

### Pre-reading 3: Self-directed learning

The ALL-SR project is investigating how **coaching** can help adult literacy learners to develop the skills, strategies and confidence they need to become more effective **self-directed learners**.

The first two pre-readings focused on **coaching**. This third pre-reading looks at **self-directed learning** and (very briefly) at correspondences between problem-solving, coaching and self-directed learning.

*As before, please read the material here **critically**. You do **not** have to accept or agree with it. Please note any issues or questions that arise for you and feel free to contact me with any concerns.*

Your only task is to read and consider the items here – which include three reflective questions. We may discuss these at our training session on 27 July so, if possible, please make brief notes on your response, just to support any discussion we have on the 27th.

#### 3.1 What is self-directed learning?

##### 3.1.1 Two questions for Google

Before considering what *self-directed learning* means, it is worth asking what we mean by *learning*.

Ask Google, *What does learning mean?* and this is what you get: *the acquisition of knowledge or skills through study, experience, or being taught.*

Ask Google, *Can single cell organisms learn?* And results include

***Molecular circuits for associative learning in single-celled ...***

*20 Mar 2009 - We demonstrate how a single-celled organism could undertake associative learning. Although to date only one previous study has found experimental evidence for such learning, there is no reason in principle why it should not occur.*

***Are single-celled organisms capable of learning? - Biology ...***

*18 Dec 2011 - In that way, an organism could effectively "remember" one bit of data by ... state and effectively serve as "memory" for a single-celled organism.*

***Bacteria 'can learn': Nature News***

*8 May 2008 - That's not to say, of course, that single-celled organisms learn in the same way as dogs, or people. "Associative learning in dogs and humans happens over the course of the organism's lifetime, and involves modifications to the strength of connections between neurons in the brain," Tavazoie says.*

Note that the last item includes a comparison of learning in single-celled organisms, dogs and people. Does Google's first definition (*the acquisition of knowledge or skills through study, experience, or being taught*) still work for learning in that sense?

Now imagine this: you enter a room and find four other people there. These four people are not just anyone, they are younger versions of you. There you are, aged just one month – what a sweet baby! And that child is you at five, with a favourite toy. Then there's you in your early 20s and, finally, you again, at least ten years ago (judging by the mobile you're carrying). Each one of those people is you, but you're not exactly them anymore. How has that come about?

Every day we get up and go about our business, in pursuit of our goals. The world gives us feedback and we adapt our behaviour and attitudes accordingly – sometimes knowingly, sometimes without even realising it. This is learning in its most fundamental sense and we do it 24/7, like it or not. Some of this learning serves us well. Some of it doesn't (e.g. the self-destructive habits we sometimes develop).

### So what?

This understanding of learning raises some interesting points, in relation to our coaching project. For one thing, it suggests that the learning we do deliberately, i.e. consciously and with intention, may be a relatively small part of the learning we do overall, as we interact with the world around us.



That in turn suggests that learning is experiential in the largest sense – it involves all our perceptions and responses, conscious and unconscious.

It also suggests that who we are is not fixed: we are changing all the time and, to some extent at least, we can shape that change – thanks partly to our ability to reflect on experience.

Perhaps it also suggests that in one sense all learning is self-directed. It certainly suggests that all learning comes from interaction between ourselves and the world around us.

### 3.1.2 How shall we define self-directed learning?

For our pilot we will need a working definition of self-directed learning, clear both to ourselves and to the learners we are working with. The pilot itself will help us develop this, but we need a starting point.

#### Working definition of self-directed learning

Learning becomes self-directed when the learner takes responsibility for their learning, i.e. what they want to learn and how they are going to organise their learning (including how to find the resources and any other help they will need).

Note that what *self-directed* does not mean is *done alone* (i.e. *without help*). Learning is about interacting with the world and finding the resources we need to learn – which includes 'help'.<sup>1</sup>

<sup>1</sup> Listen to Professor Allen Tough, a leading researcher of self-directed learning: *I was doing my PhD in Adult Education at the University of Chicago in the early 1960's [...]. As I didn't know what questions to ask about self-directed learning, I went and simply listened to some people talk about their learning. I just said, "Tell me about learning something. Tell me your stories." What I noticed was that they all told their story in terms of people, such as, "I asked my brother" or, "I went to the store and the storekeeper helped me." [...] So people told their story in terms of other people and how they helped. That's what tipped me off that self-directed learning is not a lonely thing. What I actually found was that people got help from an average of ten or eleven different people with each thing they learned. It was the opposite of what we thought. I think a self-directed learner is actually being more social than occurs in many classroom and more seemingly social kinds of learning.* (Donaghy and Tough, 2005)

### Models of self-directed learning

Researchers in adult education have been interested in the concept of *self-directed learning* for well over 50 years. Malcolm Knowles, one of the most influential of those researchers, defined self-directed learning in these words:

*In its broadest meaning, self-directed learning describes a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes.* (Knowles, 1975: 18)

As a description of how self-directed learning actually happens in real life, Knowles' five-step model (i.e. diagnosing learning needs, formulating goals, identifying resources, implementing strategies and evaluating outcomes) may be a little formulaic and overly linear, but it does offer a starting point – one we can draw on to help us think about the learner competences that might underpin self-directed learning (and by implication, the competences we hope to help our learners develop).

