Successful adult students employ strategies to learn, and effective adult education programs attend to the development of learning by enabling students to study learning processes in addition to content. Good learners have the ability to identify goals and the steps required to achieve them, identify the strengths of their own learning, actively engage in learning tasks collaboratively or independently, participate in a diverse range of educational methods, recognize learning styles and study techniques that are effective for themselves, and evaluate and make changes to their learning strategies as necessary. Translating these types of skills into the learning outcomes of any educational program is determined by the level of the class, the negotiated outcomes between the program participants and the teacher, and external constraints. Successful learning requires reflection during or after the educational experience. 'Metacognition' or self-monitoring is another essential element in learning to learn. Teachers should make a conscious effort to model and verbalize their own use of relevant learning strategies; integrate previous learning; select materials that lend themselves to metacognitive strategies; encourage students to verbalize and share their thinking strategies; provide students with feedback about how they accomplished a task; and support learners with metacognitive language and frameworks. Teachers can also help learners develop study skills, reading strategies, and resources for research. (The paper contains 6 references and a bibliography listing 14 resources about adult learning and 14 resources on study skills.) (KC)
Learning to Learn

ARIS Information Sheet
September 2000
Learning to Learn

Learning is a complex and often difficult process—particularly for adults. It requires effort, concentration, motivation and change. When we learn new information or skills, we focus most on what we are learning rather than how we learn it. Successful learners have at some stage, implicitly or explicitly, identified strategies and behaviours that enable them to effectively take on new information and skills. Adults who are less successful in their learning attempts—particularly in more formal learning/educational settings—may attribute their ‘failure’ to a lack of intelligence. The more likely scenario is that these learners may not understand or be aware of their learning strengths and the strategies they can use to utilize them.

This information sheet synthesises some of the current findings relating to adult learning processes and discusses their importance to adult education programs.

Learning in Childhood

From the moment of birth we learn. In time, we learn how to communicate needs, get around and amuse ourselves. As we grow older we engage more fully with the world around us, learning language/s, learning how to move and play in more sophisticated and complex ways. At this stage, learning appears effortless and fast. Unfettered by previous experience or knowledge we soak up—sponge like—all that we are exposed to. As we mature throughout formal schooling and through to adulthood, our capacities for learning change. The brain’s sponge like capacities diminish, it takes longer and requires much more effort to learn new things. On the plus side however, we have ever increasing reserves of experience, knowledge and awareness to enhance and influence our learning. As mature adults the capacity to learn remains unchanged but the ways in which we learn have. ‘Learning to Learn’ details the ways in which effective and successful adult learners learn.

Learning to Learn

Learning to learn activities address processes which enable learners to operate with greater independence, confidence, autonomy and self direction in learning and in life.

Effective adult learning programs attend to the development of learning to learn skills, by enabling learners to study learning processes (how) they learn best, in addition to the content (what) being delivered. Learning to learn activities can offer learners:

- an improved generic skills base
- increased development in self directed or independent learning
- more selective and effective use of resources to enhance learning and life
- increased opportunity to engage in critical and reflective practice
- enhanced organisational skills
- increased opportunity and confidence to network, team build and collaborate with others.

Learning to learn activities explicitly direct the learner’s attention to their capacity to organise themselves, their resources and their time. These activities link the management of a learning program to the practice of it.

What do good learners do?

There is not one definitive list of skills or qualities that can be identified as exclusively learning to learn skills, nor are they always discrete from other learning outcomes articulated by a teacher or learning program. Keeping that in mind, it is possible to describe the kinds of learning experiences and qualities that enable learners to demonstrate and/or adopt learning to learn skills. These qualities characterise what good/effective learners can do.

Good learners have the ability to:

- identifying short, medium and long term goals and the steps required to achieve them
- formulate the steps to achieve those goals
- identify strengths and weaknesses of own learning
- actively engage in learning tasks collaboratively or independently
- manage, priorities and complete educational program work commitments
- fulfil educational program requirements, (attending, participating, communicating appropriately with others)
- participate in a diverse range of educational practices (group work, projects, oral reports etc.)
- come to recognise and remedy physical and/or emotional barriers to learning
- move from the dependent (passive) to independent (active) learning
- recognise learning styles and study techniques that are effective for themselves
- evaluate and make changes to own learning strategies as necessary.

Translating these types of skills into the learning outcomes of any educational program is determined by:

- the level of the class
- the negotiated outcomes between the program participants and facilitator/teacher
- external constraints and pressures placed upon the program participants throughout the course of the program being undertaken.
Reflection in learning

In educational terms, reflection describes the ways in which learners consider and respond to their (learning) experience/s. This response may be during, immediately after or some time after (the learning experience) – it may happen on site or in the train on the way home. Many educators and adult education theorists assert that reflection is an essential part of the learning to learn process.

“It is activities of this kind (reflective) that are effective in helping people learn from their experiences and they do not necessarily occur without prompting. It is important for learners to understand reflection and how they might engage in it, and for facilitators to know how to promote it.”

(Boud, D. 1987a)

Boud (1987b) developed a schema which systematises ways in which learners can reflect on and learn from experience.

