

Learning In The SAF'S Context

by SLTC Karuna Ramanathan

Abstract:

Learning is a complicated and challenging process. In the Singapore Armed Forces (SAF), leaders will also have the duty to constantly direct the learning process for their teams. We will need to understand the concept of knowledge and the learning process and this is reinforced by what we do every day; trainings, exercises and operations. As the SAF operates in a complex environment, every soldier will need to learn and adapt to meet the expectations of the organisation.

Keywords: Learning; Operation; Concept; Knowledge; Leader-led Learning

INTRODUCTION

Ask any SAF Officer or Warrant Officer to define or describe learning and he or she will probably have a ready answer. In reality, however, there is very little shared consensus on what is learning, and more so on how to do it. Current opinions include the insistence that as learners we leverage more on emerging technology such as Web 2.0 applications, building on how socialisation at work creates knowledge through learning.¹ Linden researched the importance of social networks for learning and innovation in organisations, and noted that while we think that workplace information or knowledge sources are the database, Internet, or more traditional repositories, such as file cabinets or policy or procedure manuals, these tend to be underused because employees are more likely to turn to colleagues for information.

As the SAF contends with time pressure, growing complexity and uncertainty, and has to deal with a growing range of intergenerational mindsets, knowing how to optimise learning opportunities becomes important. This translates into the need to learn in context, so that we are able to better develop ourselves and those whom we lead.

This article argues for a deeper understanding of the nature of learning as it applies to developing future SAF leaders who will need to be more adaptive. It presents the SAF Action Learning Process (ALP), that was implemented Army-wide, as a systematic methodology to build the necessary skills, actions and enduring habits for learning in context. The paper also discusses commonly referenced areas related to learning and the ALP in the SAF; namely team learning, operational learning, the concept of lessons learnt, institutional learning and self-directed learning.

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DEFINING LEARNING

Most scholars agree that learning occurs when an individual acquires new information, skills or attitudes, and is inherently an internal process.² Interestingly, there is very little consensus in academia on what exactly constitutes learning, though there are several well-established approaches to describing how learning takes place in educational

environments.

The notion of learning within an educational paradigm is being limited when applied to the workplace. Research repeatedly surfaces that who one knows impacts what one comes to know, as relationships are critical for obtaining information, solving problems and learning to do work.³ Contrary to what is insisted upon in education, analytical rationality is limiting and inadequate in the examination of issues pertaining to knowledge and learning within a profession, whether as a student, researcher or practitioner. Human behaviour cannot be meaningfully understood as simply the rule-governed acts found at the lowest levels of the learning process.⁴

The average SAF soldier, sailor and airmen needs to optimise learning time on the job and in the operating environment in order to think and work better. As we optimise the learning in SAF schools, the real learning that needs to take place is out there

in the units during training, exercises and operations. Marsick found that only 20% of what employees learn were from formal and structured training, and that they were more likely to resort to personal learning strategies, to taking time to question, listen, observe, read and reflect on their work environment.⁵

LEARNING IN THE SAF

Within a military context, learning can be regarded as the acquisition and modification of existing knowledge, behaviours, skills, values, or preferences, and usually involves synthesising different types of information. In this description, learning is both content driven (acquisition of knowledge) and context driven (behaviours, skills, values and preferences in order to synthesise information).

Traditional views on learning include regarding it as academic activity or personal activity. In schools and higher educational institutions, learning is about content knowledge.⁶ However in the workplace, employees engage in informal



Progress of trainees at the Medical Simulation Training Centre (MSTC) is tracked via video cameras which can pan, tilt and zoom to capture the trainees' movements. These recordings are screened live in another room for other trainees to observe and learn from the proceedings.

learning activities at the workplace, and they seek to constantly transform content into knowledge and skills.⁷ This is made possible through meta-cognitive processes, which involve setting individual learning goals, selecting effective learning strategies, monitoring learning progress and self-adjustment.⁸

In the SAF, leaders at all levels have the duty to lead the learning process of their teams. This is the mainstay of the leadership development process, which also infers by its very claim that leaders possess role-model positive behaviours. As we seek ways to prepare our leaders to be adaptive to better engage with the complexity and uncertainty in new operating environments, learning contributes to the leader's ability to reason more effectively.

