The CABES (Clare Adult Basic Education Service) framework as a tool for teaching and learning

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Abstract

This article describes a Framework that can be used to help bridge the gap between theory and practice in adult learning. The Framework promotes practice informed by three strands important to adult literacy work: social theories of literacy, social-constructivist learning theory and principles of adult learning. The Framework shows how five key factors can be utilised to establish existing learner knowledge onto which new learning can be built, identify relevant and effective learning objectives, and provide a means of evaluating learning.

Key words: (assessment, constructivist learning, learning difference, social practice)

Introduction

Clare Adult Basic Education Service (CABES) is a multi-stranded adult basic skills programme located in County Clare, a predominantly rural country, in the west of Ireland. Almost twenty years ago, the service developed the CABES Framework as a tool for teaching and learning in order to promote an expanded view of literacy that was underpinned by key research in the fields of language, literacy and learning. The Framework is currently used across the service in a range of formal and informal, one-to-one and group classes to help plan, design and assess learning.

In the early eighties, County Clare Vocational Education Committee (VEC) along with other VECs in Ireland, set up a volunteer adult literacy scheme (later transformed into the Clare Adult Basic Education Service) as part of its developing adult education service. Tuition was provided by a small group of volunteers on a one-to-one basis. Some volunteers were motivated by a charitable

concern to help the less fortunate or a desire to 'share the gift of reading'. Others were deeply aware that economic, social and educational inequalities were disproportionately evident in the population of adults presenting with literacy difficulties (Kelleghan *et al*, 1995; Smyth, 1999). They believed that literacy was a social justice issue, akin to education as a basic human right (NALA, 2011). Very few had any experience of adult education or adult literacy tuition. Often their only experience was their own memories of learning.

In the basic training provided by the service, tutors were given an introduction to adult education principles and a number of recommendations for teaching literacy skills. Tutors were encouraged to actively involve the learner in setting relevant concrete learning goals and planning their own learning. For example, for planning, tutors were advised to use a goal-oriented approach derived from the Adult Literacy Basic Service Unit (ALBSU) Progress Profile used in the United Kingdom. Key planning questions included: Where do I want to go? What do I need to learn? How am I going to get there? (ALBSU, nd) (This goal-oriented 'backwards planning' model was later adopted in the CABES Framework). Examples of practical and relevant learning goals identified by learners included reading the local newspaper, helping children with homework, filling forms, writing cheques and composing letters.

While in adult literacy work today, an understanding that literacy involves more than skills is broadly accepted (NALA, 2005; PIAAC, 2009, DES, 2013), at the time literacy was understood as a discrete set of skills which once learned could be applied universally. In the basic training, a big emphasis was placed on word recognition, with methodologies including oral reading, building word attack skills using e.g. phonics, Dolch list, social sight words, developing a personally relevant vocabulary. Work on spelling skills, dictionary skills, basic grammar and punctuation was also stressed. Tutors were encouraged to build these skills using either real life materials (often simplified) familiar to and reflecting the interests of the learner or personal texts developed from the learner's own language experience.

Similar to the experience of other literacy schemes, progress in developing the desired literacy skills was often slow, but most learners seemed to benefit in terms of self-confidence and feeling better about their ability to learn (Street, 1995). Indeed, the emerging view was that literacy progress was not really possible without these. Assessment, when it took place, was very informal. Progress was noted through informal record keeping and reviews.

In the nineties, a number of developments took place which significantly changed the shape of the literacy service. First, research collectively known as the New Literacy Studies (NLS) challenged the prevailing view that literacy should be understood as a neutral and discrete set of skills that should be taught systematically in isolation and then applied universally. The focus of much of this research was on studies of how reading and writing were used in social practice (Barton, 2007). NLS researchers argued that literacy was not a single entity but a collection of multi – literacies (Street, 1994), literacy events and practices shaped by the wider social and cultural contexts within which they were created (Barton and Hamilton, 1998; Barton, Hamilton and Ivanic, 2000). Moreover, since social practices are not 'neutral', neither are literacy practices (Street, 1994). The term 'new literacies' has since been expanded to encompass the 'new literacies' of the digital age (Leu, 2013) along with the increasingly multi-modal nature of literacy practices (Kress, 2003).

