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ADVANCED DIPLOMA IN LOGISTICS AND TRANSPORT

*Does the Logistic Specialist (Supply) Class 3
course prepare successful students for their
assigned role in the field army?*

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Declaration

I, Richard Hall declare that I am the sole author of this study; that all references cited have been consulted; that I have conducted all work of which this is a record, and that the finished work lies within the prescribed word limits

This has not previously been accepted as part of any other submission.

Signed.....

Date.....

Consent

I, Richard Hall hereby consent that my study, submitted in candidate for the Advanced Diploma in Logistics and Transport, if successful, may be made available for inter-library loan or photocopying (subject to the law of copyright) and that the title and abstract may may be made available to outside organisations.

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Abstract

Before being assigned to their first unit within the Field Army, Phase 2 soldiers who are going to be employed within the Logistic Specialist (Supply) (LSS) Career Employment Group have to complete the basic trade-training course. This course qualifies the successful trainee as a Class 3 in their chosen trade, facilitating their assignment to a working unit. Here he completes further training in the form off a Record of Work Place Training (RoWPT) and a Record of Achievement (RoA). The RoWPT records the training the individual must complete as part of their Class 3 training that cannot be delivered in the Defence Logistics School. In comparison the RoA advances trade knowledge and is a requirement to attain the Class 2 trade qualification. It is only after completing the RoA that LSS personnel can work unsupervised. The minimum time period required to complete both the RoWPT and RoA is 12 months.

This case study investigates the validity of the trade education delivered during the Class 3 course and whether it sufficiently provides the training required to complete their role in between arriving in their unit and being upgraded to a Class 2. The primary source of information was gathered by the use of a questionnaire, issued to a number of students on the final day of their Class 3 course and a number of soldiers who had completed their course previously and where assigned to their first unit. Analysis of the results provided by these questionnaires provides sufficient evidence to prove the Class 3 curriculum provides students with the knowledge required to become an effective member of his chosen trade within the Defence supply chain.

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CHAPTER 1 – INTRODUCTION

1.1 The Role of the British Army

As an integral part of the UK's defence organisation, the British Army has long been established to provide security and protection of the Sovereign's realm. Issued specific roles and tasks by the Government, detailed in the National Security Strategy, the most recent review published on 19 October 2010 and entitled 'Securing Britain in an Age of Uncertainty: The Strategic Defence and Security Review' (SDSR) (Oct 2010) clearly identifies national security tasks and planning guidelines for British Army commanders to achieve.

These national security tasks range from rapid intervention or expeditionary operations such as Afghanistan, through routine standing tasks like maintaining foreign garrisons to supporting UK crisis such as the outbreak of foot and mouth disease. Key to current policies is the projection of military power and in addition to deploying in support of the Government of Afghanistan the British Army has deployed units, from single military advisors to full operational deployments, to over 80 countries around the world, including:

- Brunei.
- Canada.
- Cyprus.
- Falkland Islands
- Germany.
- Gibraltar.
- Kenya.
- Sierra Leone.

(MOD, 2012)

To meet this varied scale of need across the globe, the British Army has in the region of 100,000 regular officers and soldiers and 40,000 part-time reservists and a

wide variety of military capabilities. According to the MOD both these assets are divided into three specific groups:

- **Combat units.** These units spearhead the Army's military capability. They include the Infantry, the Royal Armoured Corps and the Army Air Corps.
- **Combat Support units.** These units provide support to the combat units in the Combat zone. They include the Royal Artillery, the Royal Engineers, the Royal Signals and the Intelligence Corps.
- **Combat Service Support units.** These units provide essential support services both in combat and in peacetime. They include the Adjutant-General's Corps, the Army Medical Services, the Royal Logistics Corps and the Royal Electrical and Mechanical Engineers.

(MOD, 2010)

Although the 2010 review ordered a reduction in manning and capability, identifying 2015 and 2020 as planning timelines, it is believed the British Army will retain these groupings in future structures.

1.2 The Role of the Royal Logistic Corps

As a Combat Service Support (CSS) unit, the Royal Logistics Corps (RLC) is tasked with delivering with the right equipment, in the right quantity, in the right condition, at the right place and at the right time.

To achieve these tasks the RLC is currently established with three Logistic Brigades, five Logistic Support Regiments (LSRs), six Force Support Regiments and four Enabling Regiments. In addition, each Regular RLC Regiment is twinned with a Territorial Army (TA) Regiment who are capable of conducting exactly the same role as their Regular counterpart, thus providing depth to the provision of the required support. These formations and units are deployed with their dependencies all over the world and operate in all conditions, for example the MOD state this includes on

land, sea and in the air, night and day, in rain, shine and snow, in mountains, desert, built up areas and jungle terrain. However, the requirement is even greater than that, indeed where ever and what ever conditions the British Army deploys, the RLC follow.

With such an expansive global role within the British Army, the RLC employs over 16,000 regular officers and soldiers. Following completion of command and leadership training at the Royal Military Academy, Sandhurst, and their first assignment, RLC Officers have the opportunity to undertake professional technical training. This can be in any of the following areas:

- Ammunition Technical Officers' Course.
- Officers' Petroleum Course.
- Officers' Food Services Course.
- Port & Maritime Operations Officers' Course.
- Officers' Postal & Courier Service Course.

(RLC, 2012)

Comparatively, soldiers are recruited to fulfil specific trades within the British Army. Once they have completed Phase 1, or "basic" training they are moved into Phase 2 employment training. Here they complete continuation training, acquire basic close combat skills, driving licenses and trade qualifications that will enable them execute the tasks of their chosen trade. Delivering global support within its established manning resources has led the RLC to create fourteen trades, with each trade having a specific role in delivering Combat Service Support:

- Ammunition Technician.
- Chef
- Driver
- Driver / Air Despatcher.
- Driver / Communications Specialist.
- Driver / Railway Operator.
- Logistic Specialist (Supply) (LSS).

- Marine Engineer.
- Petroleum Operator.
- Pioneer.
- Port Operator.
- Postal and Courier Operator.

(MOD, 2012)

1.3 The Role of the LSS Trade Personnel

Soldiers qualified in the LSS Career Employment Group (CEG) are responsible for the movement, tracking, storage, maintenance and issue of every possible item the British Army will require. From key capabilities such as helicopters and communication systems to ensure operational success for Commanders, to life saving commodities like rations, medical stores, water and ammunition to individuals throughout the battle space. To conduct this task logistic units which include LSS qualified personnel are strategically placed within the Joint Support Chain (JSC) and employ a number Logistic Information Systems including, but not exclusively GLOBAL, VITAL, TAV(-), SEESUPS 2 and UNICOM.

1.4 Training LSS Trade Personnel

As a specific RLC CEG the LSS trade has a structured education for all personnel throughout their career. This provides the individual with continued employment education, best preparing them for the numerous appointments they are likely to undertake within the JSC as they become more experienced and / or promote, thus attracting greater responsibility. To ensure this training is provided at the most appropriate time in a soldier's career it is delivered in stages. These stages are best explained in Table 1 below.

Table 1.1: LSS Career Education

Ser	Course	Point in Career	Rank	Training received	Follow up training
1	LSS Class 3	0 -12 months	Pte	Residential 5 week course	Record of Work Place Training
2	LSS Class 2	12 – 24 months	Pte – LCpl	Directed tasks in unit recorded in Record of Achievement	
3	LSS Class 1	3 – 7 years	LCpl - Cpl	Residential 6 week course	Record of Work Place Training
4	LSS SNCO	7 – 12 years	Cpl - Sgt	Residential 2 week course	
5	LSS Warrant Officer	13 – 18 years	SSgt - WO	Residential 2 week course	

In addition LSS trade personnel can complete the Local Resources Section course, this qualifies successful students to complete local purchase on behalf of a deployed force. Although this is not a requirement for promotion it broadens the soldier's employability within the JSC.

1.5 LSS Class 3 Course Design

As the Training Requirements Authority (TRA), CSS Logistic Capability has the responsibility to identify the standards LSS Class 3 students are to be trained to. To complete this role the TRA have appointed a specific Training Development Team (TDT). Employing the Defence Systems Approach to Training (DSAT) process, the TDT produce the required Course Training Documentation (CTD). This information is then utilised by the Course Design (CD) office to create the curriculum that best provides successful students with the skills and knowledge to work in any JSC appointment, whilst under supervision. As shown in Table 1, LSS personnel are expected to achieve Class 3 – 2 upgrade 12 months after their initial appointment allowing them to work without supervision and it is for the first year of employment that the current CTD has been created.

1.6 Aim of this Study

It is the aim of this study to conduct an in depth evaluation of the employment training soldiers receive on their initial LSS trade education course i.e. Class 3. The hypothesis to be examined is:

H_0 The LSS Class 3 curriculum does not sufficiently prepare successful students for every appointment they may encounter during their initial twelve months employment in the Field Army.

H_{0A} The LSS Class 3 curriculum sufficiently prepares successful students for every appointment they may encounter during their initial twelve months employment in the Field Army.

1.7 Methodology

Formal testing of this hypothesis will require a review of the processes employed by the organisations that set the training LSS Class 3 students receive. Including both the TDT and the CD office. Furthermore, analysis of a survey issued to students on successful completion of the course and personnel who have been employed within the JSC for no more than 12 months will provide necessary depth to the test.

It is believed this method of testing will support a number of conclusions and possibly provide some recommendations that will prove useful to CSS Logistic Capability, the TDT, the CD office and importantly the instructors who deliver the lessons to the students.

If the Null Hypothesis is accepted, the organisations involved in the production of the curriculum can take confidence from the case study and employ it to confirm they are completing their work in the best interest of their employees and the LSS CEG. CSS Logistic Capability can also be satisfied they are best preparing their tradesmen for their initial 12 months at trade. However, if the Alternative Hypothesis is supported the TRA must direct the TDT to identify how the training being provided is failing its

students. Whether this is CDT, the CD or even the training delivery, it must be altered to meet the needs of this specific trade group.

1.8 Layout of the study

This case study has been structured using the following chapters:

Chapter 1 introduces the case study and the reasons behind the selection of this particular subject matter for formal review.

Chapter 2 presents the literature that has been reviewed to gain a better understanding of the wider issues involved in this matter, particularly that of how education is achieved and the military's approach to training. Additionally, the specifics required to qualify LSS Class 3 trade personnel was studied in greater detail.

Chapter 3 describes the particular research methodology used in support of this case study.

Chapter 4 presents the analysis and results of the literature review and of the survey undertaken in support of the study.