To do this, learning must culminate in insight for SAF Commanders and Leaders. Knowledge is created when insight is formulated.

In the formulation of insight, thinking is a pre-requisite, though by itself it is insufficient. When thinking and learning go hand in hand, the leader is able to reason better, not in isolation, but with his team. The key difference

between how we think and learn in the SAF and how we think and learn in schools is that in the SAF, as leaders, we lead teams, and the thinking and learning has to be in teams. When we regard learning in this paradigm as opposed to the educational paradigm, collaboration, reflection, critical thinking, evaluation and decision making skills become increasingly important, instead of factual knowledge.⁹

It is also important to keep in mind that the individual aspects of learning present only one side of the coin. As a leader, there is also the responsibility to harness diversity and multiple perspectives within the team, as the leader leads learning in his team. If the leader is able to learn better and lead the learning in

his team, then he should be able to recognise changes in the environment, identify the critical elements of the new situation, and trigger changes accordingly to meet new requirements in a timely manner more effectively. In short, he will become more adaptive.

LEARNING AND THE ADAPTIVE LEADER

The challenge of learning can be understood better if we understand the concept of knowledge. Knowledge is multi-dimensional. Tacit knowledge is undocumented and, accordingly, is difficult to transfer to anyone else. On the other hand, explicit knowledge is objective and formal by nature and can be transferred to others within the organisation. Explicit knowledge by itself is insufficient for learning. Naturally, the tacit knowledge store is much bigger than we think. The important thing to remember is that in the context of the SAF, which largely trains and selectively deploys, tacit knowledge is created through learning in context, and to a lesser extent by experience. For SAF leaders to learn, and to lead learning, they will have to move from vocational knowledge accumulation in the schools and training institutes, to experiential learning in units during training and exercises.

Doing this as a matter of conscious practice will allow the leader to increase his ability to reason. This in turn means that he will be able to better recognise changes in the environment, identify the critical elements of the new situation, and trigger changes accordingly to meet new requirements in a timely manner. As he gains more confidence in working with his team, and leading the learning, his team will better adapt to the complexity and uncertainty in the new operating environment.

Leader-led learning is an essential part of leadership development; when practised over time, it contributes towards building one's self-awareness



Recruits taking aim with the SAR-21 rifle.

and self-management, and brings critical and creative thinking into practice, as well as ethical reasoning. In the near future, adaptive leaders in the SAF will lead through thinking and learning as they engage with their teams in the operational environment. As the leader develops his ability to reason better through practising learning skills, he will also increasingly engage with his mental models and view issues through the organisational lens; namely profession, ethics and core values. Therefore when learning is preceded by thinking, the leader is able to reason better with his team.

In this regard then, learning can be seen as a process as well as an end in itself. In either view, knowledge becomes the product of learning.¹⁰ As a renewal process, learning is seen as a process to create knowledge; and relating this to one's prior and personal experiences results in the creation of new personal knowledge.¹¹ The renewal process definition of learning resonates with the apprenticeship models of learning, however, Bhatt contended that

exploiting past knowledge can only be useful to a point where the operating environment stays stable.¹² Clearly in the SAF, this is not a valid assumption for the future. Adding to this, Kolb cautioned against the experience view of learning, and instead posited that workplace learning could be regarded as an active, changing process that the employees

