entries (up to 5%) in most European countries (Eurydice 2011). Only the United Kingdom (England) reports a significantly higher proportion of those who enter higher education through non-academic entry routes (around 28% of all entries). In general, the role of RPL in Europe appears to be mixed and relatively small scale. Recent research (Eurostudent, 2011) reports that most European countries do not provide any systematic opportunities to enter higher education without a standard upper secondary school leaving qualification and the majority of access routes to higher education would appear to rely upon traditional academic routes and qualifications as opposed to RPL.

Research undertaken by partners in the WBLIC project reveals the extent of WBL in Higher Education as highly variable and difficult to quantify within and between member states. In some member states, work-based learning in higher education appears to be emergent or re-emerging, in others it has become part of the HE landscape in recent times (last couple of decades). Projects funded by the EU such as DEWBLAM, E-View and WBLQUAL and agencies funded by national governments have helped to develop awareness and capacity to take forward the WBL agenda over several years however there have been a number of institutional, pedagogical and ideological objections to WBL in HE (Costley and Dickerdem 2011). The most common form of WBLIC is enacted through student placements (see for example IES et al 2012) and in some member states legislation has recently been passed to increase the emphasis and quality of work placements within HE curriculum. The incidence of other forms of WBL such as bespoke programmes designed in collaboration with employers and/or students is far less clear.

The evidence of employer engagement with WBL in HE is limited. Although employers make a considerable investment in continuing and professionally oriented upgrading of HE qualifications across Europe, there is little evidence of the scale and scope of activity
associated with accredited higher level learning. Research by Eurydice (2012) suggests that at least half of the European Higher Education Area countries make a direct reference to continuing professional development of those working in regulated professions (e.g. teachers, medical doctors) although relatively few countries are involved in other types of provision for industry or with external partners such as HEIs.

A recent report on learning and enterprises in Europe (CEDEFOP 2012) provides some indication of learning activity in organisations on a pan European level. However the analysis is limited for the purposes of our study of accredited learning in Higher Education as the research adopts an inclusive definition of workplace learning which embraces both off the job training and informal learning in the workplace at a range of levels. Whilst this captures the richness of workplace learning through for example job rotation, coaching, challenging work tasks as well as more formal training, it does not isolate and report on accredited learning provided through Higher Education Institutions. Nevertheless the report draws some conclusions of considerable relevance namely that ‘although research suggests that there are positive relations between work organisation, workplace learning and innovation, awareness and use of these relations seems to be low in many European countries’ (p95). Similarly there appears to be little evidence associated with the scale and scope of employee (as opposed to establishment) engagement with HE programmes at the European and national levels.

The development of WBL challenges traditional models and metrics associated with the Quality Assurance of Higher Education. Research (Grifoll et al 2012) by the European Association for Quality Assurance in Higher Education reports variety and dynamism as distinctive features of the European system with approaches often specific to the national, regional or local context. The accreditation and evaluation of programmes are the most common approaches adopted followed at a significant distance by evaluation and accreditation of institutions. However no single model for external quality assurance in
European higher education is in place let alone a system for the external quality assurance of WBL.

**Discussion**

Economic factors which relate to the policy of seeking to improve competitiveness through skills development exert considerable influence on curriculum reform. There is general agreement across Europe that education, training and learning enables people to acquire knowledge, skills and competencies that enable them to enter and progress in employment and improves the productivity and performance of organisations (Com 2011, 2011a, 2011b, 2011c). The Bruges Communiqué (Com 2010) on enhanced European cooperation in vocational education and training identified work-based learning (WBL) as one of the areas that requires increased political attention and strategic action to take the education and skills agenda forward.

The Europe 2020 strategy puts the quality and relevance of education and training systems at the heart of EU efforts to improve competitiveness and achieve smart, sustainable and inclusive growth. The development of partnerships between Higher Education Institutions (HEIs) and employers is seen as a critical factor in identifying learning requirements, improving the relevance of education and facilitating access to education and learning. An Agenda for New Skills and Jobs (Com 2011a) suggests that employers should be encouraged to co-invest and participate in the development and delivery of education through WBL. The knowledge triangle – the connections between HEI, research and business lies at the heart of European Commission thinking associated with a range of policy agendas including innovation, lifelong learning and competitiveness. The design of new curricula and programmes, innovative ways of delivering education and knowledge and stronger business partnerships are an essential element of this policy. However the main responsibility for
delivering the curriculum reforms rest with member states and education institutions themselves (Com 2011)

European policy is placing an increasing emphasis on involving employers and labour market institutions in the design and delivery of higher education programmes, supporting staff exchanges and including practical relevance in courses that can help to attune curricula to current and emerging labour market needs whilst fostering employability, entrepreneurship and innovation. At the heart of this approach lies the promotion of systematic involvement of HEIs in the development of local and regional development plans and the targeting of regional support towards HEI-business cooperation, particularly for the creation of regional hubs of excellence and specialisation (Com 2011).

