Improving Teaching and Learning through Experiential Learning

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By

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TABLE OF CONTENTS

CHAPTER ONE

DEFINING EXPERIENTIAL LEARNING

'I never teach my pupils; I only attempt to provide the conditions in which they can learn'.

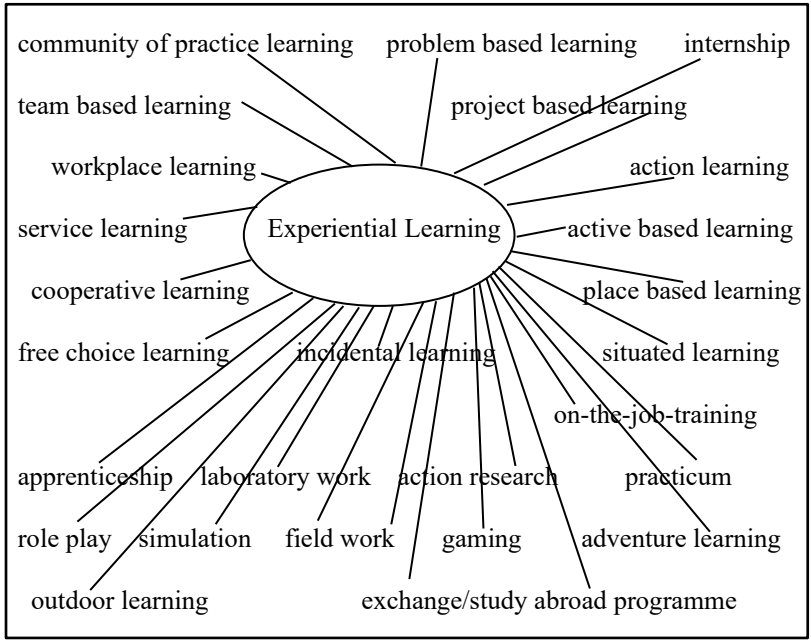
— Albert Einstein

1.1 Introduction

''The chief cause of failure and unhappiness is trading what you want most for what you want right now'.

— Zig Ziglar

Before defining experiential learning, let's look at some of the well known names by which experiential or experience-based learning is known. Some common names include action learning; active learning; active based learning; action research; adventure learning; apprenticeship; community of practice learning; cooperative learning; exchange/study abroad programme; field work; free choice learning; gaming; incidental learning; internship; laboratory work; on-the-job-training; outdoor learning; place based learning; practicum; problem based learning; project based learning; role play; service learning; simulation; situated learning; team based learning and workplace learning (Exhibit 1.1).



Referenced in: https://www.amazon.com/Assessing-Experiential-Learning-Using-senses/dp/3659182427
Exhibit 1. 1 Some kinds of experiential Learning

The similarities among the foregoing kinds of experiential learning are more important than the differences that may exist in practice. Whichever nomenclature is used, all of the foregoing kinds of experiential learning done formally or otherwise involve learners taking centre stage, actively playing an integral part in the teaching/learning process that nurtures collaboration, discovery, two-way communication, service to community, hands-on participation, deeper understanding and most importantly, commitment to lifelong learning.

The teacher is no longer ‘sage on the stage’ but becomes ‘guide by the side’. The learner uses experience to achieve personal growth and development, emotional well-being, personal strengths, personal responsibility, maturity, self fulfillment, self esteem, self confidence, sense of purpose, self actualisation, *etc.* All this is accomplished through the learner’s own preferred learning style using whichever predominant multiple intelligence best suits the situation.

1.2 Teaching and Learning

''The price of success is much less than the price of failure'.

— Zig Ziglar

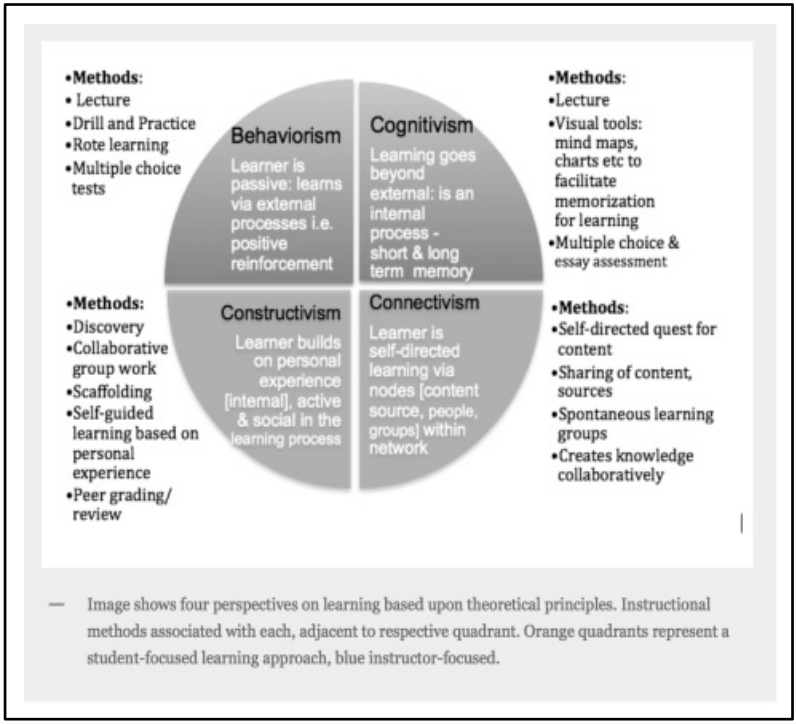
Exhibit 1. 2 Teaching and Learning

Before we get to defining experiential learning we need to understand the overall process of teaching and learning which we will soon relate to experiential learning, in an attempt to highlight the relationship between them. Smith (2012) defined teaching as 'the process of attending to people's needs, experiences and feelings, and making specific interventions to help them learn particular things'. According to this researcher, interventions like questioning, listening, giving information, explaining some phenomenon, demonstrating a skill or process, testing understanding and capacity, and facilitating learning activities (such as note taking, record keeping, discussions, assignment writing, simulations and practice) are commonly used. The who, what, why and how of teaching are also explained by Smith.

