During the past 25 years, self-directed, informal, and independent learning by adults has been the subject of a significant amount of research in North America but comparatively little research in Great Britain. In the United States and Canada, "self-directed learning" has become an umbrella term that has been used by different researchers in a wide range of disciplines to describe a wide variety of phenomena. Allen Tough, who began studying self-directed learning in the 1960s, identified the tasks addressed and assistance obtained during self-teaching projects and the major reasons why adults begin and continue learning projects. Tough's work generated a massive amount of interest in the topic of adults' independent learning efforts, including the first national investigation of self-initiated learning by Penland in 1979, Brockett's 1983 study of self-directed learning among undereducated adults, and several major studies of the organizing circumstances of self-directed learning. Stephen Brookfield has been Great Britain's most prolific writer on self-directed learning. His 1980 doctoral dissertation paved the way for later qualitative and quantitative studies of self-directed learning in Great Britain. British efforts to study self-directed learning have just begun, however, and much more empirical evidence remains to be gathered. (Contains 67 references.) (MN)
Self-Directed Learning among Adults: the Challenge for Continuing Educators

Keith Percy
Dawn Burton
Alexandra Withnall
The Association for Lifelong Learning rejects the common assumption that education equals school, and

- Argues that young people must leave school competent and confident enough to want to go on learning.
- Asserts that in Britain too many do not, and that we cannot afford this waste of time and talent.
- Provides a forum for those interested in lifelong learning to discuss their ideas at conferences, meetings and through publications.
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- Achieve a radical but principled reform of compulsory schooling.
- Establish a coherent, comprehensive system of tertiary education after 16.
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- Ensure wider and more relevant learning opportunities for adults.
- Create financial support systems to help those in need to return to learning.
- Convince politicians and voters that knowledge is the basis of democracy and that lifelong access to it should be a public responsibility and a citizen's right.

Details of the Association's aims, membership benefits and subscription rates are available from the Association for Lifelong Learning, Continuing Education Department, Lancaster University, Storey Institute, Lancaster LA1 1TH (tel 01524-849494 ext 7541, fax 01524-849499).
Self-Directed Learning among Adults: the Challenge for Continuing Educators

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Editor's Preface
Nick Small

The issue of self-directed learning is a hidden one for many in continuing education in Britain. Percy, Burton and Withnall have attempted to amend this, and offer here an excellent base from which to penetrate deeper into the field. Looking at the much higher profile of self-directed learning in North America, and the amount of enquiry this has engendered, the authors consider definitions, offer typologies, and extract many findings. The North American experience is then compared to developments in Britain, and the current 'state of play'.

The authors suggest the heavy focus on formal learning in this country has led to the more informal areas being overlooked. Self-directed learning has not been taken account of, though a recent enquiry suggests it is a significant form of learning for many adults. The research findings quoted make a strong case for becoming more aware of self-directed learning, a point brought out in a final section on moving to a learning society. Independent learning is assessed in terms of research over the last thirty years, and where it may fit once the phenomenon is more generally recognised. Research is the key to achieving this.

ALL

A welcome is extended to all those in the broad field of lifelong learning, continuing, adult, post-compulsory, etc., education to join the Association. While there appears to be a growing endorsement of instrumental education for adults, the Association is happy to help redress the balance on the voluntary side, and to promote lifelong learning as an integral part of national educational provision. The Association's publications are designed to promote well informed debate on the case for the lifelong dimension in future educational provision. If you wish to discuss, or have items for, publication, please get in touch with Nick Small, ALL Publications Officer, Open University, 2 Trevelyan Square, Leeds LS1 6ED, telephone 0113-244-4431.
1 The Phenomena of Self-Directed Learning

British and North American experience contrasted

If one reviews British and North American continuing education research literature over the past twenty-five years, it is difficult not to be aware of a stark contrast. In the United States and Canada there has been a significant out-pouring of research, theorising and discussion on the phenomenon or phenomena of self-directed, informal and independent learning by adults. In Great Britain there have been almost no published research or discussion in these fields. Candy (1991) says that discussion of 'self-direction' has become a "major - perhaps the major - growth industry" in North American continuing education teaching and research. Brockett and Hiemstra (1991) have suggested that, in the United States, self-directed learning has been the most extensively researched area of the education of adults, apart from adult participation in the formal provision of continuing education. It is ironic that the one British writer who has published extensively on self-directed learning, Stephen Brookfield, only began to be heard of in this field after he had departed to the United States in the early 1980s to pursue his academic career there.

Of course, there have been occasional calls for this transatlantic imbalance in research effort to be rectified on the British side (Percy 1988, Percy et al 1988, Withnall 1990) but to little avail. There has been little significant influence of the American research on self-directed learning observable on the British continuing education research community. It is true that when the National Institute of Adult Continuing Education (NIACE) in England and Wales came in 1990 to repeat a national survey of adult participation in learning that had first been carried out in 1980 by the then active Advisory Council for Adult and Continuing Education (ACACE 1982), it included questions on informal and self-directed learning which were not used in 1980. Nevertheless, its published discussion and justification of this additional dimension to its enquiry seems largely to have been uninfluenced by the multi-layered contemporary debates taking place in North American continuing education (Sargant 1990 57-67).

Such a contrast between Britain and North America calls for an explanation to be attempted. Brookfield has suggested that one of the
explanations is that continuing education in Britain has been practitioner led. Because of this practical emphasis, most publication and research effort has been diverted into increasing participation rates in formal provision. The emphasis on participation has essentially been fostered to secure the economic resources necessary to ensure the survival of the various continuing education providers. As Brookfield neatly summarises:

The efforts of the most devoted and hard working of adult educators will probably, in their own eyes, be far better employed broadening the clientele partaking of their programmes than studying those who choose to ignore them completely and to devise their own learning scheme (Brookfield 1980: 21).

Brookfield writes of the “inward-looking focus” of British continuing education.

Another feature, which may account for this lacuna within the British continuing education research literature, is the poor research funding arrangements in Britain for continuing education. There is little public or private finance available to provide scholarships for promising young researchers in continuing education. There are few doctoral students in the field of continuing education in Britain. In this respect the contrast between the United States and Britain could not be greater. As far as research into self-directed learning is concerned, doctoral and other theses written by students in the United States provide a rich, deep and significant source of information. Spear and Mocker (1982), for example, have indicated that within five years of Allen Tough’s The Adult’s Learning Projects being published in 1971, twenty-five dissertations, theses and other research studies had been written on the topic. This reservoir of intellectual stimulation has not been available in Britain. By contrast, the areas of adult education research which have been comparatively well funded in Britain in the 1980s have been policy and practice oriented and directed towards government programmes the focus of which has been employment related, with particular attention given to the acquisition of skills (Percy 1988).

It cannot be denied that research into self-directed learning is problematic. It is hedged around with definitional confusions and fraught with methodological uncertainties and frustrations. As Brookfield (1980) suggests, it is much easier to study the characteristics and activities of people who are already engaged in formal learning activities, rather than research into what is, in effect, an ‘unknown quantity’. Perhaps we
should not be surprised, given the limited academic base for continuing education research in Britain and the sporadic funding available for empirical studies, that that research effort has been directed elsewhere.

**The scope of this present publication**

This publication does not report new British empirical research into self-directed learning among adults: the authors do that in a forthcoming publication (Percy, Burton and Withnall 1995). It does, however, seek to make a small contribution to tilting the balance of debate in Britain away from the partial discussion of adult participation in formally-provided educational provision. If there is a phenomenon of self-directed learning by adults in this country, then we cannot understand what continuing education practitioners are doing, whether they are succeeding or failing, whether they are using resources sensibly or ineffectively, unless we know more about that phenomenon. The phenomenon is not in itself a threat; it may be an opportunity. Its existence may be a reason to be optimistic about the prevalence and prospects of lifelong learning in our society. Its processes may tell us things about the nature of adult learning that we did not formerly understand. Its qualities may complement those of the formal system of continuing education.