The concepts of multiple literacies and literacy practices helped to make sense of local experience. Ireland was entering an era of rapid social change brought about by economic growth and technological innovation. It seemed that, if people's lives were becoming more complex, so were literacy practices. Increasing numbers of learners were seeking help, but for different reasons. Some learners wanted help using new technologies (mobile phones, computers, automated services such as ATMs). Other learners sought help to cope with workplace demands e.g. the introduction of regulatory exams, new technology, qualifications for previously low-skilled jobs. There were also requests for English language classes, first from newly arrived refugees/asylum seekers and later low-skilled migrant workers who had been attracted to Ireland's growing economy.

The other major change in this period resulted from the publication of OECD's International Literacy Survey (1997) which placed Ireland second last in a group of twenty nations. Close to 25% of adults who completed the survey were assessed at the lowest level of literacy, below that considered 'functional' in the growing 'Knowledge Society' (OECD, 1997). Concerns about the adult literacy problem in Ireland were elevated significantly and the Adult Literacy Development Fund was established. The National Adult Literacy Agency increased its awareness campaign, raising the visibility of literacy as a problem shared by many (NALA, 2011).

The result was that more and more learners began to come forward. However, new literacy learners were presenting with new problems. Many learners had

word recognition skills and some fluency in their everyday reading, but they struggled with texts in new and challenging contexts. Difficulties included navigating unfamiliar text structures, using new technologies, collating information from multiple sources and writing for different purposes, especially in more formal situations. Their anxiety was further compounded when their experience took place in a social situation, e.g. the workplace or public service venue.

It was clear that the one-to-one volunteer model would not be able to cope with either the numbers or the complexities of emerging literacy needs. At this time, the Clare service made the decision to move away from skills-focussed tuition to a themed literacy approach that contextualised literacy within social contexts. The service began to develop models of group tuition built around shared learner goals, e.g. Preparation for Driver Theory, using new banking facilities, helping with homework, active citizenship etc. This new 'themed literacy' approach proved very popular with learners.

However, practitioners were concerned that the new group model would remain true to the 'learner-centred' focus that had been the basis for literacy work in the previous decade. This presented a new challenge because, although aiming for a shared goal, the learners were not necessarily at the same starting point. Also, there remained the need to expand the perspective on literacy and introduce new strategies underpinned by the growing field of literacy research. To meet these key challenges, the CABES Framework was developed.

The CABES Framework

In addition to the influence of New Literacy studies, the Framework is interwoven with ideas from social and constructivist learning theory and the guiding principles of adult learning. Constructivist theory itself is looked at from a number of different perspectives which have informed adult literacy work, e.g. Dewey's inquiry based learning, Bartlett's schema theory, Rosenblatt's transactional/reader response theory, Flavell's metacognitive awareness (Tracey & Morrow, 2006). At the same time, constructivists share the view that learning is an active process in which learners use what they know already to engage with, reflect on and make sense of new understandings and skills.

Social constructivism, a branch of constructivism, proposes that the learner's active construction of knowledge is mediated by socio-cultural experience. A strong voice for socially constructed knowledge is that of Russian psychologist Lev Vygotsky (1978). Though his research focussed on children, Vygotsky's key

point is that learning happens through social interaction, an idea that readily fits with the interactive environments of adult learning (e.g. group work, project based learning, peer learning etc.)

In Vygotsky's theory, the ideal space for socially interactive learning to take place is in the Zone of Proximal Development (ZPD). This space provides the right balance between challenge and support. It marks a reasonable distance between what a learner knows and can do now and the goal that they desire.

