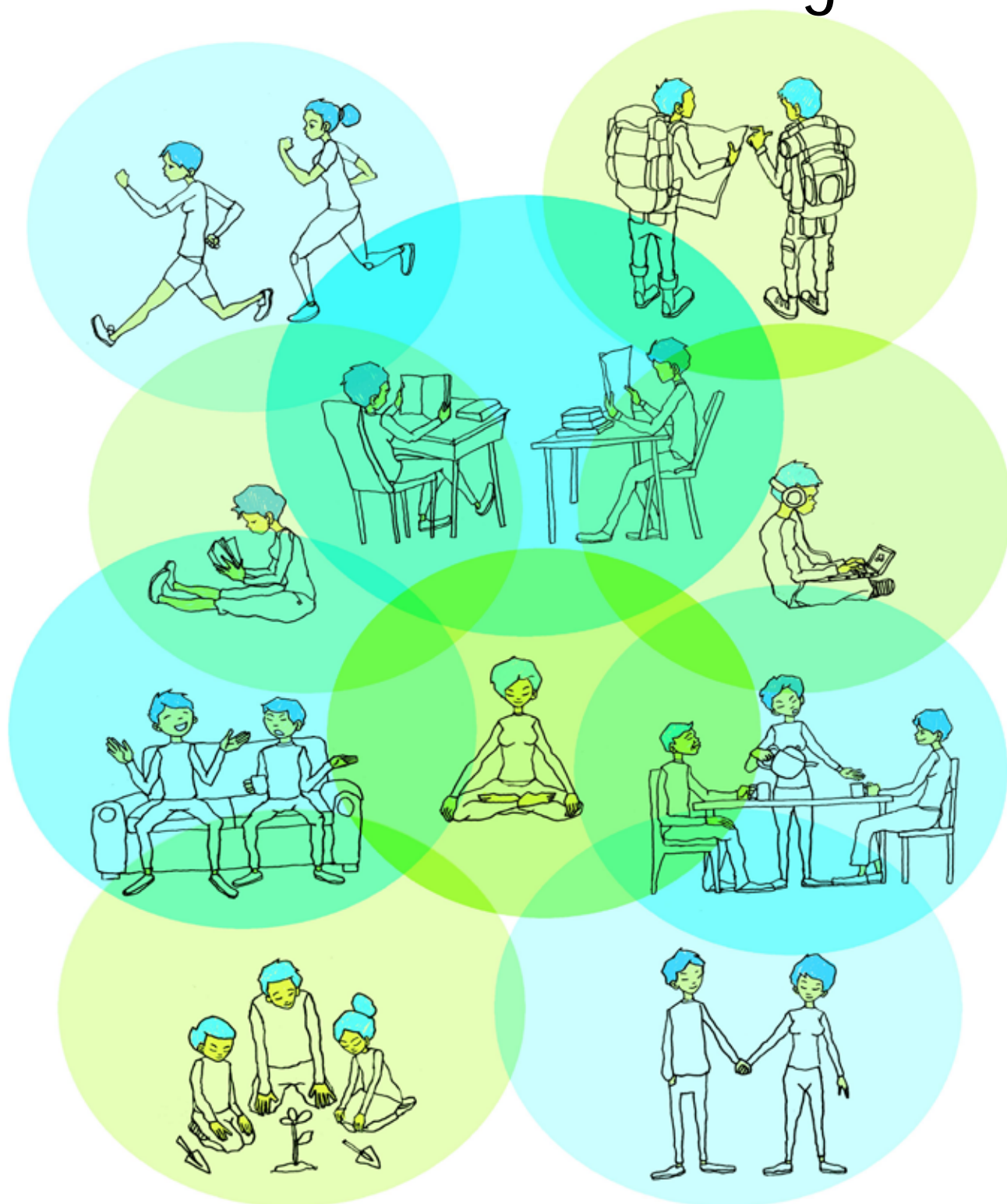


Lifewide Learning & Education in Universities and Colleges



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CHAPTER B9

General Credit: A Recognition of Lifewide Learning

Carol Costley

SUMMARY

A pedagogical process that enables people to make a claim for 'general credit' has been in place for the last 20 years at the University of Middlesex. General credit means that people can reflect upon their learning drawn from any area of their life experience. This is distinct from where the common form of accrediting prior and experiential learning for specific credit is claimed for specific learning that is contained in particular university modules.