However, even the most superficial scan of the North American literature on self-directed learning shows immediately that this is no single phenomenon. We try to represent some of the diversity of concepts, definitions and interests contained in that literature in the second section of the next chapter. Clearly there is a range of foci and they cannot necessarily be tied down within a single definition or set of criteria. There is a variety of terms in use ('self-directed learning', 'self-teaching', 'informal learning', 'independent learning'). The frustration is that none of these terms quite fits the openness of the concepts under examination. All of them seek to transfer conceptual material appropriate to the formal system of education - a socially and historically constructed professional artefact - to the heterogeneity of frontier-less adult learning in the community. We have chosen 'self-directed learning' among adults as the title of this publication because it places the emphasis upon the adult self as the prime mover in learning. But in so doing we run the double risk of both importing unexamined the ratiocinatory notion of learning moving in a uniform 'direction' and of confusing our focus on the existence of a particular social phenomenon with the alternative discourse of 'self-direction in learning' as a valued educational goal to which all teachers should aspire for their students (Knowles 1970,
Dressel and Thompson 1973). This publication is not about andragogy or independent or self-directed learning in formal learning situations; it is about the learning which is going on ‘out there’, mostly outside the influence of continuing education professionals.

The remainder of this publication surveys the large volume of published North American literature in self-directed learning as a phenomenon among adults (with brief reference to such British work as there is) and concludes with a preliminary discussion of the implications of this survey for British continuing education practice, theory and research and for lifelong learning in general.

The main aim of the next chapter’s first section is to assess why self-directed learning has become an important area of investigation for continuing education researchers since the 1960s. The second section argues that self-directed learning has become an umbrella term which has been used by different researchers, within a range of disciplines, to study a variety of phenomena. An attempt to clarify and classify different types of self-directed learning activity is the focal point of the final section of chapter 2. In chapter 3 the work of Allen Tough, a pioneer in the area of research into adults’ learning projects is assessed. Tough’s work generated a massive amount of interest in the topic of adults’ independent learning efforts. Some of the verification studies which have resulted from his findings particularly in North America, are the subject of chapter 4. In chapter 5, Brookfield’s early research in the United Kingdom, the NIACE survey of 1990 cited earlier and other small-scale research on self-directed learning in Britain are discussed. Chapter 6 reviews the implications of the work done so far in lifelong learning in relation to the notions of lifelong learning and the learning society.
Emerging concepts

The concept or concepts of self-directed learning first emerged out of Houle's (1961) classic study entitled *The Inquiring Mind*, sub-titled 'a study of the adult who continues to learn'. Houle identified three categories of adult learners, those who were goal-oriented, activity-oriented and learning oriented. Goal oriented adults, as the title implies, identified a need to learn about a particular topic or interest. As needs arose they satisfied them by joining a class or club. Adults in this category were pragmatic; few of the goal-oriented sample read a great deal and when they did it was highly structured along the lines of well-defined interests or in connection with courses or their paid work. Activity-oriented adults, unlike those in the goal-oriented category, took part in educational activities because of reasons “unrelated to the purposes or content of the activities” (Houle 1961 19). For this group it was the social interaction which learning provided that was the main incentive. Houle suggests that some of his sample were drawn to classes because of loneliness, to make friends and even to find a husband or wife! For those in the sample whom Houle labelled as learning-oriented, education could be considered a constant, rather than a continuing, activity. For most it was a source of fun but at the same time the desire to learn was overwhelming and took on “an almost religious meaning” (Houle 1961 39). Most of this group were avid readers who looked for learning opportunities in almost everything they did, whether that was a holiday, a trip to the theatre or an art gallery. It was this final group which most closely approximated to those who have become known as self-directed learners.

From the mid 1960s onwards, as we have demonstrated, American researchers and theory-makers turned their attention to the phenomena of 'learning orientation' and self-directed learning. Harris (1989) has suggested four main reasons for their interest. First, Harris believes that the emphasis on individuals and individual learning is a reaction against the large group teaching methods associated with the 1960s. Particularly influential in this regard was Malcolm Knowles' (1970, 1983) theory of andragogy which he defines as "the art and science of helping adults learn" (Knowles 1983 55). The notion of andragogy was premised on
the assumption that as individuals mature into adulthood they move towards being more self-directed. This process is aided by the accumulation of a growing reservoir of experience which increasingly becomes a resource for learning. The application of the theory of andragogy has had most impact on the ways in which educators react and adapt to adults in formal educational settings, rather than in focusing on a range of other non-formal environments in which adults learn.

A second factor viewed as important by Harris is the shift in continuing education thinking and research from a sociological paradigm based on the structural-functionalism of the 1950s and '60s, to models of social action in the 1970s and '80s. While structural-functionalism stressed education and training as a way of enabling an individual to fit more effectively into society, the more radical social action perspective has emphasised the role of adult education to empower people. This 'new' philosophy has opened up the 'space' for individuals to evaluate critically all aspects of their life. Self-directedness in this sense is akin to individuals becoming more autonomous and responsible for their own learning.

Third, Harris attributes the emergence of the concept of life-long learning itself during the 1970s and '80s as a significant feature in the expansion of interest in self-directed learning. He notes that a range of journals and books have been based on this particular theme. Increasingly the focus has lain with the whole range of learning opportunities in which adults participate during their life. Closely linked with the need to learn continually and adapt to a changing economic and social environment have been writers on post-industrial society (cf Bell 1973, Toffler 1970). Accounts such as these have stressed the need for individuals consistently to acquire new skills and knowledge as previous skills and knowledge become redundant. Finally, Harris believes that there has been a gradual move towards the view that self-directed learning is a skill which all adults should attempt to attain. Successful acquisition brings with it status and dignity and is, therefore, a worthwhile activity to pursue. Who has labelled what self-directed learning is worthwhile, in what situations and for what reasons, Harris does not pursue.

Brockett and Hiemstra (1991) give a further explanation. They argue that the study of adult education as a discipline only became the subject of systematic enquiry in the early 1970s, at the time when research on self-directed learning was gathering pace. Simultaneously, adult educa-
tion literature was moving from being highly descriptive to becoming more theoretical. They argue that self-directed learning was one of the first major areas to undergo systematic and sustained enquiry because of this trend (Brockett and Hiemstra 1991 37). While this reason may well account for the initial flurry of interest in the topic, it is not clear why there has been widespread interest since. More plausible is Brockett and Hiemstra’s point that interest in self-directed learning has become an important topic because of the difficulty and challenge of studying learners outside formal educational institutions. There are a range of features which may affect a person’s ability to engage in self-directed learning. Social, cultural, political and psychological factors all have their own part to play. One of the challenges to researchers working in this area is the design of research projects able to uncover the relative importance of a whole range of phenomena.

Self-directed learning: the definition

It is no coincidence that the major, path-making, publications of Knowles (1970) and Tough (1971) were published within one year of each other. Knowles wrote about “a distinctive theory of adult learning” and “a new technology for the education of adults”. He called the new technology ‘andragogy’; the movement from pedagogy to andragogy is characterised as the necessary parallel to the adult’s development from dependence (in learning, upon the teacher) to self-direction.

The adult acquires a new status . . . this self concept becomes that of a self-directing personality . . . Adults tend to resist learning under conditions that are incongruent with their self-concept as autonomous individuals. (Knowles 1983 56)

The last statement is, of course, an empirical one and susceptible to challenge by evidence from a wide variety of learning situations in a range of cultures. Indeed, Knowles’s new technology was as equally exhortatory as empirically-based. Andragogy was also a moral philosophy. Adult students in formal learning structures should have their adulthood respected and not be treated by their teachers as dependent. Any inclination by adults to prefer to be dependent and not to seek to be self-directing was both a negation of the notion of education (cf Dressel and Thompson (1973)) and a sign of immaturity: the teacher’s responsibility was to act both as an educator and an encourager of maturity and self-direction. This interlinking of philosophy and empiricism in the concept of andragogy opened up new vistas for review, discussion
and exploration in the 1970s and 1980s, in relation to self-directed learning in the adult classroom.