Teaching is only teaching 'if people can take on what is taught.' Thus, according to Hirst (1974), teaching should involve setting out with the intention of someone learning something and considering people's feelings, experiences and needs. Needless to say, teaching and learning are intricably bound since there is an expectation that learning will take place as a result of teaching. What then is involved in learning seems to be the next obvious question?

Driscoll (2000) defined learning as 'a persisting change in human performance or performance potential…[which] must come about as a

result of the learner's experience and interaction with the world' (p.11). Over the years many researchers have posited several learning theories, chief among them being behaviorism, cognitivist, constructivism and connectivism. Each theory seems to move one step forward of the previous theory. Nevertheless, each theory needs the others to make full sense of the world around us. In any given learning scenario, all four major learning theories kick into play. There is always some external stimulus to which the learner responds (behaviorism) by acquiring and storing information (cognitivist), in order to build a personal understanding (constructivism) that can be used to better internalise learning from sources like the internet (connectivism). The next exhibit, sourced as shown, attempts to connect the four major learning theories and offer associated teaching methods.



Referenced in: https://pypinub.wordpress.com/2014/11/09/four-learning-theories-behaviorism-cognitivism-constructivism-and-connectivism/
Exhibit 1. 3 Learning Theories

Much has been written about the learning process. Siemens (2005) considered learning as a process that occurs within 'nebulous environments of shifting core elements' – not entirely under the control of the individual. As actionable knowledge, Siemens contended that learning can reside outside of ourselves, for example within an organisation or a database and is focused on connecting specialised information sets. He hypothesised that it is the connections that enable us to learn more which are even more important than our current state of knowing.

Hughes, Toohey and Hatherley (1992) suggested that in order to learn something you need to go through a number of stages involving (1) being introduced to the thing (2) getting to know more about it (3) trying it out (4) getting feedback (5) reflecting, adjusting and trying again.

Needless to say, there are activities that are best suited to each stage of the learning process. For example, while overviews, preliminary readings, presentations and discussions may be useful in introducing something, getting to know more about it may involve actual demonstrations, experiences, group work and projects. In actually trying it out, hands-on work is of paramount importance. Role plays, experiments and detailed discussions also play their part. Getting feedback (formally or informally) helps the learner to verify his understanding of the thing and clarify any misconceptions. Reflection plays its part in bringing together all that is learned in a cohesive whole.

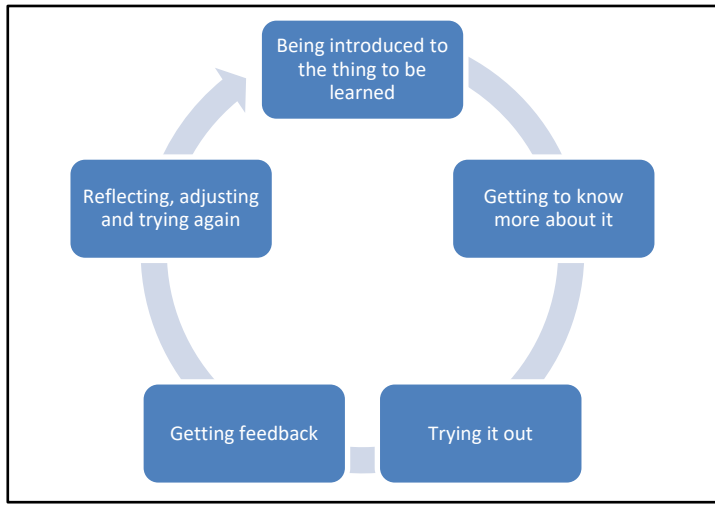


Exhibit 1. 4 Steps in learning

Sun (2018) posited that there are four basic stages of learning any new skill: unconscious incompetence, conscious incompetence, conscious competence, and unconscious competence. He contended that knowing at what stage you are enables the learner to seek the proper coaching and internalise information in a helpful way to deliberately advance to the next developmental stage, with a view of ultimately attaining mastery of a skill.

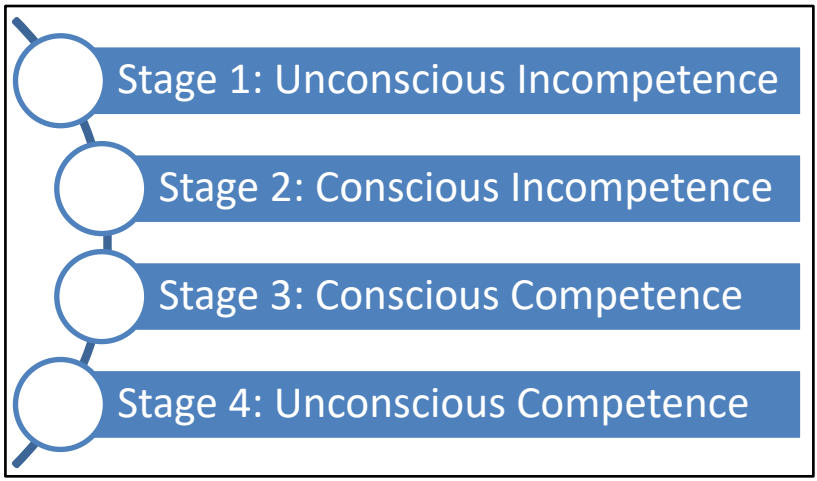


Exhibit 1. 5 Sun's Four Stages of Learning

Unconscious incompetence is the first or beginning stage at which everyone starts, regardless of the skill to be learned. Sun posited the following criteria for distinguishing this stage. The athlete:

- is not aware of the existence or relevance of the skill area
- is not aware that they have a particular deficiency in the area concerned
- might deny the relevance or usefulness of the new skill
- lacks awareness of their inability so no development or learning of the skill can occur
- needs to be moved into the "conscious competence" stage by having the coach demonstrate the skill and provide benefits that it will bring to the game.