Chapter 5 draws conclusions and makes recommendations for future research.

CHAPTER 2 – LITERATURE REVIEW

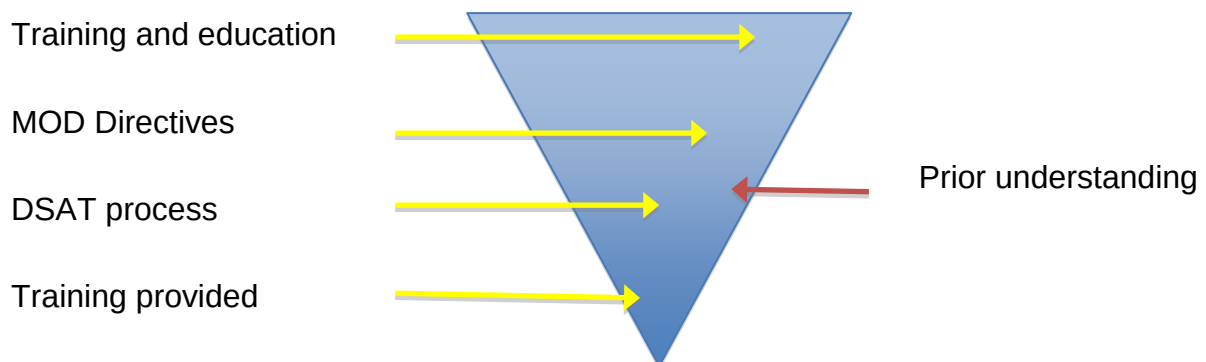
2.1 Introduction

In an attempt to break this chapter down in to independent groupings, a number of areas specific to this study have been addressed separately. Not only has this been attempted to make understanding the detail easier for anyone reading the case study but also to provide clarity to each area without confusing it with those that it maybe interlinked to. Even though modularisation of these topics has been deliberate it must be understood that each area is clearly coupled to other arenas within the study.

As the Officer in Command of Junior Training, Supply Operations Division (SOD), the author had intimate knowledge of the LSS Class 3 course. This included teaching techniques, the curriculum, delivery methods and specific CTD. However, furthering his knowledge of the overarching educational literature required a thorough review of the MOD approach to training and other directing paperwork. To ensure a broader perspective was achieved, external studies, open source materiel and other references of the training and educational environment was also reviewed.

The diagram found at figure 1.1 provides a visual representation of the author's original understanding of the literature, both military and civilian associated with this case study. Additionally, it identifies the layout of the literature review chapter:

Figure 2.1: The literature review process



2.2 Training Pipeline

Similar to a number of manufacturing processes and supply chains, soldiers who choose a career as a LSS undergo training in a number of arenas other than their chosen trade. This training prepares them for the different roles they will undertake throughout their professional military career. As previously mentioned, Phase 1 provides soldiers with the basic military skills required for service life, whilst Phase 2 then provides cap badge specific training. For the LSS trade group this includes acquiring up to HGV with trailer driving licence and further military skills. Although this training is crucial in preparing soldiers for their assigned role it is not being considered in this literature review. Instead, it will completely focus on the trade training provided during attendance of the LSS Class 3 course provided in Deepcut. Phase 3 training provides trained soldiers with further qualifications throughout the remainder of their career as part of their requirement for promotion or to fulfil a role for which they are un-qualified, again this phase of the training is unconnected to this study

2.3 Training, Education and Development

Critical to the very hub of this study lies the discussion between what, if any, are the differences between training, education and development. An examination of these three terms will provide a useful start point in their comparisons. The principal meaning of each of these terms is:

- **Training** – this usually implies preparation for an occupation or for specific skill; it is narrower in conception than either education or development; it is job-orientated rather than personal.
- **Education** – this is usually intended to mean basic instruction in knowledge and skills designed to enable people to make the most of life in general; it is personal and broadly based.
- **Development** – this usually suggests a broader view of knowledge and skills acquisition than training; it is less job-orientated than career-orientated; it is

concerned more with employee potential than with immediate skill; it sees employees as adaptable resources.

(Cole, 1996)

More simply put, training changes behaviour, education provides knowledge and development is a mixture of both in the pursuit of a profession. These definitions imply there are differences between the three facets of learning, however subtle. Taking a civilian and developing them in to a professional soldier that can afford both a military presence as required and offer a skilled trade within a multitude of environments and locations around the world requires a mixture of all three aspects.

Cole goes on to suggest that education is a matter for the community yet training and development are issues, which individual organisations should support. As an organisation that truly values the benefits of both training and development, this suggestion is supported by the MOD model for providing its personnel with the full remit of skills required for a full career. Officers, soldiers, sailors and airmen also belong to a specific kind of community, one that encourages education among its entire membership and will enhance the opportunity for further promotion

2.4 Training Authorities

To ensure all the training required by the numerous Arms, Services and Directorates that make up the MOD is identified, created and delivered in the same manner and in accordance with current legislation an overarching document has been written. Joint Service Publication 822: The Governance and Management of Defence Training and Education is that document. This publication clearly breaks down the processes, documentation and those responsible for the training delivery and that it meets the operational requirements.

As can only be expected of an organisation that provides training to such a vast number of its personnel, the British Army has a number of organisations that are responsible for training delivery. Each of these organisations has specific duties in the training environment and provides assurance and governance to the senior

elements of command that the training is being delivered and maintained in accordance with the MODs needs.

Representing the working units that will employ successful students of the LSS Class 3 course, the TRA is the ultimate authority for creating and maintaining of the Operational Performance Statement (OPS). This document specifically identifies the performance criteria that the student must understand, under which conditions and to what standard. All this information relates directly to the information provided by the associated Job Specification. Importantly, the OPS identifies to which training category the student is trained. The TRA for the LSS trade is the RLC and they complete 5 functions on behalf of the working units, namely:

- Create and maintain the LSS Career Employment Group (CEG) OPS via identification of the operational role.
- Control and conduct all necessary Training Needs Analysis.
- Agreement of the complete Formal Training Statement with the training organisation.
- Ownership and Supervision of Workplace learning.
- External validation of the entire training regime, including that which takes place in the working unit as well as at the training organisation.

The organisation responsible for the provision of individual training or education, to the standards laid out in the CTD is the Training Delivery Authority (TDA). The TDA also commands the training organisation, providing the administration and resources in accordance with extant and funded Defence policies, again on behalf of the working units that will employ future successful students.

2.5 Training Needs Analysis

Widely recognised and employed across industry and militaries around the globe, the Training Needs Analysis (TNA) process is vital in identifying the training requirement by an organisation that perceives a training requirement. This process ensures the most effective training is provided in the most efficient manner, which in today's economic climate is critical, especially when spending UK taxpayer's money. Considered the most important step in training design the by many theorists the consequences of not conducted TNA correctly are succinctly summed up by the following statement from William J. Rothwell;

'If TNA is not performed or not performed properly, the training will not be properly focused. The result will be that the training will not cover what people really need to know to do their jobs. Decision-makers will predictably ask for return on investment (ROI) studies of the training, and such studies-when conducted will show disappointing results.'

(Rothwell, 2012)

Embracing this methodology, the MOD has produced a practice; known internally as the Defence System Approach to Training (DSAT), that best suits its own requirements. Employing the DSAT process provides those completing this work with a number of auditable documents, which are covered in detail further on in this study that can be referred to throughout the process and during any future reviews that are conducted when there is a change to the need. In total there are 5 principal activities, in order of completion these are:

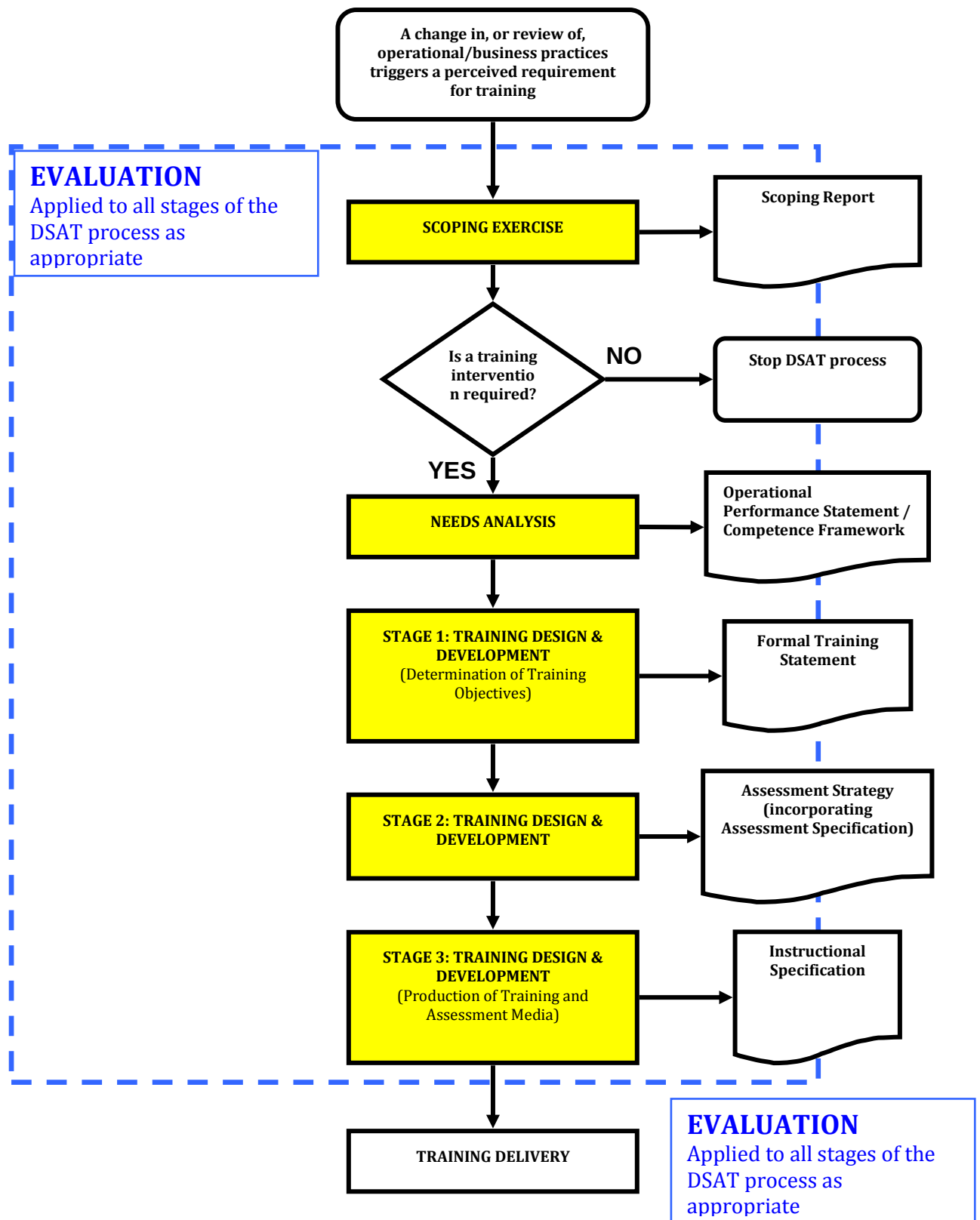
- Scoping exercise – Provides analysis of the training requirement and if possible identifies the options the training required, enabling an estimate of the resource requirement.
- TNA – Identifies the training required to enable the trainee to complete the job to be undertaken.