However, if the fundamental of andragogy was sound - that adults tend to “resist learning under conditions that are incongruent with their self-concept as autonomous individuals” - then it would seem logical to expect that independently of teacher, classrooms and institutions adults would be engaged in self-directed learning. They would be doing this on their own, informally, in the community. Sure enough, as Knowles was writing his book, Tough was in the late 1960s beginning to accumulate evidence that this was, in fact, the case. According to his earlier research, adults were indeed learning independently of educational institutions and professional educators. What is more, observed Tough, they were planning programmes of learning, using learning resources, and learning intentionally and rationally. Tough’s work appeared to be mould-breaking at the time and stimulated the other major avalanche of discussion and research which we can trace in the North American literature under what is described as self-directed adult learning. Andragogically related self-directed learning and self-directed adult learning in the community can be distinguished both conceptually and in terms of their historical genesis but they can also be reviewed as part of a spectrum of related concerns about the nature and processes of adult learning and the goals and characteristics of the adult learner.

Such a spectrum of closely related concerns can be viewed alternatively as fertile ground for the advancement of knowledge or as confusing. Oddi (1986, 1987) penetrates to the heart of the debate when he suggests that the conceptual ambiguity of self-directed learning is reflected by the number of terms used to describe the phenomenon. In total, Oddi identifies ten different uses of the terms. They include learning which is represented as self-educational; independent study or independent learning; self-teaching; self-instruction, individual learning; independent study or independent self-education. Oddi suggests that most of the literature on the topic conceptualises self-directed learning as a process. This perspective is in contrast with his own which treats a predisposition to self-directed learning as a personality characteristic and hence as susceptible to measurement (cf Guglielmino 1977). Both of these perspectives can, of course, be applied to adult self-directed learning in formal education or in the community.

Brookfield (1984) has also analysed the various different uses of the term he describes as ‘independent adult learning’. First, he draws
attention to independent learning within the context of correspondence study. Most of the path-breaking work in this area has been undertaken by Michael Moore (1973). Moore's analysis of independent learning refers to student independence, that is the ability to think critically and set goals within the framework of distance learning. Brookfield identifies a second usage as independence in learning. This usage essentially rests on the assumption that we are all independent learners because we process and decode information ourselves, independently of anyone else. Independence in learning in this sense could, therefore, take place in a very formal classroom setting. Self-teaching is the term used by Allen Tough to indicate the system planning and teaching experience adults construct for themselves (see chapter 3).

Brookfield refers to 'autonomous' learning as another notion which carries with it the sense of learner control but also implies "separateness from fellow learners as well as from institutional recognition" (Brookfield 1983 27). Following Carl Rogers (1969), Brookfield also discusses the independent learning mode as the worthwhile, inherently educational, state of being which fits most appropriately our world of fast changing values and skills. Finally Brookfield cites the voluntariness of adult education as the mark of the adult as a self-directed learner.

Caffarella and O'Donnell (1988 41) suggest that research into adult self-directed learning has evolved in five main directions:

- Nature of the philosophical position - conceptual perspectives on the process of self-directed learning.
- Verification studies - descriptive investigations of adults' learning projects.
- Nature of the method of self-directed learning - questions of "how people plan and implement learning projects".
- Nature of the individual learner - questions of who participates in self-directed learning and for what purposes.
- Policy Questions - pertaining to the educator, institutions and society.

Brockett (1982, 1985a, 1985b) and Brockett and Hiemstra (1991) have also attempted to identify what they consider research 'streams' of inquiry. They provide a threefold classification including descriptive research on learning projects, research involving the measurement of self-directed learning levels and qualitative studies.
As Caffarella and O’Donnell, after conducting their own research review of self-directed learning, indicate:

A striking feature of philosophical questioning is that it is very easy to over define a phenomenon. This leads to the concept becoming vacuous in either of two directions: (1) the concept may become empty through applying to nothing at all or (2) through applying to everything, it loses its usefulness as a distinguishing factor! (Caffarella and O’Donnell 1988 41).

This brief review of the existing ways in which adult self-directed learning has been addressed indicates the enormous range of the concepts and phenomena which the term encompasses. Indeed, one could argue that virtually every area of research in adult education could find its niche in, or some organic link with, adult self-directed learning.

Following other formulations of Caffarella and O’Donnell (1987, 1989, 1991b) we find it useful to try to tidy up the debate and to present it as crucially including three dimensions:

- Self-initiated learning taking place either within formal learning contexts and with structures provided by professional educators or outside such contexts.
- Self-directed learning as a personal attribute of the learner.
- Self-direction in learning as a (or the) goal of education.

The key interest for us in this publication lies in self-directed learning as self-initiated learning outside formal contexts. But there remains at least one more unexamined ambiguity. What is, and what is not, a formal learning context? There is a considerable literature on this topic too, which the next section begins to address.

**Constructing a learning typology**

Coombs et al (1973) have classically suggested that learning methods can be grouped into three categories: formal education, informal education and non-formal education:

- Formal education which is "hierarchically structured, chronologically graded" (from primary school to university) and provides academic, technical and professional training.
- Informal education which is "the truly lifelong process that allows individuals to acquire values, skills and knowledge from daily experience" and which may come from the media, friends and family.
Non-formal education which is "any organised educational activity outside the established formal system" and has identified learners and clear learning objectives (cf Gunn 1987 4).

Despite the widespread and even international use of this threefold categorisation, Gunn (1987) argues that it has three main problems. The first problem relates to Coombs' view that only formal education is hierarchically structured. This view is supported by the research of Percy et al. (1988) into 523 voluntary organisations in Britain. They found that informal learning can be highly structured, especially when it takes the form of training sessions and is certificated, requiring learners to attain a particular standard at one level before moving onto the next.

The second difficulty rests with two areas of learning which Gunn (1987) considers are distinctive, but which Coombs neglects. The first is dormant learning, defined as an area of potential learning which has not been translated into thought or action. This is a similar concept to that identified by Spear (1988) and discussed further here in chapter 4. The second area of learning identified by Gunn is action-based learning which has been associated with pressure groups. Action-based learning has, essentially "grown out of certain frustration with other approaches, particularly when it comes to effecting change" (Gunn 1987 5). Gunn argues, somewhat problematically, that action-based learning does not fit into Coombs' typology.

A final area in which Coombs' three-fold typology may be viewed as deficient is in its conceptualisation of incidental learning. Gunn wishes to draw the distinction between informal and incidental learning. This is an issue to which Peterson (1979) has drawn attention by differentiating between deliberate education and learning and unintentional learning. Peterson argues that whilst much learning occurs through deliberate effort, probably more is learned incidentally. The domain of deliberate education can be divided into three broad categories: school, non-school organisations and individually used sources. Learning through non-school organisations largely involves people in their adult years, whilst the use of individual sources for the purpose of learning can occur at any age. In relation to unintentional learning, Peterson considers it "has not been the subject of extensive conceptual analysis by adult education theories" (Peterson 1979 14). Within his category of unintentional learning Peterson includes learning within the home, at work, from friends and through the mass media. However, he admits this list is "suggestive: it has no systematic empirical basis, nor basis even in the
theoretical literature” (Peterson 1979 14).

Peterson’s analysis is a useful starting point, but he does not distinguish to any great extent between the characteristics of incidental learning and other types of learning. Watkins and Marsick (1992) have made an important distinction between informal and incidental learning. They suggest:

Informal and incidental learning is learning from experience that takes place outside formally structured, institutionally sponsored, classroom-based activities. Informal learning is a broad term that includes any such learning; incidental learning is a subset that is defined as a by-product of some other activity. Informal learning can be planned or unplanned, but it usually involves some degree of conscious awareness that learning is taking place. Incidental learning, on the other hand, is largely unintentional, unexamined and embedded in people’s closely held belief systems (Watkins and Marsick: 1992 288).

For Watkins and Marsick, informal learning includes activities such as self-directed learning, networking, coaching, mentoring and trial and error. Incidental learning, on the other hand, refers to “learning from mistakes, the internalisation of meaning about the actions of others, and learning through a series of covert interpersonal experiments” such as testing out a new boss! Both informal and incidental learning tend to occur in non-routine situations. Under these conditions it is up to the individual to acknowledge and learn from the unintended experience.