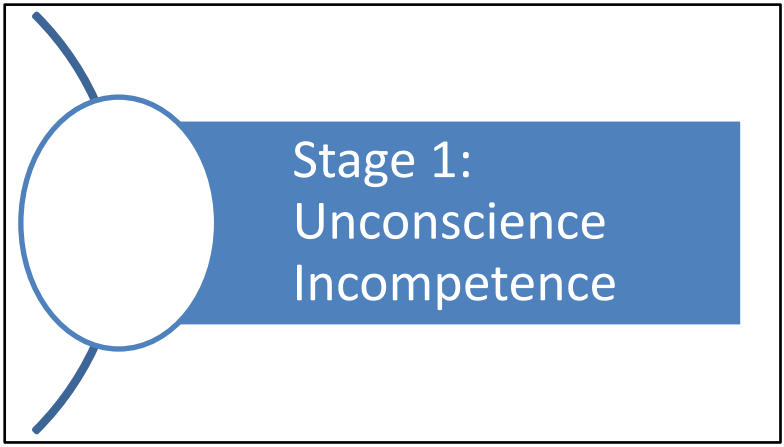


Exhibit 1. 5 Stage 1 of Learning

Sun emphasised that the goal of coaching at Stage 1 is to 'help the athlete understand the importance and benefit of developing the skill being taught. If the athlete does not see the value of learning the skill and isn't aware that they are deficient, it is very unlikely the athlete will put any appreciable effort towards learning the skill.' Sun used the basic squat as an appropriate example. He explained that the basic squat is taught to beginners because it is 'a cornerstone movement and many more complex exercises build upon this one movement.' Furthermore, Sun believed that the coach must educate the novice athlete on why the basic squat movement is important to learn as well as show where possible deficiencies exist. He contended that Stage 1 is not limited to novice athletes because athletes who may be considered overall "advanced" will need to start at Stage 1 for a new skill. Progress to Stage 2 may be rapid but Stage 1 cannot be by passed.

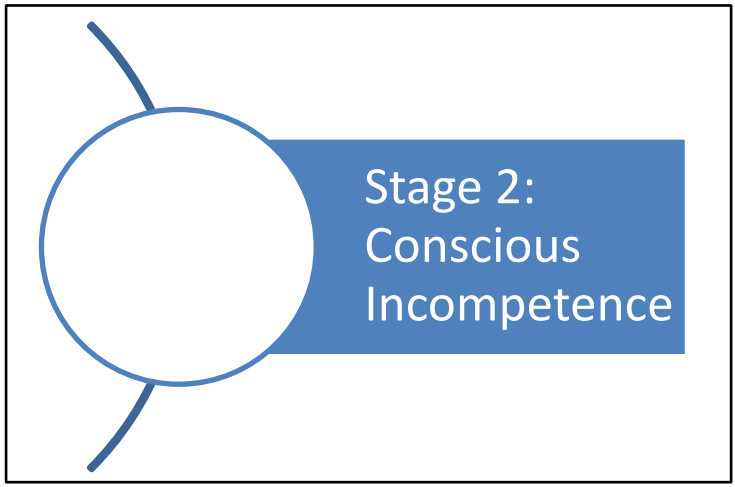


Exhibit 1. 6 Stage 2 of Learning

According to Sun, **Stage 2 (*Conscious Incompetence*)** commences where the athlete actually begins to learn the skill that is being taught. Distinguishing criteria for Stage 2 include the athlete:

- becoming aware of the existence and relevance of the skill
- is aware of personal deficiency in this area, usually typically by attempting or trying to perform the skill
- gaining an appreciation for the value of learning the skill and realising that by improving personal skill or ability in this area overall game will naturally improve
- understanding that there is a measurable level of ability that is established and the goal is to progress to the level of skill required to achieve competence
- making a commitment to learn and practise the new skill, and to move to the "conscious competence" stage.

As far as Sun is concerned, Stage 2 is the place at which reality sets in for the athlete. He affirmed that an athlete who 'once thought of himself as very strong and athletic is now humbled by a simple handstand. Or perhaps, someone who thought of herself as flexible now realises that she struggles to perform a proper overhead squat due to poor mobility.' Sun observed that if the athlete is working with a skilled coach, progression to Stage 3 (conscious competence) usually occurs fairly quickly. He observed

that some factors that may slow the progression could include injury, lack of mobility, and lack of strength. Being able to perform the skill on command makes the transition from Stage 2 to Stage 3 pretty obvious.

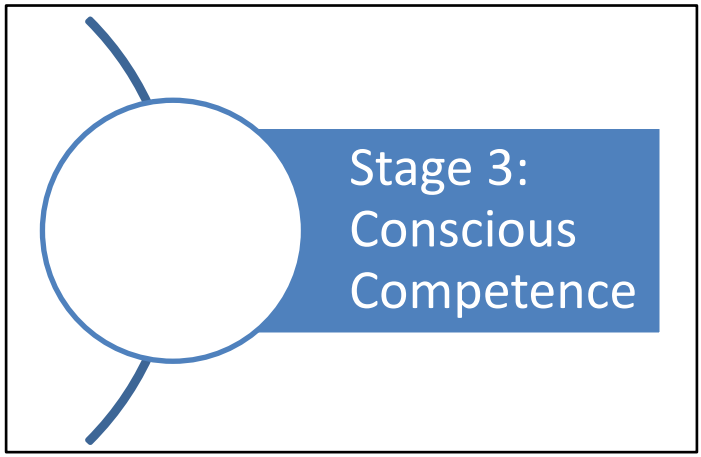


Exhibit 1. 7 Stage 3 of Learning

Sun regarded **Stage 3 (*Conscious Competence)*** as that stage comprising the 'majority of an athlete's training time in the pursuit of skill development.' While it may be true that the athlete can reliably perform the skill, he may need a great deal of focus and concentration in order to perform. Accordingly, Sun's criteria for Stage 3 include the athlete:

- can reliably perform the skill at will
- the skill is difficult, if not impossible, without concentrating and thinking about it
- can perform the skill without assistance
- the skill is not yet "second nature" or "automatic"
- might be able to demonstrate the skill, but is unlikely to be able to teach it well to another person
- continuously practises the new skill and, if appropriate, commits to becoming "unconsciously competent" at the new skill.

Sun exemplified Stage 3 by considering Olympic weightlifting as a common skill set where you will find that most athletes spend a great deal of time in the "conscious competence" stage. Sun explained that it would

take several years of concentrated practice to develop 'an instinctual ability to perform these lifts'.

Sun advised that frequent, deliberate practice is the most effective way to move from Stage 3 to Stage 4. He contended that athletes who 'struggle to move to "unconscious competence" might be practising the skill inconsistently or, in some cases, might need a new coach with a higher level of teaching ability to help them fine tune the skill and increase their understanding.'

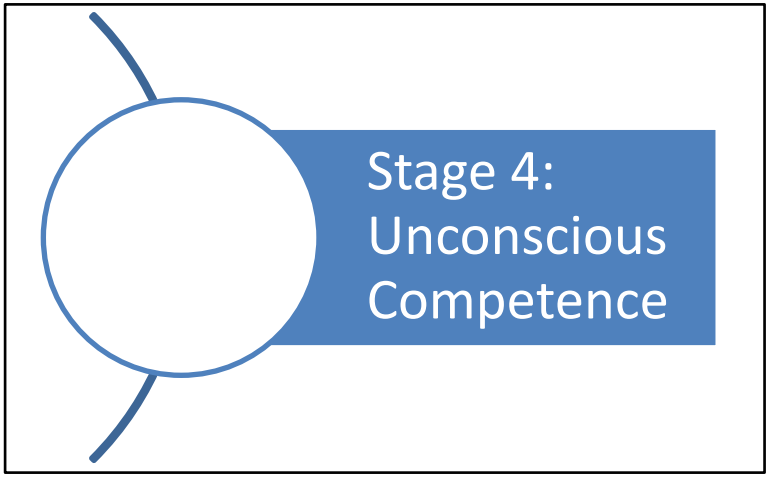


Exhibit 1. 8 Stage 4 of Learning

At Sun's **Stage 4 (*Unconscious Competence)*** the skill has now become "second nature" because the athlete has practised and drilled the skill a lot. Little to no concentration is needed to perform the skill. Sun used the example of driving a car for most adults as a skill at Stage 4. Sun's distinguishing criteria for Stage 4 include:

- the skill entering the unconscious parts of the brain because it is so well practised
- while performing another task a Stage 4 skill can to be performed
- the athlete might now be able to teach others in the skill, but some difficulty may be experienced in explaining how the skill is done as 'the movement is now largely instinctual'

- practice, or frequent exposure, is required to maintain this level of skill since any prolonged break can result in regression to a lower stage.

Sun cautioned that while Stage 4 (Unconscious Competence) is the final stage of learning, 'it can be a highly perishable stage depending on the type of skill that is being discussed.' He noted that it is possible for athletes to become somewhat complacent in their abilities. Sun cautioned that as new standards arise, both the athlete and coach may need to revisit certain skills and 'determine if there might need to be some work done in order to improve the skill to meet new standards.' Sun further advised that a coach should not focus an athlete's training on improving one aspect of development to the sacrifice of other important skills but should develop a well structured programme 'that progresses an athlete to "unconscious competence" in most skills without compromising other relevant skills and abilities.'

It is now time to move on to explicating experiential learning in an attempt to understand how it can influence teaching and learning.

1.3 Nature of Experiential Learning

'For the things we have to learn before we do them, we learn by doing them'.

— Aristotle

Exhibit 1. 10 Nature of Experiential Learning

Andresen, Boud and Cohen (2000) compared the history of experiential learning with the history of epistemology or the search for the basis of true knowledge. The researchers posited that the terms 'experience' and

'experiment' are etymologically one and refer to the controversy that Aristotle had with Plato about attempting to separate knowledge from experience. Perhaps, experiential learning or learning by doing is the oldest form of learning.

Mill in the 19th century and Locke in the 17th century explicated the value of experience. Several researchers like Dewey, Lewin, Montessori, Hahn, Neill, Piaget, Rogers, Freire, Kolb, to mention a few underscored the value of learning directly or indirectly through experience. As a matter of interest, the very first theories of experiential learning started in the mid-19th century when there were efforts to move away from traditional formal education, marked by abstract concepts presented by teachers, toward a method of instruction that was more immersive on the part of the learners.

Interdisciplinary and constructivist learning form the bedrock of experiential learning. Subjects (History, Geography, Mathematics, Physics, English, Spanish, French, *etc.*) are intermingled instead of being seen as separate fields that are not connected to each other. Instead, experiential learning makes learning more real life where compartmentalisation is minimised. All subject areas intermingle in any given experience, as occurs in the real world.

Further, in constructivist theory of learning people build or construct knowledge based on incoming information and those outcomes may be varied and often unpredictable (Wurdinger, 2005). The learners play a critical role in their knowledge acquisition and also in assessing their own learning. This means that the way in which one student solves a given problem is not identical to the way in which another solves the same problem so that take-aways from the same experience are different for different students.