It could be said that the ZPD establishes the space where learners can be active participants (not passive recipients) in the learning experience, a guiding principle of adult learning. A course within the learner's ZPD is one that:

- recognises and builds on the learner's prior knowledge and experience;

- takes place in a learning environment in which the learner can actively participate;

- provides a safe and attractive distance between what the learner knows and can do and where he/she wants to go.

Another key principle of adult learning is that learners are 'goal oriented'. The Framework helps learners to be goal-oriented by focussing attention on the learning destination and what is needed to get there. Overall, the CABES Framework reflects good adult education practice by placing the learner at the centre of their own learning experience, recognising and valuing their experience, involving them directly in planning and assessment, and, in doing so, helping to empower them as adult learners (NALA, 2005).

The Framework's Design
The CABES Framework encourages consideration of five distinct yet interlinked factors that impact on the learning experience:

- Background knowledge

- Familiarity with texts and technologies (and other learning tools)

- Language practice (verbal and mathematical)

- Social experience

- Self-awareness

The five factors in the CABES Framework provide a bridge between theory and practice because they are rooted in theory, yet visible in everyday practice.

Background Knowledge

Research has shown that reading comprehension is a constructive process that draws on previous knowledge and experience which is organised, stored and retrieved in the brain through the use of mental models or 'schemata'(Bartlett, 1932; Rumelhart, 1980 cited in Tracey and Morrow, 2006). Schemata can reflect shared cultural experience as well as individual experience. They can be formed and reformed without conscious awareness. New information and experiences can be added to, accommodated in existing schema, or if too different, may result in the formation of a new schema (Tracey and Morrow, 2006).

In literacy practices, learners 'construct meaning' by linking what they already know to new ideas and experiences (Hughes and Schwab, 2010). Learners' background knowledge can include, for example:

- general knowledge (e.g. about family, community, culture, work practices etc.),

- subject/topical knowledge (e.g. terms, concepts, factual information),

- 'how to' knowledge and problem solving experience,

- attitudes and beliefs about learning and life.

Choosing texts and pacing learning activities to take account of a learner's prior knowledge is one way to locate learning within the learner's ZPD. Occasionally, tutors find that learners are operating from some misconceptions which can inhibit learning. Moreover, identifying and reflecting on background knowledge also raises tutor's awareness that, especially in literacy classes, sometimes even basic knowledge about a topic cannot be assumed.

Familiarity with texts and technologies (and other learning tools)

 The word 'text' here refers to written or visual communication with a purpose. Texts today use different media, come in different forms, shapes, and styles, and incorporate a variety of communication modes, often within a single text. They are produced using different technologies for a multitude of purposes. Increasingly, texts are becoming multi-modal contexts, using written, spoken and visual information from various combinations of printed material, digital

interfaces, telephone conversations and face-to-face discussions (Barton and Tusting, 2005; Kalantzis and Cope, 2012).

Text meaning is constructed not only in the language of the text but in text form, structure, design, use of visuals, graphs, logos, focal points, directional indicators, use of space, even the text's materiality. Identifying and understanding meanings embedded in these textual elements requires strategies additional to traditional text 'decoding' (Kalantzis and Cope, 2012; Kress, 2003).

Different text genres have commonly identifiable characteristics of language, structure and conventions. Recognising different kinds of texts and knowing their text conventions helps the reader to distinguish text purposes and select appropriate strategies for navigating and finding meaning. Individuals are always most comfortable with those texts that they use regularly in circumstances with which they are most familiar. In these texts, learners know what to look for (purpose) and how to do it (strategy) (Barton, 2007).

Learners with limited text experience will need to spend more time learning about different text forms, features and conventions, developing strategies for that text (e.g. navigational clues, use of graphic organisers, changing direction) and making connections between texts. This will help to gradually build up a text repertoire. The process is not static, but ongoing. Literacy practices change as life experiences change, so engaging with new types of texts and text purposes, whether independently or with support, is a lifelong process.

