Measuring Non-Academic Outcomes In Adult Literacy Programs: A Literature Review

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> "Clearly the weight of argument in this publication [*Recognising and validating outcomes of non-accredited learning*] as elsewhere, requires that our judgements of whether assessment systems are 'fit for purpose' should be informed by learners' perceptions of what that means. There is tension, however, in the fact that learners' purposes are likely to be many and various and may differ within a learning group. Furthermore, they may not accord with those of the tutor or managers concerned with quality assurance – or indeed external views as to the purpose of learning and its evaluation." (Greenwood)

This literature review on measuring non-academic outcomes in adult literacy programs is meant to provide information and, possibly, direction for the research team involved in a project to measure non-academic outcomes in learners from community based programs in Ontario. I have gathered over 100 references related to this topic, some of which are very relevant and some of which are only peripherally so. After reading many of these references certain themes stand out, which I will outline here.

Introduction

Is there any doubt that there are non-academic outcomes worth studying? Certainly every study on outcomes in adult education cites a number of non-academic outcomes. It is difficult to isolate the education programming as being the cause of those outcomes. However, there are obviously strong correlations between increased self-confidence and hopefulness, and a return to further education as an adult. The following four studies (one each from the US and UK, and two from Canada) are quite different but give a flavour of what many adult education researchers have discovered about outcomes.

Hal Beder's study from 1999 is often cited and does a survey of studies on the outcomes and impacts of adult education programs in the US since the late '60s. He looked at 115 studies and chose 23 as being "credible." He makes the following conclusions from his review of the research:

"1. In general, it is likely that participants in adult literacy education receive gains in employment.
2. In general, participants in adult literacy education believe their jobs improve over time. However, there is insufficient evidence to conclude that participation in adult literacy education causes job improvement.
3. In general, it is likely that participation in adult literacy education results in earnings gain.

4. In general, adult literacy education has a positive influence on participants' continued education.

5. Although the evidence suggests that participants in welfare-sponsored (e.g. JOBS Program) adult literacy education do experience a reduction in welfare dependence, the evidence is inconclusive as to whether adult literacy education in general reduces welfare dependence for participants.

6. Learners perceive that participation in adult literacy education improves their skills in reading, writing, and mathematics.

7. As measured by tests, the evidence is insufficient to determine whether or not participants in adult literacy education gain in basic skills.

8. In general, adult literacy education provides gains in GED acquisition for participants entering at the adult secondary (ASE) level.

9. Participation in adult literacy has a positive impact on learners' self-image.

10. According to learners' self-reports, participation in adult literacy education has a positive impact on parents' involvement in their children's education.

11. Learners perceive that their personal goals are achieved through participation in adult literacy education." (Beder)

It should be noted that the only unequivocal statement is the one he makes about self-image. I include all of the outcomes he listed to illustrate how difficult it has been for the field to measure outcomes at all, whether non-academic or academic.

In a study conducted at Bow Valley College in Alberta, Canada, *A Study of Potential Incremental Success Factors Among Basic Education and Employment Preparation Students*, 50 students were surveyed which elicited the following potential success factors:

- "the ability to listen to help understanding and learning,
- a positive attitude to learning,
- the ability to act on their own,
- the ability to take part in activities with others,
- the ability to care for others in their lives,
- punctuality and attendance,
- grooming and personal hygiene,
- cultural tolerance and gender acceptance,
- work ethic and perseverance,
- coping skills and anger management, and
- improved social skills and use of appropriate language." (Holbrow)

Study authors noted that the Generalized Expectancy for Success Scale (GESS) used in the study is probably not a very good measuring tool with basic education students because of its language level and that a large scale, longitudinal study would best capture this kind of data.

In a study from the Department for Education and Skills in the UK researchers interviewed over 1900 Local Education Authority (LEA) Adult and Community learners (equivalent to school board adult programs here) and noted: "Benefits were mainly non-economic such as improved mental and emotional well being (59% overall, higher among older learners) and confidence (58% overall, higher among younger learners). Just over 40% of LEA learners experienced benefits to their social life, their ability to communicate and to their physical well being." (Morrell).

In the recent study by Trent Valley Literacy Association, *What goes on here? Practitioners study the practitioner-student relationship* (Trent Valley Literacy Association) the authors (all practitioner-researchers) state: "We focus on encouraging our students to realize that learning is possible, and more than that, that she can be successful at it. The journey we take together has steps along the way. We view these steps as progress. We are defining the term broadly. If we look for academic outcomes as the only criteria for determining if a session has been productive, within the dynamic of the student/practitioner relationship, it is too limiting. As the only indicators of success, academic outcomes do not sit comfortably." They go on to list evidence they noted of students' progress: students' vocabulary starts to change; students' body language changes; students begin to work independently; students are not embarrassed by their mistakes; students actively help others; students indicate they want to learn more; students apply things learned academically to real life; and, students know now they have the power to implement change in their lives.

These four studies may have used different methodology but discovered many of the same non-academic outcomes associated with adult education. In this paper I will explore these themes and others that emerge from the research reviewed and I will draw some conclusions and make some recommendations.

Life and Learning are Complex for Adults

What is known about how people progress in adult literacy programs is known by many educators and learners but hard to measure. This prompts many researchers to look at this area and try to articulate what they find. However, researchers are challenged by the difficulty of isolating variables in adult learning and showing direct causal relationships between education programs and non-academic progress. The complexity of how adults learn and the systems and individual attributes that promote that learning are very hard to determine. "Whether or not measurement of soft learning progress is possible *in principle*, it is often very difficult *in practice*. We can identify the promotion of self-confidence as a goal, and go some way towards forming judgements about learners' self-confidence at the end of the course. But there is nevertheless plenty of hard work to be done on specifying exactly what it is we are assessing, and exactly how we are in a position to verify that a learners' self confidence is as she or her tutor says it is." (Greenwood).

In a long term study by the National Center for the Study of Adult Learning and Literacy (NCSALL) on how adults experience learning D'Amico et al discovered three different types of learners which they described this way: "Instrumental knowers tend toward a concrete, external, and transactive orientation to the world; Socializing knowers identify self through its relation to other persons or ideas; and Self-Authoring knowers take responsibility for and ownership of their own internal authority." (D'Amico). They based their work on a constructive developmental perspective and cited these two assumptions: that growth and development are lifelong processes and do not end in adolescence and that "growth processes are gradual and in the direction of greater complexity." They believe that as one's life becomes more complex one needs a more complex meaning system to make sense of it. However, they are clear in stating that a more complex meaning system does not make one a better person.

Viewing literacy as complex set of practices is not very popular by governments. However, the Scottish Executive (the devolved government of Scotland) has embraced the New Literacies Studies' idea of literacy as a (see section on theory below) socially situated, non-linear set of practices. In their publication *Literacies in the Community* they list a number of principles and describe them this way: "The Principles are based on an understanding of literacy and numeracy as complex capabilities rather than as a single set of skills." (Scottish Executive, <u>Literacies in the Community: Resources for Practitioners and Managers</u>).

Learning is complex and difficult for researchers to disentangle from the many variables affecting an individual's life. Life is complex with many different self-evolving systems interacting. Personal growth is believed to be a process that takes us towards a more complex understanding of our world and ourselves. Much of the literature I reviewed acknowledged how complex learning is and how difficult that makes our studying of it. It also makes it difficult to develop policy and pedagogy that reflects this complexity. As practitioners we can begin, as Grace Malicky notes in her study, "…to recognize the complexity of the lives of adult literacy learners in order to make it possible for adults to continue in literacy programs." (Malicky).