Academic advisers support people in making claims for experiential learning that can be at any university level from Foundation to Doctorate. Making the claim is a developmental process and usually results in the achievement of a certificate of credit that can be put towards a university award. General credit has been used to provide access to higher education for people who do not have certificated learning. There are generations of people who have not had the opportunity to attend university but have lifewide learning that may meet HE level criteria. Some claimants already have highly successful careers and seek to develop themselves further whilst some do not realise the abilities they already have. All of them can garner their experience, reflect and formalise their learning in a way that brings new confidence and what some describe as inspiration and enrichment. The process of making the claim has without doubt been an uplifting experience for many people. It acts as a bridge between formal academic curricula and recognition of lifewide learning and achievement.

BIOGRAPHY



Carol is a Professor of Work and Learning and Head of Research and Research Degrees at the Institute for Work Based Learning, Middlesex University. Her research interests are in examining methodologies and epistemologies in work based learning (WBL) in higher education to professional doctorate level. She has written about WBL pedagogy and the development of WBL as a field of study, especially trans-disciplinarity, equity, ethics and practitioner-researcher issues. Her research profile is at

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INTRODUCTION

The principles and mechanisms for recognising lifewide learning, personal development and achievement (Jackson this volume) have been available for over 20 years through the process of accrediting prior and experiential learning (APEL) and recognising the learning in a learner's portfolio of experiences that can be counted towards a named award. The European Union has now established APEL as a legitimate and worthwhile process. This chapter considers and illustrates the ways in which *general credit* can be used to enable learners to make claims for learning they have gained through life experiences which can be counted towards a university award.

APEL practice

APEL processes usually recognise experiential learning that can be mapped against pre-existing awards and modules. The notion of accrediting experiential learning for general (non-specific credit) is less used and less well known. However it provides great potential to recognise significant abilities gained through life experiences. France in particular has embedded these practices in laws through the Validation des Acquis de l'Expérience (VAE) (Validation of Learning from Experience). The VAE process enables individuals to gain all or a part of an award based upon paid or unpaid work experience. Although the learning experience has to be related to the intended certification, it is not mapped against specific criteria like the learning outcomes that may be found in a module that is mapped through subject benchmarks and programme specifications, rather it is validated by an expert panel who will look at the individual case. In this sense the VAE comes closer to general credit than claims made for specific credit. All certifications registered on the National Repertory of Vocational Certifications in France are available through VAE which would seem like a national example of good practice.

Although APEL has been widely accepted in the UK, its uptake is not widespread and the use of general credit is marginal despite its positive effect on people and its use in widening participation in HE.

GENERAL CREDIT

General credit is sometimes known as non-specific credit. The award of general credit results in a certificate of credit in the areas that have been successfully claimed for and this is not a university award such as certificate, diploma or degree. General credit is a way of formalising informal learning and can be used as a process to recognise learning from wherever and however the learning has taken place. Not all learning is positive or even moral and universities undertake the process within an ethical framework. As with the principles behind lifewide learning, claims for general credit can acknowledge the whole of a learner's life experiences both in the past and in the present. Like specific credit it can be used as currency through the Credit Accumulation and Transfer System towards an award. The proviso is that the credit is accepted by those responsible for making judgements about what credit may be accepted on a particular award and this is usually done on a case by case basis in universities.

The UK Quality Assurance Agency for Higher Education's 'Framework for Higher Education Qualifications' (FHEQ) is normally used for University qualifications and is aligned to the Qualifications and Credit Framework (QCF). General credit can be awarded at any level. Universities awarding credit usually only award it at university level and these go from Foundation to Doctorate level (levels 3 to 8). The metric for measuring the volume or number of academic credit points is common across the FHEQ and QCF. This is based on 1 academic credit per 10 hours of learning, which can include self-directed learning hours as well as taught learning hours.