1. Return to the experience: objective recall in full detail - who said what, to whom, what happened in order, reactions, feelings – avoiding interpretation.

2. Attending to feelings: addressing, describing, naming the feelings that different aspects and stages of the experience may have provoked. An adult’s emotional response to a given experience has an enormous impact on their learning which is not always recognised or endorsed within formal learning situations.

3. Re-evaluating the experience: Whilst listed third, this step could occur simultaneously with the other two, and offer learners the opportunity to build upon their learning experience. Analysis beyond the immediate responses and sometimes hastily formed perceptions will help learners isolate aspects of the experience and connect them to their existing world knowledge and practice.

The stages of this re-evaluation process are fluid and could occur either in conjunction with or parallel to other stages, They are described by Boud et al as:

Association: Connecting the ideas and feelings that emerge to existing knowledge and attitudes, often through brainstorming, free association and joint construction of texts (without analysis at this stage) and group discussion.

Integration: This describes the consequent analysis of these associations – looking for patterns, classifying and grouping ideas and/or themes that emerge.

Validation: Validation is to do with how we, as learners ‘road test’ theories that are being integrated with existing attitudes and beliefs. Checks and balances promote a critical and cautious awareness for learners taking on new ideas – this could be through role play, observation and/or discussion.

Appropriation: Those ideas, skills and behaviours that are deemed valid can then be appropriated as existing knowledge and/or practice.

Metacognition

Other teachers and theorists have identified and named these practices in different ways, Bickmore-Brand (1996) describes learning to learn as ‘Metacognition’, one of seven principles which should be embedded in good teaching practice.

This principle is concerned with the ability to be aware of one’s thinking processes. As teachers we need to model what it sounds like to think aloud; at the same time we can make explicit the ‘why’ of what we are doing and not just the ‘what’. Learners will then be in a position to hear not only the logic of the concept but hear the accompanying language.

(Brickmore-Brand, 1996)

McCormack and Pancini (1990) describe being metacognitive as:

...being in control of your learning, monitoring your learning, knowing what you know and what you still don’t know.

Learners need to think about or monitor what they do while they are doing it. For this to be done efficiently and realistically learners need to be selective – to focus one or two things at a time, and to find ways around or through any problems which might occur.
## Contrasting student beliefs about learning and teaching

<table>
<thead>
<tr>
<th>The Passive learner believes:</th>
<th>The Metacognitive learner believes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal learning is short term; for the period up to assessment</td>
<td>Formal learning is about permanent changes in skills and understandings</td>
</tr>
<tr>
<td>The goal of formal learning is satisfactory assessment – if it is not being assessed then it has little value understanding</td>
<td>The goals of formal learning include satisfactory assessment but also the stronger motivation is genuine</td>
</tr>
<tr>
<td>Formal learning comes in discrete disconnected packages that are unrelated to each other</td>
<td>Ideas and skills from one topic or subject will be useful in other areas of learning</td>
</tr>
<tr>
<td>Learning involves remembering not independent thinking</td>
<td>Learning involves independent thinking, assessment should include new tasks requiring application of principles and procedures</td>
</tr>
<tr>
<td>Exploring wrong answers has no value, confusion has no place in learning</td>
<td>Exploring wrong or alternative answers is useful, feeling confusion is often part of the learning process</td>
</tr>
<tr>
<td>Teachers are responsible for student learning</td>
<td>The student is responsible for her/his learning, the teacher's role is assist in gaining real understanding</td>
</tr>
</tbody>
</table>

(adapted from Baird J. and Northfield J. 1995)

### Implications for teaching:

Depending on the learners, their situation and their expectations, it may be appropriate to work through these beliefs about learning systematically or concentrate effort in one or two areas.

Journal writing or diary keeping can facilitate these practices, but it may not be enough merely to direct learners to these types of tasks. Learners need to hear why these activities are deemed important and what they may gain from them. Metacognitive learning needs to be encouraged through explicit, active analysis and engagement.

**Teachers should:**

- Make a conscious effort to model/verbalise their own use of relevant learning strategies
- Integrate previous learning and processes which enable learners to develop consistent schema for learning
- Select materials that lend themselves to metacognitive strategies eg. open-ended, concrete before abstract, include repetition to enable appropriate practice by learners
- Encourage students to verbalise and share their thinking strategies
- Provide students with feedback as to how they went about a task (processes) rather than the end product of the task
- Support learners when necessary with metacognitive language and/or frameworks. *(Bickmore-Brand, 1996)*

### Study skills

There are a number of resources and teaching programs that address specific skills that help learners become more efficient and effective, they can supplement the development of good learning behaviour.

**Memory techniques** – address the ways in which a learner can recall and recap the material they study. These techniques encompass short and long term memory aids such as making summaries, recycling knowledge, revision techniques, developing schema or patterns, and importantly note taking.