Exactly what is experiential learning? Experiential learning is a method of educating through first-hand, hands-on experience. Skills, knowledge, and experience are acquired outside of the traditional academic classroom setting, and may include internships, studies abroad, field trips, field research, and service-learning projects (Firestone, 2018).

Lewis and Williams (1994) declared:

> 'In its simplest form, experiential learning means learning from experience or learning by doing. Experiential education first immerses learners in an experience and then encourages reflection about the experience to develop new skills, new attitudes, or new ways of thinking.' (p. 5)

According to Lewis and Williams, students would "learn by doing," (p. 6) as they apply knowledge to experience in order to develop skills or new ways of thinking.

In a simplistic manner we may think of experiential learning as the kind of learning that occurs through doing and reflecting on what was done, is being done and perhaps will be done. In other words, the experiences of actions drive experiential learning. A Learning Retention Pyramid (sourced as shown) indicates that whereas generally people remember about 90% of what they do, they tend to remember only 10 % of what they read about.

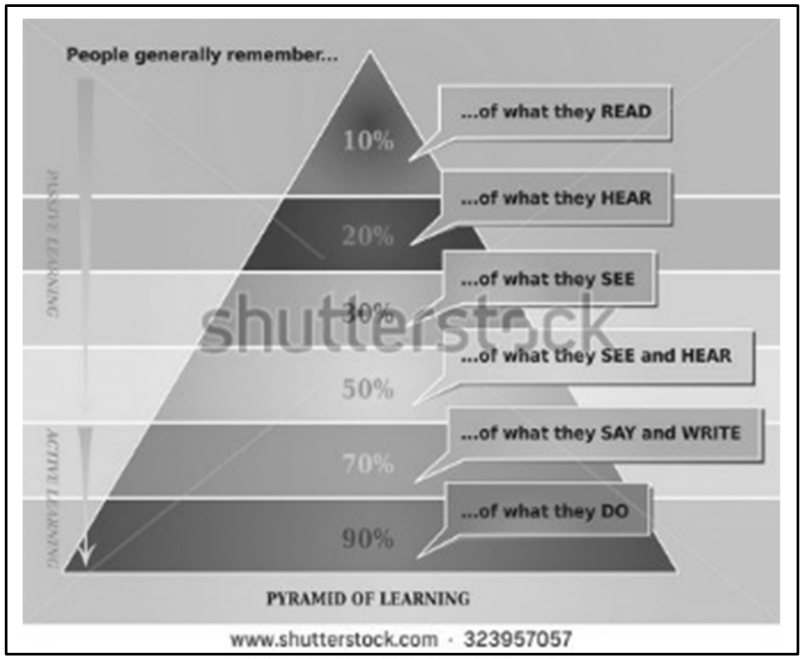
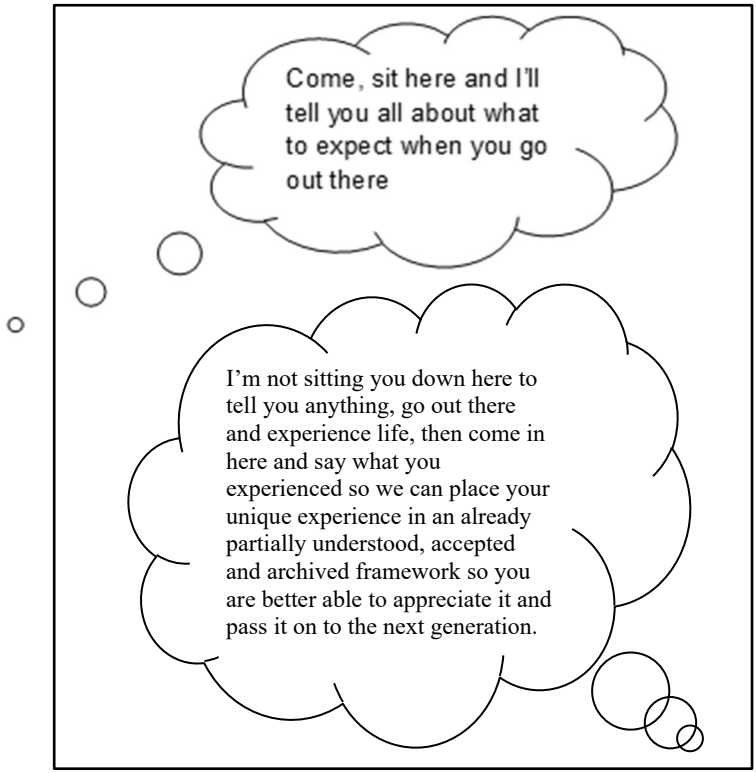


Exhibit 1. 11 Learning Pyramid

How then is experiential learning different from hands-on learning? In hands-on learning, the emphasis is not necessarily on reflecting on the product created. Whatever is learned during the hands-on process suffices the learner and minimal or no effort is made to actually reflect on the hands-on experience to glean additional knowledge.

How is experiential learning different from traditional didactic learning? Participation or active involvement seems to be the distinctive feature. Traditional didactic learning is all about making meaning from direct experience or simply learning from experience which may be staged or left open. On the other hand, experiential learning seems to take a much more holistic approach because it not only incorporates physical activities but provides intellectual, psychological, social, and emotional challenges for learners. Learners manage their own learning instead of being told what to do and when to do it. Learning may not take place in a classroom and traditional textbooks or academic texts may be nonexistent. Much of the responsibility is on the shoulders of the learner instead of the teacher. According to Moon (2004), students may have to identify the knowledge they require and then acquire it themselves, while reflecting on their learning as they go along.