APEL provides opportunities for individuals to progress to a university's (or other institution's) higher education programmes and for the academic credit they have achieved to count towards university qualifications.

Making a claim

The process usually involves facilitation, discussion and reflection that has a particular purpose when reflecting on the learning achieved from the endeavours involved in gaining general credit. The claim requires evidence, cross referencing, formative review, possible interview and assessment requirements of the specific university with the QCF.

Some straightforward examples of areas of general credit that can be claimed are for key or core skills such as 'communication', 'leadership' and 'team-working'. However claims can be made in almost any area where learning from significant human endeavour can be articulated and evidenced usually with a reflective account. Examples of some of the areas of learning that can be claimed are 'Traffic Accident Investigation', 'Community Music', 'Managing Events', 'Bookkeeping', 'Managing Data' and 'Project Planning' but the possibilities are countless.

Learning support

Like most APEL claims, candidates who claim for general credit are usually supported by a tutor (sometimes called an adviser), have access to library and other resources, often a virtual learning environment and are provided with guidance materials. Claimants craft the titles of 'Areas of Learning' based upon their individual experiences with the support of an adviser. The tutor / adviser is ideally someone who understands and is experienced with people making claims for general credit. The role of adviser involves good facilitation skills, knowledge that is grounded in experience and understanding of work practices and values and a pedagogic approach that is conducive to dealing with informal learning. Some of these abilities are; knowledge of work in context, learning consultancy skills, trans-disciplinarity awareness, reflexivity and reviewing skills (Boud and Costley, 2006). Moreover the adviser takes on the role of the critical teacher:

the authority of the critical teacher is dialectical: as teachers relinquish the authority of truth providers, they assume the mature authority of facilitators of student inquiry and problem posing. In relation to such teacher authority, students gain their freedom- they gain the ability to become self-directed human beings capable of producing their own knowledge'. (Kincheloe 2008: 17)

Kincheloe's ideas are highly relevant for advisers to claimants of general credit. Their role requires them to support learners in localising and specialising their own learning as the subject of study through reflection on experience, conceptualising and describing that learning. They do this in relation to wider contexts through discursive negotiation and engagement with, for example, communities of practice, employers, colleagues, tutors and other learners. Such educational contexts require learners to be self-directed and to resolve their own objectives and progression opportunities.

Assessment

Assessments of APEL claims for general credit follow some of the same processes as for specific credit. The process aims to evaluate and quantify experiential learning in terms of credit points at a particular level; there are reflective accounts; evidence is required; and the accreditation assessment practice is normally subject to internal moderation and external scrutiny.

However general credit does not require bench-marking against learning outcomes of specific modules or other units of learning prescribed by educational institutions. Instead the assessor must gauge the learning that has been achieved towards generic level criteria by a fairly complex process. This involves a keen understanding of education levels and quantification of credits. Experienced advisers can gain a good grasp of equivalences to the 'ten hours per credit point' stipulation for formal learning. They also gain expertise in judging the level of learning in relation to QCF. Where a particular specialisation or subject discipline expertise cuts across aspects of the area that are claimed, an assessor may seek expert advice, often available for university staff.

Another key point is how informal experiential learning gains more value in terms of learning, when put into practice (see for example individual case 2 below). In the case study a learner who already has formal qualifications in a specific subject (in this case, 'music') gains credit for the way he has applied this expertise in real life situations and increased his learning and range of abilities. The approach to knowledge is more TD (trans-disciplinary) in nature as the knowledge claims presented by learners are based upon a holistic understanding of their experience i.e. their lifewide learning. Their work (or endeavour) takes account of aspects of learning that go beyond the discipline but include disciplinary knowledge.

Those of us engaged in pedagogical research are often influenced by our teaching role. In the case of APEL for general credit we encounter individuals who feel transformed by the educational processes undertaken when making a claim (Armsby et al, 2006). Such first hand experience of seeing the results of the learning and teaching engagement can give pedagogical researchers a close up view of what appears to be worthwhile in people's lives. Colleagues engaged as advisers with those claiming general credit often have these very rewarding experiences where the learning process has been received as a valuable experience to the participant whether or not the credit is put towards an award or used towards a vocational purpose. This may represent a clear case of education for its own sake or engaging in a learning process that supports an examined and worthwhile life.

