

**THE CRITICAL ROLE OF AN EFFECTIVE SYSTEMATIC TRAINING EVALUATION PRACTICE ON  
LEARNING VALUE WITHIN A STATE OWNED COMPANY: A REVIEW AND CRITIQUE**

by

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## **ABSTRACT**

The Critical Role of an Effective Systematic Training Evaluation Practice on Learning Value within a State Owned Company: A Review and Critique

### **Keywords:**

Systematic training evaluation; effective; learning and development; the training cycle; Practice; Addie; Value; Kirkpatrick four levels; Phillips five levels.

### **Introduction**

The critical role that an effective systematic training evaluation practice plays is in its ability to collect value systematically. The collected data is utilised to make a judgement or to evaluate learnings contribution. Without the training evaluation practice learning value is obscured.

The instructional systems design (ISD) Addie is assessed as the systematic structure that can greatly assist the training evaluation practice. It supports the proposal of collecting value throughout the training lifecycle for the holistic view of learning value. The Kirkpatrick and Phillips (K/P) summative framework will be used to assess the current practice in collecting post-learning data.

Addie was highly valued by the survey participants. The current summative practice in the organisation stops mainly at level two of the Kirkpatrick/Phillips model. The practice lacks comprehensive data collection at recommended best practice levels and is therefore, not effective, efficient and systematic in its approach to declare learning value.

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To: Dr. F. Badenhorst for his great support.

## DEDICATIONS

To: my Lord and Saviour, Jesus Christ, all the honour and glory for evermore is due until we meet face to face.

God is love (1 John 4:16) Love is manifested in Christ and the Cross, It is completed in the Resurrection and its power

To: my husband, Theophilus thank you for all your love, support, encouragement and help.

To: my children thanks to you all for keeping me humble.

To: my colleagues' thank you for completing the survey questionnaire. Note the findings is what you all gave me.

To: the late Legendary Dr/Professor D. L. Kirkpatrick.

## DECLARATION

I, Joyce Ramiah the undersigned I.D. no. 5402160061084, student no.40315231, declare that this Mini-dissertation “ **The Critical Role of An Effective Systematic Training Evaluation Practice on Learning Value Within A State Owned Company: A Review and Critique**”, is my own work and is submitted in partial fulfilment of the degree Magister Technologiae. All references and citations have been acknowledged by means of a complete reference system.

Signature\_\_\_\_\_

Dated \_\_\_\_\_

## ABBREVIATIONS

ADDIE	Analysis, Develop, Design, Implement and Evaluate	ISD	Instructional systems design
ASTD	American Society for Training and Development	K/P	Kirkpatrick /Phillips
ATR	Annual training report	L&D	Learning and Development
BHRD	Bachelor in Human Resource Development	LMS	Learning management system
BI	Business Intelligence	NSDS	National Skills Development Strategy
BTD	Bachelor s in Training and Development	NQF	National Qualification Frameworks
CCFO'S	Critical Cross field Outcomes	NQFA	National Qualifications Framework Amended Act No.66 66 of 2008
CHE	Council for Higher Education	ODETDP	Occupationally Directed Education Training and Development Practices
CIPD	Chartered Institute for Personnel Development	OD	Organisational Development
EOC	Executive Operational Committee	QA	Quality assurance system
ER	Employee Relations	QMS	Quality management system
ERS	Employee Resource Services	ROE	Return on expectation
ESI	Evaluation Success Index	ROI	Return on investment
ETD	Education Training and Development	RPL	Recognition of Prior Learning

ETDP	Education, training and development practitioners	SAT	Systematic approach to training
ETQA	Education Training Quality Assurance	SAQA	South African Qualifications Authority
ETLD	Education, training, learning and development	SDA	Skills Development Act
FET	Further Education and Training	SDF	Skills Development Facilitator
FETC	Further education and training college	SDLA	Skills Development Levies Act
HCM	Human capital management	SKA'S	Skills, Knowledge and Attitudes
HCD	Human capital development	SOC	State Owned Company
HETA	Higher Education and Training Act	TAT	Traditional Approach to Training
HET	Higher Education and Training	VOI	Value Of Investment
HRD	Human Resource Development	VLX	Very large extent
HRTC	Human Resources Training Committee	WPLP	Workplace learning professional
ILT/EL	Instructor led training (classroom) and E-learning	U. K.	United Kingdom
S.A.	South Africa	U.S.A	United States of America

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## **CHAPTER: 1**

# **CONTEXTUALISATION OF THE RESEARCH STUDY AND PROBLEM STATEMENT**

## **1.1 INTRODUCTION AND BACKGROUND**

This chapter will provide the context for the research project on: the significant value of an effective systematic training evaluation practice in the search of learning value. This chapter will therefore provide an outline and focus for the study by briefly describing the theoretical and methodological approaches. Finally the chapter will conclude with, a discussion of ethical considerations, limitations and proposed chapter layout of this study.

This study examines the current training evaluation practices at a corporate university in the search for learning value. According to Lui-Abel (2012: 410), Noe (2010: 82-86) and Elkeles and Phillips (2007: 32-33) a corporate university is a centralised learning centre for a large organisation. Corporate universities are funded by organisations, as they primarily service the employees of that organisation. One of the key characteristic of a corporate university is that it aligns the learning strategy with the business strategy. Investments in corporate universities are large and therefore demand that the value to be declared (Lawson, 2009: 286). The training providers are both internal and external stakeholders with whom collaborations and relationship for the benefit of skills development is nurtured. External stakeholders are sector education and training authorities (SETA'S), academe/universities and various external providers of specialised workshops and conferences.

Lui-Abel (2012: 411) further states that, in one of the four quadrants model of the deliverables for a corporate university, “training measurement and evaluation” is

a strategic demand. Learning value is attached to an effective systematic training evaluation practice, due to its potential to boost the amount of value data that can be collected on learning. In other words the more effective and systematic a training evaluation practice is, the more the value of learning is exposed for declaration in either quantitative or qualitative terms.

The Addie training cycle is proposed as the systematic structure from which the research will view or interrogate the current training evaluation practice. The systems approach to training (SAT) and training evaluation has its foundations in the early seventies, (Rossi, Lipsey & Freeman, 2004: 1). The Addie training cycle is a systematic approach and is also known as the Instructional Systems Design (ISD) which will be discussed further in chapter two. In other words, Addie is a tool or structure which can guide the evaluation practice in the critical areas where value is created, in the search for learning value.

Bachetta (2012: 1) concurs that the systems approach to training (SAT) could enhance the collection of valuable data to make judgements on the value add. The “Addie” training cycle is a model that recommends all the training activities to engage in, to meet a training need. Furthermore, Bozarth (2008: 4) also agrees that the well-known Addie training cycle or instructional systems design (ISD) is a model that the research investigation could exploit to determine the value of learning. The training cycle provides opportunities for learning to create value. Collecting data by implementing training evaluations is a cornerstone to finding the learning value of training.

Training evaluation needs data to make judgements of value-add. According to Agarawla (2012: 365) the value creating opportunities, on the training cycle is collected by investigating the process and outcome criterion. The process criteria consist of the following types of evaluation: the confirmative, diagnostic and formative. Whereas the outcome criteria or during and post-learning data, deals

with the summative evaluation elements. The summative criteria will be assessed using the Kirkpatrick/Phillips model or metrics. Legally implying that there is procedural and substantive processes in the practice of training evaluations that point to the value creation efforts of Learning and Development (L&D).

Biech (ed.) (2008: 196) also promotes the Addie training cycle as a structure or system that will support the training evaluation efforts and practice in search of the value of learning. The Addie training cycle indicates the major activities through which Learning and Development (L&D) can create learning value. In other words, the steps or the stages of the Addie model delineates the training activities which are implemented to provide the training need.

Kirkpatrick and Kirkpatrick (2010: 3) state that the initiator in summative training evaluations was Donald Kirkpatrick. He provided a model called the four-level theory or taxonomy. The taxonomy was developed in 1959 and was one of the first models for training evaluation. Although the theory focused on the summative evaluation of training only, but it was welcomed. Other divisions in business operations were ahead for sometime in terms of monitoring and evaluation models well before the training evaluation model was developed (Beevers & Rea, 2010: 201). The Researchers assumption is that the business models gave Kirkpatrick the ideas for a training evaluation framework.

According to Phillips and Phillips (2007: viii) is that, Donald Kirkpatrick had left the theory unattended for sometime and therefore, not making the four-level theory practical for use. Jack Phillips after he had completed a meta-analysis of Kirkpatrick's theory changed some aspects to develop an adjusted framework. The levels one to four were also reviewed with a slight variation to level outcomes and then the fifth level was incorporated, now known as return on investment (ROI) methodology. Phillips established the five-level framework with

practical tools for usage by evaluators of training. Hence the Kirkpatrick/Phillips (K/P) model will be used in this research paper acknowledging the originator Kirkpatrick for the four levels and Phillips for the subsequent work and the fifth level or return on investment (ROI) framework. Further discussion on the models will be attempted in chapter two.