In agreement with several researchers, it would seem to me, that traditional didactic learning tells the learner about the how, why, where and what of something. The learner is in a passive mode as opposed to an active mode. As one researcher said, traditional didactic learning says to the learner, ‘Come, sit here and I’ll tell you all about what to expect when you go out there’. On the contrary, experiential learning says, ‘I’m not sitting you down here to tell you anything, go out there and experience life, then come in here and say what you experienced so we can place your unique experience in an already partially understood, accepted and archived framework so you are better able to appreciate it and pass it on to the next generation’.



Referenced in: https://www.amazon.co.uk/Assessing-Experiential-Learning-Using-senses/dp/3659182427
Exhibit 1. 12 Comparison of Didactic Learning with Experiential Learning

In experiential learning, the learner's individual learning style (Section 2.4) and natural preferences are taken into consideration and growth occurs from the inside, as opposed to the transfer of skills and competencies into a learner from the outside. In such an inclusive environment, the learner can develop in his own way as methods and strategies that are most comfortable to the learner are organised to make the learning experience enjoyable. Often there are unknown and unpredictable outcomes that have the potential to sustain the activities. As intimated earlier, learners are able to integrate many disciplines (performing arts, music, information and communication technology, education, engineering, performing arts, among others) and gain numerous skills while enjoying what they do.

Successful experiential learners have the capacity and willingness to reorder or alter their conception of any given topic. Because they can reason for themselves they are successfully able to explain and clearly articulate their position. They tend to undertake tasks independently and manage themselves without the need for an instructor, whether they operate alone or in a group.

According to Moon (2004) genuine experiential learners are aware of the "rules" governing their discipline or mode of operation, but are also open-minded, and able to work with people with different views. They can identify the role of emotion in their learning, as well as reflect on how they have come to their new knowledge.

Convinced that all human beings have a natural propensity to learn, Rogers (1969) posited that experiential learning was equivalent to personal change and growth. His principles of experiential learning claimed that:

1. significant learning occurs when there is an alignment between the subject matter and the learner's personal interest
2. self-threatening learning is more easily assimilated when external threats are minimised
3. as self-threatening learning decreases, learning proceeds faster
4. self-initiated learning is most lasting and pervasive.

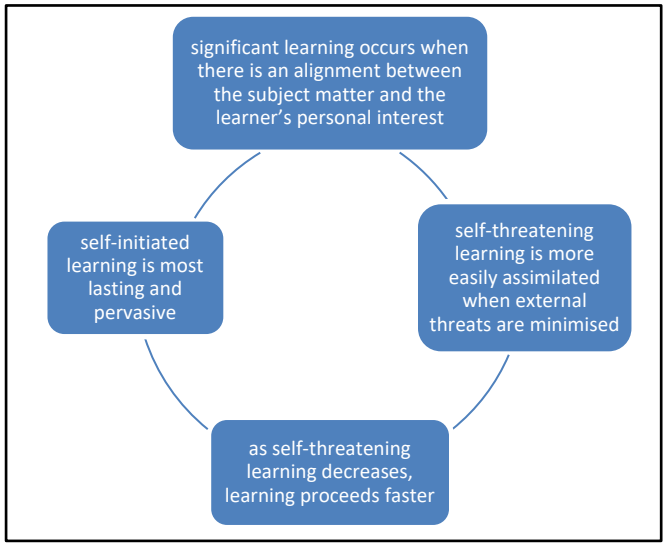


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Exhibit 1. 9 Rogers' Experiential Learning

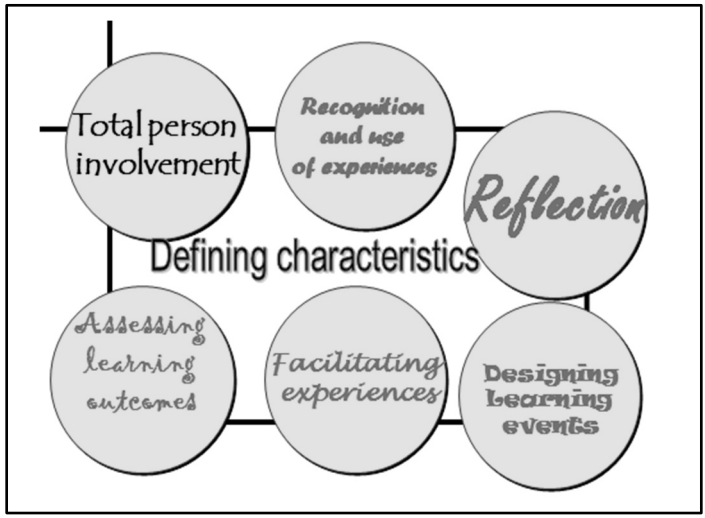
Boud, Cohen and Walker (1993) believed that experiential learning is premised on a set of assumptions about learning from experience that may be organised as:

- experience is the foundation of, and the stimulus for, learning
- learners actively construct their own experience
- learning is a holistic process
- learning is socially and culturally constructed
- learning is influenced by the socio-emotional context in which it occurs.

Andresen, Boud and Cohen (2000) listed six defining characteristics of experiential learning which I believe are important to mention here, if only to fully comprehend the nature of experiential learning:

1. involvement of the whole person: intellect, feelings and senses
2. recognition and active use of all the learner's relevant life and learning experiences
3. continued reflection on earlier experiences in order to add or transform them into deeper understanding

4. deliberately designing learning events (structured activities)
5. facilitating the experiences through negotiation
6. assessing the learning outcomes.