Advisers need knowledge of reflective practice (Schon 1976), knowledge of programme planning. They work alongside candidates, as partners in learning, rather than acting as

teacher or instructor, to help them develop themselves and encourage them to approach their work more critically.

A TRANSDISCIPLINARY APPROACH

Over the last 20 years, a trans-disciplinary (TD) approach to both curriculum innovation and to a progressive epistemic position that has relevance to communities has evolved as part of the pedagogic practices in universities involved in claims for general credit. It represents an

explicit shift from 'knowledge bound' disciplinary approaches that may tend to prioritise propositional knowledge, to TD approaches that are concerned with learning in the context of the dynamic interplay of knowledge power and subjectivity (Bravenboer and Workman 2014:18)

Forming knowledge interests and alliances that define new kinds of knowledge outside the university (Bleiklie and Byrkjeflot 2002) and critical pedagogy has led to approaches to knowledge that cut across disciplines, do not merge them and is concerned with knowledge that is generated and used in practice.

TD was established in 1994 when a Charter of Transdisciplinarity was adopted by the participants at the First World Congress of Transdisciplinarity (Convento da Arrábida, Portugal). Transdisciplinary, Interdisciplinary and Multidisciplinary are sometimes used interchangeably. Nicolescu (2008) summarises the differences between these terms from a research perspective, (see Appendix A). The mindset where knowledge is divided artificially into disciplines can cause an unhelpful rigidity in relation to learning and teaching that does not recognise the depth of learning of the whole person. Vocational and theoretical knowledge is often artificially separated (Nicolescu, 2010 http://basarab.nicolescu.perso.sfr.fr/Basarab/Docs_articles/Disciplinary_Boundaries.htm#_ftn1).

It has been explained that a discipline can be seen as a discursive system of regulatory power with its propensity to impound knowledge within arbitrary and exclusive boundaries...[and that there are] ideological dimensions of the discipline and the ways knowledge is produced for the purposes of supporting power blocs. (Kincheloe, 2004: 53-54)

Those involved in learning and teaching in relation to claims for general credit are usually aware of these critiques of disciplinary knowledge. The TD dimensions of general credit circumvent this critique of the way disciplines are structured.

Work-based learning

The field of Work Based Learning (WBL) in higher education originates from developing a curriculum model for people in work contexts that has its roots in Independent and Adult Education, and experiential learning in the 1980s-1990s. The centrality and self-direction of the learner is paramount in WBL and is enabled by curriculum mechanisms such as learning agreements, frameworks with multiple options, reflective practice and approaches to practitioner enquiry. WBL has developed a pedagogical approach to work and learning that

is usually transdisciplinary, especially in UK universities. A pedagogical transdisciplinary approach to WBL has developed in parallel with the wider, international development of trans-disciplinarity (more information can be found at <http://www.mdx.ac.uk/research/iwbl/index.aspx>).

In the growing field of WBL, many universities have explored trans-disciplinarity through their WBL curricula and some have designed innovative and successful whole programmes of study. Curriculum structures in WBL lend themselves well to recognising general credit as there is the ability to recognise learning from a range of contexts and accredit learning for general credit rather than accrediting against specific disciplinary knowledge. Evans et al (2010) explain to work-based learners that;

the experiential learning acquired by you in the workplace is rarely an exact match for the learning identified in existing university modules WBL frameworks possess built-in advantages for experienced adult learners ... the real flexibility, when assembling your claim, comes through allowing you to identify areas of learning, which you can claim for, and which are consistent with your pathway and award. To verify the value of these blocks of credits they are matched against your university's level descriptors. (Evans et al 2010:49)

General credit enables learners to have all of their learning recognised even the abilities that do not form an exact match to existing university modules. The experiential learning is often current experience as well as previous experience. Learners express their learning in 'areas' rather than modules and the areas are formulations of their own choosing that may not necessarily conform to modules or a specific discipline. These areas of learning are often used towards self-directed TD programmes of study that lead to university awards.

