

Preparing Leaders for the Complexities of the Security Environment in the 21st Century - SAF's experience with Competency Based Learning¹

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Abstract:

The paper to be presented will showcase the implementation of the SAF Leadership Competency Model comprising skills and behaviours espoused for the SAF leader for an expanded spectrum of operations into the Officer Cadet Course curriculum from Apr 04 to Jan 05. The inclusion of a focus on observing and giving feedback on leadership behaviours across a spectrum of skills has not just resulted in an improvement in the quality of feedback and efficacy of coaching but it has also led to improvements in the learning experience. This also led to an increase in the Cadet's confidence to display those desired leadership behaviours.

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SAF’s Expanding Spectrum of Operations

Until the 90s, the SAF was largely structured for conventional military operations and a large part of its Leadership training was geared towards preparing SAF Leaders to operate in this context. However during the 90s, the SAF found itself increasingly involved in UN peacekeeping missions, especially playing medical or observer/advisor roles – Namibia in 1989, Kuwait in 1991 to 2003, Angola in 91/92, Cambodia in 92/93 and Afghanistan in 97/98. By the time the SAF completed its UN operation in Timor Leste (UNTAET) in Nov 02, it had deployed up to a company-sized force of armed peacekeepers. For the SAF, this was a significant milestone as it was our very first deployment of armed peacekeepers (Tan, 2003). Singapore’s security environment also changed greatly since September 11th, 2001. Today, the SAF not only deals with peacekeeping or conventional threats, its spectrum of threats has expanded to include non-conventional threats, most notably, terrorism by global networks and their affiliates.

More recently, following the tragedy of the Great Tsunami on December 26th, 2004 the SAF’s role expanded into providing relief for the victims of disasters. Within a short span of 7 days, the SAF deployed 10 helicopters (with 6 Chinooks), 4 Landing Ship Tanks as well as 1500 men and women in a Joint Humanitarian Task Force providing relief to the worst hit regions in Melauboh and Banda Aceh (Ministerial Statement, 03 Jan 04). This effort marked the biggest and most significant operational deployment made by the SAF so far.

The SAF Leadership Framework

The SAF recognises that dealing with such threats and situations requires different capabilities and skills, and a different orientation in mindset (Choy et al, 2003; Lee at al, 2003).

Hence in 2001, the SAF initiated a major effort to review and enhance its system for leadership development. This led to the creation of a “Centre of Leadership Development” or CLD, whose mission was to promote leadership excellence and to spearhead leadership development in the SAF.

From 2001 to 2003, a Strategic Needs Analysis (SNA) comprising surveys and interviews was conducted on 1478 men and women of all 3 services. The SNA was meant to identify SAF’s future operating context and it’s demands on Leaders. Based on the outcomes from this analysis, the SAF Leadership Framework was launched in Dec 2003 as the doctrinal framework for the Leadership Development of future SAF Leaders (Chan & Lew, 2004)². This framework included the SAF Leadership Competency Model or LCM which articulates the competencies/ skills that is espoused for an SAF Leader in an expanded spectrum of operations. This approach to the model focuses on the question “whether the leader *is able to* lead given his/her skills?”

Challenge of Infusing the LCM into curricula

As a follow-up to the development of our Leadership Competency Model (LCM), the SAF recognised the need for a generic methodology and training for implementing a competency/skill based learning into our leadership training curricula. The immediate challenge was in translating leadership behavioural competencies into training methodologies and content. To understand the challenge, one must understand that the LCM comprises of five competency domains, of which four are ‘core competencies’ that directly affect leadership performance on the job, and the fifth competency domain is a ‘personal meta-competency’ required for leader adaptability and growth (see Table 1). The domain of ‘personal meta-competency’ is especially important as the SAF takes a process

Competencies	“Core Competencies” (For Leader Performance)				“Meta-competency” (For Growth / Adaptability)
	Conceptual Thinking	Social	Mission	Developmental	Self
Skills	Critical Thinking	Communicating to Influence	Planning	Developing People	Self Awareness
	Creative Thinking	Interpersonal Effectiveness	Decision Making	Developing Team	Self Management
	Ethical Reasoning		Execution	Improving Organisation	Personal Mastery

Table 1: SAF Leadership Competencies and Skills

driven view of leadership;

“Leadership is defined as the process of influencing people to accomplish the mission, inspiring their commitment, and improving the organisation” (p. 2, *SAF Leadership Development Doctrine Directive 02/2004*)