The following sections examine the intentions of training evaluations in little more detail in training organisations and to set a background to this study.

### **1.1.1 The Purpose of Training Evaluation**

Phillips and Phillips (2007: 4) and Opperman and Meyer (2008: 187) agree on the following principles that encapsulate the objectives of training evaluation for stakeholders:

- To identify and improve dysfunctional processes in (L&D), including training evaluations.
- To evaluate the diagnostics of the training needs to satisfy client requests.
- To evaluate the learning objectives developed and the design of the learning experience so as to meet the need or to improve the design.
- To appraise the effectiveness of learning programs and the value of investment involved.
- To evaluate value of interventions in alignment with business strategy.
- To build relationships with all training stakeholders.
- To provide feedback for developmental purposes on the trainers/facilitators and also for performance ratings.
- To meet the demands of legislations.
- To continue with effective programs and providers.

- To discontinue ineffective programs and terminate unreliable non performing providers.

Kirkpatrick and Kirkpatrick (2010: 2-3) also suggest that learning professionals evaluate their deliverables to organisations, because in the absence of that, nevertheless the value of learning is being judged anyway. Divisions in organisations that are creators of wealth need to prove the value of their contribution to the bottom-line, why then not training. Training is not exempted from proving the value of its investment in developing employees.

The bottom-line entails all types of value not only the monetary value. In other words, in auditing our learning practices and processes the possibility can arise to unearth learning value. In short, measuring value is fundamental to running learning and development as a professional business function (Trolley, 2009: 1). It is not only to justify what L&D has done historically, although that would be a by-product (Noe, 2010: 217 and Werner & DeSimone, 2009: 199). In other words an effective training evaluation practice supports the gathering of data on value created in all its activities to meet the training need. Training evaluations is about judging, shaping and magnifying the value that L&D adds. Through answering questions similar to the following through the increase of effectiveness of learning and its efficacy in training evaluations (Phillips & Phillips, 2007a: 44-45 and Wick, Pollock & Jefferson, 2010: 10):

- How much money to spend on a given program and was it worthwhile?
- What vendors to select for content?
- What blended learning mix should be used?
- How do we measure which groups need help?
- How do we drive completions?
- How well did people “learn”? Who? Why?
- How can we reduce the cost of this program?
- What business impact did it have?

The intentions of an evaluation activity should be to produce or unearth evidence that depicts its value and benefits, to be discussed next.

### 1.1.2 The Value and Benefit of Training Evaluations

The value of evaluation needs to be recognised by workplace learning professionals (wplp) as a tool for training to genuinely produce results (Elkeles & Phillips, 2007: 4). Training evaluations should be part of the budget discussion when interventions are planned and not be an afterthought (American Society for Training and Development (ASTD ) & Institute For Corporate Productivity (i4cp) Research, 2009: 5).

The value of an effective training evaluation practice is the quality and quantity of data that is gathered systematically: to make a judgement on the value of learning (Noe, 2010: 215; Opperman & Meyer, 2008: 183). In other words the more effective and systematic a training evaluation practice is, the more the value of learning is laid bare. Trainingjournal (2004: 67) cites (Kearns) added concepts of value in the four variables below and states that evaluation should start with the benefits to business.

- Quality of its Products and services that are improved, reinvented and developed to benefit customers.
- Quantity of Products that are increased during production due to implementing lean manufacturing or six sigma methods.
- Pricing/ benefits increased due to market share.
- Low production costs due reduced rework and optimal staff numbers.

Phillips and Phillips (2010: 5), states that there is a new definition for “value” or how training evaluations contribute value. Value has a unique set of characteristics and these are stated as follows:

- Data must have elements of quality and quantity.
- Financial and non financial indicators are present.
- The time frames must be varied.

- Meet the needs of all stakeholders.
- The methods and analysis must be consistent and be of conservative standards.
- The providers must be well trusted as sources of trustworthy information.
- The processes must perform or accomplish the right thing.
- It must create a need for movement.

Noe (2010: 13) alludes to the creativity and innovation that lays dormant in individual employees, that needs training to bring it to the fore. Therefore human assets need investment, time and nurturing to create value. To create value for an organisation the quality of Learning and Development (L&D) must be well strategised, aligned and managed. The learning function creates value through its, activities, systems and professionals. The function must be lead by a Chief Learning Officer (CLO), who knows the business and the function of L&D in an organisation and its strategic capabilities (Elkeles & Phillips, 2007: 10).

Phillips and Phillips (2009: 44) concur that C-level executives know and believe in the value of learning and want practitioners to measure impact and results for reporting. But, states instead L&D is mostly measuring K/P's level one and two only. The consternation with measurement of training is that the levels that are measured mean nothing to the C-suite executives. The accusation against evaluation measurements, is that it caters for the needs of the learning division and it is of no use to business. According to Wick *et al*; (2010: 9) training concentrates on learning objectives, but if aligned to business strategy, learning objectives are in fact business objectives. Therefore, it can be concluded that training must measure all levels for interventions but report on higher level evaluation results to decision-makers. The lower levels can be used to improve what matters to the improvement of L&D activities.

Agarwala (2012: 364) indicates that training evaluation supports the value determination of learning. The search for data in the training systems to make an assertion of value is an imperative. Erasmus, Loedolff, Mda & Nel (2012: 246) state that training evaluations have a few vital purposes and one being providing value to the organisation, whilst Biech (2008: 50) states that value is expressed or dictated by the clients requesting the training. Coetzee, Botha, Kiley and Truman (2007: 296) also agree that stakeholders know what value is, similarly to quality it is the receiver who determines what is quality. Simply construed it is the stakeholders or clients who constantly correlate the benefits and the value of items or services and make a judgement on the value or quality received.

Kirkpatrick and Kirkpatrick (2012:124) state that training evaluation is implemented based on the inputs and expectations of the client. The learning intervention must address the identified gaps in Skills, Knowledge and Attitudes (SKA's), to provide appropriate solutions and then evaluate all contributing efforts. The inputs include the financial and non financial investments, both tangible and non tangibles, both hard and soft, both quantitative and qualitative (Beevers & Rea, 2010: 175)

The benefits of implementing training evaluations according to Opperman and Meyer (2008: 187) include the value of a learning program data and to verify results for management reporting. Phillips and Phillips (2007a: 7-10) state a number of benefits of measurement and evaluation and if the training budget is competing for attention one of the benefits could be justification of required investment (Wick, *et al*; 2009: 5). Bersin (2008: 31) states that measurement supports the judgement to be made. Meyer and Orpen (2012: 278) further state that evaluation requires instruments that collect valid data for a judgement to be made on the effectiveness of a training intervention. Simply construed training evaluation practices are synonymous with data collection tools, procedures and processes.



Beevers and Rea (2010: 161) state and agrees also that as a profession HRD practitioners need to be well versed in evaluating training provision and therefore, will then reap the following list of benefits of training evaluations:

- That the L&D programs provided are continuously reviewed and improved for our customers and no training for the sake of numbers only.
- Obtain the support of learning stakeholders because training is aligned to business needs and therefore will have an impact on individuals, team and organisation.
- Provides confidence in the L&D team.
- Garners respect from business and are seen as credible business partners.
- Training evaluation must provide evidence of learning value.
- Evaluation results are used to make critical decisions by the C-suite executives and L&D.

Biech (2008: 695) discusses the ASTD 2004 competency model that makes the implementation of training evaluation a key skill for learning professionals. The ASTD 2013 competency is more of the same, but enhanced for social media.

Different organisations have stated the role of training in value creation when surveyed, but that it has its challenges for collecting value from the evaluation process and the alignment for results (CIPD Survey on talent development 2013: 33). The preceding statements indicate that organisations are searching for value in learning via evaluations, but challenges are apparent. These challenges and barriers requires new, innovative thinking especially standardisation of measurement tools or new models for a new era (Allen & Sites, 2013: 1). The following examines the global view of training evaluations first, before moving onto the challenges and barriers.

### **1.1.3 Training Evaluations: A Global View**

Beevers and Rea (2010: 167) indicate that the primary purposes of training evaluations is to provide feedback to prove, improve, review and learn. The quality imperative demands that practices and processes need to be scrutinised for areas that require improvement to make the practice fit for use. Generally individual programs are evaluated for effectiveness but the practice needs to be efficient and effective and also systematic to support the value search. Generally single training interventions or program effectiveness is mostly only summatively evaluated.

Guerra-Lopez (2008: 118) concurs that in the analysis of the training evaluation practice, that it is crucial to assess processes that both support and enhance it or and thwart or hampers evaluation efforts. The assessment of the training evaluation practice and processes are required for continuous improvement of the HRD management function. In other words evaluation practices that are ineffective and inefficient require scrutiny for credible evaluation results and future value.