Percy et al (1988) contains a substantial discussion of the phenomenon of adults in voluntary organisations, observably engaged in learning activity, but in discussion denying a distinction between ‘learning’ and ‘doing’. That is to say that the labels of ‘education’ or ‘learning’ are rejected by informants as descriptions of any part of their activity but to observers the activity contains all the objective marks of deliberate learning. It is not incidental learning.

Deciding what teaching and learning activities should be located in which category is a difficult process in its own right. In fact, the evaluation of different typologies can often cloud the issues rather than clarify them. However, it makes sense to us to utilise the term informal learning as an overarching concept. Informal learning can include learning which primarily takes place outside formal education institutions. However, it can also include learning in voluntary organisations which Coombs locates in his non-formal category. The term informal
learning can also include incidental learning as a subset (Watkins and Marsick 1992).

The importance of this discussion and attempted clarification is that they lead us away from the starting point of this chapter. Andragogy was the new technology of adult learning which represented adults as naturally conscious of their own autonomy in learning, intentionally consenting to, and sharing in the planning of, the learning process. Tough looked for, and found, deliberate and intentional learning efforts in the community carried out independently of professional educators. Dormant, unintentional, incidental self-directed learning fell outside Tough's frame of reference.

However, the concern of the rest of this publication narrows down to adult self-directed learning which is informal in the sense defined above - that is, self-directed learning in the community. The next chapter deals in some detail with the work of the pioneer, Allen Tough. Thereafter we review some of the corpus of research that followed Tough, some of which opened up prospects of adult self-directed learning which was unintentional, unrecognised and serendipitous.
3 The Work of Al'len Tough

Tough's interest in self-directed learning stemmed from his doctoral research at the University of Chicago. The focus of the research during this time was two-fold. First, to assess the teaching tasks that adults perform for themselves and second, to enquire about the advice obtained by self-teachers during the learning process (Tough 1966). In this first study in 1966 Tough used open ended questions to ask about his subjects' range of learning experiences, the types of things they had learnt and the ways in which they learned. His sample consisted of twenty educators, of whom several were asked to take part in the second stage of the project which involved recording their activities for a day. The choice of the sample of subjects is key to an interpretation of the findings, as in all Tough's research. Tough's doctoral thesis established that individuals did indeed participate in self teaching, but also identified the concept of a learning episode. Tough found that subjects tended to structure their activities in time segments. Tough later labelled such time segments as episodes lasting anywhere from 20 or 30 minutes to two hours.

By 1967 Tough had taken up a post at the Ontario Institute for Studies in Education, where most of his research on learning projects was subsequently undertaken. The Institute also became a place of pilgrimage for individuals wishing to undertake research in the area. By 1970 around two hundred men and women had been interviewed by Tough and his colleagues. Tough's second major work, Learning without a Teacher, was published in 1967. This focused on the self-teaching activities of forty graduates in the Toronto area with a mean age of 35 years. In contrast with Tough's first investigation, which used qualitative methods, the focus in 1967 was decidedly more quantitative in its approach. Through surveying the relevant pedagogic literature, an analysis of his own self-education experiences, conversations with faculty colleagues and pilot exploratory interviews, Tough constructed a list of twelve 'common' self teaching tasks:

- Deciding on a suitable place for learning.
- Considering or obtaining money.
- Deciding when to learn, and for how long.
○ Choosing the learning goal.
○ Deciding how to achieve the goal.
○ Obtaining or reaching people, books and other resources.
○ Dealing with lack of desire for achieving the goal.
○ Dealing with the dislike of necessary activities.
○ Dealing with doubts about success.
○ Estimating level of knowledge or skill.
○ Dealing with difficulty in understanding some part.
○ Deciding whether to continue after reaching some goal.

It should be noticed that a majority of these self-teaching tasks are rational and relate to 'choosing', 'deciding', 'considering', 'estimating' or 'dealing with'.

Individual respondents were asked to assess their own learning experiences within the context of the list of activities put before them. The results of the study further confirmed Tough's hypothesis that adults do engage in self-teaching and, furthermore, they also seek out assistance from a range of sources. All forty adults in the sample had each spent more than eight hours engaged in acquiring some previously specified knowledge or skill in the previous year. However, many subjects spent many more hours engaged in learning projects than the minimum eight hours would suggest. Tough concludes:

Many of the projects seemed to form an extremely important part of the subject's life and seemed to dominate his time and thought for weeks or even months. (Tough 1967 73)

During their self-teaching projects, individuals were given assistance by an average of 10.6 helpers, with each individual using at least four helpers. Tough highlights the importance of two types of helpers - those of guides and, more importantly, mentors. Mentors included a spouse, fellow learner or a tutor who were particularly singled out as important sources of help during the learning process. However, not all self-teachers' experiences during their learning projects were positive. Tough notes that individuals were subjected to critical, smug, destructive and unpleasant reactions. Nevertheless, rather than deterring self-teachers, this behaviour merely reinforced their determination to continue. A particularly interesting observation from this study was that even though subjects were told of the extent of their learning it was not held by them
Subjects compared it unfavourably with more traditional forms of learning activity because it had not been certificated as effective by an accredited professional.

Having focused on the tasks and assistance during self-teaching projects, Tough's next study attempted to identify the major reasons why adults began and then continued a learning project. The research, subsequently published in 1968 as *Why Adults Learn*, involved thirty-five adults who had completed at least six months of post-compulsory education. This piece of research was significant because it introduced the concept of a learning 'project' which was a permanent feature of his work thereafter. A learning project was defined by Tough as being of a minimum of seven hours duration. The seven hours must occur within a six month period and usually learning projects consisted of more than three or four episodes which occur on at least two or three different days. The learning project was contrasted with the learning 'episodes', which were usually of 30 to 60 minutes duration (Tough 1971).

All thirty-five adults were subjected to intensive, semi-structured two-hour long interviews. As Tough describes:

"During the 2 hours he (subject) was interviewed, the adult was guided by detailed lay descriptions of the various benefits that might have influenced his decision to begin" (Tough 1971).

Following on from the interviews, a four point scale was constructed, and the adults were asked to rate the strength of each reason for beginning and continuing the learning project. Five strong reasons and one weak reason were typical outcomes of the exercise. The most common reason cited for learning was knowledge or skill which could be applied at a later date. Another fairly common reason was puzzlement or curiosity. Because each of the thirty-five adults in the sample all had one more reason for continuing their learning project rather than for beginning them, Tough concluded that the total motivation for continuing was greater than for starting a learning project. An additional significant finding from this study was that few adults had discontinued a learning project before the planned learning goal was reached. Tough stressed two other main findings generated by the research. First, a whole range of motives were cited by respondents for their learning activities. This was used as a critique against learning theories which he considered made broad generalisations. Second, he rejected the division between different types of learning, for example vocational and practical learning. Within the learning projects described by his sample, elements of
vocational and practical elements, amongst others, were present in varying combinations.

In 1971, probably the most widely read of Tough’s books was published. *The Adult’s Learning Projects* - subtitled “a fresh approach to theory and practice in adult learning” - not only provided details of Tough’s research in 1970 but also summarised his work to date. However, it is the research findings from the 1970 study which have been widely replicated by other writers on self-directed learning. The aim of the project in 1970 was to measure more precisely “how common and important learning projects are”. Particular emphasis was given to very deliberate, intentional efforts to learn, although Tough acknowledged that a great variety of learning episodes occur during an individual’s lifetime. Tough suggests that deliberate learning episodes occur when “more than half of the person’s intention is to gain and retain certain definite knowledge and skill” (Tough 1971 7). Learning episodes of this nature need not be carried out alone, nor be constrained within particular settings. Such episodes might therefore include reading, watching television; they may take place in a library, classroom or train; they can be undertaken in conjunction with an instructor, in a group or alone. Tough deliberately chose this type of learning episode “because it seems especially interesting and significant” (Tough 1971 8).