What Learners Say

What do learners say about their own progress in adult literacy? Most of the research about learners' outcomes in adult literacy programs is based on learners' responses to surveys and/or interviews. In other words these studies documented self-reported changes in learners' lives. Some studies also included practitioner's views of the changes in learners' lives. All of the studies showed that adults have very complex lives and that self-image is central to people's progress in learning. The following studies give a flavour of what learners reported about the effects of education on their lives.

In 1996 Grace Malicky and Charles Norman interviewed 94 adults on entry to a program and 69 in follow-up interviews over a 3-year period. The authors mention a number of variables that they see impacting on learners' lives. These included: poverty, violence, time pressures and stress and financial pressures. (Malicky). The authors noted a number of changes in participants after attending an adult literacy program: increased confidence, increased independence and standing up for oneself. They also noted that many of the learners talked about going through a cycle where they felt good about themselves and then got frustrated and depressed and then felt good again.

Learners in Scotland took part in a consultation about adult literacy education (Scottish Executive, Listening to Learners: Consultation with Learners About Adult Literacy Education in Scotland) in 2001 and the subsequent report makes interesting reading. Only part of the consultation was on learners' views of progress and only a small section on non-academic outcomes. Not surprisingly, increased confidence was tied closely to other ways of progressing. "Closely bound up with progress in terms of application of skills is increasing confidence. Some learners talked about going to shops on their own for the first time, because of the increased confidence the class had given them. Others talked about having the confidence to apply for jobs…For many people, building skills and confidence go together. *'Because when you learn stuff you are getting to use it all the time and when you really need it, it's there. You're not so worried any more, your confidence is built up and you're more able to use the things that you have learned.' [Glasgow, Other Adult Learner].*" This study also found that learners saw tutors (tutors in the UK are often paid staff equivalent to practitioners in Canada) as crucial in the process of "reviewing and affirming progress."

Proof Positive, is a UK study done with 169 learners in non-accredited education (what we would call 'general interest' courses) in college and community settings. Although not focused on adult literacy (some basic skills courses were included) the study looked at learners' views of learning and its benefits. "Learners reveal a mixed picture of what is important to them including life-enhancing personal and social benefits as well as more instrumental, specific skills and knowledge. There is a danger that systems, shaped by funding and audit requirements, will eventually privilege those outcomes that lend themselves to measurement. A mixed economy is needed, and one that affords parity of esteem to both qualitative and quantitative evidence." (Turner).

A group of reports from the Department for Education and Skills (DfES) in England looked at various aspects of basic skills training. *Evaluating Outcomes for Learners in Pathfinder Areas* examined motivations and benefits for 415 learners. They found that "Before doing the training the difficulty mentioned by the greatest number of learners was lack of self-confidence (72% of all learners thought this was a problem for them). Of those who thought it was a problem, 89% considered that the training helped a great deal or a fair amount to overcome this problem." (Nelson Sofres). Ninety percent of learners in this study also said that "the training made them feel more positive about

future training…and…it was likely to fairly likely that they would do some more training in the next few years."

In doing research on progress with learners in the UK Ward used a 'journey' metaphor to talk about learning that was "particularly effective in unlocking the capacity of learners to discuss their views on the pace of their learning and progress." Ward says: "The work also developed an innovatory method of including learners in research. A metaphor relating to travelling on a learning journey was used to facilitate discussion between learners and researchers. The metaphor approach aimed to generate a shared language and conceptual framework for the research interviews in order to provide more common starting points for the researchers and learners, and to develop the skills needed for critical enquiry, reflection and analysis." (Ward). Learners on this project worked with the researchers and came up with the following key points:

- "In exploring why people set out on their learning journeys we found that most of the adult learners had been considering joining classes for some time but had been inhibited for different reasons, including fear and personal circumstances.

- Diverse aims and aspirations were identified. These were usually expressed in terms of real life activities, although a small number talked about wanting to improve their spelling. They included improving employment performance or prospects, supporting children, progression to higher-level study and building confidence.

- Only a third of the learners interviewed had been closely involved in planning their learning. There was most satisfaction with progress where learners were actively engaged with tutors in the processes of planning content and recognising learning gain.

- The journey metaphor, with its language of travel and movement, was particularly effective in unlocking the capacity of learners to discuss their views on the pace of their learning and progress. This is a fundamental question but one that we found was rarely discussed with learners in practice.

- Learning gain was defined in different ways. Most learners described learning gain in terms of what they could now do in their lives while a smaller number referred only to the technical skills they had acquired.

- Perhaps the most profound change for most learners interviewed was a massive enhancement of their confidence and self-esteem. This increased confidence had a significant impact on their learning achievements, attitudes to learning, aims and aspirations, ability to do real life activities and their social interactions with other people.

- Learners identified different ways of knowing how they had learned and expressed preferences for different levels of involvement in assessing their own achievements. They related progress to their ability to perform in real life contexts.

- Peer support was a significant factor in learning and achievement as the learners placed a great deal of value on collaborative peer assessment.

- Learners discussed how they used each other's skills and knowledge to support and validate their learning and to share successes, and identified the impact of being valued as an assessor on their own self-esteem and confidence." (Ward)

This list of findings covers a broad range of issues uncovered by many other researchers reviewed in this report. This report, *Learning journeys: learners' voices; learners' views on progress and achievement in literacy and numeracy,* is key for anyone interested in examining recent research about academic and non-academic outcomes.

The Call for Further Research

Another theme in the literature is the call for further research, especially connecting program evaluation (looking at approach, environment, culture, etc.) with research on outcomes. Beder noted in his comprehensive study (Beder) that there are a number of challenges to measuring outcomes (academic and non-academic): the lack of agreement about what literacy is or can do ("…since there are a multiplicity of variables that affect whether a person who completes adult literacy instruction will gain employment, and since many have to do with the state of the economy and the life situation of the individual, can adult literacy education reasonably be held accountable for its graduates' employment status?"); measurement methodology is questionable ("…detailed qualitative studies such as those conducted by Fingeret and Danin (1991) and Fingeret (1985) show that learners do report literacy gains that are important to their lives, whereas studies that use standardized tests such as the TABE tend to show small, and in some cases no, gains."); capacity of programs to do outcomes assessments and/or meet goals for outcomes and capacity of governments to fund these studies; and, what standards or against which other programs/learners should we judge program performance. After listing all of these challenges, Beder goes on to recommend national standards, a longitudinal study and more rigourous state outcomes studies.

Other researchers are less inclined to follow Beder's advice. Greenwood et al (Greenwood) recommend an action research approach that engages learners and practitioners in doing qualitative studies of outcomes. This is also supported by Fingeret in the US (H. A. Fingeret). Whatever the methodology of the study almost every report asks for further research and for funding to build the capacity of literacy programs to take on the research.

What Non-academic Outcomes are Mentioned in the Literature?