Agarwala (2012: 365) concurs that the organisation that subscribes to training evaluation as a tool within the L&D function are successful in delivering value. The project can be deemed a meta-practice analysis of training evaluation. This investigation will focus on the effectiveness and efficiency of the current training evaluation system, both strengths and problem areas within the organisation training evaluation system will be identified (Guerra-Lopez, 2008: 26). Agarwala (2012: 367) states that the management of evaluation towards a more effective practice is paramount for L&D survival and reputation. Systematic training evaluations will entail evaluating the whole system from needs analysis to evaluation (Bozrath, 2008: 5). The summative or end of training evaluation will lack rich data that can be collected during the needs assessment, development of learning objectives and course design. Opperman and Meyer (2008: 186) also promote an integrated approach to training evaluations.

Kirkpatrick and Kirkpatrick (2010: ix) state that the Kirkpatrick model provides a process for summative evaluation whilst the Phillips framework provides the metrics for each type of training evaluation, viz, diagnostic, formative and summative evaluations.

Kirkpatrick and Kirkpatrick (2010: 168) also emphasize that training evaluations need to build a “strong chain of evidence” to make value judgements credible. In other words, there is a need to establish the final goals upfront, before embarking on the evaluation route for value demonstration. Kirkpatrick and Kirkpatrick (2010: 1) also state that for return on expectation (ROE) or return on investment (ROI) to be credible strong documented evidence is necessary.

According to Stone (2009: 2) for performance and productivity enhancement, training contributes towards a competitive sustainable individual and enterprise. High performance individuals or an organisation is a current trend for sustained survival of organisations facing tremendous challenges which is exacerbated by global economic woes (KPMG Report, 2012: 1). Next is a discussion on seeking value for the investment.

#### **1.1.4 Training Investments Rational for Seeking Value**

Globally the training investment is huge and therefore the value of learning that utilised those budgets need to be realised (Erasmus, *et al*; 2012: 239). Based on economies of scale all investments demand accountability more so after the current economic downturn. In other words, investors seek returns. Kirkpatrick and Kirkpatrick (2010: 5) also cite that globally organisations invest annually in training, learning and development and therefore all investments demand accountability, return and value demonstration. Wick *et al*; (2010: 256) agrees that systematic training evaluation practices provide answers to questions of value, accountability and return on investment.

Elkeles and Phillips (2007: 187) contend that learning investment demands an evaluation of the training efforts to declare its value to stakeholders. Therefore this research project will investigate the current evaluation practices to determine whether they are effective in demonstrating the value of learning. In other words, there is a need to assess the efficiency of the evaluation system before effectiveness, value and value-add can be determined. The current practices of the evaluation of training interventions and projects and the value of the interventions depends on an effective and systematic practice to realize value.

Trolley (2009: 1) and Phillips and Phillips (2007: 10) agree that training needs to be businesslike and manage budgets circumvently to create value. Business always produces quarterly reports, statements of results for decision makers to review projections and targets proposed. Simply stated training is competing for scarce resources in the organisations and therefore an effort to refocus and change is an imperative (Wick, *et al*; 2010: 256). The United States of America (USA) according to an ASTD report (2011), has spent over \$150 billion on training.

Slovovitch (2012: 1) in his webinar makes a cliché statement to get the attention of training for spending with impunity, by requesting training to stop wasting money on training. He further states that between 1991 to 2013 the increase in investment in training has risen to a staggering 290 percent. Training as a strategic business partner needs to support the business in its future endeavour to be sustainable and relevant by being part of the savings drive. Pervaiz (2012: 1) states that training has an impact on employee turnover which alludes to the value proposition in talent management.

No matter the models and practices there are always trends, challenges and barriers to any application, to be next under the spotlight.

### 1.1.5 Global Trends, Challenges, and Barriers to Training Evaluation

Phillips and Phillips (2007a: 3), Agarwala (2012: 365) identify the following global trends that are in favour of training evaluations:

- Organisations have increased investment not only for training but evaluation.
- Ceo's definitely are seeking training evaluations that show results and impact.
- Organisations are seriously moving to higher levels viz. three to five.
- Increase in evaluation is driven by sponsors and clients.
- Systematic and proactive evaluation approach is making new inroads, which means that evaluation is starting at the needs analysis stage and is not a summative activity only.
- Line management forms a vital link in the training and evaluation efforts .
- Training must drive training evaluation efforts .
- Evaluation forms part of the needs analysis and is designed into delivery of learning.
- Learning Management Systems (LMS) and other technologies is supporting evaluation with data collection and collation.
- Planning and strategy is critical to the evaluation cycle.
- Comprehensive evaluation and measurement have enhanced training budgets for organisations and the opposite is true for organisation lagging behind in comprehensive evaluation practices.
- ROI/ROE metrics are growing in demand.

Elkeles and Phillips (2007: 18-27) indicate that the Chief Learning Officer (CLO) or the heads of learning have a number of challenges facing them in the current

economic climate. Managing learning expectations and the budgets spent on employee development will contribute to the sustainability of the organisation but, is just one. American Society for Training and Development (ASTD) (2009: 3); Phillips (2010: 1) surveyed Chief Executives Officers (CEO's) and Chief Learning Officers (CLO's) who agree that learning does add value, but learning is measuring levels that do not show the impact or results for the business.

There are a number of application or process problems, barriers and challenges facing evaluation endeavours globally as well. (Phillips & Phillips, 2007a: 4-7) states the following:

- Lack of emphasis by top management for training evaluation.
- Business also complains about the lack of alignment of learning outcomes whilst learning complains about the lack of support with training at the critical stages of before, during and after.
- Trainers lack skills to conduct training evaluation.
- Training staff are not clear on evaluation criteria in other words because training is reactive no baseline data is collected according to Kearns (2005) no needs assessment so outcome criteria are not set well ahead of the training implementation.
- Training evaluation is seen as time consuming and waste of money.
- Too many theories models that are complex and therefore practitioners' lack understanding and shy away from them.
- Evaluation value is not known and there is no strategy set therefore no planning.
- Stakeholders do not support the process, it is not only a training activity.
- Evaluation data not providing value for funding.
- Using the data inappropriately or not at all.

- Lack of consistency, standards and sustainability of an approach or metrics, not a new model every month.

Kirkpatrick & Kirkpatrick (2010: 23) state that the Addie stages from needs analysis to implementation of interventions is attempted enthusiastically but evaluations falls short of holistic implementation. Phillips and Phillips (2007: 13) also allude to the fact that most of the areas on the training cycle receive the necessary attention except for training evaluations. Training evaluation is often seems as an afterthought or summative only and stops at level 2 (Kirkpatrick & Kirkpatrick, 2010: 13).

Wick *et al;* (2010: 260) alludes to the fact that evaluation is an important tool to build-up capacity and abilities. But nonetheless the evaluation process must be managed to be effective, efficient, sufficient and systematic in producing measurements with appropriate tools to make judgements about the training. The global view is similar for all L&D functions, but the following brings the reality home of training evaluation for South Africa (Meyer, *et al;* 2012: 4). Discussion follows.

#### **1.1.6 Training Evaluation in South Africa (SA)**

Training evaluations in South Africa is in the domain of the Higher and Further Education and Training, and the South African Qualification Authority (SAQA) and National Qualification Framework (NQF) the National Qualification Act 67 of 2008 (Meyer & Orpen, 2012: 281). SAQA Act 58 of (1995) has since its inception made quality, access, training evaluations, assessments, and competency central pillars of producing quality qualifications for the SA workforce. Assessments, evaluation, moderation, and verification of competency are unit standard based and therefore learnt. The process requires competent assessors, moderators, and verifiers to collect valuable data for learning and individuals. SAQA also has prescribed percentages for each of the K/P levels for the establishment of quality education and training systems.

Coetzee *et al;* (2007: 258) state that the ideal for the assessment process is that the trainer should not be part of the process, which actual leads to the notion that training evaluation will require the same. In South Africa currently, training evaluation have a set of unit standards (Meyer & Orpen, 2012: 280). The management of evaluation practices towards an effective, efficient, and credible state is the responsibility of all training stakeholders. The training practitioners though must take the lead in the evaluation process. Managers and their learners also contribute to the process in a number of ways (Noe, 2010: 196).

Training evaluation is a quality control process for qualifications and certifications of trained people. The quality assurance system in the organisation must own the training assessment and evaluation processes amongst others. Simply stated quality assurance in the training division must provide the training policy, procedures, and processes, which includes strategies for each activity on the Addie cycle. In other words, the evidence collecting procedures and tools must be available for application in practice (Meyer & Orpen, 2012: 282). Quality assurance and management in education and training in South Africa has gained prominence because of the Skills Development Act of 1999 (SDA/Levy) (Erasmus, *et al;* 2012: 321). When conducting training evaluations the unit standard states that the tools are provided.

The Minister of Higher Education and Training in South Africa (DHET), Nzimande alluded to the fact that since the inception of the SDA & Levy Acts in 2000 to the current time, over R37.5 billion was collected and R23 billion was spent on skills development, but no value or return provided as it was spent on mainly short courses. The Minister is concerned about value demonstration for the past ten years for the skills development endeavours in the country. Anecdotal value was created by association of expenditure, but not demonstrated scientifically. In other words, there are challenges in demonstrating the value of training or is simply not requested as part of the reporting systems of Skill development and Seta Acts.