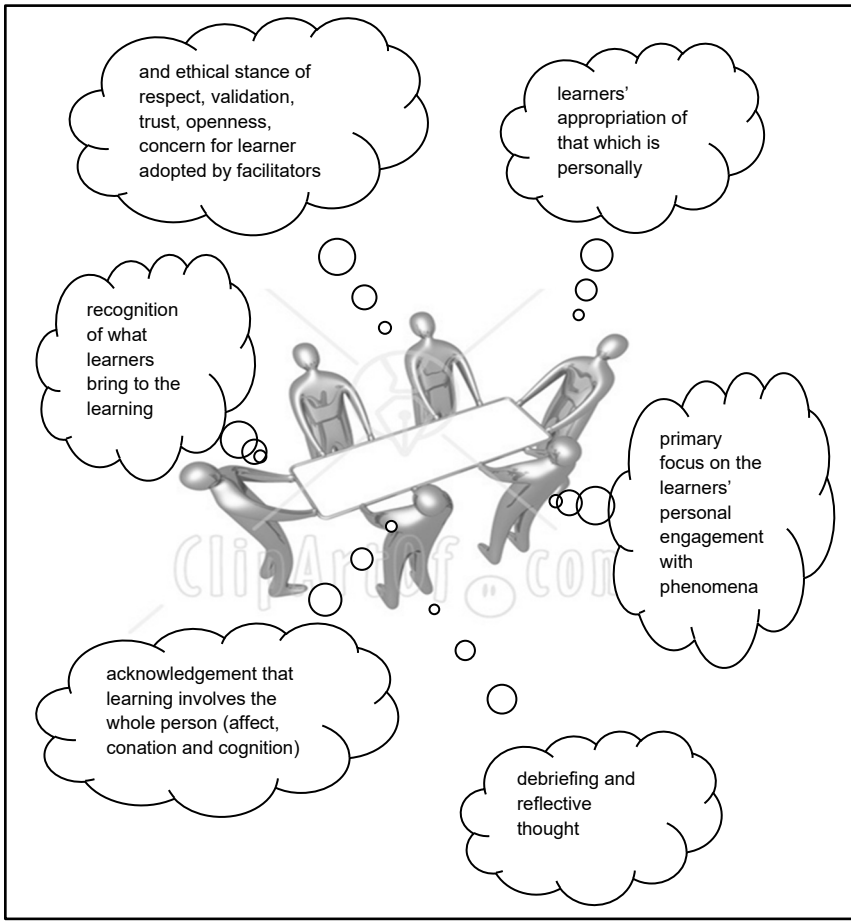


Referenced in: https://www.amazon.co.uk/Assessing-Experiential-Learning-Using-senses/dp/3659182427
Exhibit 1. 10 Six Defining characteristics of Experiential Learning

Researchers Andresen, Boud and Cohen (2000) listed essential criteria for experiential learning as:

- the learners' appropriation of that which is personally meaningful and significant to them
- primary focus on the learners' personal engagement with phenomena; debriefing and reflective thought
- acknowledgement that learning involves the whole person (affect, conation and cognition)
- recognition of what learners bring to the learning process
- ethical stance of respect, validation, trust, openness and concern for learner adopted by facilitators.

The next exhibit is a Microsoft ClipArt which is in the public domain. This exhibit illustrates the foregoing six essential criteria for experiential learning which play their individual parts in holding the process together.



Referenced in: https://www.amazon.co.uk/Assessing-Experiential-Learning-Using-senses/dp/3659182427
Exhibit 1. 15 Essential characteristics of Experiential Learning

Among the salient disputes and dilemmas involved in experiential learning, Andresen, Boud and Cohen (2000) noted the adequacy of learner-negotiated curricular; the ethics of working with deeply felt experience; the difficulty of operating within organisational contexts in which there may be potential undermining of the intended learning process because of learner participation.

As is true for every other learning endeavour, there are advantages and disadvantages involved in experiential learning.

Researchers at http://www.pathintl.org/images/pdf/conferences/national/presentations%20for%20web/2011/Pre-Conf-Ann-Alden.pdf enumerated the following seven advantages and four disadvantages which are useful to consider:

Advantages:

1. Use of multiple senses can increase retention of what is learned
2. Multiple teaching/learning methods can be integrated to maximise creativity and flexibility
3. Client-centered learning becomes the focus
4. The process of discovery of knowledge and solutions builds competence and confidence
5. Learning is more fun for both students and teachers
6. If clients are more actively engaged in learning, they have a greater stake in the outcome of what they learn and are less likely to become discipline problems
7. Students can learn life skills that will be used over and over.

Disadvantages:

1. A decentralised approach can seem less orderly, and it may be less comfortable to an authoritarian-style teacher
2. It requires more preparation by the leader/teacher and may require more time for processing
3. It requires patience and guidance by the instructor/facilitator
4. There is often no single “right” answer.

Source: http://www.pathintl.org/images/pdf/conferences/national/presentations%20for%20web/2011/Pre-Conf-Ann-Alden.pdf

Bearing the foregoing advantages and disadvantages in mind, we shall see now explore some salient experiential learning principles.

1.4 Situated Learning

'There is only one thing more painful than learning from experience and that is not learning from experience'.