Universities have developed processes for APEL/WBL using a range of differing approaches. For example some universities use specific credit only, some have general credit which can be used towards discipline specific awards and some use general credit towards TD awards.

WBL as a field of study places the focus in the workplace, not in the subject discipline. It uses knowledge, skills and abilities that emanate from unstructured learning contexts where paid and unpaid work is undertaken, such as community settings, the domestic sphere (Butler 1995, Eichler 2005) and other social situations. This is because WBL is socially accountable and reflexive, involving fields of understanding rather than disciplines (Boud 2001). It focuses on work as endeavour, not merely 'acts of practice' as a need that most of us have is to create and provide a sense of achievement, of purposefulness and meaning in our life-work.

There is an overlap regarding the current employability initiatives to which WBL can subscribe. WBL has a much broader remit than employability but in current times employment is a key concern. The focus of WBL on endeavour supports the argument that paid work is only a part of endeavour, and separation of the paid aspects of the holistic pursuits of individuals and groups of individuals portrays an incomplete picture of the possibilities of learning in, for and through work. WBL awards are usually part-time for those already in work and work can be any meaningful activity not just paid work.

Making a claim for general credit is particularly fruitful through the route of WBL because it is concerned with knowledge in practice. WBL is already established to engage with the reflexive processes of the practitioner, the discursive and material processes of contexts and their socio-political settings. Knowledge arising from these practices may not fit easily into disciplines but it is increasingly acknowledged as valuable in work settings. The credits that are gained through general credit can more readily be recognised towards WBL awards.

Lifewide learning as a field and WBL as a field overlap. A key difference is that WBL focuses on endeavour, is sometimes but not always vocational in nature. The similarities are that many but not all models of WBL take account of the whole of an individual's learning, formal and informal, past or present.

Government initiatives such as 'workforce development' changed the nature of WBL in the UK causing a much more employer / employee focussed direction for the field. This demonstrates the power of government initiatives and funding to influence the direction of learning and teaching.

CASE STUDIES

This section firstly presents three examples of groups of people who can benefit from areas of learning claimed as general credit and then three individual cases that represent just some of the many and various examples where general credit has enabled individuals and served a valuable purpose.

Group 1 Professional re-qualification from countries where awards are not recognised at an equivalent level.

This example relates to teaching qualifications awarded in Jamaica to gain teaching status in schools that are not recognised as teaching qualifications in the UK. Experienced school teachers in Jamaica who apply for teaching posts in the UK are able to gain two thirds of the credit towards the UK teaching qualification by making a claim for general credit that is based upon their teaching abilities. Although the claim has to be relevant to the work they have done as teachers it is only broadly benchmarked against UK qualifications i.e. the teachers are able to reflect on teaching abilities they have as individuals to gain some of the credit. Their experience can be from their work as qualified teachers whilst they were in Jamaica or from current work in UK schools as classroom assistants.

Group 2 On-the-job cohorts in organisations that filter their own learning towards criteria that are relevant to their work as opposed to identifying learning relevant to a university module.

In this example, a university liaises initially with employers to ascertain the learning required for specific cohorts e.g. middle managers in their work roles. The university gauges the AQF level of the abilities that are needed. The individuals then make a claim for credit against the abilities they already have and for which they can demonstrate their learning. Any areas that cannot be demonstrated then become areas in which they can receive further development. The credit they receive relates to their current work in the organisation. The process is often linked to staff appraisal schemes and gives employees the opportunity to receive training or further educational courses where needed. Employees usually find the process rewarding because it gives them university credit for their work which is a tribute to their work and abilities.

Group 3 Using experience towards HE awards in new professional areas, for example 'Furniture Conservation' and professions that do not have higher awards, for example 'Veterinary Surgery'.

This example draws upon a doctoral programme that can recognise credit at doctoral level (QCF level 8). General credit at this level is only awarded where individuals can demonstrate current or prior learning at the highest level a university offers. These individuals are usually experienced practitioners who have undertaken work that can be evidenced and articulated in relation to the appropriate level criteria. Some professional groups have specific criteria appropriate for the profession and already have recognised pathways that are well known to practitioners in the area. There are new and emerging professions that do not have such established systems and there are professional areas that have not historically developed their members to doctoral level. There are also generations of people who have reached senior positions who did not have the advantage of a university education. Many individuals and groups of individuals have been able to seek credit that recognises their expertise and put the credit towards a professional doctorate award (examples are found at www.mdx.ac.uk/wbl/casestudies).