The corporate governance and the Public Finance Management Act (PFMA 2008) have also demanded the need for holistic management practices especially the accountability of expenditure in State Owned Companies (SOC).

### **1.1.7 Training Evaluation in the Research Organisation**

Organisations are continuously searching for value in all investments or the need to show the money (Phillips & Phillips, 2007b: 1). The research organisation according to the strategic roadmap 2012 to 2015 and Ndlovu (2013: 1) (feedback form on a structured questionnaire developed by researcher to obtain feedback from skills development facilitator SDF see appendix D) has spent approximately R110 m in the last three years on training, so what is its value declaration. What is the cost benefit analysis?

The organisation is currently experiencing a number of challenges. All divisions are under scrutiny not least of all the corporate university or learning and development (L&D) division. Training evaluations is a tool that can provide proof of the value of learning to its stakeholders. Stakeholders are decision-makers, training, business managers, employees (learners), labour associations, and providers. The value declaration of learning using training evaluation as a management tool for accountability is the answer. The research organisation has a mandate to evaluate training and report on return on investment (ROI). Noe (2010: 216) and Wick *et al*; (2010: 185-186) agree that the investment of money, time and resources in training in an organisation requires accountability.

According to Wick *et al*; (2010: 256) training is competing for scarce resources. An effective systematic training evaluation practice is critical to learning value extraction. Simply stated the value of learning depends on an effective systematic training evaluation practice to be exposed.

## **1.2 RESEARCH PROBLEM**

The problem facing learning and development (L&D) is to declare the value of learning. The training evaluation practice is therefore a tool that learning and development has at its disposal. The training evaluation practice collects evidence or data to prove that learning is adding value to the organisation. But, “Is the current training evaluation practice effective, efficient and systematic in providing evidence to declare the value of learning?”

## **1.3 RESEARCH STATEMENT**

An effective systematic training evaluation practice has a critical role to play in the search for learning value: as it is the tool that collects evidence and data on the activities of L&D if based on the Instructional Systems Design (ISD) known as Addie and on the summative models of Kirkpatrick/Phillips to collect data of learning value.

The main question that needs to be addressed is therefore:

“Is the current training evaluation practice an effective, efficient and systematic in providing evidence to determine the value of learning?”

The research proposition for this study can be formulated as follows:

An effective systematic training evaluation practice plays a critical role in the declaration of the learning value in an organisation.

Whilst the opposite will be true as well being that training evaluation practice that is ineffective, inefficient and non-systematic or absent will hamper the declaration of learning value in an organisation.

## **1.4 RESEARCH OBJECTIVES**

### **1.4.1 Primary Objective**

The primary objective of the research project is to investigate the current training evaluation practice at the corporate university of a state owned company (SOC). The objective is to review and critique the current practice of training evaluation to establish whether it is an effective systematic practice that supports the search for the value of learning. The current practice of training evaluation will be examined to determine the following: the degree of the effectiveness of the practices in providing evidence to determine the value of learning. The depths and richness of the evidence to declare holistic value systematically and therefore are all types of evaluation considered in collecting data on value created.

### **1.4.2 Secondary Objectives**

The investigation of secondary objectives will support the research in answering the main query are formulated as sub-questions as follows:

Sub-question 1: How does the Addie training cycle support the systematic training evaluation process if used in assessing, developing, designing, implementing and evaluating?

Sub-question 2: How does the Kirkpatrick/Phillips model support the effective summative data collection process; the percentage attempted per level, what is used to evaluate the levels, when is it evaluated and the value of the evaluation level?

Sub-question 3: What are the problem areas, barriers or challenges to effective training evaluations?

Sub-question 4: How can the training evaluation process be improved in the future to be systematic, effective and efficient practice, in comparison to the nine items called the Evaluation Success Index (ESI) which are findings of

international surveyed organisations on what is deemed to be an effective evaluation practice (ASTD's, 2009)?

## **1.5 LITERATURE REVIEW**

According to Leedy and Ormrod (2013: 51) the literature study is important to embarking on a research project because it provides context to the research problem. Further, it forms the basis for unveiling current and past information related to the research topic. The basis of a research project is to establish all previous information in the forms of books both hard and soft copies on the subject under investigation. The investigation helps to focus the study and provide guidance to completing the project.

### **1.5.1 Theoretical Objectives**

A theoretical literature review will aim to:

- Review training, learning and development (TLD) practices locally and internationally.
- Review the Addie training cycle or instructional systems design (ISD) and its impact on training evaluations systems.
- Review Evaluation models, frameworks and value metrics in the field of training especially the Kirkpatrick and Phillips models and others.
- How to manage an effective systematic training evaluation practice for learning value.
- The impact of training and evaluations on value of learning in the Global field and in South African organisations.
- To find practical studies of systematic evaluation of training in organisations or international field.

- Review reports on the systematic training evaluations .
- Review research on what are effective evaluations success indicators.
- Establish what makes evaluations valuable and successful.
- Review surveys and questionnaires on effective evaluation practices in evaluating evaluation and the data collection instruments for each level, but where, when, what, why and how will be in focus.

### **1.5.2 Empirical Objectives**

The objectives that this aims to achieve include:

- To appraise the support of the Instructional Systems Design (ISD) known as Addie training cycle in the systematic approach to training evaluations for the diagnostic, formative and summative evaluations.
- To appraise the support of the Kirkpatrick/Phillips five level framework for the summative training evaluations .
- To appraise the problems in the process, procedure and data collection methods.
- To appraise what will be the future state of an effective practice to provide data to prove the value of learning.
- To appraise what is deemed effective and systematic training evaluations against the ASTD evaluation success index (ESI) ASTD and (i4cp) Evaluation Research (2009: 1 - 65).

## **1.6 RESEARCH DESIGN**

The research design includes both the design and methods to be applied in reaching a conclusion. According to Leedy and Ormrod (2013: 184) the design

most suitable to come to a conclusion about the problem is a quantitative descriptive design because a quantitative survey will elicit responses to a large number of questions based on the variables to reach a conclusion in this study. The design is an applied approach which means that it is a problem within an organisation which is dynamic in nature. The developmental design will be a cross-sectional study as it will collect data at a single period over November 2012 to April 2013 (Leedy & Ormrod, 2013: 188).

According to Leedy and Ormrod (2013: 191) the descriptive quantitative research survey method is a design that will describe information collected from a large population. The information measures one or more variables, by collecting data using a survey questionnaire. The survey design will require responses to questions posed and will collect data that can be easily quantifiable. A Cronbach's Alpha of above 0.700 will be judged to be acceptable for a reliability score. Because there are a number of questions and sub items and a larger response will be required, being above thirty percent survey response rate at least. The larger number of questions require a larger number of responses which will help determine consistency of response. In other words the reliability of a question will be if a large group of participants answer the same question with the same response.

The five point Likert scale will be used for the majority of questions that are mainly closed or forced selection questions, except for the rare open ended ones. (Maree, Cresswell, Ebershöhn, Eloff, Ferreira, Ivankova, Jansen, Niewenhuis, Pietersen, Plano Clark & van der Westhuizen, 2007: 167). There will be approximately thirty-eight primary questions with a variance of one to ten sub-questions in the questionnaire. The services of an on-line survey company will be employed to convert the questionnaire to an on-line format and will distribute to the given list of practitioners so as to maintain anonymity.

### **1.6.1 Research Population**

The target population for primary data collection will be all the members of the human capital team, that provide training to employees viz. the national Learning and Development (L&D) team, the Talent/Organisational Development (OD) team and the Employee Relations (ER) team who train employees. Therefore the census method for data collection will be applied which means that all members will be afforded an opportunity to be part of the research population. The survey will request participants to provide their perception and opinions on the current training evaluations practice in the organisation (Leedy & Ormrod, 2013: 189).

## **1.7 DATA ANALYSIS**

The data analysis will be a descriptive quantitative analysis for all questions except the qualitative questions and the correlations to assess the training evaluations practice implemented. The qualitative questions are open-ended questions that respondents state in a sentence form and are therefore unique in nature but provide views and opinions that enrich the close-ended forced responses. The preliminary analysis will be provided by the on-line survey company. The in-depth data analysis will be accomplished using the (SAS JMP version 2010: 1) software package that can make the inferences, with the guidance and support by a specialist technician (Leedy & Ormrod, 2013: 302).

## **1.8 LIMITATIONS OF THE RESEARCH**

The limitations of the study are that it is conducted in a single organisation; it will be within the state owned company (Soc). The Micro-level view could be used to make changes within its systems and especially systematic training evaluation. The findings could be used as a point of reference for similar sized organisations. It is also limited to the practitioners in Human Capital Development (HCM). The study does not have any control groups for the survey.