At this point, it is important to point out that the SAF did in fact attempt to introduce a structured approach to leadership training since the 1990s. In 1995, at the time that the SAF established its tri-service military institute called “SAFTI Military Institute” or SAFTI MI, the SAF also promulgated a leadership framework, called the Knowledge-Abilities-Qualities or KAQ Model of leadership. The idea behind the KAQ was simple – to break down the concept of leadership into its parts, and thereby, to spell out the knowledge, ability and qualities desired for effective leadership in the SAF. The KAQ Model emphasised mainly task and people-oriented skills like ‘Plan’, ‘Implement’, ‘Communicate’ and ‘Motivate’. The implementation of the KAQ saw the model being introduced only for the generic education of entry level Officers and Specialists/NCOs. The focus in 1995 was to provide awareness about the model and assess the trainees based on the sub-components of the model.

After reviewing existing literature on behavioural skills training (Spender & Spencer, 1993; Huszczo, 2004), we recognised that with the implementation of the LCM, the SAF would need to systematise the training of the various skill sets. The immediate point of reference was to look at the KAQ approach to training which focuses on behavioural role modelling (Bandura, 1986) i.e. demonstration by the instructors and role playing by the trainees. Here, the outcomes varied greatly as it depended on the ability of the instructors to demonstrate the desired leadership qualities. In addition, we also realised that if the training emphasised rigid, rote learning then it is unlikely to promote the development of the flexible and adaptive behaviours that SAF felt necessary for an expanded spectrum of operations (Robertson, 1990).

As it stands, the new LCM improves on the KAQ by articulating three ‘new’ leadership competency domains with 10 new leadership ‘skills’ (including meta-competencies) the scope is therefore broader than what the SAF had previously dealt with. It then became clear to the SAF that in implementing the LCM, creating

experiential learning as espoused by Kolb (1983) would be very important. This meant that structures were needed to help the trainees receive the relevant feedback to help them reflect and then apply what they have experienced (Mumford et al, 2000). Hence, we realised that the key to systematising leadership training and implementing the LCM lay in providing the instructors a standardised structure to observe, provide feedback and then coach the trainee thereby helping the trainee acquire the desired behavioural skills (e.g. Ward et al 1990). This clarity led to the creation of the Competency Based Learning (CBL) project and reviewing existing literature (Voorhees, 2001; US Dept of Education, 2001) we understood this as a method used to operationalise the competencies, skills and behaviours identified in the SAF Leadership Competency Model. For the SAF, CBL focuses on developing the leader as well as the knowledge and content he should possess. Here, the Skills in the LCM were then analysed and translated into Competency Based Learning Requirements (CBLR) that describes the leader actions or behaviours that a leader takes in pursuit of a task. We recognise that providing clear learning objectives with clear meaningful context is important in designing effective training (Tannenbaum and Yukl, 1992). A rubric was then developed for each CBLR so that the instructors could use it as a reference to observe and provide feedback to their trainees on their level of competency in meeting the CBLR. The feedback given to the trainee is recorded and tracked to monitor the development of the trainee over the designated period of training thereby allowing the instructors to effectively coach the trainee’s.

Approach to implementing the CBL

In the SAF, the most strategic place to begin the implementation of the SAF LCM would naturally have to be SAFTI Military Institute. As the Home of the SAF Officer’s Corp, it is the place in the SAF where Officers of all ranks from Officer Cadets to Colonels in the Army, Airforce and Navy come together for training. Hence, by implementing the LCM in SAFTI MI we would be able to kick start the initiative with the largest and most critical group of leaders that has the biggest combined leadership “footprint” in the SAF. To improve the efficacy of infusing the LCM into curricula and maximise the learning from an initial implementation of the CBL, we also felt that the Learning Climate is a key environmental factor that must be present (Ford & Weissbein, 1997). SAFTI MI being the origin of the Organisational

Learning initiative (Senge 1990) in the SAF has the best learning climate amongst the faculty and the trainees in the SAF to support the infusion of the LCM through the use of CBL.

Having located the training environment with the best conditions, the CBL project took form as early as Jun 03 even as the final parts of the LCM were surfaced for endorsement. The SAF felt that this creates better synergy in the transfer of the doctrinal concepts of LCM into training curricula. To further support this effort, the SAF assembled a project group comprising the Leadership Training and Curriculum Branch from CLD, Subject Matter Experts from amongst the Faculty in SAFTI MI as well as 4 foreign consultants with expertise in education pedagogy and military experience. We felt that this project team would be balanced in terms of Vocational, Leadership as well as Instructional expertise.

