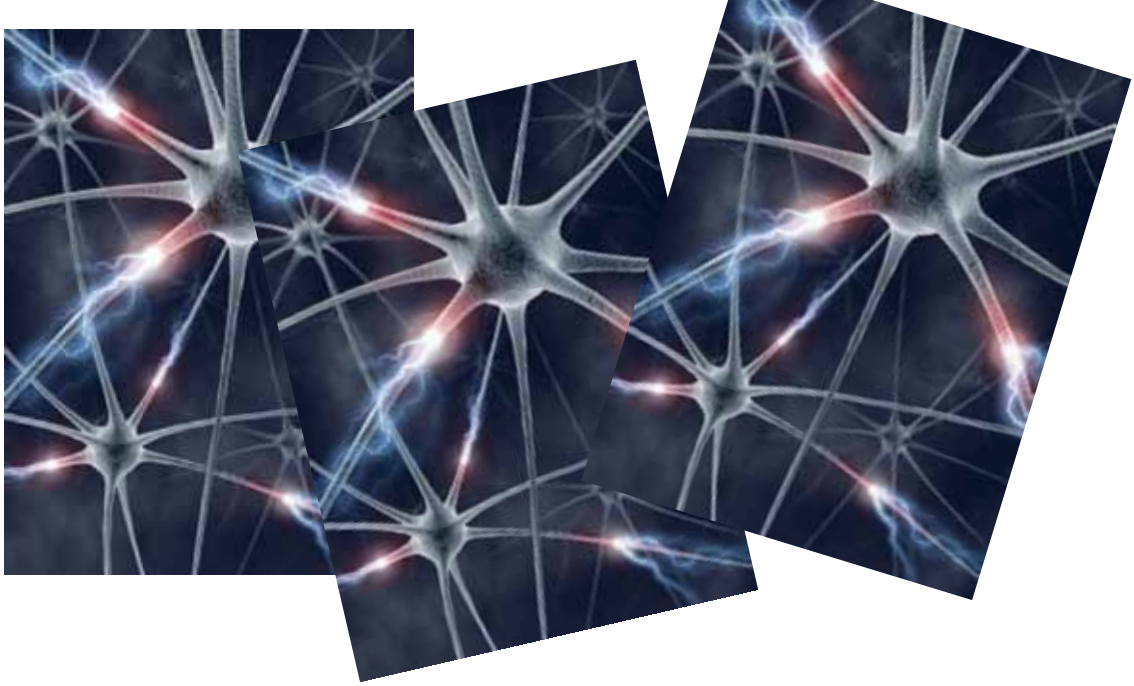
Outdoor Learning and Learning Cycles: Moving Forward



by Jonathan Lynch

In my work of teaching outdoor studies students I'll often explore the history of outdoor education, adventure education and now outdoor learning. It's a privileged position as it can help me to see the development in patterns of professional practice over the years; sometimes things repeat themselves and we can seem to stay wedded to old practices. In other areas of our field there can sometimes be a shift in thinking, theoretical application or understanding of a concept and we take a leap forward as a profession.

One such example is the popular use of experiential learning cycles and the process of reviewing to foster learning in outdoor education participants. Kolb's learning cycle (see Fig 1.) is a good example (1984) and is referred to in abundance in literature from our field from the 1980s onwards. It is especially common in development training literature from the past; in the Brathay Hall staff development notes of that time in the early 1980s trainers were encouraged to understand and follow the Kolb learning process (Everard, 1993; 13) on all courses.

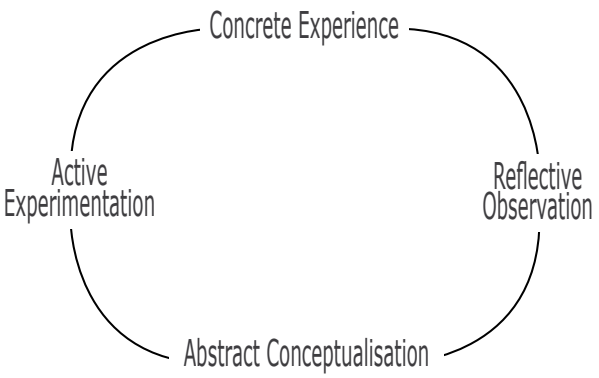


Fig 1 (Kolb's learning cycle in Jarvis (2006: 8).