There are a number of different types of evaluation metrics, models and frameworks found in the literature search on training evaluation. There are different approaches as well, to be further discussed in chapter two. It falls beyond the scope of this research study to use all types of training evaluation metrics and therefore only the Addie and the Kirkpatrick/Phillips models will form part of the questionnaire.

## **1.9 ETHICAL CONSIDERATIONS**

Permission will be requested by the researcher to engage the research population of the organisation as it will involve the employees (see Appendix A). The researcher was requested that the organisation remain anonymous. Great care will be taken to give participants an option to partake or not in the survey questionnaire and also permission will be requested to use the information provided in the questionnaire as well. In other words it will be voluntary participation and all participants will be given a report on request after the findings are concluded (see questionnaire appendix B)

## **1.10 CHAPTER LAYOUT**

### **1.10.1 Outline of the Research Report**

The research will consist of the following sections:

Chapter: 1 Introduction, Contextualisation of the Study

Chapter: 2 Literature Review in Training, Learning and Development, Addie cycle, Evaluation models and framework Systems.

Chapter: 3 Research Design and Methodology

Chapter: 4 Data Findings and Analysis:

Chapter: 5 Recommendations and Conclusions



## **1.11 CONCLUSIONS**

The proposal introduced the mandatory requirement, to declare the value of learning. The training evaluations practice is a tool that collects data of value that was created and therefore if it is measured effectively, efficiently and systematic, it has the potential to declare the value of learning.

The support of the Addie cycle and the Kirkpatrick/Phillips evaluation models will be utilised to collect information on the current practice to determine whether it is an effective and systematic practice. The Kirkpatrick and Phillips (K/P) summative framework will be utilised once it is established that it is known and used to assess the current practice's effectiveness in collecting evidence post-learning data. The challenges faced and how they can be resolved. The following chapter will be a review of pertinent literature on training, learning and development, the Addie and other training cycles, evaluation models and frameworks.

## **CHAPTER 2**

### **LITERATURE REVIEW: TRAINING SYSTEMS, TRAINING EVALUATION AND LEARNING VALUE**

#### **2.1 INTRODUCTION**

The previous chapter made a proposal that an effective systematic training evaluation practice plays a critical role in exposing learning value. A preliminary literature review was attempted also in the previous chapter. A literature review provides researchers with mental and theoretical frameworks and paradigms. Leedy and Ormrod (2013: 51) state that a literature review empowers researchers with a depth of knowledge concerning the research problem. The research problem falls within the applied research domain and therefore requires theory, models and similar information from research to work towards a conclusion of the problem statement.

When reviewing the literature, sources will provide information on learning value chains or learning metrics that inform training evaluation for measuring training impact and value. These sources will include the major international and local contributing bodies of knowledge in the field of training, learning and development (L&D): being the American society for training and development (ASTD), the Chartered Institute for Personnel Development (CIPD), Chief Learning Officer magazine, Training Magazine and topics on local training evaluation practices.

#### **2.2 TRAINING, LEARNING AND DEVELOPMENT SYSTEMS**

Kearns (2005: 135-145) states that the training evaluations process provides the link between value and learning and further states that the profit motive needs to

be replaced by a value motive. Without deliberate evaluation efforts the value of learning is unknown. Training evaluations are a critical component of the training, learning and development systems, the following are definitions that are central to this study.

## **2.2.1 Definitions of Terminology**

The following definitions are short overviews of some of the terms in this research project, and are not at all exhaustive.

### **2.2.1.1 Addie Cycle**

Addie is an acronym of the stages of the systematic approach to training (SAT) cycle, which begins at assess training needs, develop objectives, design the material, implement the training and finally the summative evaluation stage (Biech, 2008: 196). The stages can vary from four to twenty depends on the organisations need.

### **2.2.1.2 Training**

Noe (2010: 5) concurs that the definition of Training to be the organisations plan to provide skills, knowledge and attitudes, which are competencies to be able to perform current jobs that are part of organisations reason for existence. Training is specific to each organisations technical or functional requirement for productivity and high performance. However, strategically aligned training provides value to the bottom-line (Wick, *et al.*, 2010: 256).

### **2.2.1.3 Learning**

Wilson (2012: 15) alludes to the fact that learning is a complex activity that causes permanent change in the cognitive, affective, and reflective domains and it can be involuntary, planned, and or continuous.

#### **2.2.1.4 Training Effectiveness**

Noe (2010: 216) refers to training effectiveness as benefits that stakeholders derive from the implementation of training whilst design effectiveness relates to the systematic approach that impacts training effectiveness or quality, efficiency and impact (Opperman & Meyer, 2008: 187).

#### **2.2.1.5 Training Measurement and Evaluation**

According to Beevers and Rea (2010: 162) evaluation is defined as “to ascertain or set the amount or measure of value; to judge the worth of”, whilst in training it is about measuring, analysing a number of inputs and outputs of the L&D provision, with the view of establishing the effectiveness and value. Evaluation also judges the data that was measured (Noe, 2010: 214, Opperman & Meyer 2008: 187). The evaluation of training is a deliberate effort of collecting data on training to convert into valuable information to make a judgment of value, effectiveness, and efficiency of training (Noe, 2010: 216; Erasmus, *et al*; 2012: 321). In other words training evaluations evaluates process criteria and outcomes criteria to determine value of the intervention (Agarwala, 2012: 365).

#### **2.2.1.6 Systems Approach to Training**

The South African Pocket Oxford Dictionary, 2000: 982, defines Systematic as a methodical, efficient, and organised process of approaching a task. The basis of the systematic process is training theories, frameworks, and models. The theoretical models, frameworks, and previous research provide the foundation for comparison and investigation into systematic training evaluation for learning. The Systematic approach to Training (SAT) or Addie or training cycle, is defined as training that is based on the systems design process which has a start and a continuous end. The Process begins with Needs Assessment and terminates with a Summative evaluation report, but is also recursive (Bozarth, 2008: 5).

### **2.2.2 Training Systems Practices**

This study will focus on systematic training evaluations and their practice in a corporate university or learning institute, to search for the value added by training. The corporate university in this study is the strategic learning and development arm or human resource development (HRD) centre for this organisation (Lui-Abel, 2011: 413). Lui-Abel (2011: 415) states that one of the organisation's goals is to provide programme "evaluation and measurement" as a value proposition. This research project will necessitate the investigation of the current practice of training evaluation at a corporate university or learning institutes situated in seven regions, in order to report the value in qualitative and quantitative terms (Phillips & Phillips, 2007a: 3 and Beveers & Rea, 2010: 55).

According to Kirkpatrick and Kirkpatrick (2010: 32) the human capital function has to become a strategic partner to business. As a system, it improves and causes transformation in employee skills, knowledge and attitudes (SKA's) on a continuous and planned basis (Noe, 2010: 56 and Lui-Abel, 2011: 413). The evaluation of this transformation is critical to the learning value for stakeholders and the changing business environments. According to Lawson (2009: 286) to prove the value of training the learning function, is a strategic transformation agent that systematically provides value by means of skills development for individuals, teams and the organisation based on its strategic direction (Noe, 2010: 58-59 and Lui-Adel, 2011: 413).

According to the Biech (2008: 15), since the Second World War training and learning have been catalysts for the booming industrial era. In other words, this rapid growth required a skilled workforce which eventually produced a prolific "knowledge era". According to Noe (2010: 15) knowledge workers are skilled employees who contribute through what they know. They are technology savvy and are constantly challenged to change and learn new ways and skills to remain current or relevant to the evolving needs of business.

Russ-Eft (2009: 465) states that the systems approach to training (SAT) and instructional systems design (ISD) structure will help determine if the training evaluation practice is systematic. Evaluations relating to the traditional approach to training (TAT) reached level one and two of the Kirkpatrick/Phillips (K/P) model, while the SAT and performance consulting approach to training (PCAT) models implement higher levels of evaluation and the approach supports business alignment, results and impact see Table 2.1 (Barbazette, 2008: 88).

**Table 2.1 Approaches to training and the practised evaluation levels**

<b>Approach</b>	<b>Goals/View</b>	<b>Training evaluation levels</b>
Traditional approach to training (TAT)	Training function knows what is required and is able to meet legislative demands	Reaction - Level 1 Learning transfer – Level 2 (during or after training)
Performance consulting approach to training (PCAT)	Business needs are prioritised and the organisation decides on the training needs	Includes Level 1 and 2. Behaviour change – Level 3- Transfer to job Level 4-Results/impact
Systems approach to training (SAT), ISD or Addie training cycle in which training is seen from a systems point of view	Collaboration and joint endeavours from the first stages that follow through to the integrative reporting.	Addresses all levels including evaluation of Level 5, ROE/ROI

**Source: Barbazette (2008: 88)**

Barbazette (2008: 2-46), Trolley (2009: 1) and Lawson (2009: 286) agree that the L&D function must be managed to provide the bottom-line results required by stakeholders. Bottom-line results translate into the wellbeing of a brand and its associates. Bottom-line results that are indicated on the balance sheet as profit

generated. The literature also proposes that a thorough systems audit of the function is necessary to assess the value added and value chain in the organisation by defining what the function brings to the organisation that add to its prosperity. The systems audit will also improve roles and responsibilities in the following key areas:

- The strategic roles of management.
- Performance consultation ( Wick, *et al*; 2010: 24).
- Supportive internal partnerships ( Eraut, 2011: 195-196)
- Using project management as a skill in POLC ( management skills).
- Evaluation and assessment of interventions.
- Outsourcing and external partnerships for quality purposes.
- Managing practitioners according to skill and for placement.
- Marketing the L&D function.
- Planning training events using internal media and open days .
- Proper scheduling and administration.