Individual case 1: Yashpol aged 20

This case is an example of where learners can gain general credit towards a Bachelor's degree as an elective module.

Yashpol was a full-time Bachelor's degree student who enrolled onto an APEL module to see if he could claim for credits from his experiential learning in part-time work. In his initial tutorial meeting he could not think of any substantial learning experiences that might be at an appropriate level to use towards his Bachelor's degree. When asked if he spoke any other languages he said that he had learned French to GCSE level at school. When asked about any part-time work he said that he had not engaged in any formal work except for a paper round.

After some further discussion it emerged that he spoke several languages fluently, in fact his mother tongue was not English. He also worked extensively in his father's restaurant at weekends and holidays speaking different languages to staff and customers, translating and interpreting. When his father was away in India he was responsible for the business, ordering produce, managing resources, finances and people. He had not considered the informal nature of his spoken and written language abilities as something that would be of interest to the university or that would gain him credits and he had not considered that the work he did could be considered as having academic value.

Areas of learning claimed in this example: 'Communication', 'Business and Management' and 'Catering'.

Individual case 2: Nicholas aged 35

This case is an example of where learners can gain general credit that encapsulates an area of expertise that has no existing formal certification.

Nicholas already had a Bachelor's degree and awards from the Associated Board of Music at grade 8 (the highest grade) and in teaching the cello. He enjoyed being a student and learning and wanted to make an extensive claim for APEL credits that would go towards a

Master's degree. The tutors enquired carefully into the experiences that he had engaged with since his formal education i.e. how he had engaged formal learning into positive endeavour and how this had added learning to his range of abilities.

Nicholas worked for charities and communities, organising concerts, and performing in shows and recitals, engaging others in performances and providing interactive sessions for specific groups. He was able to explain the learning that he had gained, reflect upon and evidence his activities and gain credits that could be used in a Master's degree in Work Based Learning Studies.

Area of learning claimed in this example: 'Community Music'.

Individual case 3: Sandy

This case represents an example of how general credit can recognise experience that replaces what would usually be learned in formal education but does not exactly replicate the content of modules.

Sandy had previously lived and worked in a country where English was not an official language, however she worked for a UK company where English was used in everyday language and for the systems and paperwork. She had been working for several years in the accounts department and had a wealth of experience in bookkeeping, accounting and a range of financial matters. She wanted to undertake a Business Studies degree. Her APEL claim for general credit was assessed, in part, by academic staff who teach in Business Studies. She was awarded significant credit that would have covered the number and level of credits needed for the first full-time year of a degree and half of the second full time year.

Areas of learning claimed in this example: 'Financial services', 'Bookkeeping', 'Systems Management'. The claim was used as advanced standing to enter the second year of a degree.

DISCUSSION

Knowledge development in universities has systems that cause difficulty for the acknowledgement of social processes involved in recognising informal knowledge. Current structures in universities as well as national bodies that interact with universities have not yet recognised the work that is being developed with communities who are both generators and users of higher level knowledge. Engaging universities with the whole community and not just an elite part of society requires a closer relationship with communities outside academe (Gibbs and Costley 2012).

Widening participation and expansion in HE (BIS 2011) is not only a matter of providing the same curriculum to more people; it entails innovation of curricula for a more diverse community of learners. General credit can go some way to fulfilling this goal however HE has to overcome a fairly unchanging model of knowledge creation, recognition and use. There are two key areas of change that need to happen before flexible and more inclusive approaches to learning can be part of the curriculum. Firstly systems need to be put in place within the academic and administrative structures of universities. This would allow models

that include accreditation and learner-managed curriculum frameworks. Secondly there needs to be the will to change to these more inclusive structures amongst academics and managers.