There are 3 main schools in SAFTI MI; the Officer Cadet School (OCS), the SAF Advance School (SAS) and the Singapore Command and Staff College (SCSC). Of which SAS is made up of the Army Officer Advanced School (AOAS) as well as the Airforce and Navy Advanced Schools (AFAS and NAS respectively). In infusing the LCM through Competency Based Learning, the SAF sought a “Tidal Wave” approach i.e. to begin by reaching out to the areas with the most strategic mass and then for the effort to spill over to other areas in subsequent waves. Hence, our decision was to begin the effort first with a trial at Army Officer Advanced School and the Officer Cadet School. At the Intermediate level, AFAS and NAS were excluded as the curriculum of their service and tri-service courses were rather platform centric and we felt that our experiences with the other schools would better serve our efforts to infuse the SAF LCM in the curricula of these 2 schools. This differs from SCSC where the complexity of the challenges facing the students in their eventual operating environment poses a challenge to our understanding of how the lessons learnt could be generalised to the rest of the SAF. We believed firmly that by infusing the LCM at a lower level of command, the SAF could learn more about the intricacies of using CBL than if it had been at a higher level (e.g. Kaplan et al 1987). In proceeding with AOAS and OCS, the SAF felt that working with these 2 schools in the initial phase is still sufficient to help us achieve our aims. We envisaged that the successful infusion of the LCM at these schools would ensure that Army Officers at the Platoon and Company levels of Command as well as the

Junior Officers in the Airforce and Navy begin to receive behavioural skills training in the competencies of the LCM. Thereby seeding the next generations with the competencies that we espoused and for the Army to permeate the SAF LCM at the most immediate levels of direct leadership.

Infusing the SAF LCM through CBL

In preparing the Faculty of OCS and AOAS to begin the infusion of the LCM, we went beyond educating them about CBL and the steps in identifying CBLRs and designing Rubrics. We also recognised that the Faculty’s ability to observe and more importantly provide feedback to their learners is a key variable in making the use of CBL to implement the LCM a success (e.g. Holliday, 2001). Hence, all the Faculty of OCS and AOAS received professional training on the art of Coaching to enable them to be effective in engaging with their learners.

In the conduct of the trial, the strategy was to begin the effort with AOAS in the initial design phase. The main consideration here is that other than the challenge of the size and scope of training in OCS, there was a difference in the maturity levels of the faculty. Those in AOAS would have more experience having attended the Command and Staff Course at SCSC and having served in a wider variety of Staff and Instructional appointments. Hence, through them we could better appreciate and understand the challenges of using CBL to implement the LCM.

The knowledge of the use of CBL was then shared with OCS and together with an Educational Needs Analysis on the curriculum in the Tri-Service, Army, Airforce and Midshipmen terms, a decision was made on the list of 6 skills/ 10 CBLRs to be infused through CBL (see Table 2). Here the principle was that the CBLRs for each of the skills being deployed in the current training curricula must be observable in the existing training activities. Following the SAF Training Development System, the Schools would conduct a syllabus review biannually. At that time they could make more changes to the existing curricula to allow the infusion of other skills (see Chapter 15, SAF Instructional Design Course Handbook, 2004).

The transfer of knowledge from AOAS also allowed the design of a better instructor preparation package. Here, follow-up sessions were conducted with the Instructors at the end of

every training term to help them learn and improve their skills in providing feedback (Yukl, 2002). In addition, as part of the SAF Training Development (TD) System, the Subject Matter Expert and Head of TD in OCS conducted routinely conduct training visits. These visits allowed the follow-up sessions with the Instructors to be done on site, thus improving the efficacy of learning for the instructors.

To ensure that the behavioural skills training of leadership competencies for SAF Leaders is aligned with our Operational doctrine, we made sure that during the design of the Rubric, a cross reference was made to the existing SAF doctrine. Rubrics included descriptions of the skill in a tactical context as well as in general context i.e. during the management of daily routines (see Table 3). The CBLRs were then integrated into existing Operations Military Knowledge lessons to