According to Stone (2009: 19-20), training that is strategically aligned to business outcomes adds value, effectiveness and efficiency to individuals, teams and the organisation. Further Wick *et al*; (2010: 30) concurs that learning objectives need to be aligned to business objectives. Training evaluations provide data to conclude a report on the value of training or the intervention to stakeholders. The investment in learning or the training function is a decision that organisations are compelled to make. On the one hand, learning organisations see it as a strategic competitive advantage that can be used to create wealth and future sustainability, while on the other hand, if training is only funded because of legislation or is viewed as a necessary evil, training then lives up to that misnomer.

Elkeles and Phillips (2007: 15) allude to the choice between a possible value of investment (VOI) and not investing in the training of employees. Erasmus *et al*; (2013: 239) allude to the fact, that training is implemented to produce learning value and should also be accountable. There is an established connection between training and the evaluation of training (Agarwala, 2012: 363). Evaluation is, thus, the tool for determining the value created during a systematic approach to training or the training cycle. Consequently, training evaluation is the responsibility of all training professionals who, after completing the training cycle, need to declare learning value and be accountable for the expenditure incurred.

Critics of the learning function in organisations state that practitioners have lost touch with the realities of business and lack business knowledge or acumen (Elkeles & Phillips, 2007: 4). Learning is therefore incorrectly construed in terms of needs, rather than L&D and management working together using the systems approach to training to bring about business needs alignment. The power and politics between business managers and learning is evident in the type of relationships building which is crucial for success.

Bersin (2008: 31) and Beevers and Rea (2010: 52-72) agree that in the current dispensation the L&D organisation relies on technology. Systems data is deemed to be part of business intelligence (BI). Business intelligence is data that resides in the organisations systems. Various business systems provide data that should be leveraged for systematic training evaluation efficacy and efficiency. The systems approach to training (SAT) includes the following organisational elements, divisions and systems (Opperman & Meyer, 2008: 190): the following elements are supportive of the systematic approach:

- Strategic vision.
- Mission and values.
- Business models.



- Current and future plans and operations.
- Government mandates and licensing requirement of SOC'S.
- New government ventures.
- Human and government relations.
- Public finance management act 2008 (PFMA).
- Technology models business intelligence , plans and operations.
- Legal and regulatory compliance plans.
- Procurement and bbb-bee.
- Financial resources.
- Human resources systems (Thorne & Mackay, 2007: 23).
- Standards, quality and productivity targets.

Bachetta (2012: 1) concurs that SAT could enhance the collection of valuable data. The Addie training cycle is a model that proposes the training activities to be undertaken in order to meet the training need. The L&D function, in turn utilises (SAT) to systematically meet the training need. In other words, Addie is a tool or structure which can guide the search for the value of learning.

This research project will investigate the process of training evaluations based on the Addie training cycle, against the diagnostic and formative types of evaluation generally overlooked as a source of value and, finally, against the summative evaluation methods used in the organisation. The next section will be a discussion on the value of the systematic approach to training evaluations and the support of the Addie training cycle.

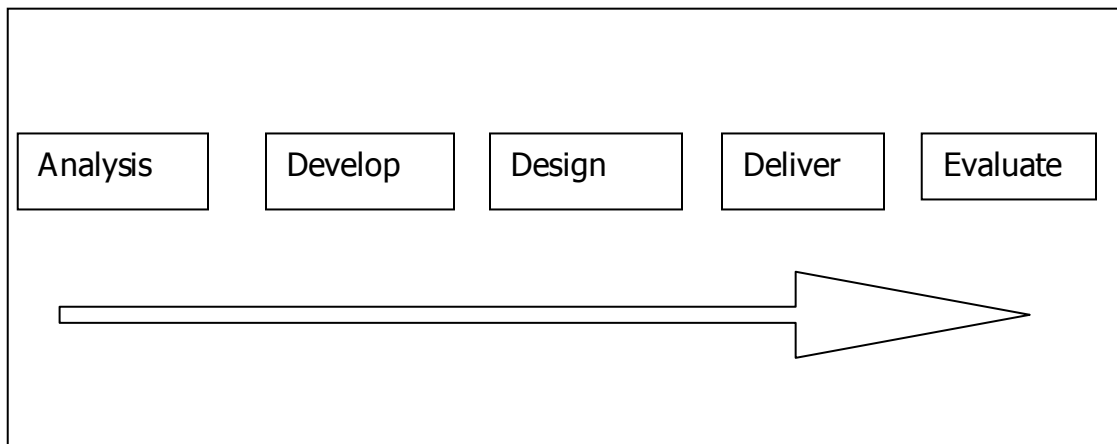
## 2.3 THE ADDIE TRAINING CYCLE

The Addie training cycle is illustrated in figure 2.1 below. It indicates the activities that training/learning function will need to complete in creating value for employees, the organisation's bottom line and the L&D bottom line (Bozarth, 2008: 5). Bottom-line measures are the financial aspects of operating a business. In other words, the profit margin, while for L&D the bottom-line is the return on investment. Investments must grow and have a positive effect on profit (Lawson, 2009: 286). The outcome of this should be borne in mind by all training stakeholders if the training budget is seen as an investment and not a expense. (Wick, *et al*; 2010: 165). Investors in training and receivers and providers of learning interventions must seek value in L&D and its proposition for skills development.

The countrys' decision-makers and regulators think that skills development is the bottom line, but unfortunately this is only the tip of the iceberg. The search for learning value must be tracked throughout the entire Addie training cycle, as well as being systematic in it endeavours to provide an effective quality control tool. According to Noe (2010: 9 ) training provision that is unsystematic will reduce the benefits, that is reactive appraoch overlooks stages in the Addie cycle and implements only what training clients' request.

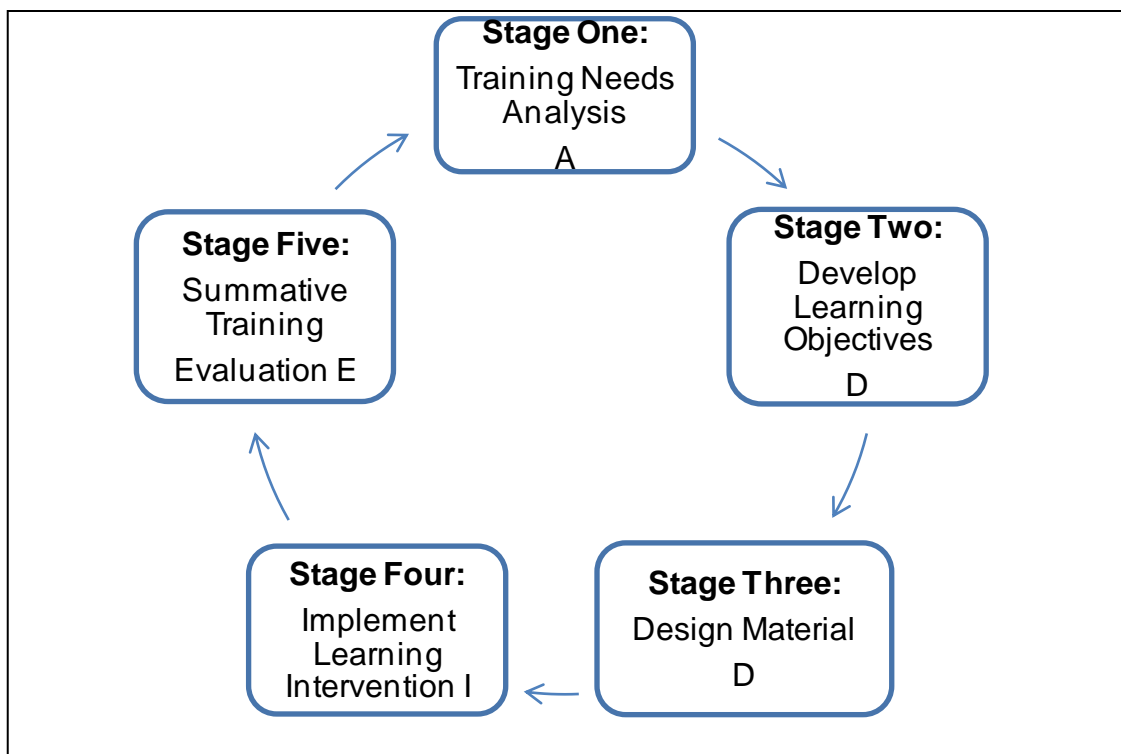
When certain stages are skipped, evaluation becomes difficult and credibility is lost. Evaluation is thus avoided (Noe, 2010: 8). According to (ASTD and (i4cp), 2009) Research state that training divisions that overlook the value of evaluations do so because the CEO or management does not request evaluation efforts or reports. It is therefore difficult to isolate value, only the levels that are easy to evaluate or of little importance to business are attempted, that is, levels one and two of the Kirkpatrick/Phillips (K/P) five-level framework.