Language Practice
One longstanding recommendation in adult literacy teaching has been to use the learner's own language experience to create texts for the learner to read. The advantage to using self-generated texts was that the learner was engaged in the creation of the text and that the language and context would be familiar. However, in everyday social practice multiple forms of language are used; some are colloquial and familiar, many others are more formal and distant from the learner's experience. The more formal language structures are often connected with institutional or 'imposed' literacy practices which language experience texts do not prepare the learner for using (Barton, 2007).

There is immense variation in the use of language (verbal and mathematical) for different social purposes and within different text formats, e.g. choice of vocabulary, use of grammatical forms, sentence complexity, formulas and rou-

tine phrases, use of social and cultural conventions. Learners need to be able to identify not simply the elements of language (vocabulary, sentence structure, grammar and punctuation), but how these elements work in specific contexts (Hughes and Schwab, 2010).

Social Experience

There is now a 'shared recognition that learners need to develop a range of literacy capabilities that allow them to engage effectively within educational, workplace, leisure and community settings' (Wyatt-Smith and Elkins, 2008 p 901). In other words, literacy is now recognised as encompassing knowledge, skills **and** processes of 'socialisation' into literacy practices. All individuals and communities are 'socialised' into some literacy practices and not others. Wider opportunities to engage in literacy practices, and particularly to engage in practices that are highly valued in a society, promotes confidence as well as 'literacy mobility'.

Moreover, adult education courses typically place a high emphasis on learning through social interaction. Learners may be given case studies or problems to solve that engage learners both inside and outside the classroom. Group work may involve both face-to-face class discussion and the use of social media. Some learners may find this type of interaction a distinct mismatch from previous learning experiences and so struggle to 'fit in'.

There are also social and vocational contexts outside the classroom to consider. For deeper learning to be consolidated, learners need to have opportunities to apply and adapt learning to complete tasks and solve problems in real situations. Learners who are anxious about social interactions within the classroom are probably less likely to engage in corresponding 'real life' activities where they could apply their learning in the wider world. Without 'real life' application, learning is unlikely to be sustained over time (Oates, 2002).

Self-awareness

Thirty years ago, literacy practitioners observed that progress for literacy learners was as much about self-confidence and self-efficacy in learning as it was about gaining particular skills (Charnley and Jones, 1987; Street, 1995). Significant research has since demonstrated the importance of learners developing greater awareness of both their own ways of knowing (meta-cognitive awareness) and how their emotions can affect learning (Krathwohl, 2002; Dirkx, 2011). Moreover, 'learning to learn', that is understanding and develop-

ing appropriate learning strategies, is essential for enhancing and supporting skill transfer and adaptability (Oates, 2002).

Metacognitive awareness means that a learner understands his or her own thinking processes and recognises that there are different pathways to learning (Tracey and Morrow, 2006). This includes being able to identify prior knowledge relevant to a task and utilise effective strategies for learning and problem solving. It also means that learners can reflect on their learning, revise strategies and monitor their progress, identify weaknesses and ask for help.

Learners with self-awareness also know that attitudes and emotions impact on learning both positively and negatively. They know that strong motives and desires can stimulate and energise their learning, while learner anxiety (as result of low confidence, previous negative experiences, e.g. fear of failure) inhibits learning (concentration, memory, willingness to take risks, attitudes) (Dirkx, 2011). This self-knowledge helps them to be more aware of their own 'learning issues' and also to be more understanding about the needs of fellow learners.

Considering these five factors together builds a picture of the learner's starting point or learning readiness, gives an indication of ZPD and reachable goals. This information is essential for a tutor to be able to plan effectively for learner needs and differences, including embedding relevant 'soft skills' and can also provide a template for evaluating learning progress.

How the CABES Framework is used in practice

The Framework adopts a goal-oriented or 'backwards planning' model widely used in adult literacy work. Each of the five key factors outlined in the CABES Framework are considered first in the context of an identified learning destination (What is needed to get where I want to go?) (see Table below). These are filled in the column on the right.