1.1 Critical Thinking	2.1 Communicating to Influence	3.1 Planning
3.2 Decision-making	3.3 Execution	4.2 Developing Team

Table 2: Competencies and Skills Deployed in OCC

CBLRs actually deployed in the entire OCC

- 1.1.1: Analyses the mission (of 1.1 Skill: Critical Thinking)
- 1.1.2: Develops Courses of Action (of 1.1 Skill: Critical Thinking)
- 2.1.1: Communicates thoughts & ideas [effectively], clearly & concisely (of 2.1 Skill: Communicating to Influence)
- 3.1.1: Assigns tasks, organises and prioritises work (of 3.1 Skill: Planning)
- 3.2.1: Makes sound decision in alignment with higher HQ's intent (of 3.2 Skill: Decision-Making)
- 3.3.1: Takes charge and [executes tasks] (of 3.3 Skill: Execution)
- 3.3.2: Adapts/ Adjusts [plans & orders] (of 3.3 Skill: Execution)
- 4.2.1 Builds team cohesion and morale (of 4.2 Skill: Developing Team)
- 4.2.2: Motivates team members (of 4.2 Skill: Developing Team)
- 4.2.3: Resolves conflict (of 4.2 Skill: Developing Team)

Table 3: Sample of a CBLR and its accompanying Rubric

2.0 Competency: Social

2.1 Skill: Communicating to Influence

A2.1.1 CBLR : Communicates thoughts and ideas [effectively], clearly and concisely.
References: SO & P, Chapter 3, Para. 3-4, pg. 3-2; SAF Leadership Handbook, Chap 2, para 2c.(3)(a), pg. 17 and Annex A, Communication

Novice/ Adv Beginner	Competent	Proficient	Expert
<p>Novice: .Communicates but has difficulty organising a presentation.</p> <p>Advanced Beginner: .Delivers an organised presentation.</p> <p>.Has difficulty ensuring the message was understood and interpreted correctly.</p>	<p>GENERAL . Organises message in a logical and structured manner. . Keeps message concise and focused, elaborating where necessary.</p> <p>. Ensures subordinates' [peers and superiors] accurate understanding and interpretation.</p> <p>. Asks subordinates [peers and superiors] to repeat and/or paraphrase the message.</p> <p>. Actively listens and observes non-verbal cues for understanding.</p> <p>. Clarifies misunderstandings and resolves misinterpretations.</p> <p>TACTICAL . Accurately communicates higher headquarters intent and guidance. . Briefs/Issues a simple clear, complete and timely plan/order. . Uses staff aids (e.g., sketches and sand models) to highlight important places and features.</p>	<p>GENERAL . Knows listeners and tailors the message to them. . Adapts communication style and content to the listeners.</p> <p>. Uses appropriate medium and method for the listeners.</p> <p>TACTICAL . Briefs issues plans and orders that: Uses authoritative expression Recognises subordinates prerogative Avoids qualified directives.</p> <div style="border: 1px solid gray; border-radius: 10px; padding: 5px; margin-top: 10px;"> <p>NOTE: Achievement of "proficient" and "expert" competency levels depends on operational experience and additional training, and continuing leader development. It is possible but UNLIKELY that an instructor will see an OCS candidate demonstrate a behaviour or action that would indicate "proficient" or "expert" level of competency.</p> </div>	<p>GENERAL . After presentation starts, effectively modifies method of communication as necessary to ensure accurate understanding and interpretation of the message based upon subordinate feedback/superior guidance.</p> <p>TACTICAL . After the order, runs through entire operation from the start, covering critical areas that need to be emphasised or coordinated, problem areas and how they are to be overcome. NOTE: "Presentation" or "order" also includes briefings and AOP.</p>

Table 4: Sample of how CBLRs are deployed in LIC 10 – Protection of Installation Field Camp

Competency Based Learning Requirement	Activity for observing CBLR
1.1.1 - To analyse a mission	<ul style="list-style-type: none"> ▪ Personnel Access Control ▪ Vehicle Access Control
1.1.2 - To develop a course of action	<ul style="list-style-type: none"> ▪ Quick Reaction Force ▪ Protecting an Installation
2.1.1 - To communicate thoughts & ideas effectively	<ul style="list-style-type: none"> ▪ All activities
3.1.1 - To assign tasks, organise and prioritise work	<ul style="list-style-type: none"> ▪ Personnel Access Control ▪ Vehicle Access Control ▪ Protecting an Installation
3.2.1 - To make a sound decision in alignment with Higher HQ Intent	<ul style="list-style-type: none"> ▪ Quick Reaction Force ▪ Protection of Installation ▪ Fighting Patrol
3.3.1 - To take charge of a situation and executes tasks	<ul style="list-style-type: none"> ▪ Personnel Access Control ▪ Vehicle Access Control
3.3.2 - To adapt or adjust plans and orders according to situation	<ul style="list-style-type: none"> ▪ Quick Reaction Force ▪ Protecting an Installation
4.2.2 - To motivate team members	<ul style="list-style-type: none"> ▪ Fighting Patrol

support the development of Leadership Skills in their appropriate military context. We felt that generalisation and the setting of context is important in helping to build a principle-based knowledge of the skill so that the trainee could learn to adapt and apply it across different contexts (Lewis & Jacobs, 1992; Baughman & Mumford, 1995). Table 4 gives a sample of how CBLRs were deployed in a Low Intensity Conflict field training package to facilitate the development of the trainee's leadership skills in an expanded spectrum of operations.