▪ **Self-confidence**

The most commonly mentioned non-academic outcome in any of these studies is self-confidence, also called self-determination, self-direction, self-esteem, agency, choice, control, independence and standing up for oneself. As Beder said it in his review of

literature on adult education outcomes: "Participation in adult literacy has a positive impact on learners' self-image."(Beder). This is reiterated again and again in every study I have read. Not a lot of the literature explores how this self-confidence is developed or what aspects of the literacy program learners identify as promoting their self-confidence. However, the literature is clear that self-confidence was crucial to learning and may contribute to other positive changes in learners' lives. One study said it this way: "*Learning for Life* [title of study] places self-esteem in its proper perspective. It is not a mere by-product of adult basic and literacy education; it is the sparkplug that ignites self-efficacy and social action."(Royce).

Almost every research study cited in this section mentions self-confidence as the key non-academic outcome of adult education. In *Dancing in the Dark* Niks and her colleagues use the term agency and describes it this way: "The five sub-categories of agency: self-confidence, control, choice, awareness and reflection, appear to be factors affecting how our research participants learn. It is not so much their education as it is life experiences that affect their futures. These life experiences influence the aspects and degree of agency that people will have and therefore how they will deal with their world. Agency, like literacy, is not a skill that is measured simply by whether you have it or not. Some people have some kinds of agency, some of the time, in some circumstances." (Niks). Niks et al talk about agency as affecting how people learn and not as an outcome of learning but the study offers a useful way of looking at self-confidence as part of a larger construct called agency.

In a longitudinal study entitled *Changes In Learners' Lives One Year After Enrollment In Literacy Programs: An analysis from the Longitudinal Study of Adult Literacy Participants in Tennessee* the authors focused on the changes in 199 participants in adult literacy programs from 1991 to 1995. "The changes these adults reported one year after enrollment included a higher rate of employment, increased self-esteem, increased involvement in community organizations, and increases in some uses of literacy." (Bingman). The authors state: "The other positive changes occurring in students' lives, especially those outside the classroom, generally are not assessed, perhaps because they are difficult to track and to measure." They used the Rosenberg Self-Esteem Scale to measure self-esteem (it rose from 3.52 to 3.66 on a 5-point scale).

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future training…and…it was likely to fairly likely that they would do some more training in the next few years."

- **Independence**

Learners report over and over again that attending a literacy program helped them to feel more independent. They mentioned things like going to the shops on their own(Scottish Executive, <u>Listening to Learners: Consultation with Learners About Adult Literacy Education in Scotland</u>), living on their own (V. Purcell-Gates, and Sophie Degener, Erik Jacobson, & Marta Soler), acting on their own (Holbrow) and making changes in their personal lives that supported their independence. One of the principles of learning put out by the Scottish Executive is "promoting self-determination." (Scottish Executive, <u>Literacies in the Community: Resources for Practitioners and Managers</u>). Whether we describe this quality as independence, self-determination or agency, the literature shows that it is connected in very profound ways with the ability to learn and learners' sense of achievement.

The *Learning for Life* study was conducted with 70 students who attended programs in Pennsylvania between 1968 and 2000. One of the only longitudinal studies, this study concluded: "Having acquired basic skills and self-esteem, participants strove for practical goals that included higher education and vocational training, secure employment and enhanced financial status. The educational attainments of participants' children as well as successful adult learners' satisfaction with their lives, social awareness and community involvement reflect personal impacts that have relevance for all of us as educators and as a nation." (Royce). This study also found that 85% of participants enrolled in programs because of a need for self-sufficiency, the desire to set an example, self-improvement and self-actualization.

Malicky et al did a small study with 5 students in Alberta that looked at impacts through the lens of the New Literacy Studies (see section on theory below). The students in this study described the impacts on them in empowerment terms. "The adults demonstrated both acceptance of and resistance to the dominant discourse on literacy. They were members of social networks both within and outside the literacy program. Consistent with expectations for community- based programs, empowerment was a predominant theme but tended to be more at all individual than a public, social level." The authors go on to recommend: "The individual nature of empowerment reflects a need for individuals to move from being objects of the actions of other people to subjects creating their own lives before they can assist in the larger process of change." (Malicky and Norman).

- **Attitude Change**

Changes in people's attitudes were another non-academic outcome of adult education. Education is shown to affect the views and values of people about diversity, gender and race. For instance, the study from Bow Valley College shows a shift in people's attitudes about other cultures and genders, and in their work ethic. (Holbrow)

A study by the Department for Education and Skills (DfES) in the UK looked at attitude changes as a result of adult learning courses. They used "attitude scales" on over 8000 people and found that "adult learning has beneficial effects on attitude change." (Preston). In particular the author states "Adult education is implicated in a movement towards more 'open minded' perspectives on race and authority, but not usually with more ideological shifts in position. Notably, it helps prevent individuals from moving towards an entrenched racist/authoritarian position."

Well known literacy researcher and practitioner Arlene Fingeret led a study called *LIVES OF CHANGE: An Ethnographic Evaluation of Two Learner Centred Literacy Programs* in which she and her colleagues outlined the following impacts: "…both programs ask students to participate in a learner centred approach with writing as its focus; as a result, many of their impacts are similar, arising from the struggles of participation in learner centred education and reflecting the extensive use of writing. Learners in both programs have improved their reading and writing abilities, and attest to positive changes in attitudes. Learners use their new abilities in their lives, often describing new literacy practices in areas such as work and shopping. In addition, participation leads to culture-related impacts, including changes in the culture of families and gender-related changes in behavior." (H. A. Fingeret, et al).

It's not clear if the attitude changes documented in these studies are a result of specific educational interventions about these issues or are a natural by-product of more learning and being part of a diverse learning group.

- **Relationship and Community Building**

Learners' increased confidence enabled them to take part in more activities in the literacy program thus building their relationships with others and helping to create a sense of community. Many studies mentioned how learners became more involved in community/civic activities as a result of their attendance at literacy programs. Also a number of studies mentioned learners' increased ability to help and care for each other. (Trent Valley Literacy Association; Holbrow). There is little discussion of how a literacy program's own community and its connections to its local community helps to promote greater community involvement for learners.

In a study by Dr. Allen Manning on positive outcomes of literacy programs he affirmed that attending literacy programs lessens isolation in adults: "A large proportion of those

who lack basic skills are embarrassed to admit it. For example, more than 67% of these adults who are married never tell their spouses about their literacy problems. The result is social isolation that prevents many people from making progress. Evidence shows …participation in literacy programs leads to a significant increase in participation in other community organizations. Literacy programs are also a steppingstone to participation in higher-level educational programs."(Manning)

In a study in the UK on community-based literacy programs Hannon et al noted that "Both tutors and students talked of concepts such as informality, friendships, empathy, being 'looked after' in relation to learning. While these qualities did not preclude the curriculum they were working to, or raising students' expectations of what they could achieve, tutors were able to incorporate a wider view of the curriculum and measuring achievement, often developing long-term relationships with students." (Hannon)

In *Proof Positive* the author noted the importance of learning in community: "Learners conveyed a strong sense of the importance of learning with others. There were many comments on the support, honesty, feedback and stimulation they received from their peers: 'it's good to have the chance to learn from others, to give and take' and 'the group is like a mirror – we learn from each other's mistakes and responses'." (Turner)

A number of studies mentioned the importance of the teacher's relationship to their own learning and to the learner. (Connon Unda; Scottish Executive, Listening to Learners: Consultation with Learners About Adult Literacy Education in Scotland; Trent Valley Literacy Association). The BEST program was a program to train worker instructors to teach literacy in workplace settings. "The use of worker instructors is a key structural element in attaining the broad project goal of worker empowerment. Both instructors and program participants share a common workplace and membership in the local union." The study looked at how worker instructors had become empowered through their own training. The impacts of the training were similar to those reported by adult literacy learners including a supportive learning community and improved or changing relationships at home and at work. Connon Unda states: "In BEST, we believe that the instructor's conscious engagement in their development is an integral aspect of the capacity to facilitate the growth of fellow workers."