The learner can then consider his or her own resources with a good understanding of what is needed to achieve a goal. The tutor and learner explore the learner's current experience (Where am I starting out from? What resources do I have already?) These are filled in the column on the left.

The two reflections are then compared. The tutor and learner identify where the gaps are and what needs to be worked on (What more do I need to get there?). These are filled in the middle column. They will form the basis of the Individual Learning Plan. If the gap between where the learner wants to go and where he

or she is starting out from is too great, the tutor may advise revising a goal into smaller, more achievable steps.

Alternatively, a tutor working with groups towards Quality and Qualifications Ireland (QQI) accreditation might first develop a Group Learning Plan in consultation with the learners and then customise for individual learners over the first few weeks of the course. For example, five ITABE (Intensive Tuition in Adult Basic Education) learners may share a common goal, such as working towards QQI accreditation, but the contents of their individual learning plans, based on the information from the Framework, will show individual differences.

When the plan is complete, the learner will be able to see that by taking what he or she knows and can do already and adding to that store of knowledge, skills and competences through learning, the goal can be achieved. The CABES framework can be used in initial assessment and planning and then revisited to guide formative and summative assessment.

Table 1: Sample CABES Framework Template using a goal-focussed backwards planning model

	Step 2: Identify learner resources	Step 3: Identify gaps and make a plan	Step 1: Describe the destination
Learner Name:			
Learner Goal: Where do I want to go?			
Framework Headings	*Where am I starting out from?*	*What do I need?*	*What does reaching this goal look like?*
Background knowledge	*What relevant information, observations and experiences does the learner bring to the learning?*		*Factual or conceptual knowledge, e.g. terms, concepts, facts and other information*
Familiarity with texts, tools, technologies	*What equipment, tools and materials can the learner already use that will help him/her?*		*Texts, technologies and other tools that will be used.*
Language practice (verbal and mathematical)	*What kinds of language practices does the learner use every day or in the past?*		*Examples of the kinds of language tasks involved e.g. reading, interpreting and expressing information and ideas.*
Social experience	*What experience has the learner of interacting social situations similar to classroom experience and those associated with achieving the learning goal?*		*Social contexts and social interactions involved.*
Self-awareness	*How does this goal link to the learner's motivation? Can the learner identify/reflect on previous learning experiences and identify personal strengths or weaknesses?*		*Learning skills and problem solving strategies, organisational skills, applications of learning, sense of well-being and success.*

Key strengths of the Framework

The Framework uses a 'wealth model' in its approach to teaching and learning. The CABES Framework is designed to place the learner at the centre of their own learning experience. By including a focus on the resources the learner has already, as well as naming learning needs, the CABES Framework identifies the learner as an essential resource for their own learning. Tutors are then encouraged to plan learning experiences that will maximise learner opportunities to utilise their resources.

The CABES Framework emphasises a holistic view of learning.
Using a goal-oriented or 'backwards planning' approach in the framework helps tutors and learners to connect knowledge, skills and competences to a meaningful whole, an identified learning purpose. Moreover, the five factors in the Framework draw on and encourage tutors and learners to activate Multiple Intelligences (Gardner, 2011) as they learn. In addition, an explicit focus on inter- and intra-personal elements highlights the role that emotions can play in learning, both positively and negatively (Dirkx, 2011).

The Framework is versatile.
Tutors and learners outside the literacy services can use the Framework for thinking about and planning learning. For example, tutors could use the Framework to help identify key learner resources needed to participate effectively in a course; these can then inform initial assessment.

The Framework can also be used in conjunction with other assessment strategies. For example, in Clare it has been integrated with initial interview practices in a Department of Education and Skills programme, Back to Education Initiative (BTEI) and with initial assessment in ITABE.