### Knowles' five self-directed learning steps

The self-directed learner

1. Diagnoses his or her learning needs
2. Formulates learning goals to address those needs
3. Identifies human and material resources available to help achieve those learning goals
4. Chooses and implements appropriate learning strategies
5. Evaluates learning outcomes.

### Draft core competences for self-directed learning

To support its pilots, the ALL-SR project team has developed a competency framework for self-directed learning. (You can see the framework at the end of this pre-reading; apologies for the small print). It identifies five learner competences:

#### 1. Learning management and awareness

The learner (a) understands that they are primarily and ultimately responsible for their own learning; (b) recognises that they must take a proactive role in the learning process and (c) is able to do so.

#### 2. Problem-posing and goal setting

The learner can identify and describe the problems they encounter related to literacy<sup>2</sup> and set realistic goals related to solving those problems.

#### 3. Planning

The learner can plan steps in a learning project<sup>3</sup> in order to achieve his or her own learning goals.

<sup>2</sup> Includes reading/ writing/ digital literacy /numeracy

<sup>3</sup> *Learning project* refers here to any sequence of activities undertaken by the learner in order to achieve a literacy learning goal.

### 4. Selection and realization

The learner can find learning resources and can select from a variety of learning strategies in order to achieve his/her individual learning goals.

### 5. Monitoring and evaluating

The learner can monitor his/her own learning processes; can evaluate his/her own learning progress; and can draw conclusions for further learning.

This framework is based on a review of research into learning processes and learner autonomy, but, as you can see, there is quite a close correspondence to Knowles' five-step model.

### 3.1.3 Learning projects

In 1971, Allen Tough, a Canadian professor, published a study of self-directed learning undertaken by a cross section of individuals (factory workers, young mothers, professionals, etc.). The study found that those adults typically engaged in about eight self-directed learning 'projects' per year. On average, each project occupied about 90 hours. Some projects were related to the person's work, some to their personal lives; sometimes the focus was on competence, sometimes on intellectual curiosity.

Tough defined a learning project as

*...a series of related episodes, adding up to at least seven hours. In each episode, more than half of the person's total motivation is to gain and retain certain fairly clear knowledge and skill, or to produce some other lasting change... For convenience we have adopted the shorthand label of learning project to refer to this series of related episodes. "A sustained, highly deliberate effort to learn" or some such phrase might communicate the meaning more clearly at first glance, but seems cumbersome after repeated use.*

*...The concept of an episode is the foundation on which the definition of a learning project is constructed. Any one day in a person's life may be crowded with a multitude of activities, and one way of grasping or conceptually organising this variety of activities is to see how they are divided into episodes. An episode is a period of time devoted to a cluster of sequence of similar or related activities, which are not interrupted much [i.e. for more than two or three minutes] by other activities. Each episode has a definite beginning or ending in time. The activities during an episode include all of a person's experiences (everything he does, thinks, feels, hears, and sees) during that period of time. ...Many episodes are between 30 and 60 minutes in length, but some are shorter or longer.*

*The concept of an episode emerged in 1966 in some open-ended interviews about adult learning. In these exploratory interviews, I asked people to tell me about their entire range of learning – about all the different things they learned and all the ways they learned. Most people structured their descriptions in the form of episodes. Each person's daily life seemed to consist of activities divided into various "chunks" of time, each period lasting 20 or 30 minutes, two hours, or somewhere in between.*

*I became aware that many people plan or describe their day in terms of episodes. In this sense, episodes exist in real life: they are not just arbitrarily and artificially imposed on experience by a researcher. (Tough, 1971: 7, 8)*

## Coaching pilot: Pre-reading (3)

This concept of a self-directed **learning project**, based on a series of **learning episodes**, may provide us with a useful model (and language) for the pilot – working like this:

- Learner selects goal to work on for pilot duration; goal = **learning project**
- Learner plans actions to achieve goal; actions = **learning episodes**

### References

Donaghy, R. and Tough, A. (2005), *Professor Allen Tough Reflects on Self-Directed Learning*.  
[<http://allentough.com/learning/donaghy.htm> . Retrieved: 14 July 2015]

Knowles, M. (1975), *Self-directed learning: A guide for learners and teachers*. New York: Cambridge Books.

Tough, A. (1971), *The Adult's Learning Projects: A Fresh Approach to Theory and Practice in Adult Learning*. Toronto: Ontario Institute for Studies in Education [<http://allentough.com/books/alp.htm> . Retrieved: 14 July 2015]

## 3.2 Coaching, problem-solving and self-directed learning

Coaching is a structured interaction about a topic where the coach asks questions that encourage the other person to develop solutions to a challenge or problem. The role of the coach is to help the person work out what needs to be done, **not** to provide the answer. The coach does this by asking questions that help the other person to problem-solve.