### 2.3.1 The Different Views of Addie



**Figure 2.1. Traditional View Source: Bozarth (2008: 4)**

The simple linear flow of Addie belies the value that it creates, in reality each topic requires intense activities by workplace practitioners both line and training to create value. This basic view displays a dashboard of the main elements involved in meeting a training need.



**Figure 2.2 the recursive or iterative Stages of the Addie training cycle source: Chan (2010: 6 &17).**

The recursive approach views (SAT) as continuous cycle starting with analysis and moving through the various stages and again returning to the analysis.

The linear sequential or waterfall view of the training cycle stages is as follows:

- (Analyse) -analyse training needs.
- (Develop) -develop the training objectives.
- (Design) -design training material or experience.
- (Implement or deliver) -implement the training.
- (Evaluate) -evaluate the training (summative evaluation).

Erasmus *et al*; (2012: 249) state that the principles of evaluation indicate that the process is ongoing; that is, that it is pre-planned and not an afterthought. Noe (2010: 7) agrees with this principle as can be seen in the ISD utilised, which is a seven step process which makes evaluation planning in advance of delivery. Accordingly, evaluation is a control and checking method for quality; it is for more than just an event or activity but looks at the L&D system as a whole.

According to Noe (2010: 4) the training cycle that is depicted in his literature is a seven step model, that was adapted to more than the five levels discussed above. This seven step cycle supports systematic training evaluation because evaluation is planned at step five and is not an afterthought or end. According to Beevers and Rea (2010: 235) whether there are four or more stages in the training cycle, and whatever the form of the diagram that illustrates it, each stage contributes to creating learning value. Beevers and Rea (2010: 234-235) also based their model on the Addie cycle but depict a four stage training cycle, but agrees with the South African requirements for a level for learning assessment stage (Kiley, 2007: 250).

### **2.3.2 Critique for and against Addie or ISD**

Allen and Sites (2013: 1) and generally the critics state that the current ISD Addie training cycle has undergone many changes since its development in the late 1930s. Critics also state that it is slow to respond to training needs, which probably lead to the demise of the Addie training cycle. Noe (2010: 8) states the view of professionals that ISD is flawed, because in organisations the neat stages are not followed as it is time consuming and it is assumed to end at evaluation. Value creating efforts should take thought and planning and if that is Addie's problem then stakeholders should be taught to also plan as well because training should not be a reactive or in crisis mode continuously.

Allen and Sites (2013: 1-14) criticises and states that the Addie system is slow, inflexible, hinders innovation and is unable to take advantage of technology. Moreover, quality and timeliness in providing solutions is not optimised. Although this could be true to some extent, some type of system should be used to manage the HRD function. For new practitioners, focused systems and models provide the structure for L&D deliverables. Accordingly, a new approach, called the Successive Approximation Model (SAM), has been proposed by Alan and Sites (2013: 1).

Bersin (2008: 31) states that it is a mistaken assumption to make is that without systems, an organisation will be able to function effectively and efficiently. However, the professional competencies required for workplace learning professionals (WLPs) will be difficult to identify without a guide to follow. Training systems such as the Addie cycle contributed to the ASTD Competency Models old and new (Biech 2008: 695) and ASTD.

However, it is the researcher's belief confirmed by Chartered Institute of Personnel Development (CIPD) (2013: 34), that the Addie cycle does provide a

structure for training and since it has been tried and tested by many practitioners it does have its value. The researcher's belief is that all types of models and frameworks in every field of study have been an improvement on the original research. Noe (2010: 9) agrees that the Addie cycle needs to be systematic and flexible to meet the training need. In this way, platforms have been set-up for further development and review. Iterative models are said to waste time and are slow to respond, especially during periods of high change such as the current economic crisis. But everything is not on high change all the time, majority of training should be proactive to add value to learning.

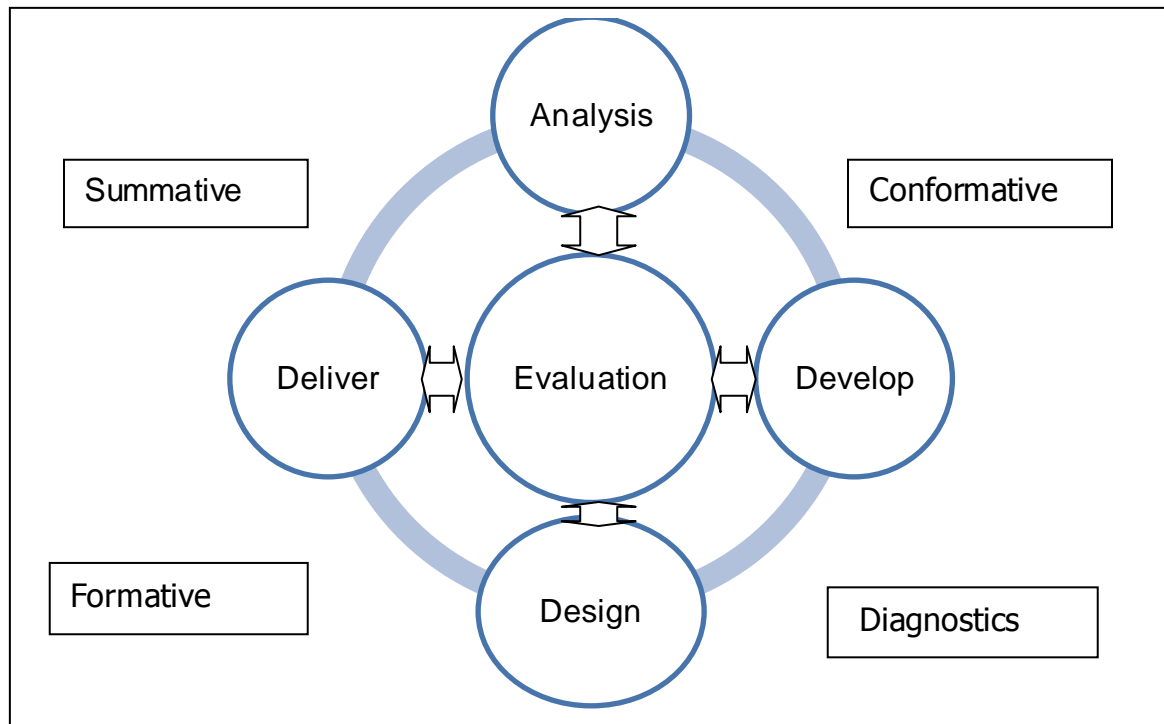
According to Meyer *et al*; (2012: 427-428) training systems are important tools for success of the function. E-learning and M-learning needs to investigate whether the Addie cycles works with its approach. In addition, technology and social media might require a new and different cycle (Biech, 2008: 198). 1). However, Addie is still a very useful systems approach model and it gives a structure for training and learning to follow by providing a complete service to organisations. The Addie cycle also supports the collection and documentation of achievements or value at each stage of the model.

### **2.3.3 The Evaluation Centric Model and Value**

Whereas, Phillip and Phillips (2007: 23) , Bozarth (2008: 6) and Wilson (2012: 411) also propose a centralised format for Addie which places evaluation in the centre of the training cycle. Figure 2.3 below illustrates this.

The format in figure 2.3 communicates the importance of evaluation in managing training. Evaluation should not only be done summatively but is central to the first four phases as well. The conformance, diagnostic and formative evaluations are conducted as process evaluations and after the implementation step has the five levels of summative training evaluation. If the adapted model is to be used the evaluation at each step will require different checks and controls in the form of tick sheets and feedback loops. The four-stage systematic evaluation model will

also help deal with some of the problems arising due to time constraints and technological advances. The Learning and Development (L&D) function should in the current dispensation utilise the Systems Approach Training (SAT) to systematically evaluate training, due to the collaborative nature of learning versus training.



**Figure 2.3 Adapted by Researcher Centralised view of Addie Evaluation (Importance of Evaluation) and evaluation types**

**Source: adapted from Phillips and Phillips (2007: 23), Bozarth (2008: 6) and Wilson (2012: 411).**

The model in figure 2.3 can be expressed descriptively in the following terms adapted by researcher from Phillips and Phillips (2007: 23). (Wick, *et al*; 2010: 6 d's)

- Analysis and evaluation produces proper analysis that confirms the need is a training need if wastage is avoided that declares saving value for organisation and L&D costs with budget, collects baseline data for comparison with post training data.