Proof Positive also notes the importance of the role of the tutor (practitioner): "The role of tutors was critical, particularly their skills in observation, communication and informal assessment. Learners saw them as the key source of external information about progress and although a range of assessment methods was mentioned, the main approaches were informal observation and interaction. Feedback to learners was largely verbal. Importantly to learners, this was generally seen as supportive and part of the learning process." (Turner). This was reiterated by the Scottish study which interviewed learners about their experience of education: "There was most satisfaction with progress where

learners were actively engaged with tutors in the processes of planning content and recognising learning gain."(Ward).

There is a broad range of literature that speaks to the issue of teaching excellence and the impact teachers have on learners. Connon Unda's study directly relates to the effect of instructors' learning on adult literacy learners. Other studies report that learners see instructors as key to their learning and many studies include in their recommendations calls for more professional development. Parker Palmer, in his book *The Courage to Teach*, says "Who is the self that teaches? How does the quality of my selfhood form-- or deform--the way I relate to my students, my subject, my colleagues, my world? How can educational institutions sustain and deepen the selfhood from which good teaching comes?" (Palmer).

Relationships are key to learners and learning, as many of these studies attest to. Barton et al have issued a preliminary report on their study about the lives of adult learners and it is clear from their list of initial findings that relationships among learners, and between learners and teachers, matter to the overall success of adult education programs:

- "Relationships matter in learning, including teacher/student and student/student relationships, also the networks of support learners are part of.
- Learning environments often offer structure and stability in learners' lives.
- Being in control is a key motivation for learning.
- Health is often a barrier to learning, both physical and mental health.
- The need to recognise small gains in LLN and the wider benefits to the learners.
- There is a complex relationship between teaching and learning: learners don't learn what teachers teach." (Barton)

Theories such as the new literacy studies, social capital and situated learning (see below) may help us to understand the centrality of community and relationship building to adult learning. How this will be translated into program building will be an important question for adult educators in the future.

▪ **Learning to Learn**

Bossort et al conducted a study called *Learning to Learn* with 44 students from ABE programs in B.C. and concluded that: "Participants reported many instances of having learned concrete skills that they could apply and find helpful and practical. Even more importantly, however, is that people have **learned that they have learned.** They now have the confidence that they can keep on learning on all kinds of levels throughout their lives." (Bossort). The authors associated the reported impacts with an

economic benefit: "One of these implications is the economic benefit to society of ABE in facilitating healthier personal and family lifestyles and greater and more informed participation in social relationships of all kinds." Beder echoes this idea when he states: "In general, adult literacy education has a positive influence on participants' continued education." (Beder). This may be seen as an academic outcome of adult literacy programming but it requires a critical and reflective process on the part of a learner to understand how he or she learns best and that does not necessarily require an ability to read or write text.

'Thinking about thinking' or metacognition (thinking which involves active control over learning processes such as planning how to approach a learning activity, knowing when you understand something and when you don't, and evaluating progress in learning) is a learned ability that literacy programs recognize as important but are often unclear about how to encourage. Silja Kallenbach has written a major study about using multiple intelligences theory in adult literacy and recommends: "… improvement in students' sense of self-efficacy or metacognitive skills could be considered legitimate secondary outcomes, joining such criteria as registering to vote, reading to one's children, and getting off welfare." (Kallenbach). Her approach emphasizes working with learners to determine their learning strengths and acknowledge their multiple ways of learning and knowing. Perhaps her work can help us understand how to develop the metacognitive capacities of learners.

Models for Practice

This section will look at what has been recommended as ways to assess 'soft outcomes' or non-academic outcomes. Certainly one of the strongest themes in assessment in adult education has been portfolio assessment. This process entails collecting a learner's work according to a set of criteria and then having the learner and teacher/practitioner review the work in order to assess the progress and the process of learning. (H. A. Fingeret; Macdonald). In *It Belongs To Me: A Guide to Portfolio Assessment in Adult Education Programs* Fingeret says: "Portfolio assessment is practical and useful, according to the practitioners and students who participated in this project. It redefines the scope of assessment, and provides a way to look at personal development as well as academic skill growth as reflected in new literacy practices." Fingeret did report a challenge for programs where volunteers and staff had not had enough professional development in using portfolio assessment. It is also interesting to note that she uses portfolios to examine the perceptions that learners have about how they learn and their theories of literacy.

Another resource in assessment is the "progress profile" a method originally developed in England and taken on by literacy practitioners in Alberta. (ALBSU). *Progress profile : measuring progress in literacy development* is put out by the Literacy Coordinators of Alberta. It is a formative assessment process but uses a "Progress Summary" to review

progress and reassess goals and learning plans. It is a learner-centred process that "recognizes that learning occurs in a range of areas: cognitive (e.g., how students read), personal (e.g., self-esteem), and social (e.g., community activities)." (Norton).

The Department for Education and Employment in England is also struggling with how to measure 'soft outcomes' in their employment programs. They have published a report, *Measuring Soft Outcomes And Distance Travelled: A Review Of Current Practice* (S. Dewson, Jude Eccles, Nii Djan Tackey and Annabel Jackson) that recommends that "the development of one model to measure soft outcomes and distance traveled is unlikely" and that "there is a clear need for guidance" in assessing soft outcomes. They have developed a guide (S. Dewson, Judith Eccles, Nii Djan Tackey, Annabel Jackson) that gives examples of a number of assessment methods that may be useful in literacy. They caution: "It is important to understand a client's external situation in order to gain a better understanding of the context in which progress is being made and the factors that are most likely to be attributable to the project." The methods include self-assessment computer programs, portfolio assessment, interviews/surveys, sliding scales and they make recommendations about how to present findings. They do not advocate a 'one system fits all' approach because each program and person is so different.

In a research project conducted by Beth Bingman in the US, she and her co-researchers had to reach agreement about language: "To establish a common language for outcomes assessment across the sites, the research team and program participants then developed what they call the "Inputs to Impacts Grid." (Focus on Basics). This grid shows inputs, process, outputs and outcomes for students and programs. What is interesting here is that inputs are weighted the same as outcomes. If moving on to employment is a desired outcome for the program, what are the inputs available to help them attain that outcome?

Guy Ewing, in an unpublished paper, has suggested a similar grid that has two sets of three columns: the first is impacts on learners and lists indicators and examples; and the second is impact on communities with indicators and examples. Under 'impacts on learners' he lists learning outcomes, impacts on independence in daily life, impacts on self-confidence and impacts at work, home and in the community. (Ewing). He states in the paper: "Using a broad-ranging list of impacts like this does not negate the potential use of demonstrations and tests for the articulation of skills required in an LBS [Ontario Literacy and Basic Skills program] program. This kind of articulation could be useful in achieving recognition, outside of the LBS system, for what some LBS learners achieve." He suggests that a full list of impacts be determined through a consultation with the field.