It is argued that to take this policy agenda forward there is a need for flexible, innovative learning approaches and delivery methods to improve the quality and relevance of provision (Cedefop 2012). Distance learning, e-learning, WBL and the recent development of open universities in a number of countries, illustrate how the traditional HE landscape is changing (Eurydice 2011a, 2012) however there remains some resistance to change in many countries. The national regulatory framework in each member state supports or incentivises partnerships between employers and HEIs and the development of curriculum in a variety of ways and to varying degrees. There is general agreement across Europe that policy intervention is required to encourage employers to co-invest and participate in the activities of education and training institutions, particularly in higher and vocational education. These partnerships are seen to provide vehicle to develop and update skills profiles, multidisciplinary curricula and qualifications, and facilitate the provision of a range of work-based learning, from apprenticeships to industrial PhDs (Com 2010). However policy analysis suggests that European education and training systems have been slow to respond to the requirements of
the knowledge society, failing to adapt curricula and programmes to the changing needs of the labour market (Com 2011).

Despite the common features found in the motivation for curriculum reform, the shape and form that integrated curriculum take vary depending on distinctive national, regional and local characteristics. In some countries the economic crisis has slowed down curriculum reforms and created uncertainty surrounding policy continuation and sustainability (Cedefop 2012). Cross country comparisons are inevitably fraught with difficulty given the conceptual ambiguity and methodological complexity in this field. There is considerable variation in the legislative and regulatory frameworks governing HEIs in different member states and this impact’s on the development and implementation of WBL. In some countries WBL is greatly influenced by national values and regulation or other national reforms. Some forms of WBL in HE appear most prevalent in some countries where the regulatory framework provides HEIs with the autonomy necessary to develop and accredit higher education programmes at the institutional level. In other countries some forms of WBL are being driven by national regulation.

Decentralisation is seen to bring about adaptation and contextualization of the curriculum which serves the needs of both employers and learners more effectively (Cedefop 2012) and this may encourage relationships between HEIs and local employers to develop. At the heart of the distinctive nature of WBLIC is the role of the external organization as a partner with the HEI in the planning and delivery of learning activities that are responsive to the needs of a specific workplace. This may contest the supremacy of the role of the HEI in curriculum design and validation of knowledge and challenge conventional approaches to education to varying degrees within and between countries. More that 80% of the 2020 workforce is already in employment (UK CES 2009) and if the European economy is to benefit from
higher skills amongst the workforce then the re-skilling and up-skilling of those already in work will be an important if group of potential learners in HE.

In some countries regulation is in place to support partnership working between HEIs and industry and curriculum development. In other countries a voluntary system is in operation and HEIs often face considerable challenges in engaging employers in curriculum development and delivery.

Despite conceptual differences in understanding WBL within and between member states, some forms of it (notably work placements) have been a central element of the higher education curriculum for several years. However the extent to which the work placements are developed to accommodate new learning methods and innovation at the national and European levels is unclear. Furthermore, in order to gain a picture of the scale and scope of WBL activity, data relating specifically to different types of work placement (e.g. nature, duration) and other forms of WBL (such as bespoke provision) in the HE context is in need of further conceptual and empirical development at the national and European levels.

Conclusions

This analysis suggests that it is mainly economic factors which relate to the policy of seeking to improve national competitiveness through knowledge and skills development that have influenced curriculum reform over recent years. However other drivers, such as enhancing the student experience and changing funding mechanisms for higher education are also at play. The European policy context is clearly favorably disposed towards WBL as an integrated curriculum given the significant role that higher education systems are seen to have to play in the transition towards a smart, sustainable and inclusive economy. However the analysis contained in this paper suggests that there remain a number of institutional, pedagogical and ideological objections to WBL in HE that have to be overcome if the
curriculum reforms are to become widespread and have the impact that policy makers hope for.

The nature and prevalence of WBL at the European and national levels is difficult to capture and provides at best, a limited and partial picture of activity and impact. This is partly due to the conceptual ambiguity of WBL and the fact that it not reported on as a distinct entity in strategic policy documents at the European and national levels. Where WBL does feature, the data does not allow a full understanding of its nature in the higher education context nor its incidence, funding or impact. There is a pressing need for a common framework to capture the incidence of essential characteristics of a range of forms of WBL to inform policy development, implementation and evaluation. WBL (or flexible learning or whichever label makes sense) in different forms is thought to hold the key to unlocking the potential of HEIs to make a greater contribution to a smarter, more inclusive Europe and it is important to establish a shared understanding of the characteristics of WBL in HE from an employer, research and policy perspective. Given the importance of integrated curricula that policy makers identify in the transition of the European economic model, developing shared understanding amongst stakeholders and investment in the evidence base to monitor the development, implementation and contribution of WBL over time should be a policy priority for governments and other key stakeholders at the national and European levels.

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References