The Framework can aid planning learning to accommodate learning difference. As stated above, learners may have a common goal, but do not have common starting points. The framework helps tutors and learners to identify individual starting points and learner needs within the context of the group goal. This can then help tutors and learners to customise a Group Learning Plan to meet individual learner needs. Tutors can help meet these needs by making adjustments to content, activities or assessment and/or providing additional help (within the module, parallel to the module or sometimes outside the module).

The Framework can help raise tutor's awareness of the risk of 'cognitive overload'.

Learners use their working memory to temporarily store and manage the information required to carry out complex cognitive tasks such as learning, reasoning, and comprehension. However, working memory has a limited store supply. When too many new learning elements are introduced at once, learners can experience what John Sweller (1998) described as 'cognitive overload', making it difficult to process information and complete tasks. Learners can experience stress, anxiety and frustration with a resultant negative impact on learning. Each of the five factors outlined in the CABES Framework can put pressure on working memory. When too many of these elements are new to the learner, cognitive overload is likely. The Framework can remind tutors to be aware of and limit the number of new learning elements introduce in a learning episode and so reduce the risk of 'cognitive overload'.

The Framework identifies 'soft skills' as fundamental to the learning process.
The Framework raises the visibility of interpersonal and intrapersonal skills (including emotional and meta-cognitive awareness) necessary not only for learning but for competency outside of learning. The knowledge sub-strands on the NFQ (National Framework of Qualifications) highlight competences in role, context, learning to learn and insight at all levels of learning, but these are often seen as 'soft skills' informally acquired as a bonus to the more substantial content knowledge and skills.

In the CABES Framework 'soft skills' are integral to learning. They are what enable a learner to act on their learning outside the classroom. Planning for and building enabling outcomes into a learning plan means that their achievement by learners can then be recorded as part of learner progress. Moreover, this increased learning competence will result not only in better learner outcomes but also strengthen learner resilience and increase likelihood of further progression. Using the Framework can help learners to demonstrate that, while at times literacy and numeracy gains may at times be slight, significant progress has been made in other areas.

Final Thoughts

The Framework was designed to meet two key challenges: the first was to expand tutors' and learners' perspectives on 'literacies' and what this means for teaching and learning. The second challenge was to try to ensure that, in an era of rapid change, the service would not lose the 'learner-centred' focus that is at the heart of not alone literacy, but all good learning.

These challenges are ongoing. Tutors joining the service come from a variety of backgrounds, some former volunteers, some with teaching experience in the formal sector, some with particular technical expertise. They all bring their own conceptions of what literacy is and what it means to teach and learn. The Framework may reinforce or it may challenge long held views. Tutors are really only convinced of the Framework's value when they find it useful in their own practice. Also, in recent times, adult education has come under pressure to perform in a way that may force 'old principles' to give way to more pragmatic concerns, e.g. meeting demands for standardisation and coping with reduced resources. The Framework therefore is presented not so much as providing a fixed solution, but rather a way of keeping a much needed dialogue open between tutors and learners as well as adult educators and key stakeholders.

The CABES Framework is a versatile and holistic framework that can be used with individuals and groups to plan and assess learning. Underpinned by theories of literacy as social practice, social and constructivist learning theory and principles of adult learning, the Framework guides tutors and learners through a learning dialogue. Most important, using the CABES Framework helps to ensure that a genuine adult learning experience, with an holistic focus on learning (i.e.one that integrates personal and social development with curricular knowledge and skills), is maintained across programme strands and throughout curriculum design and delivery

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References

Adult Literacy Basic Skills Unit (nd), The Progress Profile (no date) London.

Barton, D. & Hamilton, M. (1998) *Local literacies: reading and writing in one community*. London: Routledge.

Barton, D., Hamilton, M. & Ivanic, R. (2000) *Situated Literacies: Reading and Writing in Context*, New York: Routledge.

Barton, D. (2007) *Literacy: An Introduction to the Ecology of Written Language*. London: Blackwell.

Barton, D. and Tusting, K. (2005) *Beyond Communities of Practice*. Cambridge: Cambridge University Press.