Aboriginal educator Priscilla George (Ningwakwe) has developed a holistic approach to adult literacy that responds to the needs of aboriginal learners who may have experienced trauma in their lives. She states: "…the holistic approach to literacy is

recognition and interpretation of the symbols and messages sent to us through the spirit, heart, body and mind, then acting on those messages to improve the quality of one's life." (George). She backs up her approach with studies into emotional intelligence, multiple intelligences and the effect of emotions on the brain. She goes on to say: "Aboriginal literacy practitioners continually seek ways to nurture the spirit, heart, mind and body - for themselves, and for the learner. They provide a welcoming environment (they do not replicate the educational institutions, the system that did not work in the first place), and treat the learner as a whole person, an individual with skills and strengths that he/she may not yet have recognized. Practitioners develop an "invitational approach to literacy" - a phrase coined by William Purkey and John Novak (1984), "the process by which people are cordially summoned to realize their relatively boundless potential"."

Greenwood and Vorhhaus in the UK have come up with a framework of good practice for *Recognizing and validating outcomes of non-accredited learning* (Greenwood) which listed nine elements which they point out were not always necessary nor always enough: identification of learning objectives; assessment of learners; negotiation of learning objectives with learners; learner self-assessment; on-going formative assessment; progression guidance (where to go next); record of achievement; moderation of assessment (among practitioners); and celebration of achievement. In a longer report on the same project Greenwood et al suggest there is"…plenty of hard work to be done on specifying exactly what it is we are assessing, and exactly how we are in a position to verify that a learners' self confidence is as she or her tutor says it is." (Greenwood).

A study in England, *The Literacy and Social Inclusion Project*, "has identified four cross-cutting themes in motivating and improving the literacy skills of at-risk individuals. These are
1. Engaging individuals and building relationships
2. Meeting needs and interests
3. Providing book and reading experiences
4. Working in partnership" (Bird)

Bird emphasizes the need for community and welcoming venues for adult learning and points to the need to acknowledge the holistic needs of adult learners: "Building the skills of at-risk adults means responding to what interests and motivates people, providing enjoyable learning experiences in local venues where they feel comfortable, and encouraging further participation in learning. 'Literacy support' is needed that is wider than skills learning; adults may need help initially with difficult issues they face such as homelessness or debt. This means providing opportunities to help them develop appropriate language and communication skills, as well as support for reading and writing. This may require one-to-one help." (Bird)

Equipped for the Future (EFF) is a large American strategy to create a national accountability framework for adult literacy. There are many resources online for all aspects of the program (see King for an online comprehensive resource for using the EFF framework). The approach is based on the following principles:

- "Learning itself is a purposeful, goal-directed activity. An ongoing goal setting process is integral to effective learning.
- Purposeful and transparent learning builds on learners' prior knowledge and experiences to construct new knowledge.
- Purposeful and transparent learning also means that learners monitor and assess their own progress. Metacognitive strategies help them to be mindful of what is being learned and what good performance looks like." (King)

The standards wheel is at the centre of the system. These standards are used with the three roles they have chosen for learners: parents/family members, citizens/community members, and workers. This is a very comprehensive system with a plethora of resources available online. It takes into account non-academic outcomes but within a pre-determined framework. They look at the teaching/learning cycle in this way:

"1. Determine individual goals and purposes.
2. Identify standards that would help learners achieve their goals.
3. Find out what learners already know and can do.
4. In a group situation, come to consensus on a shared priority (real life concern) that focuses the learning activity.
5. Design a learning activity to address the shared priority (real life concern) of the learners.
6. Develop a plan to capture evidence and report learning.
7. Carry out the learning activity.
8. Observe, document, evaluate, and report evidence of performance on the standard.
9. Reflect on how what was learned is transferable to other real life situations.
10. Determine next steps to help learners meet their goals." (King)

This system is being taken up by hundreds of programs in the US but there has been some controversy about the time and resources required to use the system (see previous section on matching resources with assessment needs).

In the report *Learning outcomes in a nonaccredited curriculum: a view from the adult education sector* John Vorhaus makes the following statements and recommendations regarding assessment:

"1. When devising methods for recording learning, it is necessary to keep in mind the distinguishing characteristics of the non-schedule 2 curriculum and student cohort.

2. Some of the most important distinguishing characteristics of the non-schedule 2 student cohort are: low levels of confidence and self esteem; negative experience of formal education; classes comprising students of mixed ability/experience; voluntary attendance; wide range of future aims and ambitions.

3. Many non-schedule 2 learning outcomes are difficult to verify; and they are more numerous and varied than is commonly supposed.

4. Colleges (and funders) should devise means of recording students' learning which are sensitive to the numerous and varied paths and purposes that the students are pursuing.

5. We should replace the single category of 'Progression' with the three-fold categorisation – 'Progression', 'Development', 'Equilibrium' – so as to acknowledge the importantly different ways in which students pursue adult education.

6. Evidence of retention and attendance is largely irrelevant as evidence of learning.

7. The appropriate standard of evidence of students' learning is better described as 'detailed' and 'individual' rather than 'robust' and rigorous'.

8. A primary means for tutors and colleges gathering evidence of learning outcomes is student assessment; this should be formative rather than summative." (Vorhaus)

Many people have many ideas about how to assess adult learners' progress and how to set up literacy programs, and the pressure from funders to be more accountable has resulted in studies and systems that offer some promise. The initial problem still remains: without appropriate resources adult literacy programs are limited in their ability to provide in-depth assessments of learners.

What Theory Can Teach Us

I have chosen the following theories to outline because they emerged as theories that are interwoven with the studies discussed above. There are many other theories that may be relevant and enlightening and might be explored by practitioners.

Social Capital Theory

Tom Schuller writes: "Human capital is defined by the OECD as "the knowledge, skills and competences and other attributes embodied in individuals that are relevant to economic activity."(T. Schuller). He goes on to describe social capital as "…*networks*, *norms* and *trust*, and the way these allow agents and institutions to be *more effective in achieving common objectives*. The most common measures of social capital look at participation in various forms of civic engagement, such as membership of voluntary associations, churches or political parties, or at levels of expressed trust in other people." Social capital is seen as integral to healthy, productive societies and thus, is of concern to governments.

Part of social capital is informal learning, such as that done in community organizations. Ian Falk discusses how 'knowledge resources' and 'identity resources' are required for informal learning: "Knowledge resources certainly include those so-called 'human capital' literacy elements of basic skills, but it is much more than that. Quality knowledge also includes knowing the 'who, when, where, why and how' of the situation in hand. Identity resources are those resources that shape our identities as we learn to adapt to change, or take on new roles and tasks. Unless we see ourselves 'in the new role' that our learning, education and training knowledge provides us with, we are unlikely to use that new knowledge." (Falk).

In their report *Modelling And Measuring The Wider Benefits Of Learning: An Initial Synthesis* Schuller et al look at the problems with establishing causal relationships between education and outcomes or impacts. The recommend a longer, deeper look at education and its relationships with social cohesion and quality of life. "Values and attitudes formed through learning are likely to have important effects in adult life across all the social domains including health behaviour, crime, parenting and civic participation. They are also fundamental to social cohesion." (T. e. a. Schuller). Social cohesion does not mean social compliance here; it refers to the notion in social capital theory that membership in a community gives one a sense of belonging and meaning.