Unlike many of Tough’s previous studies which had focused exclusively upon adults, this study compared the learning activities of adults with ten year old children and sixteen year old adolescents. Another novel feature of the project was that the sixty-six adult respondents in the sample were chosen from seven distinct occupational categories. This was in contrast to most of Tough’s earlier work, which concentrated on well-educated, middle class subjects.

The seven groups were:

**Blue collar factory workers.** The sample consisted of tyre and rubber plant workers, whose employment did not require lots of knowledge, training and interpersonal or mental skill. The age range of respondents was 25 to 45 years. None had undertaken post-compulsory education.

**Women in jobs at the lower end of the white collar scale.** Respondents within this category were typists and secretaries in two large companies. None of the sample had children, they had all been working for at least two years and none had attended college.
Men in jobs at the lower end of the white collar scale. A variety of occupational groups were drawn together within this sample, which included departmental store salesmen, airline passenger agents and clerks working in a large store. All the respondents had worked for at least three years, none had attended college and all were on a low income.

Elementary school teachers.

Municipal politicians.

Social science professors.

Upper middle class women with pre-school children. All of the subjects in the sample lived in a middle class neighbourhood. A year prior to being interviewed the women were all full-time mothers. Each of the sample had one pre-school child at home.

Within each of the seven categories there were ten subjects: the only exception being the 'elementary school teachers' group, which contained six respondents.

A range of important findings was generated from this piece of research. All but one of the interviewees had conducted a learning project in the previous year, and less than one per cent of all the learning projects was undertaken for credit. There were, however, some important differences between the different occupational groups, both in relation to the total number of hours devoted to learning projects and the actual number of projects undertaken (see Table 1).

Table 1
Differences between Groups in Total Hours and Total Number devoted to Learning Projects

<table>
<thead>
<tr>
<th></th>
<th>Total Hours</th>
<th>Total Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest</td>
<td>Professors</td>
<td>Professors</td>
</tr>
<tr>
<td></td>
<td>Politicians</td>
<td>Teachers</td>
</tr>
<tr>
<td></td>
<td>Lower white collar men</td>
<td>Lower white collar men</td>
</tr>
<tr>
<td></td>
<td>Factory workers</td>
<td>Mothers</td>
</tr>
<tr>
<td></td>
<td>Lower white collar women</td>
<td>Factory workers</td>
</tr>
<tr>
<td></td>
<td>Teachers</td>
<td>Politicians</td>
</tr>
<tr>
<td>Lowest</td>
<td>Mothers</td>
<td></td>
</tr>
</tbody>
</table>

Source: summarised from Tough (1971) 20-21 tables 4 and 5.
A significant finding of the research was that every category which included women spent less hours engaged in learning projects. Unfortunately, Tough does not pursue this line of enquiry, but it is most certainly one which requires further investigation. Another research finding which supported Tough's earlier work was that the majority (68%) of projects were self-planned.

The methods used to uncover the existence of learning projects were intensive, highly structured interviews. However, as a refinement upon previous studies, probing questions and prompt sheets were devised to help people recall their learning efforts. Tough believed learning efforts were difficult to recall up to a year after the event and, therefore, extensive probing was required to reveal them. He suggested that few of his previous studies had adequately probed for self-teaching activities. From a methodological point of view Tough regarded this piece of research as a success. The extent of self-learning projects was much higher than previous studies suggested was the case. Tough acknowledges that the “extensive probing by interviewers who were thoroughly familiar with the study's purposes and definitions” (Tough 1971 17) was a key factor in the success. However, it was not only the interviewer who was informed about the aims and objectives of the project, but also the interviewee. This final point raises some important questions about Tough's research methodology.

Despite the success of the research project in relation to Tough's assessment of his aims and objectives, he did in fact criticise his own methodology. Whilst the sample of adults was distributed across seven groups, Tough, nevertheless, thought that his sampling techniques needed refining. The research did not include subjects at the highest level of the occupational hierarchy, for example corporate presidents. His sample also excluded those at the other end of the socio-economic scale, who were unemployed, illiterate or elderly. Interviewers who were involved with the project also felt that respondents were not recalling or revealing all their learning projects. Tough suggested that recall might be improved by interviewing respondents at intervals of three to four months rather than twelve months.

By 1978 Tough began to propose future directions on which research effort might be concentrated. In his article, Major Learning Efforts: recent research and future directions, Tough highlighted a wide range of areas which merited further investigation. There was a call for more emphasis on cross-national research, a theme first brought to the fore in 1971.
There was a need for research which investigated learning projects aimed at individual growth, understanding the world and answering the basic questions in life. This is a theme to which Tough returned in 1991 with the publication of *Crucial Questions about the Future*. He suggested that more research effort should be concentrated on peer learning groups and self-help groups and how such groups and individuals could be supported by public institutions and government. Finally, Tough argued that more emphasis should be focused on the way in which adults make intentional changes, for example in jobs and relationships. This final topic was one which Tough followed through and was his last major study of adults' learning projects, published in 1982 as *Intentional Changes: a fresh approach to helping people change*.

The contribution Tough made to the study of self-directed learning amongst adults should not be underestimated. The extent of interest generated is illustrated by the number of subsequent studies undertaken on the topic. A review of some of the most important research findings is the subject of chapter 4.
A measure of the American interest in self-directed learning is that whole books have been written on the basis of indexing previous research efforts (see Long and Reddy 1991). Major reviews of the literature have been undertaken by a number of authors, for example Brookfield (1985b), Caffarella and O'Donnell (1991a), Brockett and Hiemstra (1991) and Candy (1991). The intention in this section is not to duplicate the accounts which already exist, but to review three important pieces of research on self-directed learning. They relate to the first national study on the subject, research with 'under-educated adults', and the 'organizing circumstance' for self-directed learning.

The first national investigation of self-initiated learning

Most of the previous research on self-directed learning had involved the use of relatively small samples. Penland (1979) perceived this to be a major deficiency. The only other national survey in the area of adult education in the United States had been conducted by Johnstone and Rivera in 1965. However, the latter study largely related to institutional adult education. Penland's survey of 1501 adults in the United States consisted of a one hour interview. It is important to note that Penland's interviews utilised the schedule designed by Tough, albeit with a few minor amendments. As we have seen, Tough's methodology was predicated on a rational model of self-directed learning, in which adults plan, choose and decide.

Penland found that around 80% of the population over the age of 18 considered themselves as continuing learners. Of those only 2.9% were actually engaged in taught courses or school-like activities. Over three quarters of the sample had planned one or more learning projects on their own account in the year prior to the study (November 1976). The length of time devoted to learning projects ranged from one hour to more than 900 hours; however, the mean was much lower at 155.8 hours. During questioning, respondents were asked why they preferred to learn on their own rather than take a course. Reasons ranked highly on this account were: desire to set own learning pace 46%; desire to set own learning style 37.4%; and ability to maintain flexibility in learning efforts 31%. At the other end of the spectrum, reasons which were ranked of little significance by respondents planning their own learning were:
dislike of formal classroom teaching situations 14%; lack of time to engage in a formal study programme 17.9%; transport difficulties and expense in travelling to attend a taught class 5.3%; and, finally, lack of money to pay for a course or class 5.2%. These findings led Cross (1981) to conclude that incentives to help adults participate in taught classes by reducing transport and other financial barriers have been missing the mark. More appropriate strategies would include the facility for learners to start learning when they wished and to learn at their own pace.

Respondents were also asked where they preferred to undertake their learning (Table 2).

Table 2 Locations where respondents prefer to undertake their own learning

<table>
<thead>
<tr>
<th>Category</th>
<th>Most important</th>
<th>Least important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home</td>
<td>66.4</td>
<td>7.0</td>
</tr>
<tr>
<td>On-the-job training</td>
<td>37.9</td>
<td>12.1</td>
</tr>
<tr>
<td>Outdoors</td>
<td>16.6</td>
<td>23.5</td>
</tr>
<tr>
<td>Discussion group</td>
<td>14.3</td>
<td>22.6</td>
</tr>
<tr>
<td>Classroom</td>
<td>12.5</td>
<td>32.5</td>
</tr>
<tr>
<td>Library</td>
<td>5.8</td>
<td>35.0</td>
</tr>
<tr>
<td>Public events</td>
<td>4.0</td>
<td>48.1</td>
</tr>
</tbody>
</table>

Source: Penland (1979) 175 table 2.