- Training design and development – Produces the CTD's and the Lesson plans required by the instructors.
- Training delivery.
- Evaluation – Confirmation that the training provided meets the Defence requirement.

The TNA for the LSS Trade CEG was initially conducted in 2005 in preparation for the amalgamation of two previous RLC trade groups; that of the Supply Controller and the Supply Specialist. The Class 3 course TNA was again reviewed in its entirety in 2011, with only a small number of recommended changes that have since been incorporated in to the OPS. To further compliment this TNA system student feedback and instructor advice allows for minor changes to the courseware to be incorporated quickly, as long as it does not teach a skill outside the set OPS.

To assist those employed in the DSAT process the diagram found at Figure 2.2 provides a flowchart that can be followed and shows which particular CTD is produced at each stage.

Figure 2.2: The DSAT process



(MOD, 2008)

2.6 Course Training Documentation

The CTD produced during the DSAT process described above supports of the LSS Class 3 course includes the following documents:

- **Training Authorisation Document** – The Training Authorisation Document (TrAD) collates all the details specific to the remaining documents allocated to this trade related course.
- **Job Specification and Operational Performance Statement** – Both of these documents specifically identify the requirement of personnel performing this job role within the operational environment. The Job Specification articulates information specific to the individual, their main objective, the selection criteria and training they must complete, their responsibilities, both to and for, Specific Tasks, any additional duties, possible future role changes and the conditions under which this role is performed. The LSS Class 3 has 4 individual OPSs,
- **Formal Training Statement** – The FTS is developed to in order to meet the requirements of the OPS and detail the Training Performance Statements, the Workplace Training Statements and the residual Training Gap Statements. The FTS identifies the total training be delivered as part of the students Class 3 course curriculum or the type of external training to be completed. Although this may comprise of traditional on job training, distance learning, distributed training commercial/outsourced training or a combination of all these, However at this time the only external training provided to LSS Class 3 students is on job training in the soldiers first working unit. Confirmation of this training is recorded in the soldiers Record of Achievement. This section also identifies each individual Training Objectives and whether it is a core training, legislative and/or accreditation requirement by.
- **Course Specifications** – The Course Specification document provides critical information for course planners and instructors to assist them in

delivering this course. In addition to detailing the make up of the course i.e. the aim of the course, the resources required, the minimum and maximum class size, the Safety, Health, Environmental and Fire Requirements, the reference material, it breaks the course duration down into effective and non effective training times,

- **Instructional Specifications** – This document provide the management and delivery information necessary to deliver the lessons linked to the training objectives within the Formal Training Statement. Section 1 gives the administration details required for the delivery of lessons and details the Enabling Object, performance, Conditions and Standards. Section 2 provides the information for execution of the lesson and is split into 2 parts, covering introduction information and the development details. Included under this development area are the Key Learning Points (KLPs). These are details that must be covered by the instructors during instruction.
- **Assessment Strategy / Specifications** – The course assessment strategy details the overarching assessment policy and is based against the extant TO's contained within the FTS. The Assessment Specification provides specific information regarding the test regime for the course and is created to support the course assessment strategy. This ensures all stipulated TO's are sufficiently tested and is based on the most recent version of the course training documentation. It is against the document and the test elements within the CME that examinations are produced.

These comprehensive documents provide the instructors with the level of detail they require to create lesson plans for each of the objectives they are to teach. Together all this material provides the instructors the framework needed to identify which kind of training delivery will be best suited to convey the information required by the students to enable them to complete their role within the JSC.

2.7 Training Methods

According to the Oxford Dictionaries Pro, training is categorised as:

‘the action of teaching a person or animal a particular skill or type of behaviour’

(Oxford University Press, 2012)

Of the 12 training techniques identified by Reece and Walker, SOD trade instructors employ 11, the only technique not employed being Seminar’s. This is due to the fast paced nature of the course it is felt the research would take too long, especially as the vast majority of students do not have any experience in the subject matter or the confidence to lead discussion groups.

- Lecture – One-way communication by the teacher with no feedback from students. May last from 5 minutes to more than two hours.
- Question and Answer – Teacher-centred interaction with the students.
- Practical’s – Real or simulated situations with students learning from experience.
- Tutorial – Interaction between the teacher and one or a small group of students providing opportunity for guidance and support.
- Individual Learning – Situations where students work alone with books, equipment and other resources.
- Demonstration – Teacher shows the basic steps and sequence of a skill, or the main attributes of a concept with students watching.
- Seminar – Students either individually or in small groups are set a task to research and from which they report their findings to the whole group and lead a subsequent discussion.

- Case Study – The examination of a real or simulated situation so that learning can take place through the discussion of each of its facets.
- Role Play – Students are invited to enact, in the training situation, the role they will be called upon to play in their job of work.
- Project – The particular task is laid down by the teacher but the lines to be followed to achieve the objectives are left for the student to decide. Projects have an end product and tend to be integrated activities.
- Assignment – Similar to a project but usually of shorter duration and not as open-ended.
- Problem Solving – Teacher sets a problem, which students solve either individually or in groups.

(Reece and Walker, 2012)

To provide the highest quality of training these techniques are used where they are most appropriate to the aim of each lesson and on a number of occasions, 2 or more techniques are blended together. Furthermore the entire school has a Coaching and Mentoring ethos, which encourages instructors to recognise individual strengths and weaknesses. This information can then be employed to support students in their learning experience, not only for the course they are currently enrolled, but also for their entire career.

2.8 Training Categories

All training completed on behalf of defence is allocated a recognised category. These categories state the level of understanding the students are to achieve in relation to each OPS being taught. The table below identifies the training categories employed by the MOD during the training needs analysis process.

- **Training Category 1** - By the end of the formal training course the trainees will have performed the whole task several times, to the full job standard, and under realistic scenarios and conditions in which the operational physical, functional and environmental fidelities were accurately reproduced. The trainee will be able to perform the task competently immediately on arrival in the operational workplace.
- **Training Category 2** - By the end of the formal training course the trainee will have performed the whole task at least once to full job standards, under realistic physical, functional and environmental conditions and in a realistic scenario. The trainee should be able to perform the task on arrival in the operational workplace.
- **Training Category 3** - By the end of the formal training course the trainee will have performed the whole task in a training environment to a lesser standard than required in the job (safety standards to be met in full).
- **Training Category 4** - By the end of the formal training course the trainee will have demonstrated an adequate level of underpinning knowledge and principles required but will not have applied it to develop the skills required to perform the task.
- **Training Category 5** - All formal training delivered in, or under the auspices of, the workplace.
- **Training Category 6** - Trainees do not require any formal training.

The allocation of every training category is decided by the TRA and is entered on the OPS, ensuring formal promulgation of this information.

2.9 Course Length

The LSS Class 3 course has recently been through a number of iterations to identify the best fit for the annual training programme, whilst achieving the required output. Currently 4 weeks and 3 days long comparatively short when compared against other arms and services within Defence. The Royal Air Force (RAF) Basic Supply course is 13 weeks and 2 days, The Royal Navy (RN) Supply course is 13 weeks in length and the Royal Engineers (RE) Class 3 Logistic Specialist course is 11 weeks in total. This disparity in course length can be attributed to the requirement for the RAF, RN and RE tradesmen to be capable of having to work unsupervised immediately after completing their respective basic trade education packages. In comparison, until they achieve the Class 2 qualification upgrade RLC LSS Class 3 trade personnel must be supervised by a Class 1 JNCO.

2.10 The Course Curriculum

The current LSS Class 3 course includes education on the demanding, issue, receipt, storage and movement tracking of the many different commodities required by the British Army. Not only are these activities learnt using manual techniques, students are also taught how to conduct transactions that support these accounting actions via operating a number of Logistic Information Systems utilised throughout the JSC. Within the current course length the LSS Class 3 course covers all the TOs, EOs and KLPs identified by the CTD and is taught to the allocated training categories, which are predominately 2 and 4.

2.11 The Training Gap

Another capability of the TNA is its strength in identifying any training gaps that cannot be included in the courseware for whatever reason. As with the vast majority of classroom-based courses the LSS Class 3 course does not have the ability to prepare students for every eventuality. To address this issue students are tasked with completing a Record of Work Place Training (RoWPT) document that provides them the opportunity to learn the skills 'on the job' that cannot be learnt within SOD. These include;

- Operating in different of weather conditions.

- Operating in different environments.
- Taking part in military road moves.
- Assisting with the establishment and decommissioning of a Field Storage Area.

Once the soldier has completed each specified task, their personnel RoWPT is annotated as such and countersigned by a Class 1 NCO. Once completed this document is retained by the Soldier as proof of his competency of each task. This document can be completed in tandem with the RoA, which supports the soldiers' upgrade to Class 2.

2.12 Evaluation

Included throughout the DSAT process, training evaluation is threaded neatly into every step. This ensures a judgement regarding the value of the training is constantly being taken and when considered necessary a further TNA is completed. This achieves a number of objectives, firstly it assures the chain of command that they are getting what they want and is it value for money, both question previously highlighted. Secondly. It provides confidence to the training establishment, the instructor and student that the training is effective and efficient.

Any evaluation process is achieved at three different levels:

- **First Party** – normally conducted by, or on behalf of, the organisation itself for internal purposes, this level is completed by the CD department via an internal validation process.
- **Second Party** – An activity completed by, or on behalf of, parties who have an interest in the training organisation. This level is completed by the schools higher command via external validation.
- **Third Party** – In accordance with current legislation Ofsted, an organisation external to SOD, provides this level of assurance.