Social capital theory values the kind of non-academic outcomes that literacy learners report. Indeed, social capital theorists feel that networks of informal learning are crucial to the ability of people to imagine themselves as lifelong learners and should be supported by governments intent on developing learning cultures, social cohesion and more educated populations.

Theories about Measuring Achievement in Education

> "We start out by making the important measurable, and end up making only the measurable important."(Wiliam).

Dylan Wiliam outlines a number of issues in educational assessment: "…things that can be measured easily come to be regarded as more important than those that cannot."; educators will 'teach to the test' if required to reach certain 'performance indicators'; "the clearer you are about what you want, the more likely you are to get it, but the less likely it is to mean anything."

In the following anecdote Merrifield shows how important what we measure is and how measurement doesn't necessarily capture ability.

> Measures of all kinds are used to sort people into categories, reward some and punish others. Some do not do what they are intended to. Sticht describes what happened when the military miscalibrated its aptitude battery in the period 1976-1980, thus permitting "over 300,000 lower-aptitude people who would have

been rejected into the military without the services being aware that they were getting 'functionally illiterate' personnel" (Sticht, 1988, p. 69). What happened? Nothing. Data shows that in terms of completing military training, and receiving satisfactory job ratings, 80% of those 300,000 "low aptitude" people performed 80-95% as well as average-aptitude personnel. As Sticht remarks, "These data suggest that great caution ought to be exercised in declaring people functionally incompetent because of their performance on literacy or other types of aptitude tests."" (Merrifield)

All of the authors I surveyed touched on similar themes:
- Assessment of learners and evaluation of program performance should be detached from one another (Derrick, "Making the Grade: Assessment and Achievement in Adult Literacy, Numeracy and Language")
- Transfer of skills from one setting to another is problematic and requires the ability to "scaffold identities across school and life worlds" (T. Schuller). See also: (Derrick, "Not Seeing the Forest for the Trees? Measuring Achievement and Attainment in Adult Literacy, Numeracy and Language") and (Bransford)
- "Preserving the myth that judgements of educational attainment have some kind of external, scientifically verified status as objective truth is unsustainable…In reality, giving up on the search for 'the answer' that will fix the system's problems is likely to be the first step towards a more sustainable approach to measuring educational standards…. "(Skidmore 2003) quoted in (Derrick, "Not Seeing the Forest for the Trees? Measuring Achievement and Attainment in Adult Literacy, Numeracy and Language"; Merrifield)
- Formative assessment is preferable to summative assessment especially for adults who may have had negative past experiences with summative assessment (tests of knowledge learned).
- "The 'wider benefits of learning' are recognized and evaluated." (Derrick, "Not Seeing the Forest for the Trees? Measuring Achievement and Attainment in Adult Literacy, Numeracy and Language")
- Using multiple and varied assessment methods is crucial.

Merrifield says that standardized tests may have a role but cautions that they do not necessarily capture what we or policy makers may want to know about how learners have progressed: "The only thing we can be sure we are measuring with standardized tests is the ability to perform on standardized tests. This is not completely worthless – anyone wanting a credential like the GED, in order to enter further education, needs to be able to perform well on tests. But we should not assume that they have much to do with how people engage in literacy in everyday life." (Merrifield)

These are just a few of the insights and approaches advocated by these authors. The approaches and ideas posited by these authors are not in vogue in policy circles and are seen as 'alternative' ways of viewing assessment.

The New Literacy Studies (NLS)

The NLS view of literacy is a complex one. It theorizes that literacy is a socially embedded practice that is experienced differently in different roles and contexts; that it is formed by different discourses that are powerful (or not) in cultural, political and social contexts; and that literacy is practiced for different reasons that are "embedded in broader social goals and cultural practices." (Barton and Hamilton, 1998). NLS challenges those who hold power: "NLS, then, takes nothing for granted with respect to literacy and the social practices with which it becomes associated, problematizing what counts as literacy at any time and place and asking 'whose literacies' are dominant and whose are marginalized or resistant." (Street, 2003). The policy view of literacy (and the public view greatly shaped by media accounts of government policy initiatives) is a simpler one than that of the NLS. Barton and Hamilton write "In the media narrative on literacy the autonomous view of literacy usually provides the framing of what are regarded as possible or reasonable questions to pose and limits what might be possible answers." (1998). The answers narrow as government develops policies that embody the notion of the learner as human capital and literacy as autonomous skills acquired through discrete activities in rigidly prescribed levels.

In an article on how to best assess adult writing skills Marilyn Gillespie brings out the idea of literacy embedded in the activities of, and participation in, everyday living: "Literacy is not merely the capacity to understand the conceptual content of writings and utterances, but the ability to participate fully in a set of social and intellectual practices. It is not passive, but active, not imitative but creative, for participation in the speaking and writing of language is participation in the activities that make it possible. Indeed it involves the perpetual remaking of both language and practice." (Gillespie)

In Ontario Katrina Grieve conducted research about self management among literacy learners and said clearly in her final report: "What I found [through a lit review and interviews] was that there is a whole movement of research in a broad range of fields challenging the idea that skills can be taught in isolation and easily applied to other situations. This research describes, instead, a social view of knowledge, literacy and learning that depends on context, meaning, and relationships." (Grieve).

A study done by Victoria Purcell-Gates in 2000 surveyed learners about changes in their lives from attending adult literacy programs.(V. Purcell-Gates, and Sophie Degener, Erik Jacobson, & Marta Soler). Purcell-Gates describes one aspect of the study this way: "A qualitative analysis was done using the spontaneous student comments on 173 home literacy practices questionnaires attributing changes in literacy practice. Results showed that students contextualized their reported literacy practice changes to life changes such as changes in employment, changes emanating from learning to read and

write, changes in living situations, and family situations. These results demonstrated the socially-situated nature of literacy and literacy change." She believes that the study "…contributes to a social practice theory of literacy (Barton & Hamilton, 1998) which views literacy as best understood as a set of social practices which are associated with different domains of life and which are purposeful and embedded in broader social goals and cultural practices." This study makes a link between literacy learning and non-academic outcomes and analyses these outcomes using the NLS framework.

The Scottish Executive (the devolved government of Scotland) has put out a resource for literacy programs called *LITERACIES IN THE COMMUNITY: resources for practitioners and managers*. The summary is available online and the whole kit is available for £35. (Scottish Executive, Literacies in the Community: Resources for Practitioners and Managers). The resource lists three principles for learning: promoting self-determination; developing an understanding of literacies, and; recognizing and respecting difference and diversity. They describe the principles this way: "The Principles are based on an understanding of literacy and numeracy as complex capabilities rather than as a single set of skills." Under the second principle listed above they state:

- Literacy and numeracy will be recognised as changing social and cultural practices taking place in contexts that are also continuously developing and changing.
- The curriculum will be designed to develop, along with knowledge and skills, an understanding of how different and complex the many uses of literacy and numeracy are in adult life.
- Learners will be encouraged to become critical learners and users of literacy and numeracy, aware of how complex it is to transfer existing capabilities to new roles and contexts.

This fits within the New Literacy Studies approach to adult literacy and is unique because it is the only government I have found to embrace this approach. On the other hand, Learning Link Scotland (a network of literacy programs) has asked from their government for more resources "to discern the full range of 'soft-measurement' tools being used in the non-formal sector." (LEARNING LINK SCOTLAND).