Whilst, not surprisingly, the majority of respondents preferred to learn in the comfort of their own home, a substantial proportion undertook self-directed learning at work. Individuals who used the mass media as a source of learning, especially television, engaged in far less continuing learning than those who used non-human and human resources. What was also interesting about Penland’s study was the data he collected relating to the use of libraries. Only 40.3% of the sample had used a library in the previous year. This contrasted with 60% who had never used the library, or had used it so infrequently as to elicit a ‘don’t know’ response. The data also indicated that the number of organisational memberships held by continuing learners was higher than that of the population as a whole. Over half of the non-learners were not members of any organisation or group.

A final area of questioning related to the planning of self-learning
projects. The results indicated that 25.3% of projects were self-planned and 22.7% involved the use of a non-human planner, for example a series of television programmes or a work book. A human planner was used by 29% of the sample. A human planner was defined as a "significant other person" who helped to fill the gap between the learner's level of knowledge and the skills required to gain access to appropriate resources. Finally, a group planning approach was used by 14.6% of the sample either in a workshop or classroom setting.

Penland's extensive study of self-initiated learning largely supported Tough's conclusion that there is a considerable amount of learning activity undertaken by adults outside formal institutions. Penland argued that self-planned learning should give a far higher status when he suggests:

People should not have to apologise about such activity simply because the culture has taught them that it is not what learning is really supposed to be (Penland 1979 178).

Rather, he argues that learners should be encouraged and supported by the creation of "shopping-centre access to multi-disciplinary teams of learning consultants and information brokers" (Penland 1979 178).

The confirmation of self-directed learning within a national sample had the effect of generating even more interest than before in self-directed learning. Particularly important in subsequent literature was the identification of self-directed learning within different groups of people. One of these groups was 'hard to reach' adults. Among the findings that emerged from Tough's 1971 study was the tendency for people from lower socio-economic groups to engage less in self-directed learning than those in higher social groups. This aspect of self-directed learning was subsequently challenged by Leeann and Sisco (1981) in their study of under-educated adults in Vermont. The next section highlights some of their main findings.

Self-directed learning among under-educated adults

Self-directed learning amongst less educated adults has been the subject of considerable debate (see Brockett 1983). The intention here is not to review all the relevant literature in this area but to highlight Leeann and Sisco's (1981) study which has been particularly influential. Their aim was to focus on adults having less than twelve years formal education. This study was designed to provide a contrast to many earlier pieces of research which used middle-class respondents, who had
attained high levels of academic proficiency.

The study was conducted in Vermont over a two year period. The project consisted of three phases. The first replicated Tough's interview schedule with a sample of ninety-three adults, randomly selected, who were all living in a rural county in Vermont. The second phase used in-depth interviews with a sub-sample of fourteen subjects selected from the first phase. The third phase involved data analysis and dissemination of findings. The results from the first phase indicated that nearly everyone had undertaken one learning project. The average number of learning projects conducted was four and the average amount of time spent on each effort was 106 hours. A range of learning projects had been undertaken by respondents. In essence, they were located in three main areas; those which were “hobby/craft oriented, home/farm related and job/career directed” (Leean and Sisco 1981:15). There were, however, no significant differences in the number of learning projects of those subjects who had less than twelve years education. This finding led Leean and Sisco to conclude that years of education was a poor predictor of adult learning activity.

The second phase of the study built upon the findings of the first stage and probed further into the learning activities carried out by those who had demonstrated self-directed learning. The sample was also selected on the basis of age, gender and educational background. To this end, a series of seven semi-structured interviews lasting over fifteen hours in total were conducted with fourteen of the original sample. This research design was particularly useful because it introduced a qualitative element into the research which had been absent in many other projects. It was also useful because it introduced a longitudinal element within the research which had previously been neglected. In total the data collection period in the second phase lasted six months. The project's second stage provided rich and informative descriptions about the self-directed learning activity of the respondents. People commented on how much more they had learned outside the school system. They enjoyed working at their own pace without anyone judging their learning ability. The value of common sense thinking and rational problem solving was expressed by both women and men in the sample. Gaining access to resources and information was not a major problem for most learners, although some respondents indicated that they were sometimes frustrated by being unable to attain comprehensive and accurate information.
Leean and Sisco's research was instructive on two accounts. First because they gave an insight into the self-directed learning activities amongst a group of adults who had previously been neglected. Second, they introduced qualitative methods to the study of self-directed learning via the case study. At the other extreme, a growing number of researchers have favoured a more quantitative approach. The focus of quantitative studies has been on personality traits and psychological processes which may predispose particular individuals to self-directedness in learning. They also represent a sharp departure from Tough's intensive, semi-structured interview orientation.

**The organizing circumstance for self-directed learning**

The influence of Tough's methodology on subsequent research on self-directed learning has been incredibly strong. Because of this, there has been a taken-for-granted assumption that adults' self-directed learning efforts are both deliberate and occur in a linear fashion. Tough (1971) went to great pains to indicate that adults were very systematic in both choosing the subject of their learning project and acquiring suitable resources.

More recently, the presumption that adults' self-directed learning activities are always deliberate and systematic has been called into question (eg Merriam and Caffarella 1991). Spear and Mocker's (1984) research with a sample of seventy-eight adults with less than high school education focused on two aspects of self-directed learning: first, the motivation or triggering event that set the learning process in motion, and second, "how resources were acquired and why and how decisions regarding the learning process were made" (Spear and Mocker 1984 2). They found that pre-planning occurred in a small minority of cases and then only in a "vague fashion". Having reached the conclusion that the planning activity did not rest with the individual, an analysis was made of the impact of the environment in which learning took place. This line of enquiry led to the concept of the "organising circumstance" to be developed. They argued that:

The organising circumstance, rather than preplanning by the individual, is the directing force behind much, perhaps most self-directed learning for this population (Spear and Mocker 1984 4).

The results of the study highlighted four main ways in which the environment had an impact on individuals' learning activities. First, they concluded that a change in life circumstances was the impetus or trigger
for a learning project or episode. Second, such a change in circumstance provides few resources or opportunities for learning that are viewed as reasonable and attractive by the learner. Third, the structure, methods, resources and conditions for learning are provided or dictated usually by a particular set of circumstances. Finally, learning sequences do not necessarily progress in a linear fashion, rather, circumstances created by one episode are used as a stepping stone to the next stage of the process (Spear and Mocker 1984 4-5).

Developing the concept of the organising circumstance further, Spear (1988) introduced the notion of learning clusters. He argued that information about a particular activity or event could be defined as a learning cluster which is stored until it fits in with other clusters of ideas on the same topic. Spear concludes:

The learner is perhaps in greatest control when the assembling of the clusters begins and decisions are made regarding what knowledge is of most and least importance (Spear 1988 217).

Further evidence that self-learning projects are not always planned in advance is provided by Berger (1990). She found that her twenty subjects did not even make a conscious effort to begin a learning project. Instead, they became involved by talking to family and friends or through a chance event. Berger's subjects did not plan a linear learning route before they began their project but tended to have a trial and error approach. They changed course and followed additional avenues of enquiry as they progressed. This is a similar finding to that presented by Danis and Tremblay (1987, 1988) whose subjects took advantage of learning opportunities as they presented themselves. Clearly more work needs to be done on the actual process of self-directed learning. Most recent evidence suggests it is much more complex than Tough's original conceptualisation would have us believe.
The most prolific recent British writer on self-directed learning is Stephen Brookfield. His most prominent piece of empirical research was undertaken as his doctoral research at the University of Leicester in 1980. Unlike most of the published North American research on self-directed learning, Brookfield described the concept as independent learning. Brookfield identified three dimensions of independent learning. First, it was the responsibility of the learner to specify intermediate and final learning goals, locate the appropriate resources and measure their own progress. Second, independent learning was conducted without reference to formal adult education. Finally, it was learning which attracted no institutional accreditation or financial support. Brookfield’s sample consisted of twenty-five adults aged between 40 and 65. Most of the respondents had left school between 14 and 16 years of age. The research was located in a small town in the rural West Midlands.