Method of Trial Study of CBL in Army OCC

In OCS, a pilot for the infusion of the LCM was conducted in the 54th Cohort/ 2003 Officer Cadet Course (OCC) Charlie Wing. The pilot was intended as a check that the CBLRs deployed in the curricula could be observed during the actual conduct of the lesson. In addition, this also allowed us to ensure that the use of CBL does not come into conflict with the existing operational military knowledge training objectives as well as the existing performance assessment systems. This was important as we wanted the data to be free from other confounding factors (London et al 1990). A field experiment was then done on the 55th Cohort/ 2004 OCC Delta and Foxtrot Wings. The control group for the study was the 54th Cohort/ 2003 OCC Hotel Wing³. By planning for a control group before the trial group, we

prevented the control group instructors from engaging in observational learning of CBL being practised in the trial group (Bandura, 1986). Here, we tried to eliminate the social threats to internal validity e.g. compensation, etc. The instructors in the trial wings were also under strict orders not to communicate the practise of CBL as a trial to their cadets to minimise the presence of an expectancy effect.

In this study, Cadets were asked to rate the usefulness and level of continuous guidance of their instructor's feedback on each of the 10 CBLRs / Leadership Behaviours on a 5 point ordinal scale. They were also asked to rate their own self confidence in displaying the same 10 CBLRs / Leadership Behaviours on a 5 point ordinal scale. Our first Null hypothesis states that there should be no difference between the trial and control groups in the ratings of the usefulness and continuous guidance of instructor's feedback on each of the 10 CBLRs. Our second Null hypothesis states that the ratings of usefulness and the level of continuous guidance of the instructor's feedback would have no significant relationship with the Cadet's self confidence to display each of the 10 CBLRs.

The data from the Cadets were collected twice during the Officer Cadets Course. The first point was midway through the course i.e. about 5 months into the Course and this would see the completion of the Tri-Service and Service Terms. The second data collected is towards the end of the course prior to the Commissioning of the Cadets as Officers approximately after 10 months of training. Here the data from the Cadet's peer appraisal of Leadership ability were also used as a validation data point. Following the first point of

³ There were 2 other Wings i.e. Sierra and Tango Wings in 55th Cohort/ 2004 OCC. These 2 Wings closes after providing Cadets for Army Schools like the School of Artillery, Signal Institute etc for the last 5 months of their training. Only Infantry, Guards and Commandos complete 10 months of training at OCS, SAFTI MI.

data collection some cadets were posted to the Officer training wings in the Schools of the other Arms in the Army e.g. Armour, Artillery etc together with Cadets from Non-trial wings. We took the opportunity to follow up on these cadets to conduct an “external validation” to understand the ability of these cadets to display the behaviours we desired. 2 months after the Cadets were posted to their new School we asked the Officer Training Cadre to rate the ability of their new Cadets (both trial and non-trial) to display the 10 CBLRs / Leadership Behaviours. These new instructors were “blind” to the Cadet’s background as they were not told which of the cadets were from the trial wing. Hence there was an independent validation of the cadet’s demonstration of the 10 CBLRs by instructors in other Army Schools as well as the cadet’s peer appraisals of each other’s leadership abilities.

At the conclusion of the trial, for each of the 10 CBLRs / Leadership Behaviours the Cadets were asked to rate the usefulness and level of continuous guidance of their instructor’s feedback and their own self rating of confidence to display each behaviour. A one-way analysis of variance was conducted to determine significant differences between the Trial (N=41)⁴ and Control Group (N=100). In addition, a multiple regression analysis was performed with the Cadet’s Self-Ratings to display each CBLRs / leadership behaviours as a dependent variable. The predictors used were the usefulness and as well as level of continuous guidance of their instructor’s feedback for the corresponding behaviour. The consolidated outcomes from the trial are presented in Table 5 and Figure 1.