Charnley, A. and Jones, H. (1987) *The Concept of Success in Adult Literacy*. London: The Basic Skills Agency.

Department of Education & Skills (2013) *Adult Literacy Programme-Operational Guidelines for Providers.* retrieved from: www.education.ie/en/Schools-Colleges Services/Further-Education-and-Training/AdultLiteracy/Adult-Literacy-Programme-Operational-Guidelines-for-Providers.pdf

Dirkx, J. (2011) 'The Meaning and Role of Emotions in Adult Learning', in Merriam, S. and Grace. A (ed.) *The Jossey-Bass Reader on Contemporary Issues in Adult Education.* San Francisco: Wiley.

Gardner, H. (2011) *Frames of Mind: The Theory of Multiple Intelligences.* New York: Basic Books.

Hughes, N and Schwab, I. (2010) *Teaching Adult Literacy: Principles and Practice.* Berkshire, UK: Open University Press.

Kalantzis, M. and Cope, B. (2012) *Literacies.* Cambridge: Cambridge University Press.

Kelleghan, T.,Weir, S., Ó hUallacháin, S., Morgan M. (1995), *Educational Disadvantage in Ireland*, Department of Education, Combat Poverty Agency, Educational Research Centre, Dublin.

Krathwohl, D. (2002) A Revision of Bloom's Taxonomy: An Overview in *Theory into Practice*, Volume 41, Number 4, Autumn 2002 College of Education: Ohio State University.

Kress, G. (2003) *Literacy in the New Media Age.* London: Routledge.

Leu, D., Kinzer, C., Corio, J., Castek, J., & Henry, L. (2013) 'New Literacies: A Dual-Level Theory of the Changing Nature of Literacy, Instruction and Assessment' in Alvermann, D. et al (ed.) *Theoretical Models and Processes of Reading* (6th ed.) International Reading Association retrieved from www.reading.org/Libraries/books/IRA-710-chapter42.pdf

NALA (2005) *Guidelines for Good Adult Literacy Work.* Dublin: NALA

NALA (2011) *1980–2010: A Living History*, accessed from https://www.nala.ie/sites/default/files/publications/nala_1980–2010_a_living_history.pdf

Oates, T. (2002) *Key Skills/Key Competencies: Avoiding the Pitfalls of Current Initiatives* in Contributions to the Second DeSeCo Symposium accessed at www.oecd.org/education/skills-beyond-school/41529505.pdf

OECD (1997) 'Literacy Skills for the Knowledge Society' in *International Adult Literacy Survey*, Paris: OECD.

PIAAC Literacy Expert Group (2009) PIAAC *Literacy: A Conceptual Framework.* Paris: OECD.

Smyth, E. (1999), 'Educational Inequalities among School Leavers in Ireland' 1979–1994'. *Economic and Social Review* Vol 30, July: 267–284.

Street, B. (1994) 'Cross-Cultural Perspectives on Literacy' in Maybin, J. (ed.) *Language and Literacy in Social Practice*. Clevedon, England: Multilingual Matters, 139–150.

Street, B. (1995) *Adult Literacy in the United Kingdom: A History of Research and Practice* NCAL: UPenn, Philadelphia, USA.

Sweller, J.,VanMerrienboer.,JJG.,Paas, FGWC.(1998) 'Cognitive Architecture and Instructional Design'. *Educational Psychology Review*, 10(3), 251–296.

Tracey, D. and Morrow, L. (2006) *Lenses on Reading: An Introduction to Theories and Models*. New York: The Guildford Press.

Vygotsky, L. (1978) *Mind in Society: The development of higher psychological processes*. Cambridge MS: Harvard University Press.

Wyatt-Smith, C. and Elkins, J (2008) 'Multimodal Reading and Comprehension in Online Environments' in Coiro, J. Knobel, M. Lankshear, C. Leu, D. *Handbook of Research on New Literacies*. Routledge: London.