General credit can be used to open access to education and to build upon, reflect and consider current learning to form a trajectory that develops further learning and in many cases to make decisions about future direction. General credit is able to centre students within their own areas of understanding from the start allowing access to education for a wide variety of people who work in a range of fields. As a mechanism for access, general credit allows those who have missed a higher education earlier in their lives for a variety of reasons to access H.E. and can introduce people who have high level abilities to the critical, theoretical and academic aspects of higher level learning. Claiming general credit starts with the learner's current learning, often providing reassurance and confidence, acting as a turning point to further self-development and often to a university award.

Some writers, for example Zembylas (2006) have drawn upon Foucault's references to subjugated knowledges to make the point about how subjugated knowledge can be given value by the codifying processes now available through APEL. However, a concern is raised regarding the more formalised value of credit points bringing elitist forms of knowledge because power pervades intellectual discourse and late-modern society is highly codified and referential to the elitism that has gone before. A Foucauldian analysis has shown that social contexts of knowledge often replace external discipline with self-discipline. APEL offers many forms of confessional practice where people's social lives are brought into a power situation by educating them to govern themselves. Knowledge production, recognition and use presupposes power-relations. Seibert and Mills (2007) demonstrate the power relations at the micro-level of society now resonate as much as the macro, top-down models of power that require the more pervading micro-levels of repressive activity can be produced in educational knowledge practices. In the new learning society people become individually responsible for their continuing education.

General credit is distinctive in that it can be seen to fit an epistemology of praxis and by developing new dynamic relationships between knowledge and values, it is opening up new possibilities. This distinct area of learning and teaching is able to draw from the debates about the positioning of knowledge raised in Nowotny et al (2001, 2003) who show how research used to 'speak' to society and now that it is also integrated into society, embedded in a context that speaks back to science. This repositioning of social, individual, professional and market forces has enabled the expansion of the kinds and types of knowledge that are recognised and the diversification of the criteria by which it is judged.

CONCLUSION

General credit provides an established means of recognising an individual's lifewide learning and achievements. There are generations of people who have not had the opportunity to attend university but have lifewide learning and achievements that would meet HE level criteria if they were able to explicate them in ways that allow them to be evaluated and judged by HE assessors. Our experience has demonstrated that by making a claim for general credit claimants can garner their experience, reflect and formalise their learning in a

way that brings new confidence and what some describe as inspiration and enrichment. The process of making the claim has without doubt been an uplifting experience for many people. The process of claiming general credit acts as a bridge between formal academic curricula and the recognition of lifewide learning and achievement.

Educationalists need to rethink their premises and traditional constructions about learning and knowledge. Higher education can play a role in recognising curricula emanating outside the university and reconciling it with the expertise that is unique to higher education.

Learners claiming credit are established in their particular context rather than in disciplinary knowledge, they have insider knowledge and can give explication of the richness of work as a source of learning. It is also the case that advisers involved in learning, teaching and assessment processes in relation to general credit need to be mindful of the power dimensions of the adviser / learner relationship and of the wider issues of power and control in relation to knowledge.

If more universities developed and applied the use of general credit in the ways described above it would lead to a more constituted HE system based on promoting democratic and radical principles in partnership with wider community values, constructing systems and frameworks that can be used flexibly by learners. These are learning systems that include quality assurance, rather than ownership of unique cognitive values.

The readiness of institutions to take on the process of accreditation for general credit requires a flexibility of university qualification structures and a willingness to open access to underrepresented groups. Developing the will and capacity to award general credit will also provide another mechanism for recognising students' lifewide development while they are at university.