— Archibald MacLeish

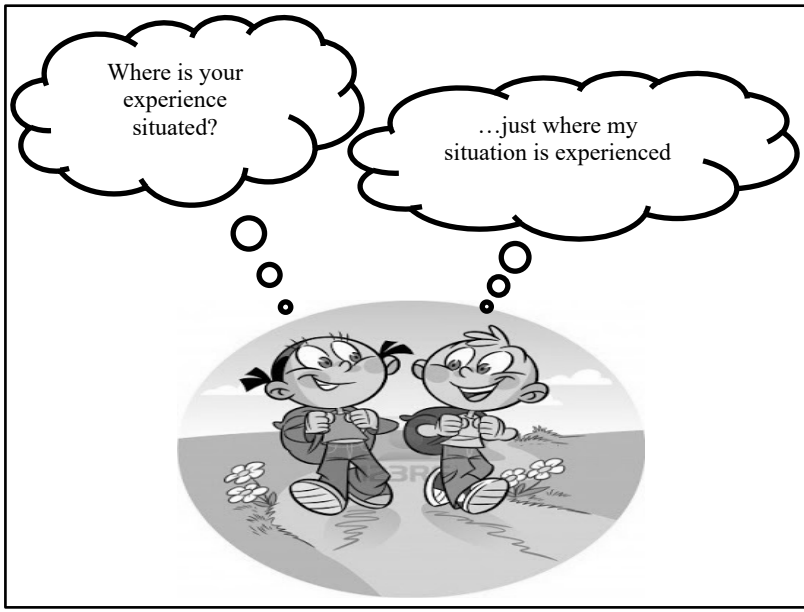


Exhibit 1. 16 Situated Learning

The foregoing exhibit highlights a conversation between two characters. The response to the question, 'Where is your experience situated? is '…just where the situation is experienced'. While such a response may appear to be begging the question, there seems to be an interesting link between situated learning and experiential learning that we should explore in this section. Essentially, situated learning occurs in the context of its application. It is characterised by a social process in which knowledge is co-constructed in a given social and physical environment.

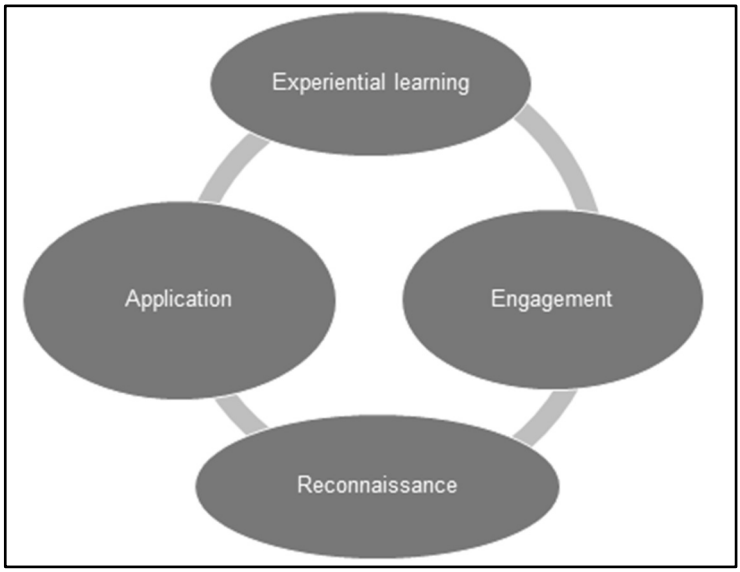
Down (2006) posited that situated learning is deliberate and requires effort, resulting in a change of practice, primarily as a result of reflective practice. She proposed that the ability to learn from experience may be enhanced by the use of a metaphoric framework, which enables the learner to deliberately focus on essential aspects of his experience in context and

make meaning of what is occurring around him, often in a community of practice. Accordingly, she proposed a working definition of learning through experience as:

> 'Learning is not remembering – nor is it a progression through a sequence of learning and assessment exercises. Instead, it is the learner interacting, in a structured way, with work, experiential, social, intellectual, emotional, and physical contexts in order to better work within them and to improve his/her practice' (p. 7).

In here experimental work, Down investigated the experiences of 108 vocational education and training practitioners, who had changed jobs or whose jobs had changed. She investigated how they were able to adapt what they knew and could do at that time. Phenomenological in approach, she used a customised and contextualised methodology which was designed to collect and analyse data from the participants without decontextualising it.

She used activity theory, Engeström's theory of expansive learning, grounded theory and discourse analysis to answer the main research question, 'How do practitioners understand the transfer of competence (that is, what they know and can do) across different workplace contexts and how does it influence their practice?' The researcher's four stage model of experiential learning involved engagement, enactment, reconnaissance and application depicted in the next exhibit.



Referenced in: https://www.amazon.com/Assessing-Experiential-Learning-Using-senses/dp/3659182427
Exhibit 1. 11 Down's four stage model of experiential learning

As participants interacted with the technical, learning, social, physical, emotional and organisational contexts comprising their workplace, they move among these four different types of activity: engagement, enactment, reconnaissance and application. A metaphoric framework of negotiating a swamp, originally used by Schön (1987) to support learners proved useful in helping to make sense of experiences. Hanging out at Exploration, Engagement, Enchantment and Enactment Islands helped effective reflection on everyday activities with a view to better understanding those activities and enhancing effectiveness and survival in the workplace.

Each of the four E islands provided a reflective space where thoughts may be organised as reflection occurs and actions are planned for forward movement. There is movement among the spaces as new challenges occur; the contexts in which experiences change; and personal and working identities develop. Down recommended that students should be taught the foregoing strategies prior to or concomitant with their entry into the workplace as an effective strategy for learning to become a good worker or to develop an identity as a worker.

Brown and Duguid (2002) believed that practice shaped assimilation as different individuals respond to the same stream of information in different ways as they are learning to be different kinds of people. Lave (1988) claimed that learning is situated in an activity, context and culture and social interaction is critical as learners become engulfed in a community of practice that holds certain beliefs, practices and behaviours. Newcomers or beginners begin at the periphery of the community and move towards the centre as they become more engaged with the norms and culture of the group. As time progresses they may become 'experts' of practice.

Referenced in: https://www.amazon.com/Assessing-Experiential-Learning-Using-senses/dp/3659182427
Exhibit 1. 12 Cognitive apprenticeship in picture

As noted earlier experiential learning occurs under a host of different headings. Cognitive apprenticeship may be considered among those. Brown, Collins and Duguid (1989) posited that cognitive apprenticeship supports learning by allowing students to acquire, develop and use cognitive tools in authentic activities. The learner's perspective is emphasised while learning becomes a collaborative social interaction and knowledge construction. Accordingly, the researchers proposed that active perception should supersede concepts and representation, in an effort to give new meaning to learning.