It's interesting to see that in the new National Occupational Standards (Skills Active, 2010) for 'higher level outdoor sector roles' (senior instructors or experienced trainers) the experiential learning cycle is mentioned. In the section titled 'D35 Promote the Transfer of Learning from Outdoor Experiences' the use of reviewing is the main component noted to meet this sections aim. In it the importance of the experiential learning cycle is 'key knowledge' to be applied.

So whilst the new National Occupation Standards are very comprehensive and I applaud their creation it started me thinking that there is almost 30 years between Kolb's work and these standards. I started to wonder if we will continue to see outdoor learning through the lens of such models and theories as the 'experiential learning cycle', Kolb cycle or any learning cycle throughout next the 30 years?

Kolb's learning cycle has not stood up well to critical scrutiny from established educational fields. In the field of adult education authors are critical of his learning cycle on many levels, some of which are that:

- As a model of learning it is too simplistic and restrictive; as problems arise in moving the learner and their learning to new situations from outside a closed learning cycle (Jarvis, 1987; Wallace, 1996; Moon, 2004).
- Jarvis (2006) explores fundamental flaws with Kolb's (1984) learning cycle particularly that Kolb's work omits how the person is changed as a result of using the learning cycle, the influence of the social dimension, the process of reasoning, the possibility that we may not always universalise our experience and the role of emotional and practical learning (2006; 8).

If we are to use reflection and experiential learning as a key tenant of our work in the outdoors, particularly with more mature and able learners, then these concerns must not go unchallenged. Experience, and 'learning through experience' are complicated topics and whilst Kolb's cycle fails to stand up to contemporary scrutiny it has served us as a profession well in an area of learning that is complex.

Moon writes:

> "The experiential learning cycle (Kolb) only hints at the psychological processes that might underlie what is observed. In this way, the writings on experiential learning only hint at the role of reflection. They do not take into account some particularly important developments in the literature on higher level learning that are particularly helpful in the further exploration of reflection in learning – the constructs of deep and surface learning" (1999; 101).

Moon's work (1999, 2004) moves beyond a simplistic 'cycle' approach to learning and her approach to using reflection is not to move learners 'round a cycle' but to help learners move from superficial learning (Surface) to deeper learning and understanding. The process she describes is one which considers learning as either Deep or Surface. For her, surface learning is less meaningful and is where we learn something superficially and therefore struggle to recall or use that learning later – such as learning something by rote like cramming to sit and exam. We can remember the information for a short while but we probably don't really understand it and the learning dissipates over time and becomes less useful.

Deep learning is learning where we've 'played around' with knowledge on something. Perhaps we've tried to make it fit another situation, broken its components down and rebuilt it? Deep learning is learning where we really understand a concept or idea and can use it in new situations or apply it to other learning. It can be recalled easily as it is very well understood like contour interpretation in successful ML candidates who have reflected and deconstructed contours and the lie of the land over and over in many situations and different areas.

The use of reflection in outdoor education and outdoor learning is commonly associated with the process of reviewing, which it turn is a component of the Kolb learning cycle (see Fig 1). Reflection plays a central role in the process of deep learning and I'm suggesting in this article that if we use reflection to 'deepen' learning, using Moon's model (see Fig 2 below), we might improve the quality of outdoor learning.

From (Fig. 2) the Cognitive Structure is our current understanding on a matter (our thoughts, levels of awareness etc) and the learning moves from surface to deep through the processes of Noticing to Transformative learning. The 'R'(with a ¾ circle around it next to upward pointing arrows) refer to reflection, and most importantly that reflection is really needed to move up the learning levels. 'Representation of Learning' is the product of learning; the knowledge we use back in our 'life worlds'.