REFERENCES

- Armsby, P., Costley C. and Garnett J. (2006) 'The legitimisation of knowledge: a work based learning perspective of APEL' *International Journal of Lifelong Learning and Education* vol 25. no 4 pp 369-383.
- Barnett R (2000), *Realising the University in an age of supercomplexity*, Buckingham, SRHE and OU Press.
- Boud, D. (2001) 'Creating A Work-based Curriculum'. In D. Boud and N. Solomon (eds) *Work-based Learning: A New Higher Education?* Milton Keynes, The Society for Research into Higher Education and Open University Press. pp.44-58.
- Boud, D and Costley, C (2006) 'From project supervision to advising: new conceptions of the practice' *Innovations in Education and Teaching International* 44;2 pp119-130.
- Bravenboer D. W. and Workman B. (2014) 'Developing a Transdisciplinary Work Based Learning Curriculum: a model for recognising learning from work', in M. Childs, M. Keppell and S. Reushle. *Open Learning and Formal Credentialing in Higher Education: Curriculum Models and Institutional Policies*, IGI Globa.
- Butler, L (1995) 'Unpaid work in the home and accreditation' In *Culture and Processes of Adult Learning* eds. M. Thorpe, R. Edwards, and A. Hanson Routledge; London.
- Department for Business Innovation and Skills (BIS) (2011) Higher education: students at the heart of the system, White Paper, London; BIS.

- Eichler, M. (2005) 'The other Half (or More) of the Story: Unpaid Household and Care Work and Lifelong Learning' In Editors, Nina Bascia, Alister Cumming, Amanda Datnow, Kenneth Leithwood and David Livingstone *International Handbook of Educational Policy* Vol 13 pp 1023-1042 Netherlands, Springer.
- Evans, A., Perrin, D., Helyer, R. and Hooker, E. (2010) 'Making Your Learning Count: How APL can Enhance your Profile'. In Ed. R. Helyer *The Work Based Learning Student Handbook* Palgrave.
- Gibbs, P. and Costley, C. (2012) 'The Community of Workers' University: a pragmatic institution for the future?' *Higher Education Quarterly*, Vol 66 No 1 90-105.
- Jackson, N. J. (2014) Lifewide Learning and Education in Universities & Colleges: Concepts and Conceptual Aids, in N.J.Jackson and J. Willis (Eds) *Lifewide Learning and Education in Universities and Colleges*. Chapter A1 Available at: <http://www.learninglives.co.uk/e-book.html>
- Kincheloe, J. L. (2008) *Critical Pedagogy* second edition, New York; Peter Lang
- Kincheloe, J. L. (2004) Questions of disciplinarity/interdisciplinarity in a changing world In J.L. Kincheloe, and K.S. Berry (eds) 'Rigor and Complexity in Educational Research' second edition, Maidenhead; OU Press.
- Nicolescu, B. (Ed.). (2008). *Transdisciplinarity: Theory and practice*. Cresskill, NJ, Hampton Press.
- Nicolescu, B. (2010). *Disciplinary boundaries - What are they and how they can be transgressed?* Paper prepared for the International Symposium on Research Across Boundaries. Luxembourg, University of Luxembourg.
- Nowotny, H., Scott, P. and Gibbons, M. (2001) Re-thinking Science: knowledge and the public in an age of uncertainty, Cambridge, Polity Press.
- Nowotny, H., Scott, P. and Gibbons, M. (2003) Mode 2 revisited: the new production of knowledge, *Minerva* 41, pp. 179-194.
- Siebert, S. & Mills, V. (2007) The quest for autonomy: a Foucauldian perspective on work-based research *Research in Post-Compulsory Education* Special Issue: Work-based Learning and the Worker Researcher Volume 12, Issue 3, 2007.
- Zembylas, M. (2006). Work-based learning methodologies, politics and power: Developing a Foucauldian research ethic. *Journal of Education and Work*, 19, 291-303

Appendix A

'Transdisciplinary', 'interdisciplinary' and 'multidisciplinary' are sometimes used interchangeably. Nicolescu (2008) summarises the differences between these terms from a research perspective:

Multidisciplinarity concerns studying a research topic not in only one discipline, but in several simultaneously...Interdisciplinarity... concerns the transfer of methods from one discipline to another... Like multidisciplinarity, interdisciplinarity overflows the disciplines but its goal still remains within the framework of disciplinary research...transdisciplinarity concerns that which is at once between the disciplines, across the different disciplines, and beyond all discipline. Its goal is the understanding of the present world, of which one of the imperatives is the unity of knowledge...Transdisciplinarity entails both a new vision and a lived experience. It is a way of self-transformation oriented towards knowledge of the self, the unity of knowledge, and the creation of a new art of living in the society.

(Nicolescu: 2008, p2-3)