Some of the researchers I have read see literacy through the NLS lens (Malicky and Norman) or understand their findings as being aligned with the NLS (V. Purcell-Gates, and Sophie C. Degener, Erik Jacobson, Marta Soler). NLS acknowledges literacy practices as many and varied and sees it as a complex process that will require multifaceted approaches to assessment in order to capture all of the outcomes of adult learning.

Situated cognition/learning

Situated learning is a theory that posits that an integral part of learning is the situation and setting that people learn in. Mark Smith puts it this way: "Initially people have to join communities and learn at the periphery. As they become more competent they move more to the 'centre' of the particular community. Learning is, thus, not seen as the acquisition of knowledge by individuals so much as a process of *social* participation. The nature of the *situation* impacts significantly on the process." (Smith, <u>The Social/Situational Orientation to Learning</u>).

This theory originated from behavioral theories about observational learning but was really popularized by Lave and Wenger in their book *Situated Learning: legitimate peripheral participation*. This has spawned a great interest by corporations and others in Wenger's theories about 'communities of practice'. This theory says that we learn through our daily practices within communities. Wenger puts it this way: "Over time, this collective learning results in practices that reflect both the pursuit of our enterprises and the attendant social relations. These practices are thus the property of a kind of community created over time by the sustained pursuit of a shared enterprise. It makes sense, therefore to call these kinds of communities *communities of practice*. (Wenger 1998: 45)."(Smith, <u>Communities of Practice</u>).

Robert Putnam works teaching teachers and believes the situated learning approach is useful for teachers who are trying to improve their practice. He says: "Dissatisfied with overly individualistic accounts of learning and knowing, psychologists and educators are recognizing that the role of others in the learning process goes beyond providing stimulation and encouragement for individual construction of knowledge (Resnick, 1991). Rather, interactions with the people in one's environment are major determinants of both what is learned and how learning takes place." (PUTNAM). In his studies with teachers he finds that knowledge socially constructed within communities of practice is a positive and powerful way to learn for teachers.

The findings listed previously in this paper on community building show the importance that learners see in sharing a supportive community of learning. Studying more deeply how communities of practice develop and grow may help literacy practitioners improve their practice and their own learning.

Theories about How Our Brain Works

Brain researchers see the brain as a new frontier in science and there has a great increase in this research. Every day we are learning more about how the brain and learning work. I have included long sections of the following studies about cognition and how our brains work because many of the findings can inform and change how we view non-academic outcomes.

Tom Sticht, well known literacy researcher, points to recent research on the brain to support his theory of "content-based instruction." (Sticht). He says: "One of the achievements of cognitive science is the confirmation of the dual nature of cognition given in the dictionary definition: all human intellectual activities, such as thinking, communicating, problem solving, and learning, require both processes and content (knowledge). This implies that attempting to raise people's cognitive abilities to high levels simply by improving processes such as "reading," "writing," "critical thinking" is nearly futile. To perform these processes well requires high levels of content knowledge on which the processes can operate." He points out that those with little background in reading may be able to sound out words but do poorly on comprehension: "…in reading, it has been found that students who must occupy their limited working memory in decoding print to speech, as in phonics, cannot comprehend well what they are reading. Comprehension requires additional processing "space" in working memory, particularly in regard to addressing knowledge in long term memory and merging it with the new information gleaned from the book." In other words, if we only focus on the 'skills' and ignore learning the content, we will do a disservice to learners. This promotes the idea of non-text-based learning to promote understanding before we tackle teaching content through reading and writing.

In her paper *The Brain and Consciousness: Sources of Information for Understanding Adult Learning,* Lilian H. Hill lists a number of ways our understanding of the brain and consciousness can broaden our understanding of adult learning:

- *People's experiences differ and so do their brains.* Individuals become more diverse as they mature since experiences and the neural connections people make are distinctive.
- *The concept of neuroflexibility reinforces lifelong learning.* In healthy individuals, aging does not diminish adults' capacity for learning.
- *Information that is contextually embedded is easier to learn.* The brain is not skilled in learning isolated, sequential bits of information but very quick to learn in situations that are true to real life.
- *Emotional states are the link between learning and memory.* We literally must feel something is true before it can be believed and learned.
- *Employing multiple sensory experiences helps to activate learning.* The brain operates simultaneously on many levels in a coordinated fashion. This tendency can be utilized in the classroom since memory and learning are stimulated by experiences involving different senses and relationships.
- *Learning involves the creation of meaning.* In order to make meaning of new information, the brain will connect new experiences to previous ones activating consciousness. Assisting students in connecting learning experiences to their personal lives helps them to learn in ways that are relevant.
- *Discussion of values and adult students' concerns for the world around them connect our experiences to the world.* The way we teach and learn affects the world around us. Ideally, adult education helps adults develop their potential so that "the learners

become more liberated as adults, better capacitated to participate in the lives of their communities and institutions, and empowered to create an authentically human future" (McKenzie). (Hill).

In their book *How People Learn*, Bransford et al make the following points about how we learn (Bransford):

- Metacognitive processes can and should be taught (predicting outcomes, planning ahead, apportioning time, explaining ideas to oneself, noting failures of understanding, activating background knowledge)

- "Participation in social practice is a fundamental form of learning."

- Transfer of knowledge happens best when a learner understands the underlying principles and can then apply them to problems in new contexts

- "Learners are most successful if they are mindful of themselves as learners and thinkers."

- "Learning changes the physical structure of the brain. Structural changes alter the functional organization of the brain; in other words, learning organizes and reorganizes the brain. Different parts of the brain may be ready to learn at different times."

In her large study for the National Institute for the Study of Literacy (NIFL) Jennifer Cromley makes the following points about what cognitive scientists have found out about adult learning:

- Skills need to be taught in the context in which they will be used. For example, if students are learning to add fractions for a word problem test, they need to practice fraction word problems, not just adding fractions.
- Reading skills are subject-specific—understanding what you read in literature does not guarantee that you will read well in social studies.
- Problem-solving skills in one subject (like reading) are different from those in other subjects (like math). Problem-solving skills need to be taught separately for each subject.
- Since problem-solving skills do not automatically transfer from one subject to another, teachers need to show students how to transfer these skills and give them lots of practice.
- Students need more and better mental models of the world in order to learn and master new information and skills.
- Thinking skills such as inferring unstated facts need to be taught explicitly in the classroom, they do not develop on their own (except in a very few students). These strategies need to be practiced over and over again.

- Most adult learners have a very limited number of strategies for understanding new material or solving problems. Teaching them more strategies can help them learn much better.
- Learning lasts when the student understands the material, not just memorizes it.
- Information needs to be presented in small chunks so that working memory can process it.
- Students need immediate practice to move information from working memory to long-term memory.
- It is impossible to remember without associating new information with what you already know.
- Thinking changes from being good at familiar subjects to being able to work in unfamiliar subjects.
- Background knowledge is vital—it affects memory, reading, thinking, and problem solving.
- People have informal beliefs about how the world works (e.g., about gravity), which interfere with learning.
- Good teachers need to know what topics tend to be hard for students in the specific subject they teach, and effective ways to help students get past those roadblocks. They need subject specific teaching knowledge in addition to general teaching knowledge and subject knowledge. (Cromley)

Much of our new understanding about the human brain and how consciousness works can help to support the importance of non-academic outcomes and non-text-based learning.