CHAPTER 3 – RESEARCH METHODOLOGY

3.1 Introduction to the Primary Methodology Employed

In the attempt to identify whether the training delivered meets the basic standards required by the MOD in preparing qualified trade personnel for their initial appointment, it would seem action research would provide the majority of answers. To facilitate this method of research a number of options where available:

- Postal survey.
- Telephone survey.
- Face to face interviews.
- Street questionnaire.
- Internet survey.

Due to the population spread of those that needed to be questioned in relation to this issue, it was evident that a survey would provide the best opportunity to receive the quantity of responses deemed necessary to correctly inform this case study.

However, it is understood that a return of only 20% is the average that can be expected from a postal survey and given that a number of the target population would be working overseas and in some cases deployed on Operations or Exercises, this return rate could be considerably lower.

3.2 Target Audience

This situation led to the decision to survey soldiers who were attending the final day of the LSS Class 3 course. This provided the author, who is currently employed as the Officer in Command, Junior Training, SOD, immediate access to a large and most importantly captive audience. Although these trained soldiers had not served in their chosen trade in a working unit employed within the JSC, they were in the unique position to inform this case study as to their understanding of the roles they would be expected to undertake within it. Gaining this insight informed the study as to trade personnel's initial confidence, trade knowledge and preparation at the beginning of their trade career.

At the time of this decision SOD had programmed the delivery of three LSS Class 3 course prior to the submission date of this case study, with each course being loaded with a maximum of 18 students. With the first course being identified to complete the pilot questionnaire and providing these courses were fully loaded and delivered in accordance with the statement of training need, it provided the opportunity to inform this case study with 36 completed questionnaires. Although the majority of these students would be soldiers having only completed Phase 1 (Basic) training, it was felt that this audience would provide a particular currency to the study.

During the creation of the questionnaire a further three courses were added to the statement of training need requirement. This addition was ordered to push through a maximum of 72 other personnel who wanted to re-trade from their original specialisation into the LSS career employment group. This opportunity was offered due to the planned reduction in the Army's overall strength from 102,000 to 96,400 and ensured soldiers employed in trades that were overborne in the future structure could be retained in the Army whilst rebalancing the deficit experienced by the LSS trade. As these individuals had passed both basic and trade training they are considered as Phase 3 soldiers. Due to their own specific experiences in the field Army they were also asked to take part in the survey. This provided a further 69 questionnaires to the study and most importantly 54 of these surveys were completed via a population that had additional experiences of the Army training engine. The deficiency of quantity of three was simply due to a lack of photocopied surveys available at the time of issue.

To add even further breadth to the study an additional 50 questionnaires were posted out to soldiers who had passed their trade training and were currently serving with their first unit in the JSC. These questionnaires were sent to a single RLC unit, namely 4 LSR as the author has served with the unit previous to his current appointment. In hindsight this was not the best option as the unit were heavily involved in preparation for a forthcoming deployment. However, it was hoped by including this group of soldiers would provide a more experienced point of view on the training received to the study regarding the validity of the trade knowledge they

gained during their LSS Class 3 course. Of the 50 questionnaires posted a total of 12 were returned, providing a response rate of 24%.

Together the three groups who received a questionnaire provided a total of 117 completed questionnaires for analysis. Of the 155 questionnaires issued this provides a return of 75%. It is believed this is considered an extremely high return for such a survey.

3.3 Questionnaire Design

To ensure maximum participation, ease of understanding and completion, the questionnaire was kept to the minimum number of questions with the original design aim of keeping this document to a single page. However, as the questionnaire began to take shape it became apparent this course of action was unachievable, especially if the survey was to have any depth, whilst providing the necessary detail worthy of analysis. On completion the document included only 16 questions and was just over a page and a half in length, meaning it was still a single sheet of A4 paper but contrary to the original plan it needed to be printed on both sides of the paper. Each of the 16 questions had a number of available answers that were identified by ticking the appropriate box, thus answering negatively to the other available options.

The identity of those who were completing the questionnaires had to be anonymous again this was regarded necessary to encourage participation. To facilitate this requirement, questions regarding the participants themselves were only generic i.e. age, gender, time served and stage of training. It was felt anonymity would have the added affect of providing the greatest honesty, yet provide the participants credentials. Questions regarding curriculum specifics were far more detailed, thus providing the information required for in depth analysis. These covered a number of specific areas. In particular the participants understanding of:

- The environments they will be required to work in.
- The numerous Logistics Information Systems (Log IS) employed,
- Extant policies and procedures,

- The various commodities and how to safely handle each of them.
- The accounting documentation.

3.4 Questionnaire Trials

Initially the questionnaire was given to a number of LSS instructors employed within the SOD. This included the following ranks:

- 1 x Captain.
- 1 x C2 Grade Civilian.
- 1 x Warrant Officer Class 1.
- 1 x Warrant Officer Class 2.
- 2 x Staff Sergeants, including the LSS Class 3 lead instructors.
- 1 x Sergeant.

It was hoped that by providing such a variety of personnel, each with their own experiences and levels of expertise, the opportunity to review the questionnaire, a better sense of its suitability could be obtained. This review identified a number of key issues.

- **Accuracy** – Despite having proof read the document on a number of occasions there were a few of spelling and grammatical errors. The document also referred to out dated documents and used an unrealistic reference to time i.e. 4.3 weeks.
- **Scalars** – At points where the questionnaire asked for levels of understanding, the use of the Likert scale would be more appropriate and provide clearer answers for analysis.
- **Language** – Although everyone reviewing the document understood every question, a clearer definition of the requirement was preferred i.e. what was meant by the statement 'a good understanding'.

- **Repetition** – It was believed by the reviewing personnel that two questions, although worded differently, effectively asked the same question.
- **Completion Time** – On review all personnel completed the questionnaire within 15 minutes, some finished as quickly as 5 minutes of starting.

Once the questionnaire had been amended to incorporate these observations the same personnel re-examined the paper. With no further comments the questionnaire was given to 18 students on the day they finished their LSS Class 3 course, by the author in their classroom, where they all completed the survey at the same time. Although it took a little longer to finish than was expected, all distributed papers were returned completed. Following the success of this pilot, fifty questionnaires were posted out as previously described.

3.5 Secondary Interviews

Interviews of other personnel involved in identifying the Operational Performance Statement (OPS) and Formal Training Statement (FTS) and maintaining the LSS Class 3 courseware were deemed critical. Organisations such as the TRA and the Training Delivery Authority (TDA) provided key information regarding the standards and curriculum to which students are educated. The RLC TDT and CD office were also consulted for their specific expertise regarding course maintenance.

Personnel from these formal bodies who interact with the course management team and instructors were questioned via semi-structured interviews. These interviews were structured around how the CTD was decided by the chain of command rather than what was included in the numerous lesson plans. This information was thought to be crucial to aid an understanding of how each Training Objective, Enabling Objective and Key Learning Point was identified.

Using a number of initial questions these interviewees were asked for their own perspective on the requirements of the course before being queried on their own areas of expertise. This proved a greater understanding of the overall issue of what

is required of qualified trade personnel man, providing the detail required comparing the need against the product.

3.6 Secondary Research

In addition to the survey conducted in support of this case study, a number of other avenues were employed to identify and further understand the subject matter, thus enabling better analysis. To inform the author of the wider aspects relating to this study the following methods of secondary research were employed.

- **Chartered Institute of Logistics and Transport (CILT) Knowledge Centre**
– Having become a member by requirement, the author visited the CILT knowledge Centre for a variety of background information, taking advantage of the available catalogue search facility on a number of occasions. Initially this proved difficult to access and not a great deal of information was extracted but perseverance brought some success in informing the study on some of the broader aspects relating to training and education.
- **Swansea Metropolitan University Library** – Again having been provided access to this facility as part of the Advanced Diploma, this source proved helpful during research. As a distance learner access to the available hardcopy materiel held in the numerous libraries was impractical leaving only an electronic interface available. Again initial attempts to access useful documents proved difficult. However, direction provided by the University on how best to access useful educational information relevant to the specific subject matter helped significantly.
- **Defence Intranet** – Although access is restricted to the Defence community, the author had unrestricted access. Widely employed by the MOD to

safeguard, publish and issue routine direction this was an invaluable source of information.

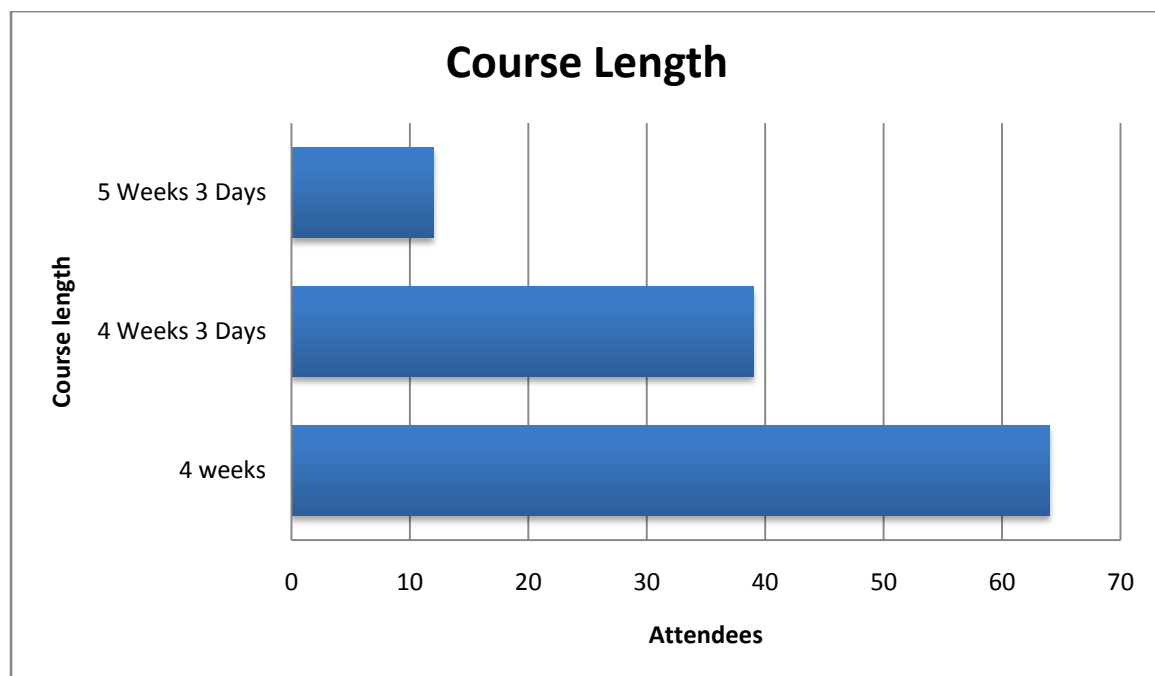
- **The World Wide Web** – Potentially a huge source of information this method was used extensively whilst obtaining external references and different educational viewpoints.