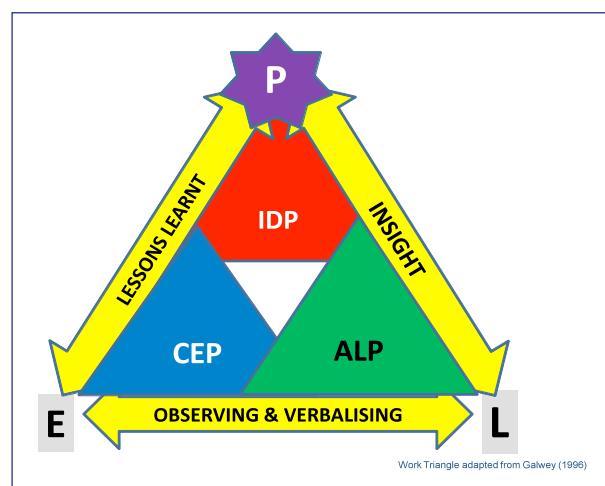


Figure 1: Learning in Context

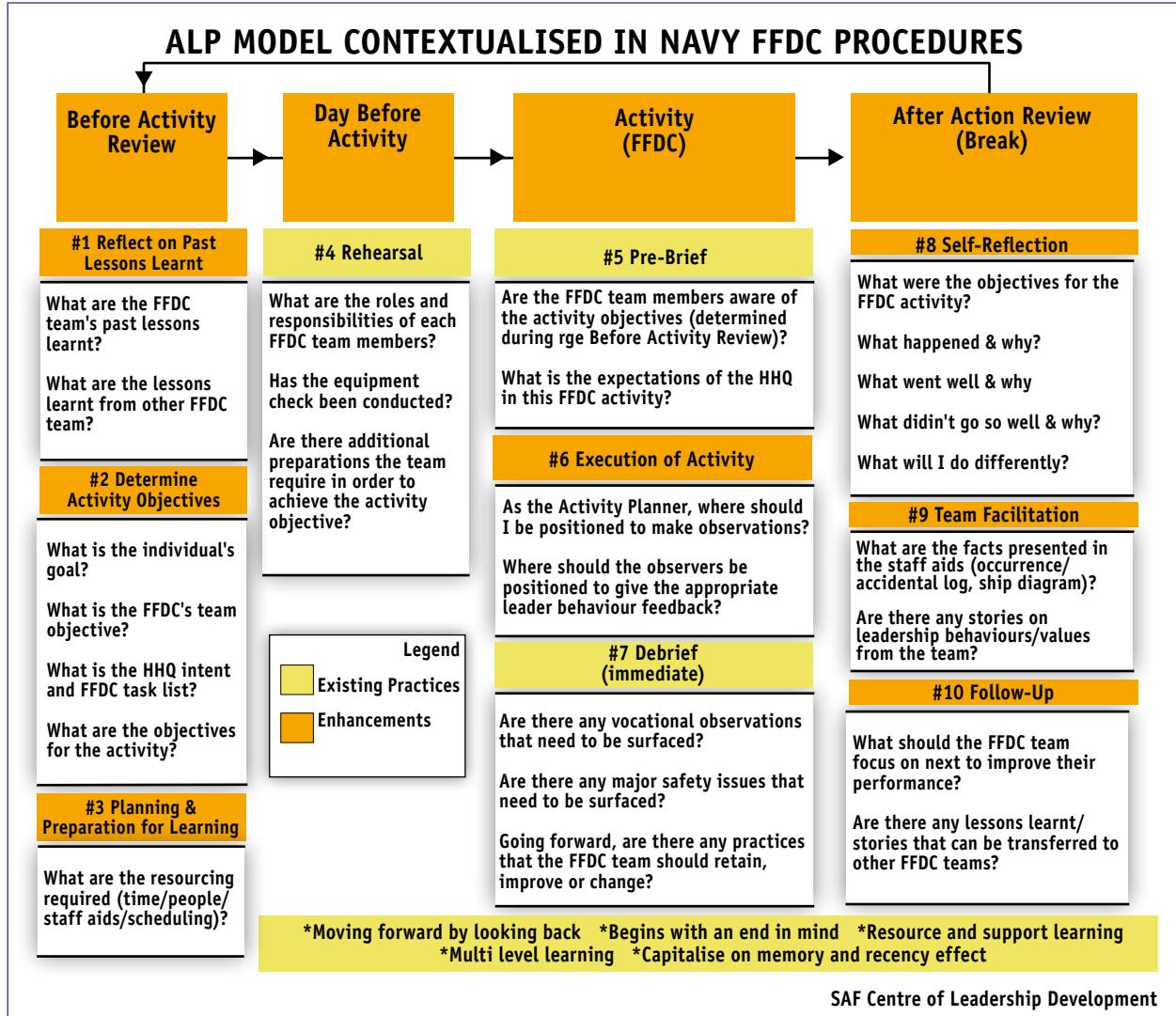


Figure 2 : Navy Fire Fighting and Damage Control Template

should undergo in order to manage performance and motivational expectations. This perspective requires learning to be seen as a continuous process to address emergence, which is more forward than just being dynamic.¹³

As a process then, knowledge is actively created, and in the context of the SAF, this means that the individual leader is able to actively reflect, internalise and experiment to create knowledge as he engages with the environment. As a leader in this context, he has the additional responsibility to lead learning in his team, so that he can optimise the diversity and gain from the multiple perspectives

of his subordinates. This is because the uncertainty inherent in the new operating environment renders his experience and expertise increasingly inadequate. In short, to be adaptive, he cannot rely on his views alone, and would need to create knowledge through gaining insight from himself and from others around him. This will require that he understands and engages with the diversity and multiple perspectives of his team members.

LEARNING IN CONTEXT

As one of the three Leadership Development (LD) processes, the Action Learning Process (ALP) brings learning alive in a team. Together with the

Individual Development Process (IDP) and the Command Effectiveness Process (CEP)¹⁴, the ALP provides a comprehensive and systematic approach to the design of learning in context. The IDP amplifies development, the ALP designs learning, and the CEP provides Commander level and system level feedback on leadership effectiveness, which will include experience as a key measure. Such holistic design is supported by ground based and practical learning skills, tools and outcomes. When designed well and supported by the leader practice field of coaching, facilitation and reflection, the ALP promises individual, team and organisational learning outcomes. As presented in Figure 1, such a holistic approach results in observations and verbalisations, insights, and lessons learnt, fuelling the need for a knowledge management system.

SAF ACTION LEARNING PROCESS (ALP)