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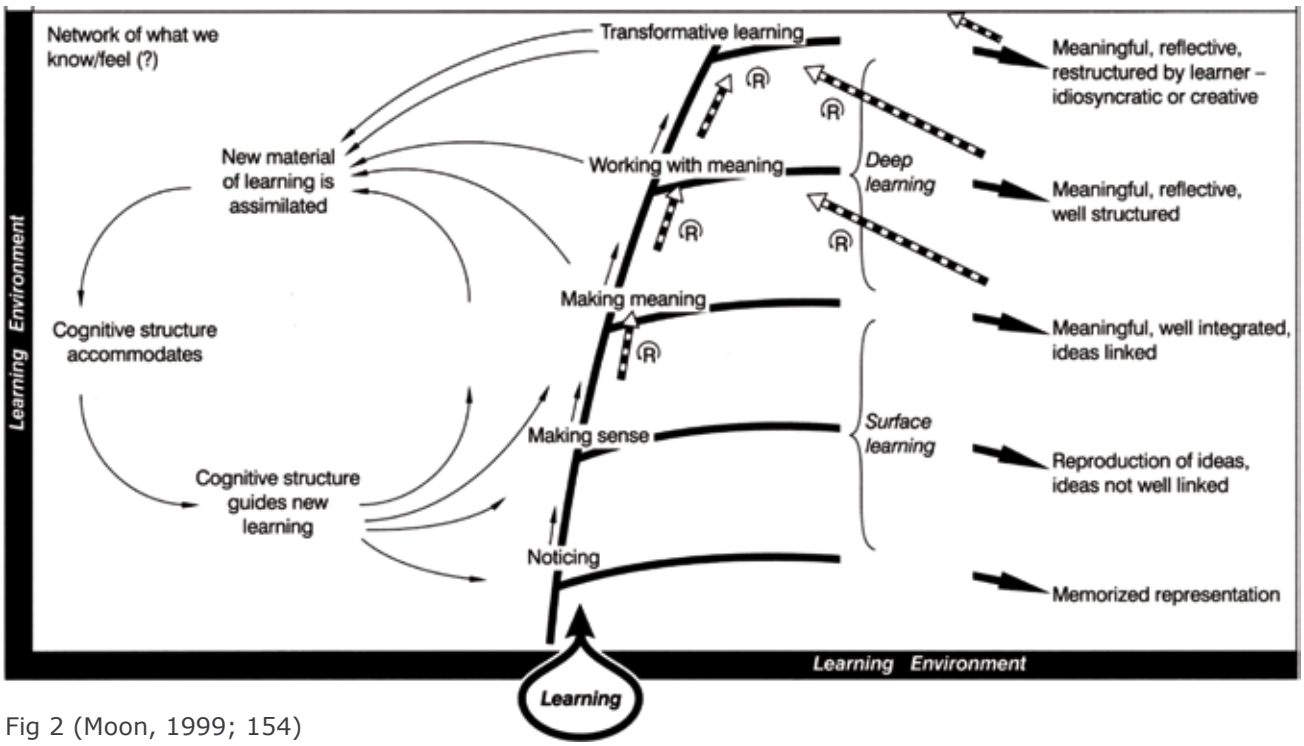

Fig 2 (Moon, 1999; 154)

SURFACE LEARNING

- **Noticing** is defined as the first stage in perceiving, "I've just noticed this bit of information I wonder if it's useful?"
- **Making Sense** is defined as ordering/organising the learning. Learning is looked at only in the context in which it appears, not really how the learning is to be learnt or used in the future. An example might be: "I think we've got enough information now to solve this problem lets start it."

DEEP LEARNING

- **Making Meaning** is defined as learning that has assimilated into the cognitive structure (our understanding). An example might be: "I understand the relationship behind this sequence now".
- **Working with Meaning** is defined as understanding that is being further developed from the Making Meaning stage. Reflection plays a necessary role at this stage and is needed to deepen understanding. An example might be: "I understand the processes that enabled us to plan well for that task". At this level the original learning 'materials' (group members thoughts, comments from the review, immediate experiences) are not needed here and the learner is really doing most of the work (reflecting) compared with the educator.
- **Transformative learning** is a theoretical position and is defined as where we might aspire to go with this model or process (as other authors have indicated that we should not arrest the process ourselves but see where it developes) but for the purpose of this article I won't explore it further.