Chapter 4 – Analysis and Results

4.1 Course Length

As previously highlighted the data for this study was taken from personnel who attended courses of varying timescales. The bar chart below shows a breakdown of the number of students who attended each variable course length. It could be assumed that those who attended the courses of a shorter period would not receive the same standard of training provided to those who completed the 5 weeks and 3 days course. However, those lessons removed to facilitate the required reduction were selected with extreme care to ensure the trade education was not degraded in any way.

Figure 4.1: Course Length



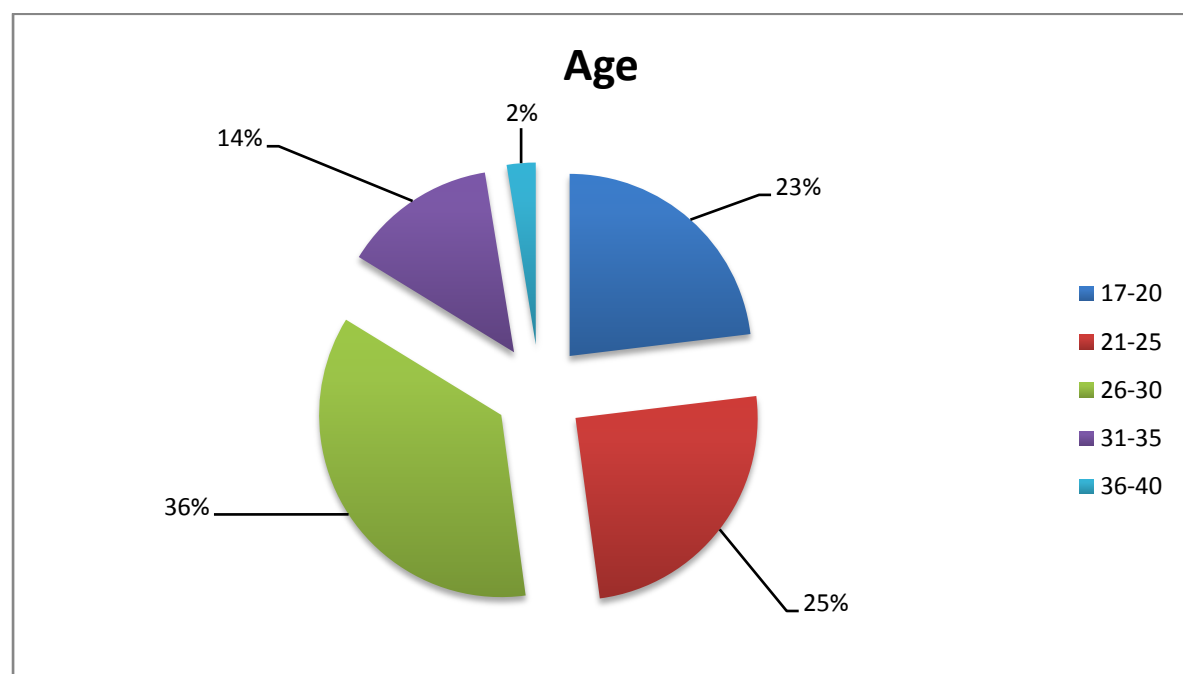
To facilitate the require reductions all Physical Training (PT) periods were removed in entirety and all Mandatory Annual Training Tests (MATT's) were taught elsewhere within the Training Pipeline. With a stated requirement for Phase 2 soldier to complete a minimum of five PT periods per week and the MATT's package equating to a total of 4 days of the course length, calculating the reduction, whatever the

requirement, was simple mathematics. Hence every single student who answered the survey received exactly the same trade knowledge from the course they attended whatever the length. Thus ensuring they received the requisite knowledge required to operate within the JSC throughout their initial assignment.

4.2 Population Data

With almost a 50/50 split of Phase 2 and Phase 3 students questioned in this study, the population included a far broader spectrum of personnel than is usually experienced by SOD and its instructors. As would be expected by this out of the ordinary split within the student population, the ages and time served differs greatly. Conversely, the number of female respondents almost equalled the 9.4% (BBC News, 2012) female population expected within the British Army. The figures included below depict both the age variations and the time of service of the entire population surveyed.

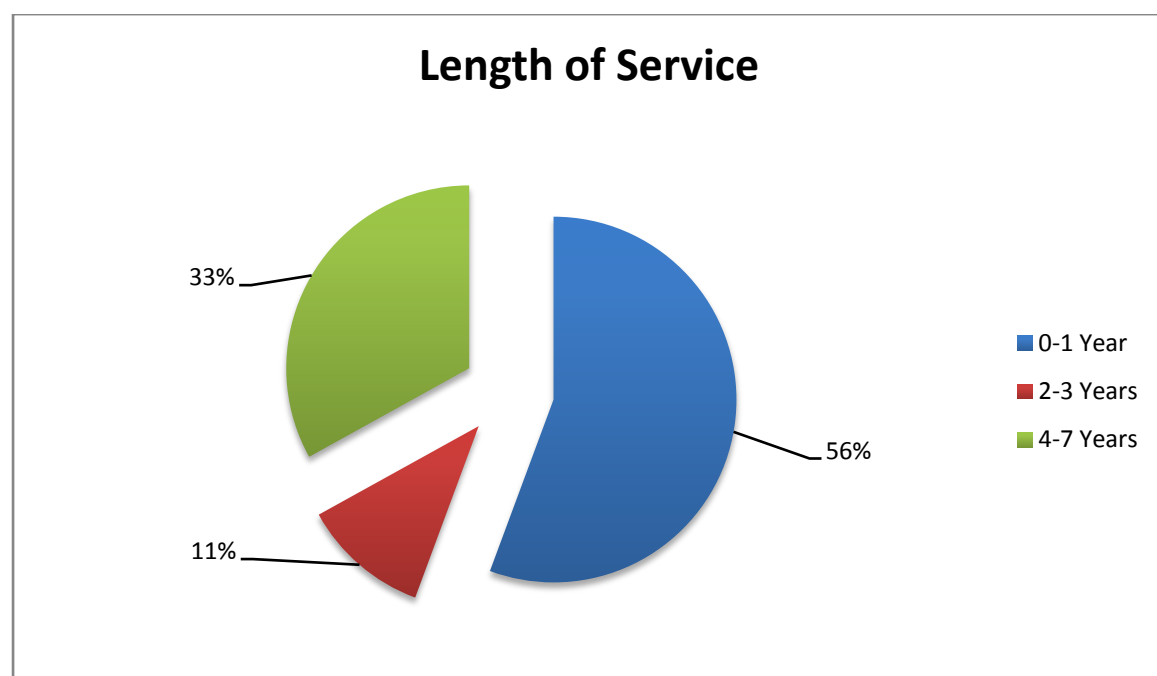
Figure 4.2: Age differential



Historical evidence from the training years 2010-2011 and 2011-2012, informs us that the average age of soldiers attending the LSS Class 3 course is 22, which

confirms the Armed Forces preference to recruit younger personnel. Although under 18's were deployed on Operations such as the Falklands, the Balkans and more recently the Gulf this practice was stopped at the turn of the century. The Optional Protocol to the Convention in the Rights of the child prohibited the routine deployment of under 18's since 2002. However, the occasion to train and educate young personnel is still seen by the MOD as a good opportunity for both the individual and the service they enlist into.

Figure 4.3: Length of Service differential



Obviously without Phase 3 soldiers being loaded onto the courses covered by this case study, as is the norm, the length of service of the sample population could be measured in months rather than years.

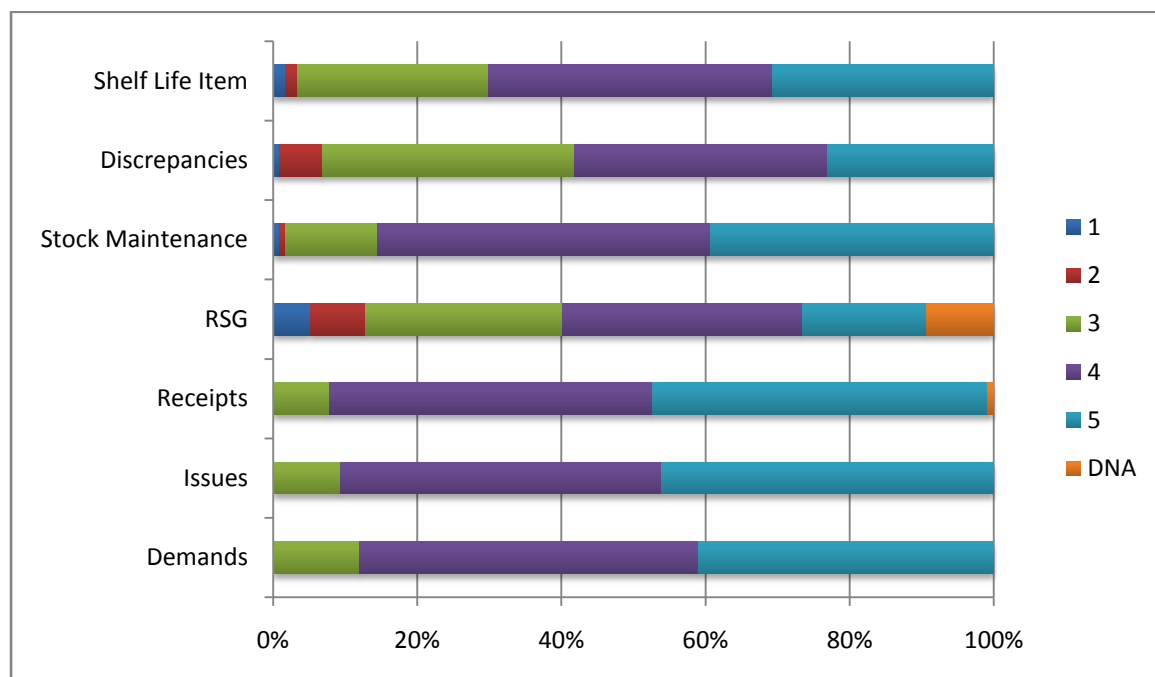
Clearly, it is evident a number of soldiers undergoing Phase 1 training take longer to complete than is the planned assumption. This can be attributed to a number of reasons i.e. medical grounds, compassionate issues, failure to achieve the required standards and a desire to terminate service. Despite these difficulties the Training Pipeline aims to allocate successful Phase 1 soldiers a place on one of the annual eighteen LSS Class 3 course instances within 1-2 months of joining Phase 2 training.