The theoretical foundation for the ALP is Kolb's learning cycle, and its practical foundations are in the military After Action Review (AAR).¹⁵ The Kolb's learning cycle describes how individuals learn from experience, and how reflection is an essential input in the active experimentation, concrete experience, reflective observation and abstract conceptualisation. Both the Kolb cycle and the AAR have been around for more than two decades; however the SAF is arguably the first organisation to deliberately align the AAR with Kolb's cycle for learning.

A starting assumption with the ALP is that AARs as events are scheduled and designed into training, exercises and operations. What the ALP does is that it strengthens the design and conduct



The SAF also keeps up with current issues through dialogues and lectures by our nation's leaders. Minister for Culture, Community and Youth and Second Minister for Communications and Information Lawrence Wong speaking to students from the 45th Command and Staff Course (CSC), 15th CSC (NS) and 3rd CSC (Executive) during the Distinguished Speakers' Programme.

of these AARs such that it brings alive the learning within teams. By doing so, the AAR optimises the performance experience for learning and engagement. As the leader facilitates the AAR for learning, this generates insights for the team. An early adaptation of Kolb's cycle in AARs generated easy to use questions to promote team level learning in Navy Fire Fighting and Damage Control (FFDC) exercises, and this template demonstrated just how easy it was to redesign training so that the learning can surface, and where knowledge becomes a product. The key point to note is that there is no change in the activity, no additions to time allocated, and no requirement for additional training. The template serves as a guide to the leader conducting the activity to be more prepared to ask questions to lead the learning in his team. This template has been adopted by the Republic of Singapore Navy (RSN) for FFDC training in the fleet (see Figure 2).

The use of the Kolb experiential cycle is closely linked to Argyris and Schon's differentiation between "single-loop" and "double-loop" learning.¹⁶ Single-loop learning is a simple version of the Kolb cycle, in which performance is evaluated through reflection and then corrected or improved. In double-loop learning, the whole activity is part of a larger cycle, in which the reflection takes place on the fact of engaging in the activity and the assumptions implicit in it. This brings into question the learner's mental models and his ability to understand how these might limit his thinking.