LCM skill	COMPETENCY BASED LEARNING REQUIREMENT	Cadets in Trial Group were more confident in displaying this leadership behaviour		Cadet's Confidence in behaviour is predicted by usefulness of Instr feedback and guidance i.e. CBL	Behaviours where Cadets in Trial Group were assessed to be better by their new SSSO Sch Instructors
		Service Term	End Pro Term		
1.1	To analyse mission	P<0.00	-	-	-
	To develop a course of action	P<0.00	-	-	-
2.1	To communicate thoughts/ideas effectively, clearly & concisely	P<0.00	P<0.03	P<0.02	P<0.00
3.1	To assign tasks, organise and prioritise work	-	-	-	-
3.2	To make a sound decision in alignment with Higher HQ Intent	P<0.00	P<0.03	P<0.00	P<0.00
3.3	To take charge of a situation and executes tasks	P<0.00	-	-	-
	To adapt or adjust plans and orders according to situation	P<0.00	-	-	-
4.2	To build team cohesion and morale	P<0.00	P<0.03	P<0.03	P<0.00
	To motivate team members	P<0.01	N/A	-	-
	To resolve conflicts	P<0.00	N/A	-	-

Table 5: Summary of key findings from for the trial on the use of CBL

Note: A special note must be made with regards to the behaviours “Motivate Team members” and “Resolve Conflicts”. For Professional Term, these 2 behaviours were planned to be observed during Uncontrolled Navigation Exercises but subsequently a decision was made to exclude these types of Exercises from CBL (see Para 9) and as a result the Cadet’s did not receive feedback on these 2 behaviours.

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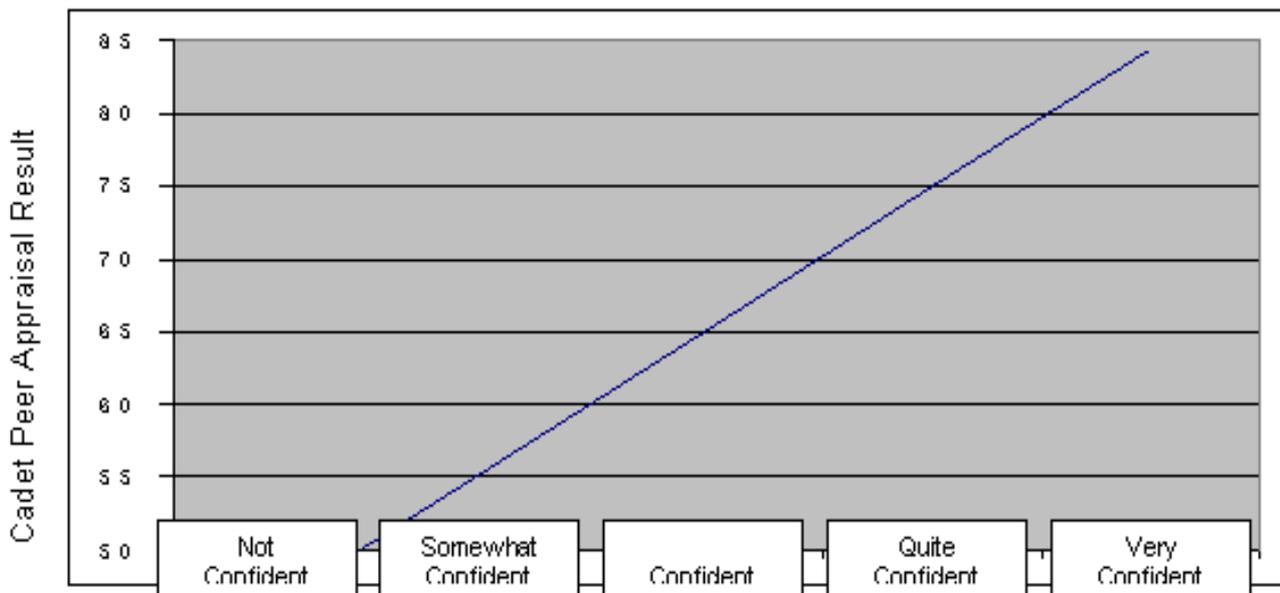


Figure 1 Cadet's self-reported confidence in "Communicating to Influence", "Decision-making" & "Team Building" Skills

Findings of Study

From all the data collected, the ratings of the usefulness of instructors' feedback and the presence of coaching in the 'trial group' were significantly better than the 'control group' (see Table 5). A unique trend we observed was that differences between the trial and control group in the Cadet's perceived confidence became less significant towards graduation except for CBLRs/ Leadership behaviours in the LCM skills of Communicating to Influence (2.1), Decision Making (3.2) and Developing Teams (4.2). Here it is important to note that there are no statistical differences in the ratings given by the trial group cadets at the end of Service Term and the end of Professional Term.