If we truly want to develop meaningful and purposeful outdoor learning then surely we must try to operate within this Deep Learning level. To do this we must be deliberate and mindful of the role and format of reflection to do so. In this article I'm suggesting that often in outdoor learning reviewing occurs at the lower levels of Noticing and Making Sense which is working only in the Surface Level approach; to move towards a Deep Learning process we need to work in the Making Sense, Working with Meaning and possibly Transformative learning levels.

Examples of Surface Learning in a review might be:

- Asking group members what they did to help the team succeed in a challenge. This might evoke a response that correlates to the Making Sense stage where just specific actions or behaviours may be identified that helped the group succeed. They might reply: "we all worked together" or "we talked about the activity/problem before we started and came up with a plan". These statement of 'learning' would really be Surface learning as they're stuck in a context without deeper exploration of what these 'ideas' mean to individuals; ideas such as 'working together' or 'planning'.

Trying to deepen our participants' learning would involve trying to work at these deeper levels where reflection is used purposefully. Looking at the deepest stage that most of our mature and able learners could achieve, Working with Meaning, it helps to look at this stage more deeply.

Moon (1999; 143) notes that Making Meaning and onwards to Working with Meaning are important stages for learners and ones that most good teaching aims to move people towards. Working with Meaning is a stage that is characterised by a learner's sufficient understanding of a concept or process to be able to deliberately try and relate it to previous learning to deepen their understanding. To deepen learners understanding we may find ourselves coaching learners or setting probing questions; challenging their current understanding and creating new examples to try out their new understanding.

In outdoor learning and outdoor education examples might be:

- In a review after an expedition we might ask participants to take the discussion points from the review and go away and contemplate them for a while. This may be to spend an hour in the Centre grounds or a walk through the forest, even a mini-solo. The resulting reflections may benefit further group discussion and may help others in the group to Work with Meaning for themselves.
- During a week's personal and social development course where there are daily reviews, ask participants' to keep a journal of their learning through the week. Use this as a basis for a final review where they can see their personal learning processes and the results of this. Sharing some of the entries (people willing) may help others to deepen their understanding on their learning and learning processes.

In all the Deep learning stages where reflection is key, as facilitators our role in helping reflection deepen the learners understanding relies on our own sufficient awareness and experience of reflection in learning.

Moon (1999; 167), notes that as facilitators we should be asking our learners to move from a 'descriptive' reflection process to a deeper, more evaluative one. One where we might ask what the meaning might be of someone's reflection on action, or what they might think someone else would make of their reflection, trying to be objective and even just trying to make sense of the reflections.

A cautionary note should be made at this stage before we try to apply this model to all ages and abilities of groups in outdoor leaning. Moon notes that this model of learning is one best suited to mature and able learners. This is a term she doesn't define more but suggests that they are learners who are aware of their own processes of learning and have a suitable level of self awareness where they can digest and reflect on information accurately.

Finally, Moon writes that she sees reflection as a 'cognitive housekeeping' - re-arranging new learning against old and breaking down/rebuilding learning in different contexts and situation all of which helps to deepen our learning and understanding on an issue. The way we help learners move beyond Making Sense and Making Meaning is very important, as the learner is the most key element in this learning process. Using written formats could really help as the process of writing and putting reflection into words in learning logs or journals is a very strong way of approaching this process. ■

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Author's Notes

Jonathan Lynch has been involved in Outdoor Education since 1993 and is a Senior Lecturer in Outdoor Studies at the University of Cumbria. Jonathan is interested in outdoor learning and what theory/knowledge informs our practice in experiential learning outdoors. Any thoughts or questions on this article are welcomed and he can be contacted at Jonathan.Lynch@cumbria.ac.uk.

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