In selecting his sample, the main criterion Brookfield used was that all the individuals had to be experts in their chosen field. A wide range of interests was represented. In contrast to the methodology used by Tough and many subsequent studies, Brookfield’s research took a qualitative approach. The use of semi-structured interviews allowed interviewees to stress and explain the significance and meaning of their learning activities. Themes which emerged in earlier interviews were explored in further interviews at a later date. After the interview had been completed, an interview report was compiled which was subsequently shown to respondents to verify that it was an accurate account of their learning activity. Once the interview stage of the project had been completed responses were coded into categories which were then illustrated by quotes from the transcripts or interview notes.

Several potentially significant findings came out of Brookfield’s work. First, the respondents’ learning projects were not measured in hours, but years. The mean length of the ‘expert’s’ learning projects was twenty-two years and the median sixteen years. Second, Brookfield’s subjects were much less focused in their learning activities than some of the North American literature would have led us to expect. They spoke of learning projects becoming self-perpetuating with new avenues of enquiry arising continually. Several methods of enquiry were used at
different times and for different purposes, for example, experimentation and problem solving approaches were combined. Third, a common feature of all the 'experts' was that they documented their learning activity via the compilation of progress charts, record sheets and diaries. Finally, twenty out of the twenty-five independent learners referred to being members of a society or a club. Of this twenty, twelve respondents belonged to two or more groups and two belonged to ten and fourteen respectively. This finding supports the point made by Penland (1979), that people who are extensive self-directed learners "tend to be members of more interest groups than the rest of the population". This emphasis on a 'community' of learning with other interested people led Brookfield to conclude that his 'experts' were part of a learning fellowship. There are evident connections here with the findings on learning in voluntary organisations reported in Percy et al (1988).

One aspect of the self-directed learning process, which has eluded many previous research projects, is the evaluation of their subjects' learning experiences. Brookfield's research is particularly instructive on this point. His subjects assessed their expertise according to both subjective and objective indices. Within the subjective category, experts felt they had a good knowledge in their particular area because they could call into question the views of other experts and detect mistakes in articles. Objective indices of evaluation mainly related to peer recognition and peer comparison. They took the form of requests from enthusiasts' journals for contributions; requests for advice from fellow experts; the frequency they were selected as a team member in competitions and tournaments; the invitation to speak at clubs and societies and the elevation to the status of judge. Since Brookfield completed his doctoral thesis he has written extensively and theoretically on self-directed learning (see Brookfield 1981, 1982, 1983, 1984, 1985a, 1985b, 1985c). However he has not subsequently undertaken such an intensive piece of empirical research on the topic.

The most extensive piece of quantitative research to date in Britain which touches upon adult self-directed learning was commissioned by NIACE in February 1990. The British Market Research Bureau interviewed 4,608 adults from the age of seventeen about their learning and leisure activities. Twenty-six per cent indicated they were engaged in formal study at the time of the interview or had been within the previous three years. Another ten per cent of the sample indicated that they were not engaged in formal study at the time of the interview or had
been in the previous three years, but they were "studying informally". Informal study was cited as particularly popular by younger people, especially in the 20 to 24 age range. Slightly more men than women were identified as studying informally, as were respondents in the higher socio-economic groups. Respondents who had left school at the age of 16 to 17 and those who had left at the age of 18 or over, exhibited little difference on this factor. However, those who left formal education under age 16, reported themselves as studying informally much less frequently than the other two groups.

The study also incorporated a geographical variable at the level of the region within the analysis. The results of the survey suggest that there were differences among regions in the reported activity of studying informally. Sargant highlights the fact that a higher number of informal learners were recorded in South West England and East Anglia "where geography makes access to conventional provision difficult" (Sargant 1990:63). However, apparently in contradiction the South West also had one of the highest formal adult education participation rates. Likewise, the densely populated South East had a high reported rate of studying informally, even though access to formal adult education provision should have presented few problems. Sargant also claims that "It is also possible that social or cultural barriers to formal provision cause some groups, for example ethnic minorities, to choose to learn informally" (Sargant 1990:64). The study, however, did not control for ethnic origin.

Another area of questioning in Sargant (1990) focused on the amount of time respondents spent per week studying informally. Around 42% of the informal learners indicated that they spent one to three hours studying and 19% considered four to six hours a more appropriate assessment. Most (47%) of the learning activity was undertaken in the home, reading from a book. The next category of frequency was informal learning within the workplace. The learning locations which were given a low rating frequency by informal learners were learning with an informal group; at a training centre; from family and friends and learning at home through television.

In addition to the two research projects outlined above, there have been several other small scale British projects which have focused on independent learning. Marie Strong's MEd thesis undertaken in 1977 was one such project. Her attempt was the first in Britain to replicate Tough's work on adults' learning projects. Her sample consisted of eighteen further education lecturers. Using Tough's methodology, each
of the lecturers was questioned about how many learning projects they had undertaken, for what length of time and what assistance they had been given. From the outset Strong highlighted the difficulties of trying to get subjects to identify any learning in which they had engaged. Because of this initial lack of response, a range of prompt sheets was used. At the end of the exercise, Strong concludes that her sample exhibited a greater predisposition to self-teaching than Tough's subjects. When respondents were questioned about the assistance they had been given, Strong indicates that they were particularly hesitant about admitting the need for help. The most often cited learning projects within Strong's sample were work related. This finding is comparable with the high incidence of employment related projects highlighted by Penland (1979) and Sargant (1990). Other topics cited as the focus of learning projects included learning to care for a first baby; learning how to play a new sport or game and finally, learning how to save money through 'do-it-yourself'.

A final view of informal learning, which goes some way to answering the issue raised by Withnall (1990) that we need more informal learners to tell of their informal learning experiences, is provided by Melville (1987). What to do with an empty field at the side of his property prompted Melville to engage actively in a learning project. His short, sharp and witty article is a record of the stages he underwent to decide on the field's fate. He argues that to attend a formal class with a teacher is "a long way down the road from the starting point" (Melville 1987 318). Chatting to friends and browsing through books in the library involved a minimum of commitment, little money and the syllabus could be constructed as the project evolved. He used four different types of learning resources. The first was the use of printed materials such as books and newspapers. The second resource was what he called 'field studies' which involved collecting together 'market intelligence' about what other people were doing in similar situations. Third, people were a key resource in the learning process, whether they were friends or experts. Finally, the importance of incidental learning experiences was noted. These were defined as learning experiences which could not be predicted, and included television and radio programmes and generally "bumping into people" who turned out to be useful.

Melville concludes that the independent project method of learning was particularly suitable for his learning requirements on that occasion. He argues that the timing and scope of courses on offer did not meet his
needs. Nor did he particularly want the commitment of a formal taught course. He does concede, however, that the learning project method did have its problems. He argues that reading is a one way activity, in effect he could not have a discussion with a book to clarify his ideas. He suggests that information got from friends could have been prejudiced and that they may have told him what he wanted to hear. There are also problems with consulting experts. Often they did not have the time or inclination to grasp fully what was being asked of them. This sometimes resulted in Melville feeling that he had not been treated with full seriousness. Finally, and most crucially, Melville highlights the fact that he had no way of checking whether or not the advice given was correct. This had important implications for the quality of learning which had taken place.
Towards a Learning Society

The concepts of lifelong education and self-directed learning are evidently inter-connected, certainly at the level of values and aspirations. Dave (1975) described the nature of lifelong education as "a comprehensive concept which includes formal, non-formal and informal learning extended throughout the lifespan". He goes on:

It seeks to view education in its totality and includes learning that occurs in the home, school, community and workplace, and through mass media and other situations and structures for acquiring and enhancing enlightenment... Learning and living are closely intertwined, each enriching the other. (Dave 1975 43)

Candy (1991) refers to two essential components of lifelong education as 'vertical integration' (learning opportunities available from cradle to death) and 'horizontal integration' (learning opportunities available in a wide variety of contexts and settings beyond formal educational institutions). Cropley (1979) neatly characterises the latter as 'lifewide education'.