The reason for the diminished significance between the trial and control group towards the end of Professional Term occurred as a result of improved ratings given by the cadets in the control group. For the external validation done to obtain from the independent observations of Instructors at the other Army Schools also found that cadets from the trial wing are better than their peers in demonstrating these 3 behaviours. Overall, what was most pertinent was that the trial Wing cadets continued to rate their instructors' feedback and continuous guidance significantly higher than that in the Control Wing for 6 out of 10 CBLRs at the end of Professional term (near commissioning). These 6 CBLRs are "Develop a Course of Action" (P<0.03), "Communicating to Influence" (P<0.04), "Make Decision in

Alignment with Higher HQ Intent" (P<0.00), "Build Team Cohesion and Morale" (P<0.00), "Motivate Team Members" (P<0.00) and "To Resolve Conflicts" (P<0.02).

The Multiple Regression showed that for each of the CBLRs where the Cadet's Self rating of Confidence was more significant than the control group, the ratings of Instructor's feedback/guidance predicts the Cadet's confidence on these LCM behaviours. Here an increase in the usefulness of the instructors' feedback and continuous guidance on a leadership behaviour (i.e. use of CBL) correlates positively with an increase in the cadets' perceived confidence in displaying that behaviours under Communicating to Influence (2.1), Decision Making (3.2) and Developing Teams (4.2). Another regression was performed to examine the relationships between the cadet's self-ratings of confidence on the fore-mentioned CBLRs vis-a-vis their OCS end-of course peer ratings of leadership. The analysis revealed that an increase in the Cadet's Perceived Confidence to display the fore-mentioned LCM skills did predict a higher Peer Appraisal Scores (P<0.00).

Interpretation of Study findings

When LCM was infused into the curricula through CBL, we actually build upon on the training based on the KAQ model. Hence, even without CBL, the existing training based on the KAQ model would have developed the Cadets in skills under the Conceptual and Mission Competencies. This is because the existing

curriculum was designed to hone all of the cadets' skills in critical thinking, planning and mission execution through role modelling (Bandura, 1986; Ackerman 1991). Therefore, by the end of the course, the Cadets in the control group would also have developed their competence in these areas with most of their ratings of perceived self-confidence being marked increased at the end of the course. However it is important to note that the practise of CBL and systematising Leadership development helped the Cadets achieve self-confidence in the same set of skills earlier in their training. In addition, for "Communicating to Influence", "Make Decision in Alignment with Higher HQ Intent", and "Build Team Cohesion and Morale" the ratings of Cadets from the trial group remained significantly higher than that from the control group.

To the SAF, this suggests that CBL is more efficient in helping Cadets achieve confidence in displaying the desired leadership behaviours in the LCM Skills infused into the OCC training curricula. What is more pertinent is that, it is clearly more superior in helping Cadets develop "Communicating to Influence", "Make Decision in Alignment with Higher HQ Intent", and "Build Team Cohesion and Morale". It is also important to note the fact that the trial Wing cadets continued to rate their instructors' feedback and continuous guidance significantly higher than that in the Control Wing for 6 out of 10 CBLRs at the end of Professional term (near commissioning). This reinforced our belief that the identification of CBLRs and rubric did result in a higher quality of feedback and development by providing the necessary structures in developmental feedback.

From the Regression Analysis, it is clear that the Cadet's perceived self-confidence for each of the significant CBLRs/ Leadership Behaviours can be predicted by the usefulness and level of continuous guidance of the feedback given by the instructors on that same said behaviour. This analysis validates that the significantly higher levels of cadet's perceived confidence to display the Skills of Communicating to Influence (2.1), Decision Making (3.2) and Developing Teams (4.2) consistently is attributable to the use of CBL. The fact that an increase in the Cadet's Perceived Confidence to display the fore-mentioned LCM skills predicts a higher Peer Appraisal Score demonstrates that the Cadet's perceived self-confidence has also translated into behavioural competence. The independent validation by the instructors in the other Army schools reinforces the fact that the Cadets from

the CBL trial are demonstrating better behavioural competence than their peers in these 3 behaviours. The peer appraisal and independent observations from instructors in other Army schools have provided multi-source feedback to demonstrate that the Cadets who underwent CBL do truly demonstrate behavioural competence in the skills infused into their curricula.