Conclusions/Recommendations

Read about theory: The theoretical concepts outlined in this paper give us different frameworks for viewing non-academic outcomes. Practice tells us these outcomes are crucial and theory can help us to analyse and explain why they are crucial. Discovering a language and set of ideas that expresses our lived experience as practitioners can greatly enhance our ability to talk to policy-makers, volunteers and learners about what we are doing. It also can support our recognition of the importance of non-academic outcomes to the learning of adults.

In particular brain research, which may not be considered strictly 'theory' but is an ever expanding set of understandings about how we adapt, change and grow as humans, can shift our thinking dramatically about working with adult learners. The idea that content is essential to mastering reading and writing or that memory is enhanced by multiple factors including emotional connection, could change our educational approaches, especially with learners at basic levels. Also, much of what are considered 'soft outcomes' (or as we have called them, 'non-academic' outcomes) are integral

supports for how the brain adapts and changes (two examples are the importance of the social practice of engaging with others and using multiple sensory states to learn).

Embrace personal growth as an integral part of learning: Perhaps all of the non-academic outcomes boil down to this term: personal growth. This term is much reviled by the anti new age crowd but it does describe learners' process of learning about their relationships to their inner and outer worlds and their changing awareness, behaviour and lives as a result of that learning. A study in the UK found that 85% of people entering adult learning programs (not just literacy programs) entered, in part, for purposes of self-actualization. (Royce). And clearly, brain research tells us that learning can and does happen throughout our lives. It is important for practitioners to remember that a desire to learn for the sake of self-improvement (or personal growth) is a legitimate reason (and motivation) for adults entering adult literacy programs. Social capital theory also reiterates the idea that positive identity formation is crucial to our ability to see ourselves as learners. Whether personal growth coincides with a government's stated outcomes for adult education is more questionable. Nonetheless, these studies point out that personal growth is inextricably woven into the learning that occurs in literacy programs.

Informal or community learning contributes to positive learning experiences: In a paper responding to a discussion paper on social inclusion, The National Institute of Adult Continuing Education (NIACE) in the UK states "… references to 'home and community literacy activity' could be more clearly conceptualised and described...In our experience, capitalising on the natural, purposeful literacies which arise from daily living and working offer opportunities for development. This is particularly so for many young adults, where so called 'informal' approaches prove attractive and rewarding. Through strategies and approaches, such as those identified in the report, many more people could be engaged in supporting the development of literacy, without describing the activity as 'teaching' or 'learning'. In order to support such ideas and developments, the concept of home and community literacies could be more clearly defined. That would help practitioners and providers to contribute their experiences and reflective analysis. It would also assist the policy makers in understanding how they could harness the concept to reach more adults and families at risk." (NIACE). Research into how the type of program and pedagogical approach affect learners' confidence and outlook about learning would be very useful to the literacy field.

Promote learner confidence: Little needs to be said here. The literature review is clear that self-confidence, independence and agency are essential parts of being successful at learning. This is a feeling that scaffolds into other areas of learners' lives and makes them more likely candidates for further education. Niks et al state: "Participants with high agency had more confidence in their ability to learn and employed a wider variety of strategies for learning than participants with less agency. Agency was not solely connected with formal education or lack of it, rather with factors outside the sphere of

education." (Niks). Documenting the kinds of activities and approaches that learners identify as building self-esteem will help practitioners to plan programming and articulate their pedagogical vision.

The Tension of Matching Resources with Assessment Needs: Reflecting the complexity of adult learning in developing assessment tools often results in very difficult to navigate systems (the Equipped for the Future manual is one example (King)) and systems which require time, expertise and energy that small literacy programs do not have. Learning Link Scotland, an umbrella group of community run programs, states: "Whilst measuring progress of individuals and groups can be done within the organisation, linking that progress to impacts on national targets is at the moment impossible for the voluntary sector. Our inability to measure those impacts, and have them recognised at national level, results in the sector feeling undervalued and sometimes overlooked in current and proposed funding structures."(LEARNING LINK SCOTLAND). This is reiterated by the Literacy and Skills Development Agency (LSDA) in the UK: "Providers of adult literacy, numeracy and ESOL face the challenge of developing procedures and documentation that serve a range of purposes and at the same time keeping bureaucracy at an acceptable level."(Greenwood).

Any approach for measuring non-academic outcomes will have to balance available resources in literacy programs with learners' needs and funders requirements. A relevant and authentic approach will have to acknowledge the complexity of learners' lives, of adult learning and of literacy programs' circumstances.

Promote teacher learning: When learning works it is transformative, life-enhancing, and a confidence and community builder. Why wouldn't we all want to do it all of the time? Teachers/practitioners/educators are people intimately engaged with learning but not always their own. However, when they do engage with learning their practice and views can change, often for the better. Practitioners should be involved in 'communities of practice' about teaching adult literacy. All the research shows that this is extremely rewarding and enlightening and has a direct effect on improving practice. Sharing information about non-academic outcomes will help to build a body of knowledge that can transform how we deliver adult literacy.

Integrate research into practice: Research should become a standard part of assessment procedures. In other words, assessment should teach us, and learners, new insights that we can then use to shape our approaches to education. Research protocols, methods and ethics should be part of every practitioners professional development. Collaboration between programs could produce a critical mass of data that can begin to tell the story of what actually happens in programs, rather than reflecting the story that funders want to hear.

Don't get stuck looking for the one system that will work: The complexity of adults lives teaches us that there can never be one system or approach that will fulfill the needs of learners or reflect the diversity of their learning styles. However, we often get caught in trying to develop policy or programming that slots learners into a profile or label. D'Amico talks about the differences and commonalities among learners: "In our study, we found that participants' experiences varied across different ways of knowing, and that there were intriguing commonalities among the experiences of learners who shared a particular way of knowing. This less visible form of diversity in adults' ways of knowing is one aspect of what we call a "new pluralism." The diversity of learners' ways of knowing that will likely exist in any ABE or ESOL classroom calls for what constitutes the second aspect of our new pluralism."(D'Amico). Discovering commonalities is useful but honouring difference is crucial.

Silja Kallenbach and Julie Viens have done extensive research on using multiple intelligences theory in adult education in the US. It is useful to note here one of their recommendations that emphasizes the need for a more pluralistic view of measuring progress: "A policy and accountability system that speaks to what we learned would capture a broader range of goals and more multidimensional ways to gauge student progress than currently found in the federal government's National Reporting System criteria. For example, improvement in students' sense of self-efficacy or metacognitive skills could be considered legitimate secondary outcomes, joining such criteria as registering to vote, reading to one's children, and getting off welfare." (Kallenbach).

Evidence of the importance of non-academic outcomes is already available: As you can see there is a lot written about non-academic outcomes. However, we are still some way from convincing policy makers that these are important and essential to learning. We also don't have a lot of information about how programming improves or deters progress in non-academic outcomes. We have some clues and suggestions from these studies and deepening our inquiry into what turns learning on or off in adult learners will ultimately be very useful for adult educators. We must also be wary of promoting only one set of pedagogical practices to answer these questions. The best we can do is continually question what we think we know, seek new information and create communities to share and discuss our practice. There will always be knew ways of looking at the complex systems of learning represented by the individual learners that walk through the doors of literacy programs.

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