Clearly, self-directed learning has an organic connection with both vertical and horizontal integration thus defined. But is anything being said here? Both lifelong and self-directed learning are broad, diverse, even amorphous and nebulous concepts, that require focusing and bottoming in reality before they become useful. As we have already demonstrated in this publication, the concept of self-directed learning can be approached either as a social phenomenon (which has been poorly researched, at least in Britain) that may contain threats or opportunities - certainly implications - for the formal provision of continuing education, or as an andragogical goal, a goal in itself, a notion which essentially defines 'real learning'. In this publication we have concentrated upon the former, upon self-directed learning as a phenomenon and have indicated that there are many unresolved issues and questions outstanding in the North American debate despite the volume of research activity over the past thirty years.

Indeed, it seems as if we are dealing with such a complex phenomenon, or set of complex phenomena, that the more research there is, the more lines of enquiry and definition are opened up. The thirty years of American research activity are particularly characterised by the meto-
dological hegemony of one founding father, Allen Tough, and by a rationalistic, time-segmented, project-based and quantitatively defined series of related concepts such as 'learning projects' and 'learning episodes'. In the 1980s, the work moved on, in ways we find attractive, to examine (or at least to ask questions about) the self-directed learning of adults with limited educational qualifications, women, ethnic minorities, older adults and to propose other, less rationalistic and planned, modes of self-directed learning activity. Is the propensity to self-directed learning a personality characteristic or an environmentally-determined circumstance, or both? Does not the examination of adult self-directed learning have to begin in the lifespace inhabited by the individual at a particular time, as Spear and Mocker have argued, because the form of learning activity - the resources used, people consulted, network joined or class enrolled in - will depend upon what is available, or adjacent to, that lifespace? Not so much a choice of options but a lateral and pragmatic movement. Indeed, is the notion of 'choosing to learn' inherently necessary to the phenomenon of adult self-directed learning? One of us has tried to argue elsewhere (Percy et al 1988) that learning among adults in voluntary organisations can empirically be shown to be an extension of, to be continuous with, doing. There is not a moment of deciding what, or how, or from what or from whom to learn. There is an intentional and progressive pursuit of an activity which we - the observers - may argue cannot proceed without learning. But it may not be labelled as 'learning' by the doer - 'learning' may be restrictively perceived to be what occurs in courses and classrooms; it is not here and now. We hope to offer further empirical exploration of these issues in a forthcoming publication (Percy, Burton and Withnall 1995).

These considerations seem relevant to British debates about lifelong learning, about participation rates in formal continuing education provision and about issues such as quality, evaluation and professionalism in continuing education. We do not know much for certain but it seems reasonable to hypothesise from the North American literature that the phenomenon of adult self-directed learning is at least significant in our society. So professional agonising about participation rates and their upward or downward movements, while not unnecessary, needs to be set in context. Participation in classes, courses and programmes may normally be one of a range of learning options available to adults and it may, because of convenience, immediacy, nature or orientation, be the least attractive of options. Or it may not be a question of options at all. We know enough about autodidaxy (as Candy terms it) in the early 19th
century and before to suspect that self-directed learning may come more easily to adults than institutionalised education does. In a sense the development of formal systems of education, legally enforced until a certain age, may have undesirably circumscribed our ways of thinking about adult learning. Indeed, adults, to make the move to participate in formal provision, may normally require added incentives - for example, familiarity with and confidence about group learning, desire for social interaction, or need for institutionally recognised qualifications or accreditation.

But what of quality, successful learning and professionalism? How do we know that self-directed learning is successful and efficient in satisfying adult learning needs and does not mislead, confuse or de-motivate? The answer is that empirically we do not know; there are hints in the North American research literature of frustration among learners, resources not available, intellectual wild-goose chases, misunderstandings and misperceptions. Such occurrences seem very likely to be the case. Life is imperfect; forms of learning closely integrated with life will presumably share the irregularities and uncertainties of ordinary circumstance. Of course, the questions of curriculum quality, success in learning and professionalism in standards are questions belonging to the vocabulary of professional teachers. Curriculum development, delivery and evaluation are aspects of a professional framework, justified by an historically accumulated ideology, within which continuing educators frame their understandings of what they are about. If the framework of meaning were expanded to encompass the whole range of informal, as well as formal, adult learning, the understandings and the ideology would necessarily evolve.

That is a central point. As this publication has maintained consistently, the North American research on self-directed learning is voluminous, intriguing but unfinished; the British research is hardly begun. We have a lack of empirical knowledge. But let us say we did not have that lack and were very well-informed about self directed learning among adults in Britain, what would follow for the formal system of continuing education? Would the latter then be shown to be costly, not relevant, wrong-headed, able to be discarded? Would professional continuing educators prove to be unnecessary? Almost certainly not. The more likely prospect would be that better knowledge would allow the twin phenomena of formal and informal adult learning to complement each other as part of the whole apparatus known as lifelong learning. We would expect perspectives
from the self-directed learning phenomenon - those, for example, of immediacy and the organising circumstance - to reinforce current tendencies in the formal system such as the development of flexible, open and distance learning. We would expect perspectives of evaluation, of new technology, and of flexible learning materials, imported from the formal system, to influence the prevalence, nature and effectiveness of self-directed learning among adults. It would be the professional continuing educator - there would be no other - who would be charged with identifying, harmonising and revising these perspectives and with translating them into an effective future.

Candy rightly reminds us of the notion of the learning society in which education is both continuous and universal, and of the intellectual lineage of that notion through the nineteenth century as far back as John Stuart Mill and the utilitarians. In an educative society, thought Mill, taste, morality and the collective interest would be promoted "not only through formal institutions of education but also through the general social environment, industry, literature and cultural activities." (Candy 1991 78)

Similarly, Candy quotes a UNESCO publication of 1990 which urged that "the learning society . . . involves . . . all groups, associations, institutions and agencies". Moreover:

if a learning society is to be effective, the opportunities provided by it must be accepted and utilized by its citizens. Only autonomous learners can take maximum advantage of such an opportunity so the evolution of a learning society depends on the development of autonomous learning (after Candy 1991 78-79).

The irony is that we might be closer to a learning society in Britain than we know. If we look only at participation rates in formal provision, document and lament fee increases and changes in government financial policy for continuing education, and talk solely about marketing and management of formal programmes and systems then we may be missing the point of lifelong learning. The American evidence and debate on the social phenomenon of self-directed learning among adults are instructive, exciting and compelling. We do not know, because we have not yet properly enquired, how applicable that evidence and that debate is to our society. Only if we wish to enter the next millennium one-eyed as far as lifelong learning is concerned will we continue to remain ignorant.
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association for lifelong learning
Does self-directed learning fit into continuing education practice? In this publication the authors' aim is to bring self-directed learning into the main stream of the continuous learning debate in Britain. Compared to the North American position, self-directed learning is a minor tributary in Britain, perhaps because it remains an 'unknown quantity' compared to formal learning provision. Attempting to rectify this, the authors begin by reviewing the situations in Britain and North America, then move to definitional issues. Learning typologies are discussed prior to a description of Allen Tough's pioneering work. This prompted numerous studies of self-directed learning amongst adults, and three of the many research findings are reviewed. The focus then moves to Britain, and to the research of Stephen Brookfield. The findings of the extensive 1990 NIACE survey into adults' learning and leisure are looked at against Brookfield's work, and other significant outcomes of the survey are pointed up. The place of this means of informal learning is considered within a learning society, the possibilities for continuing educators reflected upon and the necessity for further research strongly urged as an essential contribution to influencing long-term policy and practice.