Further Developments for infusing LCM

To help us understand the relative importance of these 10 CBLRs in an expanded spectrum of operations, we surveyed 75 Infantry, Guards and Commando Officers who took part in the Tsunami Disaster Relief Operations in Melauboh and Banda Aceh in Jan 05 following the Dec 26 Tsunami. These officers were asked to rank the order of importance of the 10 leadership behaviours deployed in the OCS curricula for a mission in an expanded spectrum of operations like the one they deployed to. Based on the experiences of these 75 officers, the 3 most important leadership behaviours to a task like the humanitarian mission to Melauboh and Banda Aceh are "Analysing the Mission", "Communicating to Influence" and "Making Decisions based on Higher HQ Intent". The fact that the second/third most important Leadership behaviours were also LCM behaviours with the most significant gains from the CBL trial reassured us that CBL is effective in helping SAF prepare its leaders for the expanded spectrum of operations in the new security environment of the 21st Century.

A post study trial is currently planned for the graduates of the 55/04 Officer Cadet Course who were deployed into operational units. Specifically this new study will focus on the ability of these graduates to display the LCM skills they were developed on during their training in OCS SAFTI MI. We wanted to know if the perceived self-confidence and behavioural competence observed during the course becomes true predictors of performance whilst on the job and what are the follow up activities required (Walker & Smither, 1999). Together with our existing training systems, we feel that we are better able to develop the necessary leadership skills in our leaders following the use of CBL. With the introduction of LCM into the Curricula of Company Tactics Course and the Officer Cadet Course in 2003/2004, 7 Company Tactics Courses and 6 cohorts of Officer Cadet Course have been conducted with CBL. Therefore by end 2005, an entire generation of Junior SAF Leaders would

have experience some development of their Leadership Skills/Behaviours based on the SAF LCM. At the same time, the Army would see most if not all of its Platoon and Company Commanders receiving similar developmental experience during their training in SAFTI MI. It then becomes immediately apparent to the SAF that there exists a need to continue the development and infusion of the LCM Skills to maintain the momentum of the Leadership Development efforts.

We have therefore taken a 2 prong approach; the first being the continued infusion of other LCM skills into the Leadership training curricula. The second main prong is to create a system for “On the Job” development of the LCM skills through a structure of developmental action plans (e.g. Lombardo & Eichinger, 1989). For this the SAF Leadership Competency Development (LCD) Handbook was launched in Feb 2005 to help SAF Commanders and Leaders develop the skills/behaviours espoused in the SAF LCM in their subordinates. This Handbook lays out the template for the Individual Development Plan (IDP) tagged to the key HR activities in the annual work year cycle. The start point would be at the end of the Personnel Performance Ranking in October, where following the ranking all subordinates will be debriefed on their overall performance. Here the IDP includes a section for debriefing the subordinate about their competency in the various Leadership skills. The SAF LCD Handbook provides practical developmental assignments (McCauley et al, 1995) for developing the various aspects of the LCM skills which the Leader and his subordinate could incorporate as part of an action plan within the subordinates’ IDP. As this is done largely on-the-job it is classified as Informal Training in the IDP. The mid point of implementing the IDP, will be in February where nominations are made for General Training and Education courses in the following Work year and this begins the Formal Training Phase in the IDP. Here, we have re-aligned all the General Training and Education Courses in the

SAF according to the SAF LCM. Hence, during this Formal Training Phase, superiors could nominate their subordinates to attend short courses to help develop them in a specific LCM skill. Currently, data collection is underway to help the SAF understand the challenges of implementing the IDP and based on that data we will be refining the IDP system.

We believe that the IDP and CBL together will provide a holistic development of the Leadership skills of an SAF Leader as he transit between the Schools and Units. For the next step in the implementation of the SAF LCM, the Training and Manpower stake holders will be working together to ensure that the existing HR policies and systems are fully integrated with the IDP and CBL efforts for an SAF Leader’s entire career span. Thereby creating synergy between both efforts and facilitating the development of SAF Leaders for an expanded spectrum of operations.

Conclusion

The SAF views Leadership Development as a process and journey and both applicable to the individual and collectively as an organisation. Having recognised the expansion of the SAF’s spectrum of operations, we are of the view that we have an answer to this challenge and that is our Leadership Framework which encompasses a Leadership Competency Model that espouses the skills the future SAF leaders’ should possess. Today as much as we are learning how best we could develop these skills, we are also gaining greater clarity about the skills we espoused for our Leaders. One of the greatest challenges for the systemisation of leadership development remains in developing leaders on the Meta-competencies of Self-awareness, Self-management and Personal Mastery. A challenge which the SAF CLD is eagerly seeking means to uncover in order to allow the SAF to make another leap forward in its quest for excellence in Leadership Development.

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