This ensures soldiers are provided the best opportunity to complete Phase 2 training and join their assigned unit as quickly as possible. Thus reducing skill fade on newly acquired skills, including their ability to complete trade related tasks.

4.3 Transactional Capability

Assigned to any role within the JSC, requires LSS trade personnel to complete a variety of accounting and tracking transactions. Initially taught theoretically and using recognised manual accounting systems, students must be competent in completing a number of basic transactions that enables them to understand how to maintain a manual account. This is achieved via a combination of formative and summative assessments of each they will be completing in their chosen trade. To prove their understanding of each business practice, all students must attain a score of 60% or more, under exam conditions, to reach the required standard. Every student who completed the questionnaire had completed this requirement.

Figure 4.4: Respondents Transactional Competencies



Employing the standard Likert Scale with 1 being 'do not understand' and 5 being 'fully understood' each student identified how confident they felt about completing

each of the individual transactions they had been introduced to and tested on, throughout their trade education. Figure 4.4 provides a comprehensive breakdown of the competences students recorded.

It is clear from these results that a large majority of the students felt that on completing the course they owned an acceptable understanding of what was required to complete a demand, an issue and a receipt. Indeed the vast majority believed they had a better than average understanding of these skills. On the whole the same can be said for stock maintenance, discrepancies and shelf life transactions. However, a small number identified they lacked confidence in these areas.

The procedure that provides the greatest differential throughout the questioned population is the Returned Stores Group (RSG) transaction. As this procedure is new information to both Phase 2 and Phase 3 trainees, it would be fair to assume there should be no difference in understanding irrespective of previous military experience. By means of confirming this assumption a Chi Square test was carried out to determine whether there is a statistically significant difference between the two groups of trainees. The following hypothesis was tested:

H_1 : There is no statistically significant difference in the understanding of RSG between Phase 2 and Phase 3 Trainees.

H_{1a} : There is a statistically significant difference in the understanding of RSG between Phase 2 and Phase 3 Trainees.

Table 4.1: Students Understanding of RSG

Observed data

	Uncomfortable	Comfortable	Very Comfortable	
P2	15	22	20	57
P3	11	9	39	59
	26	31	59	116

Expected data

12.78	15.23	28.99
13.22	15.77	30.01

Chi-square cell values

0.39	3.01	2.79
0.37	2.90	2.69

chi-square = 12.15
p = 0.002294

The above calculations provide the following results H_1 ($\chi^2 = 12.15$, $p = .002$, $df = 2$), thus contradicting the above assumption, as there is a highly statistically significant difference. This allows rejection of the null hypothesis (H_0) in favour of the alternate hypothesis (H_{1A}). Compressing the answers provided by the questionnaire identifies a large majority (66%) of Phase 3 trainee's feel very comfortable handling RSG, whereas only 35% of Phase 2 trainees feel the same. Results for those feeling uncomfortable, including the 11 (9%) who did not answer, identified closely matching results for both groups of trainees, specifically 26% at Phase 2 and 18% at Phase 3. However, more than twice as many (38%) Phase 2 trainees felt comfortable in completing this transaction in comparison to (15%) the Phase 3 students.

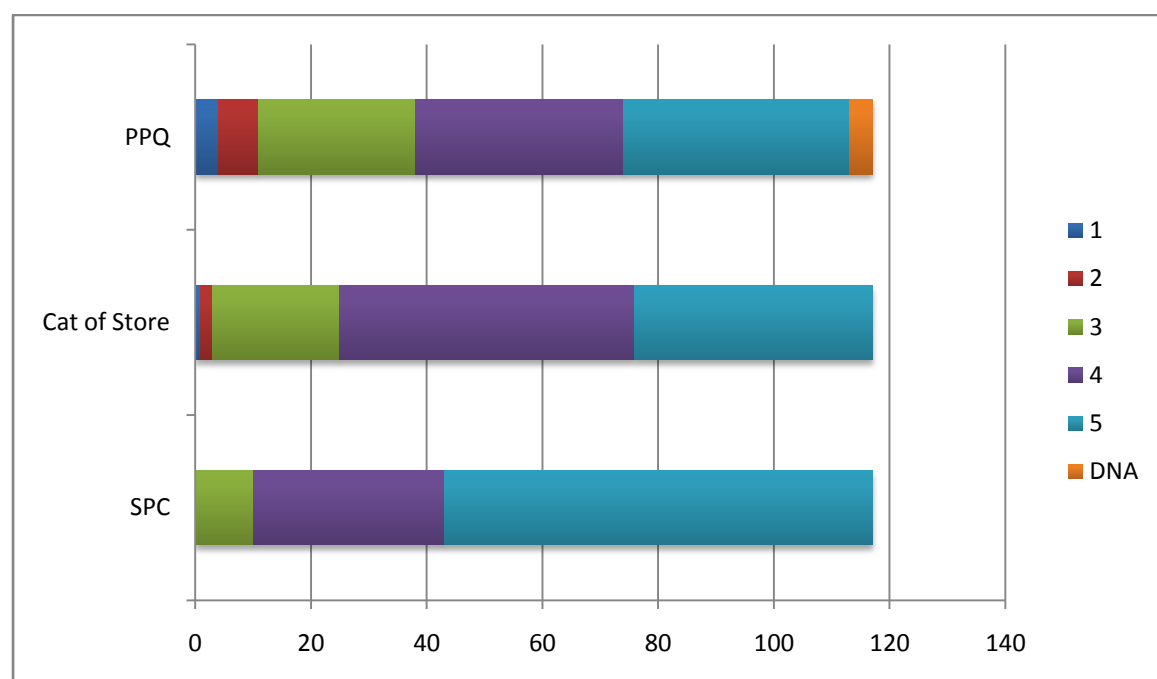
4.4 Tradecraft

In conjunction with the transactions taught, the students are introduced to a number of additional topics that both support their understanding of their chosen trade and their ability to complete transactions. In some cases recognised throughout NATO and industry this subject matter provides the knowledge required to work with UK's allies and contractors whenever required. Again employing the Likert Scale with 1

representing 'unsure' and 5 being 'completely able', Figure 4.5 shows the populations understanding of a selection of these topics.

Again, these figures provide evidence that the lion's share of the students responded positively to the query into their understanding of this area of their recent education. Interestingly, more so with regard to the Standard Priority Code and the steady reduction in understanding in the other two areas i.e. the Category of Store and Pre Packed Quantity. This could be an area for further examination in an attempt to identify if the timing of delivery for each lesson assists in the retention of information. As this specific information is introduced at the beginning middle and end of the course respectively.

Figure 4.5: Tradecraft Understanding



Compressing the six possible responses into three distinct groups i.e. 1 and 2 as uncomfortable, 3 as comfortable and 4 and 5 as very comfortable it becomes evident a larger majority have concerns regarding their understanding of PPQ's in comparison to both Cat of Store and the Standard Priority Code (SPC). If you also

regarded those that did not answer as a lack of understanding into the Uncomfortable group this then totals 15 (12%).

As only 44% of Phase 2 trainees are very comfortable in their knowledge of PPQ whereas 83% of Phase 3 trainees are very comfortable with their understanding the assumption that there is any disparities in the understanding of this trade related issue. To better understand the breakdown of reported answer regarding the Pre Packed Quantities a Chi Square test was carried out to determine whether there is a statistically significant difference between the two groups of trainees. The following hypothesis was tested:

H_2 : There is no statistically significant difference in the understanding of PPQ between Phase 2 and Phase 3 Trainees.

H_{2a} : There is a statistically significant difference in the understanding of PPQ between Phase 2 and Phase 3 Trainees.

Table 4.2: Students Understanding of PPQ

Observed data

	Uncomfortable	Comfortable	Very Comfortable	
P2	11	24	25	60
P3	4	6	49	59
	15	30	74	119

Expected data

7.56	15.13	37.31
7.44	14.87	36.69

Chi-square cell values

1.56	5.21	4.06
1.59	5.29	4.13

chi-square =
p =

21.84
0.000018

The result of H_2 ($\chi^2 = 21.84$, $p = .000$, $df = 2$) identifies there is a statistically significant difference between Phase 2 and Phase 3 Trainees in their understanding of how

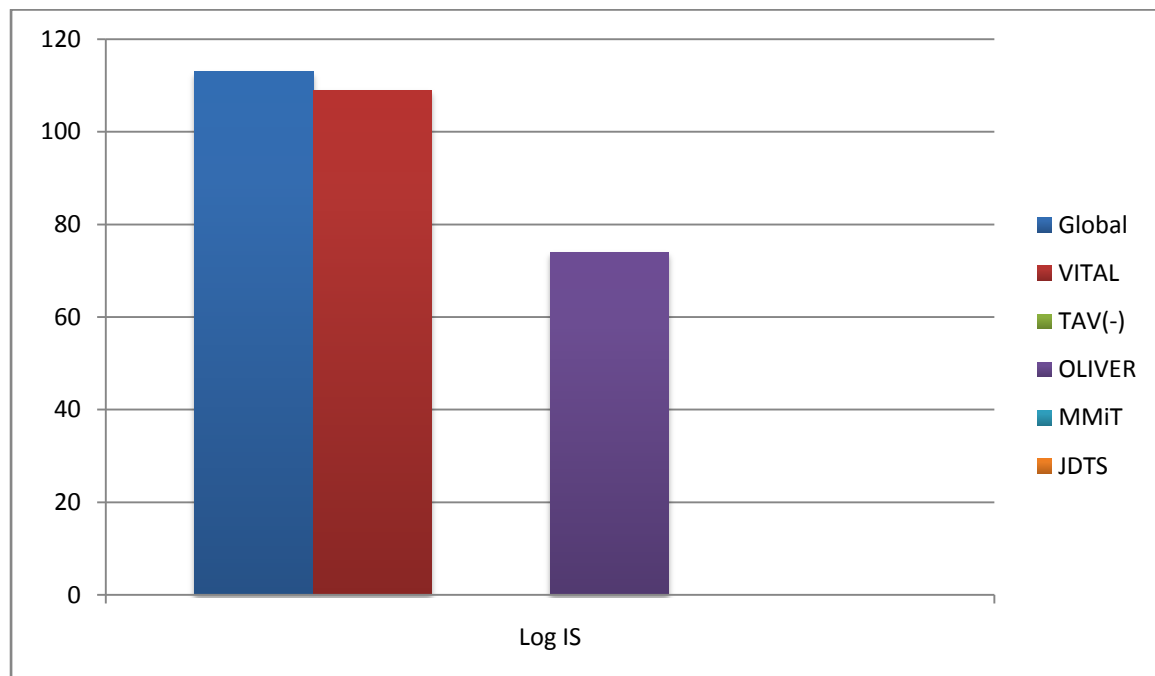
PPQ's are employed within the JSC This means the alternate hypothesis is to be accepted in this case. Indeed of the Phase 3 soldiers questioned, 83% confirmed they were very comfortable, whereas only 42% Phase 2 answered in the same vein.