The table below compares models of problem-solving, coaching and self-directed learning.

Problem-solving model	GROW model of coaching	Five-step model
<ol style="list-style-type: none"><li>1. Define the problem</li><li>2. Identify possible solutions</li><li>3. Select and implement a specific solution</li><li>4. Monitor and evaluate the results – if unsatisfactory, repeat steps 2-4.</li></ol>	<ol style="list-style-type: none"><li>1. Define the goal</li><li>2. Establish the current reality</li><li>3. Identify obstacles and options</li><li>4. Decide on the way forward</li></ol>	<ol style="list-style-type: none"><li>1. Diagnose learning needs</li><li>2. Formulate learning goals to address those needs</li><li>3. Identify human and material resources available to help achieve those learning goals</li><li>4. Choose and implements appropriate learning strategies</li><li>5. Evaluate learning outcomes.</li></ol>

### Reflective questions

1. When you use the term *learning* what sort of activity do you normally have in mind?
2. Where might a person develop the idea that a successful learner can learn alone (i.e. without help)?
3. What self-directed learning projects have you undertaken this year?

Generic competences for self-directed literacy learning (ALL-SR, 2015)

	Competence 1 <b>Learning management &amp; awareness</b> The learner (a) understands that s/he is primarily & ultimately responsible for his/her own learning; (b) recognises that s/he must take a proactive role in the learning process & (c) is able to do so.	Competence 2 <b>Problem posing &amp; goal setting</b> The learner can identify & describe the problems they encounter related to literacy <sup>4</sup> & set realistic goals related to solving those problems.	Competence 3 <b>Planning</b> The learner can plan steps in a learning project <sup>5</sup> in order to achieve his or her own learning goals.	Competence 4 <b>Selection &amp; realization</b> The learner can find learning resources & can select from a variety of learning strategies in order to achieve his/her individual learning goals.	Competence 5 <b>Monitoring &amp; evaluating</b> The learner can monitor his/her own learning processes; can evaluate his/her own learning progress; & can draw conclusions for further learning.
<i>Underpinning knowledge, skills and attitudes (KSA) 1</i>	The learner takes a positive attitude towards learning & actively manages his / her learning process. He/ she is willing & able to take responsibility within the learning process.	The learner can express dissatisfaction related to his/her own literacy competencies & specify literacy problems / literacy learning goals.	The learner can locate & activate internal resources (knowledge & strategies to problem-solve & learn; attitudes & behaviour) & external resources (social resources, time & space for learning, learning resources) to enable/facilitate his/her literacy learning.	The learner recognises literacy challenges in everyday life & knows how to use the texts they encounter (i.e. in relation to those literacy challenges) as learning resources to develop their own literacy skills.	The learner can select & use resources (e.g. schedules) that help him/her to monitor & evaluate his/her competencies.
KSA 2	The learner is aware of & can speak about his/her strengths & weaknesses in autonomous/self-directed literacy learning & is aware of personal preferences in learning.	The learner can describe problems s/he has encountered &/or objectives related to literacy, with reference to specific contexts & the literacy-related materials that s/he encounters in those contexts.	The learner can organise his/her learning conditions (e.g. suitable time, place etc).	The learner knows how to search for appropriate literacy learning resources for self-directed learning & knows how to use them.	The learner can critically review their literacy learning progress & make adjustments to their learning plan &/or goals to optimise their development as a self-directed literacy learner.
KSA 3	The learner can identify & cooperate with learning partners.	The learner can set concrete literacy learning goals & describe how those goals relate to other goals (e.g. become better at report writing to progress at work; become better at filling in on-line application forms to find a better job)	The learner can identify learning activities to achieve specified goals.	The learner can reflect on familiar, effective literacy &/ or language learning strategies. S/he can learn/ try out new strategies & reflect on further individual use.	The learner can evaluate learning resources in order to reach his/her learning goal(s).
KSA 4	The learner can ask for help at different stages of the learning process & for various kinds of help.	The learner can reflect on & describe possible causes of whatever difficulties they may encounter in their literacy learning.	The learner can organize learning activities in order to achieve specified goals.	The learner can find ways to practise with learning resources & does so independently.	The learner can evaluate strategies & methods in order to reach his/her learning goals.
KSA 5	The learner can maintain (self-) motivation, can develop self-efficacy <sup>6</sup> & can show persistence.		The learner can review his/her learning plan for potential problems & propose solutions/mitigations.		The learner can evaluate both the learning process <sup>7</sup> & its outcomes.

<sup>4</sup> Including reading/ writing/ digital literacy /numeracy

<sup>5</sup> Learning project refers here to any sequence of activities undertaken by the learner in order to achieve a literacy learning goal.

<sup>6</sup> Self-efficacy refers here to the person's belief/confidence in their own ability to do what is necessary to achieve their literacy learning goals.

<sup>7</sup> E.g. selection of literacy learning goals, formulation of learning plan, selection and use of materials/resources, own performance, selection and performance of learning partners