To strengthen leader skills, the ALP's practice field includes the five skills of goal setting, team learning, storytelling, critical reflection and summarisation. These skills are required so that the leader and his team will be able to verbalise their experiences, derive their insights, record and plough back into the next activity lessons that they have learnt. The practice field for the learning that has to take place during experiential activity is formed by these five specific skills, and increased attention to these skills will enable the leader and his team to be better prepared to face ambiguity and uncertainty in the

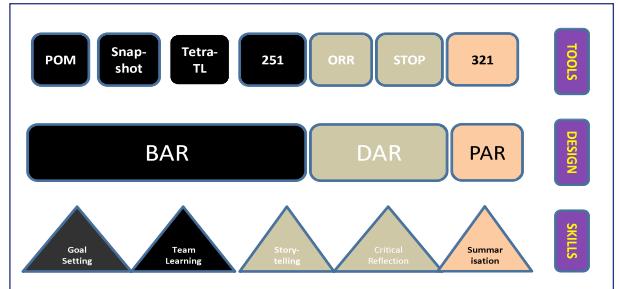


Figure 3: SAF Action Learning Process System Overview

new operating environment. Figure 3 provides the overview and the set of tools that have been provided to the SAF units to strengthen learning.

The Learning Organisation linkage is most obvious with team learning, and potentially, though less, with shared vision and mental models.¹⁷ Team learning is the foundational skill required to bring learning alive, and in the SAF we have adapted the TetraMap™ approach to install Team Learning, to mitigate the horizontal stresses within the team. Goal setting is the entry point to the ALP, while Summarisation is the exit point. Storytelling is the lifeline of the ALP. If the leader is unable to get his team to verbalise their experiences to each other, then the learning in the team becomes limited. To counter the vertical stresses in the team, the ALP design includes story techniques at the Before Activity Review (BAR), During Activity Review (DAR) and Post Activity Review (PAR). When done well, the use of story will build commitment, strengthen values, and result in insights that can be converted into lessons learnt. Most importantly, it strengthens learning and engagement on the ground. These skills are taught to young leaders in the SAF schools, so that they will become confident to practise these as leaders who lead learning when they are posted into units.

The ALP is a design frame that can be implemented into training, exercises and in operations to support structured conversations. For the leader, this potentiates a balance between process and content facilitation techniques, depending on the context of the structured conversation and the learning need. For example, in the training content, the

content facilitation approach might work best. What the ALP does as a process is to allow the leader to be consciously applying himself by seeking to listen deeply so as to become more aware of those in his team, to what they are saying and what they are not saying. This ambiguous silence is detrimental to learning and knowledge creation, and this is the value proposition of the ALP.

The contention is that team learning will be the means and not the ends to team effectiveness.

Through the ALP, Retrospective Observations, Insights and Lessons Learnt (OIL) is the habit of reflecting and learning from experience, to manage complexity. This is the focus of training and exercises in the SAF. Prospective OIL refers to the ability of the leader to plough forward what he has learnt, to reduce the effects of uncertainty and to increase the risk-taking probability in future missions. This is the focus of ops missions, and mitigates the uncertainty in the new operating environment.

TEAM LEARNING AND THE ADAPTIVE LEADER

The SAF is a team of teams. A team is a unit of two or more people who interact and coordinate their work to accomplish a shared goal or purpose. Teams cannot be effective unless the members (and/or the Leader) attend to teamwork (how team members *work together*), dynamics (how team members *relate* to one another) and cohesion (how team members *gel* with one another). These areas are interrelated, and these can also be states (or outcomes) rather than frames (or perspectives). Learning is an integral part of successful teams, and therefore understanding what these terms mean and how they might relate to the leader's ability to lead learning will be important for the Adaptive Leader.