4.5 Logistic Information Systems (Log IS) Confidence

Having proven a basic knowledge of manual accounting, students are then exposed to the variety of Log IS employed by the British Army and across Defence. Each of which have specific processes, procedures and transactional methodology. This is considered a natural progression for students and provides the prefect opportunity to deliver a blended learning environment into the curriculum, thus supporting the students understanding of the trade as a whole. Teaching each system and its capabilities lends itself completely via employment of the Explanation Demonstration, Imitation and Practice (EDIP) methodology preferred by Defence as an educational tool. Following completion of each IT module they are likely to encounter during their future service, students must prove technically competent in its operation.

Responses to the questions included to specifically target the respondents understanding of specific Log IS used by LSS personnel were very encouraging. Clearly identifying the three systems learnt during the course curriculum, amongst a selection of six. Figure 4.6 displays the number of students who identified Global, Visibility in Transit Asset Logging (VITAL) and On Line Inventory Verification and Records (OLIVER) correctly.

Figure 4.6: Log IS confidence



Additionally encouraging is the fact every single respondent recognised those systems included as ‘red herrings’, rejecting each in turn, as those for which they had not received any training. Tracking Asset Visibility (-) (TAV(-)), Management of Material in Transit (MMiT) and the Joint Demand Tracking System (JDTS) are indeed all systems employed within the JSC but are introduced to LSS personnel at a later stage of their education or employed by 1st line units for tracking demands.

It is easy to dismiss this issue as respondents are only introduced to three Log IS systems, each of which interact between each other in a variety of ways. However, it was an important question to ask bearing in mind all respondents will be working on Log IS for their entire career and confidence in its operation is important. Maybe a more detail set of questions in regard to this topic would have proved more valuable. Especially as it is understood younger members of society from which the MOD recruit are believed to possess a greater level of IT literacy due to everyday interaction such as is experienced through mobile phones, electronic games and the Internet.

4.6 Conditions Based Operating

As highlighted in the introduction, all service personnel must be capable of operating globally, in all conditions and all types of climate, however this capability is recognised as a training gap within the LSS Class 3 course curriculum. It has been acknowledged that any attempt to replicate such conditions in a college classroom, in a four-week timescale, is impossible. Some of the confidence required to operate out of barracks comes from personnel attributes and experiences, others are provided during the education received during Phase 1 training. However, to best prepare soldiers to be able to complete their assumed roles in such conditions, they are further exposed to field exercises at sub-unit, regimental and formation level during their initial assignment. Any such deployments are recorded within the Record of Work Place Training (RoWPT) documentation issued to all successful students. Immediately following an individual's return from exercise, the CoC must sign the RoWPT as proof of their participation. Following a period of 12 months within a working unit this document is reviewed to ensure the soldier has completed all such training gaps.

Figure 4.7 shows the confidence the sample population had at operating in camp, on exercise and on operations. This information provides an understanding of each individual's conviction as to their capability at being able to complete their given role, no matter where they are or what conditions or climate they find themselves deployed into. Obviously a mature location such as a peacetime barracks provides the best possible conditions for soldiers to complete their work. These conditions can become significantly worse as soldiers deploy on exercise and yet worse still in the operational environment. Comparison of Phase 2 and Phase 3 students' confidences at operating out of barrack may provide evidence that confirms the value of the RoWPT documentation and how completing exercises improves a soldier's ability to work in a variety of conditions.

Table 4.3: Phase 2 trainee's environmental confidence

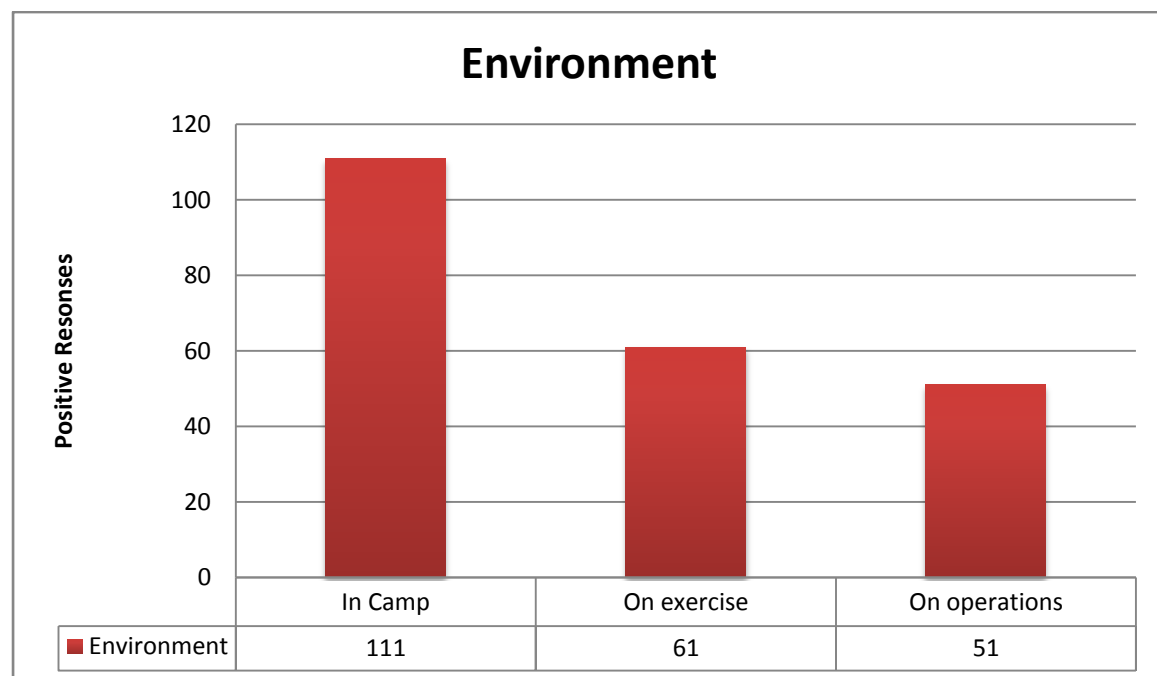
	Camp	Exercise	Ops
No	5%	60%	60%
Yes	95%	40%	40%

Table 4.4: Phase 3 trainee's environmental confidence

	Camp	Exercise	Ops
No	5%	37%	53%
Yes	95%	63%	47%

Both groups are equally confident in Camp, yet as expected Phase 3 Trainees are more confident than Phase 2 Trainees on exercise this confidence gap can be probably be explained due to more Phase 3's have taken part in an exercise. Surprisingly both groups are roughly equal when questioned about their capability to deploy on Operations is considered.

Figure 4.7: Conditions based operating



Despite this lack of confidence in relation to being able to operate in the more austere locations, the majority of students expressed a clear understanding of the

JSC and RSC and their role within it. Exactly 65% of all respondents understand what JSC & RSC are. 31% stated they did not understand JSC&RSC (4% gave no reply). The same 65% of all respondents stated they understood their role in JSC & RSC, 24% indicated they did not know their role (11% gave no reply). If the no replies are taken to indicate a lack of understanding then exactly the same percentage (35%) do not know what JSC & RSC are and the same percentage do not know their role.

A Chi Square test was carried out to determine whether there is a statistically significant difference between the two groups of trainees. The following hypothesis was tested:

H_3 : There is no statistically significant difference in the understanding of JSC and RSC between Phase 2 and Phase 3 Trainees.

H_{3a} : There is a statistically significant difference in the understanding of JSC and RSC between Phase 2 and Phase 3 Trainees.

Table 4.5: Students Understanding of JSC & RSC

Observed data

Q10		JSC & RSC				
		Yes	No		Yes	No
Phase 2		33	24	57	57.89%	42.11%
Phase 3		42	17	59	71.19%	28.81%
		75	41	116		

Expected data			for Yates' correction	
			3.85	11.25
		36.85	20.15	
		38.15	20.85	

Chi-square cell values		0.31	0.56
		0.29	0.54

chi-square = 1.70
p = 0.134 df = 1

H₄: There is no statistically significant difference in the understanding of the role a student plays in JSC and RSC between Phase 2 and Phase 3 Trainees.

H_{4a}: There is a statistically significant difference in the understanding of the role a student plays in JSC and RSC between Phase 2 and Phase 3 Trainees.

Table 4.6: Students Understanding of their role within the JSC & RSC

Observed data

Q11		Role in JSC & RSC				
		Yes	No		Yes	No
Phase 2		34	23	57	Phase 2	59.65%
Phase 3		41	18	59	Phase 3	69.49%
		75	41	116		30.51%

Expected data

36.85 20.15
38.15 20.85

for Yates'
correction

2.85 5.54

Chi-square cell
values

0.31 0.56
0.29 0.54

chi-square = 1.70
p = 0.268 df = 1

The results of H₃ ($\chi^2 = 1.70$, $p = .134$, $df = 1$) and H₄ ($\chi^2 = 1.70$, $p = .268$, $df = 1$) indicate that the null hypothesis must be accepted in each case as we have no evidence not to do so. There is no statistically significant difference between Phase 2 and Phase 3 Trainees in their understanding of what JSC and RSC are and what the student's role is.

4.7 Commodity understanding

Providing general support to the field army requires the provision of every commodity from ammunition and medical supplies throughout the entire commodity spectrum to Equipment Support (ES) materiel. Having the capability to provision, account and control such a vast array of items requires a number of specialist skills. Within the MOD, commodity types have specific control measures and accounting procedures

all of which must be learnt and understood by the LSS from the very beginning of their trade careers. These skills are taught throughout the Class 3 curriculum although the actual handling of much of these items is not possible due to the restrictions that apply.