**Reading strategies** are ways in which learners pick up the gist or main ideas of the material they are reading efficiently and effectively, scanning the text and skimming or speed reading, they include different types of reading for different purposes eg. reading for the aim of the text, locating the main points, predicting, reading with a key question in mind.
Resources for research relates to how learners are given explicit instruction in how to access knowledge and undertake research particularly in using libraries, computer catalogues and negotiating shelving and the Dewey system of classification! With the advent of the Internet and its learning and researching possibilities learners needs to be given opportunity to learn about its potential and possibilities.

References:


Bickmore - Brand J. 1996 Literacy and Learning Principles Explained in Stepping Out: Literacy and Learning Strategies EDWA


Boud, D. 1987b A facilitator's view of adult learning in Boud, D. & Griffin V (Ed's) Appreciating Adults Learning from the Learner's Perspective Kogan Page London

McCormack, R. and Pancini, G. 1991 Learning to learn: introducing adults to the culture, context and conventions of knowledge: a guide for teachers Division of Further Education Melbourne Victoria

Winberg C. 1995 Learning How to Study 1, USWE South Africa

Bennett, Vivienne; Fraser, Peter and Randell, Shirley 1991 Can I do it?: a guide for adults returning to study Council of Adult Education (CAE) Melbourne

Boyle, P. and Carruthers, M. with Rowlands, G. (ed.) 1986 How to write better reports: book 1 Adelaide College of TAFE Adelaide

De Fazio, Teresa 1999 Teaching in Australia: a guide for international students Allen and Unwin St. Leonards, NSW


Hillard, Robin 1991 Study manual: for those who aren't sure where to start Hillard Publishing Traralgon, Vic

Kindler, Jan and Taylor, Elizabeth Not dated Study skills Caulfield Institute of Technology, TAFE Division Melbourne

McCormack, R. and Pancini, G. 1991 Learning to learn: introducing adults to the culture, context and conventions of knowledge: a guide for teachers Division of Further Education Melbourne

Morris, Marlene 1985 Assignment - writing skills: module 3 in study skills series Adelaide College of TAFE Adelaide

McGirrick, Barbara; McInerney, Mary; O'Sullivan, Mary; Reilly, Ruth; Spence, Mary 1985 Assignment - writing skills: module 4 Adelaide College of TAFE Adelaide

O'Connell, Jim 1985 Assignment - writing skills: module 5 Adelaide College of TAFE Adelaide

Parslow, Jacquie; Pratt, Mandy; Plush, Coralie and Greentree, Rosemary 1987 Study skills: resource pack for teachers Adelaide College of TAFE Adelaide

Purcell, R. and Osmond, L. 1985 Using the library South Australia. Department of Technical and Further Education Adelaide

Riggall, Kevin 1985 Library techniques - basic: Study skills series, Modules 5 and 6 Adelaide College of TAFE Adelaide


Winberg, Chris 1995 Learning how to study 1 USWE Observatory, South Africa

Boud, D. 1987b A facilitator’s view of adult learning in Boud, D. & Griffin V (Ed’s) Appreciating Adults Learning from the Learner’s Perspective Kogan Page London

McCormack, R. and Pancini, G. 1991 Learning to learn: introducing adults to the culture, context and conventions of knowledge: a guide for teachers Division of Further Education Melbourne Victoria

Winberg C. 1995 Learning How to Study 1, USWE South Africa

Bennett, Vivienne; Fraser, Peter and Randell, Shirley 1991 Can I do it?: a guide for adults returning to study Council of Adult Education (CAE) Melbourne

Boyle, P. and Carruthers, M. with Rowlands, G. (ed.) 1986 How to write better reports: book 1 Adelaide College of TAFE Adelaide

De Fazio, Teresa 1999 Teaching in Australia: a guide for international students Allen and Unwin St. Leonards, NSW


Hillard, Robin 1991 Study manual: for those who aren’t sure where to start Hillard Publishing Traralgon, Vic

Kindler, Jan and Taylor, Elizabeth Not dated Study skills Caulfield Institute of Technology, TAFE Division Melbourne

McCormack, R. and Pancini, G. 1991 Learning to learn: introducing adults to the culture, context and conventions of knowledge: a guide for teachers Division of Further Education Melbourne

Morris, Marlene 1985 Assignment - writing skills: module 3 in study skills series Adelaide College of TAFE Adelaide

McGirrick, Barbara; McInerney, Mary; O'Sullivan, Mary; Reilly, Ruth; Spence, Mary 1985 Assignment - writing skills: module 4 Adelaide College of TAFE Adelaide

O'Connell, Jim 1985 Assignment - writing skills: module 5 Adelaide College of TAFE Adelaide

Parslow, Jacquie; Pratt, Mandy; Plush, Coralie and Greentree, Rosemary 1987 Study skills: resource pack for teachers Adelaide College of TAFE Adelaide

Purcell, R. and Osmond, L. 1985 Using the library South Australia. Department of Technical and Further Education Adelaide

Riggall, Kevin 1985 Library techniques - basic: Study skills series, Modules 5 and 6 Adelaide College of TAFE Adelaide


Winberg, Chris 1995 Learning how to study 1 USWE Observatory, South Africa
NOTICE

REPRODUCTION BASIS

This document is covered by a signed "Reproduction Release (Blanket) form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").