In the ALP, team learning is promoted through the Tetramap™ approach to diversity and perspective building in teams. Patterns of defensiveness undermine learning, and if recognised and surfaced creatively, actually accelerate learning. For teams to enter into a genuine thinking together, pooling of past experiences, verbalising current experiences and summarising together for meaning are key activities.

In the SAF schools and units, team leaders are provided with simple tools and techniques to recognise and address patterns of defensiveness among team members. The issue here is not individual strengths and weaknesses, but rather, preferences. That is why the approach to Team Learning must not be psychometric in nature, which focuses on avoidance rather than approach. Once there is an appreciation of individual preferences, then there can be attention to pooling of past experiences, verbalising current experiences and summarising together. The desired end-state is to enable teams to genuinely think together, in other words, to learn in teams. The contention is that team learning will be the means and not the ends to team effectiveness. Doing this will also strengthen team dynamics, though this is largely a function of time and repeat interaction opportunity among members.

OPERATIONAL LEARNING AND THE ADAPTIVE LEADER

At the leader level, operational learning is the capacity to make conscious decisions, arising from the ability to process information and sense make, based on data, information and knowledge. Such decisions combine experience with observations, insights and lessons learnt, and leverage on the intellectual abilities within teams to strategise the best way forward in managing complex issues.

The ALP is a first process to attend in a deliberate and systematic manner, to the workflow aspects required to incorporate information and knowledge in the form of lessons learnt into training, exercises and ops. In considering the utility of information and knowledge to the Commander, we must acknowledge that we only know what we know when we need to know it, and we are pattern based intelligences. So it is very important that we process design Knowledge Management into training, exercises and operations in order for the information and knowledge to have utility, rather than as a reference.

LESSONS LEARNT AND THE ADAPTIVE LEADER

The United States (US) Military defines lessons learnt as either results from an evaluation or observation of an implemented corrective action that produced an improved performance or increased capability, or a positive finding.¹⁸ Every training activity in the SAF has performance standards for evaluation. For purposes of generating insight, lessons learnt should not be confused with performance standards. It can be argued that not carrying out something that is part of Standard Operating Procedures or doctrine is NOT a lesson learnt, but a performance issue.

Therefore in the context of the Adaptive Leader, lessons learnt refer to personal and/or collective insights obtained based on observations from experiential activity, and involves deliberate analysis. Insight can be explained as the ability to perceive and understand the inner (as opposed to the outer) nature of things. Observations refer to watching something (event) or someone (person) and taking note of it. Analysis can arise from two levels, more commonly at the organisational level, and, where expertise exists, at the individual level.

INSTITUTIONAL LEARNING AND THE ADAPTIVE LEADER

Institutional learning as used in the SAF explains the learning that takes place in schools and training institutes. Dealing largely with the design of instruction and the presentation of content to support the learning, institutional learning outcomes are determined and organised through curriculum. These include residential courses, mixed residential and non-residential programmes. In the quest to develop Adaptive Leaders for the future, some changes in curriculum can be expected, including embedding of the ALP skills into experiential opportunities e.g. field exercises. Such embedding will increasingly be supported by enhanced questioning techniques for instructors, as they seek to facilitate the learning to draw out the observations, insights and lessons.

SELF-DIRECTED LEARNING AND THE ADAPTIVE LEADER

Self-directed learning occurs when the learner is both the focus and also the participant in the acquisition of new knowledge and skills. The central idea is to promote a continuous engagement with content as well as with the person himself, through learning practices such as participation, inquiry and reflection. Within the context of the Adaptive Leader, the continuous attention to learning is an important attitude that will need constant reinforcement from Commanders and leaders. The ability to better understand content and context is attended to in part by a positive attitude towards continuous learning.

CONCLUSION

There is a clear need to differentiate between how we learn in schools and how we need to learn in units, when we are in leader and Commander appointments, and when we are in training, exercises and operations.

There are increased demands placed on our cognitive and behavioural abilities, and these will get more critical as the SAF increasingly operates in complex and uncertain environments. This paper highlights the importance of understanding and preparing to learn in context, rather than only focusing on the content and its delivery as in pedagogical aspects, and the recall of that content for learning. ☽

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