Both ammunition & medical stores rightly attract security regulations and in the majority of cases these commodities have attached hazardous material restrictions. To compensate for this soldiers are provided with a Realistic Working Environment (RWE) where they can handle ES materiel, learning basic skills that are required when handling all commodities irrespective of their restrictions. These skills together with the theoretical knowledge on handling hazardous material provide the Class 3 tradesmen enough information to manage these items once assigned to their new unit.

Figure 4.8: Commodity type handled

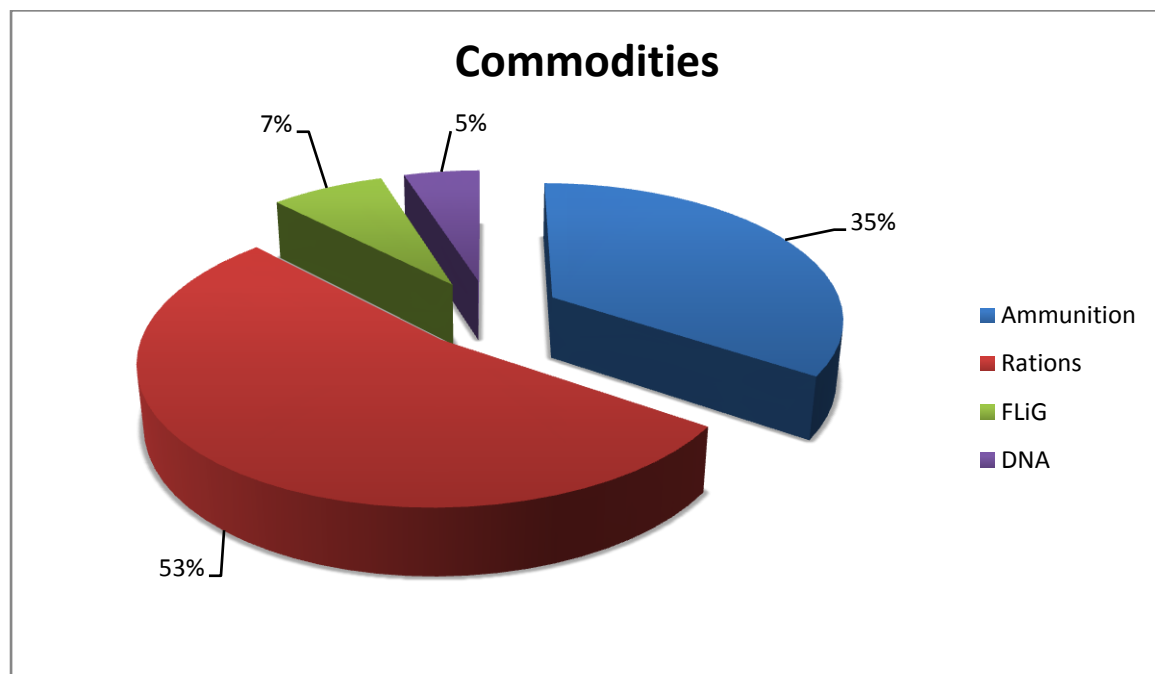


Figure 4.8 shows how many of questioned soldiers who have handle Ammunition, Rations and Fuel, Lubricants and industrial Gases (FLiG) in the past 12 months. These results identify that despite the handling of commodities being restricted to ES materiel on the Class 3 course, a large volume of the student population have in fact

had occasion to handle other commodities. This situation is due to two distinct reasons. Firstly a number of students questioned being Phase 3, had already deployed into the field army, where such practice is a requirement of everyday soldiering. Secondly, those Phase 2 soldiers will have handled a limited amount of these commodities during Phase 1 training, although under supervision i.e. rations during exercises, ammunition on range days and medical stores as part of their First aid assessments. As expected though very few people have touched FLiG within the 12 months prior to the questionnaire.

Chapter 5 – Conclusions and Recommendations

5.1 Directing Agencies

The MOD have a number of agencies establish with personnel who are both generally and intimately involved with the requirement and delivery of all its training requirements. These agencies have their own specific responsibilities to ensure the plethora of courses is sufficiently resourced to ensure the agreed OPS is met.

Including the TRA, and the TDA this totals a significant commitment by the MOD to ensure soldiers undergoing training are provided the highest standard of preparation for the role they have been recruited for. Thus following Coles (1996) description of training perfectly. The LSS Class 3 course is but one of these courses but remains under the directing agencies umbrella of support, meaning it is fully supported by the organisations that manage its delivery.

5.2 Supporting Documentation

As discussed at great length throughout Chapter 4, the DSAT process is applied to all the MODs training needs. The LSS Class 3 course is no exception to this rule and is processed through this rigorous system on a continual basis. As can be seen in Figure 2.2 this system evaluates the training being delivered and through a process of three stages produces 4 specific course training documents, namely,

- The OPS.
- The FTS.
- The Assessment Strategy.
- Instructional Specifications.

These documents ensure the LSS Class 3 course meets the needs of the Field Army and as such, through the revolutionary cycle of the DSAT process ensure it remains current.

From EO's, through TO's down to specific KLP's the training documentation is extremely comprehensive. Identifying the lessons to be learnt, how they are taught, to what category and how a student's understanding of the subject matter is to be assessed further highlights the complexities of this supporting documentation. This detailed information provides the MOD with the confidence in the training it is delivering and that it will provide successful students with the skills and education required to complete their given role within their assigned units, not only for their first twelve months but beyond.

5.3 Training Deficiencies

Limited to conditions, environments and TO's that can be delivered within the classroom environment and a compressed timeline, the DSAT process has identified a number of training deficiencies within the LSS Class 3 course curriculum. To ensure these lessons are learnt, each is formally recorded and responsibility for training is passed to the Field Army by the TRA. These activities are generic and can be completed using skills already learnt in the classroom, meaning successful students are well equipped to tackle each as the opportunity arises.

5.4 Tested Hypothesis

In an attempt to clarify if the LSS Class 3 course curriculum delivered the trade training required by soldiers who were to be employed within the MODs supply chain this study considered a number of issues. These issues were specifically selected for their value in providing supporting evidence for either of the following hypothesis:

H_0 The LSS Class 3 curriculum does not sufficiently prepare successful students for every appointment they may encounter during their initial twelve months employment in the Field Army.

H_{0A} The LSS Class 3 curriculum sufficiently prepares successful students for every appointment they may encounter during their initial twelve months employment in the Field Army.

As evidenced throughout Chapter 4, the null hypothesis is rejected in favour of the alternate, meaning the Class 3 curriculum delivers the needs of the individual and the organisation. Of the 150 questionnaires distributed, 117 were returned, providing a sample population that could inform the study with a reasonable degree of confidence of the results no matter which side of the argument that supported.

Of the many questions answered the overwhelming majority of the sample population reported confidence in the theoretical knowledge and practical skills learnt during attendance of the LSS Class 3 course. Understanding of accounting transactions, Defence Log IS, likely conditions and the commodities to be handled was high. Furthermore, specific Chi Square tests were conducted against detailed criteria to add additional stress on the test hypothesis.

These tests, using the unique variation of the sample population examined Phase 2 trainees' confidences against those of the Phase 3 trainees. This was tested in the following areas;

- RSG Transactional Capability – A Chi Square test proved there was a highly statistically significant difference between the Phase 2 and Phase 3 trainees, despite expectations to the contrary. Even though both sets of trainees felt they could complete this specific role, the Phase 3 trainees felt very comfortable, whereas the Phase 2 trainees simply felt comfortable.
- PPQ Understanding – A Chi Square test confirmed acceptance of the alternate hypothesis i.e. H_{2a} : There is a statistically significant difference in the understanding of PPQ between Phase 2 and Phase 3 Trainees. Again this difference identified that more seasoned soldiers felt very comfortable with PPQ's compared to the Phase 2 soldiers who could only confirm they were only comfortable.

- Understanding of the JSC & RSC and the trainee's role within it – The Chi test completed in respect of both these areas also provided results in favour of null hypothesis.

5.5 Over training

The training delivered during the Class 3 course provides successful students with a great deal of trade knowledge that will enable them to complete every single role they are likely to be employed in following completion of Phase 2 training. Much of this knowledge will not be utilised by each student, as the majority will only be tasked with a single role during their first 12 months assignment. It is conceivable they may stay in this role for the remainder of their first assignment and throughout their second appointment. This situation could lead to a quantity of the education received being long forgotten by the time they next need it, be that on their third posting or on return to the Defence Logistics School to complete further trade education. However, for a number of good reasons, Phase 2 soldiers are not assigned to their first unit until they have completed all necessary training. The evidence in Chapter 4 suggests that should the organisation know the role soldiers are to undertake during their first 12 months, the Class 3 course could be better tailored to their future requirements, thus not training them in skills they are likely not to use. However, this approach would cause difficulties in the management of the training pipeline and introduce the requirement for further education of trade personnel as personnel move throughout the MODs supply chain, either on re-assignment or in support of operations.

5.6 Under Training

Comparing the length of the LSS Class 3 course to that of other services and directorates it is easy to suggest that the training provided does not in fact deliver the education required. This argument gains further credence when the known training deficiencies are considered. However, it is accepted that once assigned to the Field Army there will always be a qualified supervisor in place to provide adequate support to assist in the completion of their duties, as is the case with most organisations of

this size and shape. This supervision is well established and is utilised mainly in the process of assisting with the completion of ROWPT and ROA documents, rather than educating soldiers on lessons already learnt.

5.7 Recommendations

Although repeating this questionnaire is reasonably simple as the LSS Class 3 course has been and continues to, cater for a large number of students per year, this study is relatively unique. This is due to two reasons, these being the course length and the sample population. During this study the TRA demanded a change of requirement of the TRA. Namely, an uplift of the annual output, thus enabling the employing Corps the opportunity to re-qualify other tradesmen into the LSS CEG. This brought about a number of changes to the quantity of courses, its curriculum and the students attending in a compressed time line. Although this added pressure on the course curriculum it is clear it is well resourced and fit for purpose.

This robustness does not happen by chance, the DSAT process is mature and well understood by all those involved. To ensure this course curriculum continues to prepare successful students for their assigned role in the field army it must be reviewed constantly. This includes training methods, training documentation and lesson plans to ensure that which is being taught, is actually what is being done within the defence supply chain. Furthermore, the TRA has a significant role in ensuring the trade is being correctly employed.

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