- Develop objectives and evaluation impacts refined objectives and business alignment produces value for organisation and learners in meeting the training need and the value added to the bottom-line.
- Design material and evaluation highlights the areas to be reviewed in the training material and missing material gathered before training begins equals value to all training stakeholders due to enhanced quality of training material. Finally the designing needs to produce material that meets the learning styles of each generation attending the training.
- Deliver the training and evaluate leads to the five summative levels promotes value for designers and developers, trainers, assessors, learners competency and SKA transfer followed later by evaluation of behaviour change, results, impact, ROI and ROE.

Kiley (2007: 252) agrees that systematic training evaluations make diagnostic and formative evaluation important identifiers of the value of learning data. Simply stated, if baseline benchmarks are devised and dealt with when diagnosing the needs, value will be easy to identify and declare. The alignment of learning objectives to business objectives is therefore addressed and value is systematically created. When the design of the material with all the tools for assessment of competency and pre-post-tests is comprehensively addressed, then learning value is created, but this requires a documentation process and procedure.

The ISD framework provides a structure to gauge whether diagnostic, formative, confirmative and summative evaluations are addressed systematically. Opperman and Meyer (2008: 4) and Bozarth (2008: 5) agree that successful evaluation integrates all elements of the ISD or training cycle. This leads to a discussion of the much-practised according to Kirkpatrick and Kirkpatrick (2010: vi) training evaluation models and frameworks that are central to this study. Thus the discussion on the summative models of Kirkpatrick, Phillips and others follow.



## **2.4 TRAINING EVALUATION MODELS AND FRAMEWORKS**

### **2.4.1 Kirkpatrick Foundational Model**

The first attempts to make training evaluation a reality by applying the four-step model was devised by Donald Kirkpatrick in the early 1960s (Kirkpatrick & Kirkpatrick, 2010: ix). Kirkpatrick's first model was a theory by the originator of training evaluations and, even though it was primarily summative, but it did establish a platform for additional work. The challenge with the original four levels was that, although the steps required much effort, they were nevertheless simplistic. The model actually prompted training professionals to deliberate around its concepts and move forward to others.

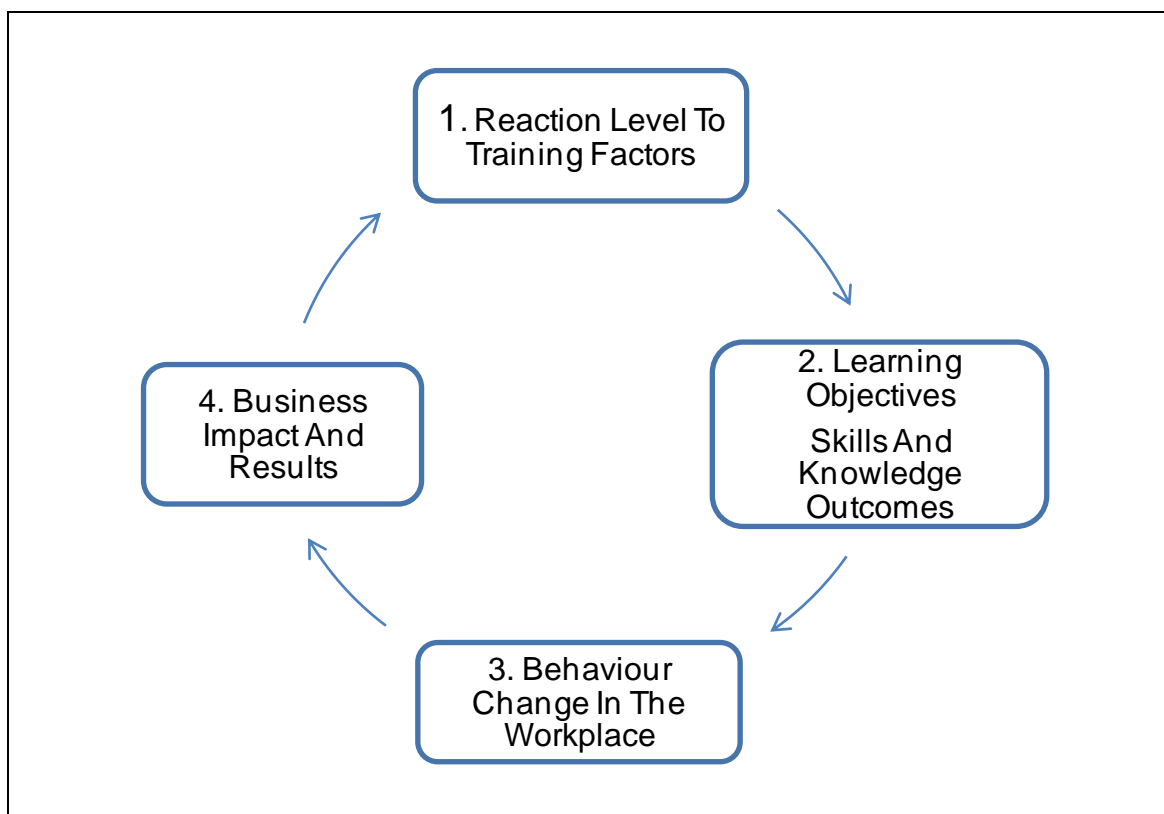
The primary complaint against it was that it lacked the data collection tools to make the model practical for application and it did not provide for data collection from the needs analysis to summative evaluation (Bersin 2008: 66). Training professionals have subsequently used and added tools to create observational and descriptive methods to evaluate training. The Kirkpatrick model is thus currently still under review by the originator (Kirkpatrick & Kirkpatrick, 2010: 13).

According to Vasquez and Norwood (2013: 1) the Kirkpatrick partners confirmed by Kirkpatrick and Kirkpatrick, (2012: 324) data should create a strong chain of evidence of historical data, which is the state before the intervention of training, which is the baseline data that Kearns (2005) proposed for comparison. The data is both qualitative and quantitative.

Phillips and Phillips (2007a: vii) also cites Kirkpatrick's four levels as the original theoretical model, which was subsequently reviewed, improved and increased in terms of the number of levels. In the 1980s, Phillips and Phillips included data collection templates and added a fifth level called return on investment (ROI).

Hence, acknowledging Kirkpatrick as the originator and Phillips as later contributor to what is the Kirkpatrick/Phillips framework.

Kirkpatrick and Kirkpatrick (2010: 3) have cautioned training divisions in organisations to prove their value or face severance. The basic problem with the initial four levels of evaluation was that it was summative and lacked diagnostic and formative evaluation phases. Although it appeared useful on paper, it lacked substance for application, especially with regard to data collection instruments. Nevertheless, 80 percent of organisations use it even though it lacks practical application (Kirkpatrick & Kirkpatrick, 2010: ix).



**Figure 2.4 Kirkpatrick's Model four levels and its sequential flow by researcher**

**Table 2.2 Kirkpatrick Levels and Evaluation objectives (Including return on expectation (ROE))**

Level	What is evaluated?
1	To what degree participants react favourably to the learning event
2	To what degree participants acquire the intended knowledge, skills and attitudes based on their participation in the learning event
3	To what degree participants apply what they learned during training when they are back on the job
4	To what degree targeted outcomes occur, as a result of the learning events and subsequent reinforcement
5	Return on Expectation 2010 (Latest level addition)

**The Donald Kirkpatrick Four/five Step Model Source: (Kirkpatrick & Kirkpatrick, (2010: ix) forewords by Donald L. Kirkpatrick**

#### **2.4.2 Criticism of Kirkpatrick four levels and Move to Return on Expectation Level 5 (ROE)**

The main problems and complaints about the model were resolved when Phillips and Phillips (2007: 10) reviewed the four-level taxonomy. Donald Kirkpatrick also reviewed the model in the 1990s. By then, the training field had evolved and by 2010 had begun to include return on expectations (ROE) and the Kirkpatrick Business Partner Model (KBPM) (Kirkpatrick & Kirkpatrick 2010: 25). Kirkpatrick and Kirkpatrick (2012: SU 105) emphasise that training evaluations need to build a “strong chain of evidence” to make value judgements credible.

Kirkpatrick and Kirkpatrick (2010: x) allude to the fact that training is “on trial” because the value created by learning for the organisation and its employees is currently unclear and unknown to stakeholders. The new ideas and proposals on training evaluation models are numerous and some differ greatly from the K/P

framework. Many of the criticisms of the Kirkpatrick four levels related to its heavy reliance on theory, until the recent move was made to ROE and the business partner model (KBPM) (Kirkpatrick & Kirkpatrick, 2012: SU 105).

Yeo (2011:1) states that when training evaluation are in focus mostly, evaluation discussions seem to gravitate to the original Kirkpatrick taxonomy. Accordingly, the levels are understood to be of use only once the training is implemented and so the diagnostic and formative evaluation value is lacking in the evaluation reports. The lack of data collection instruments also makes Kirkpatrick's model daunting for users, although many others have provided tools for the own purpose (Bozarth, 2008: 275).

### 2.4.3 Phillips Five Level Framework

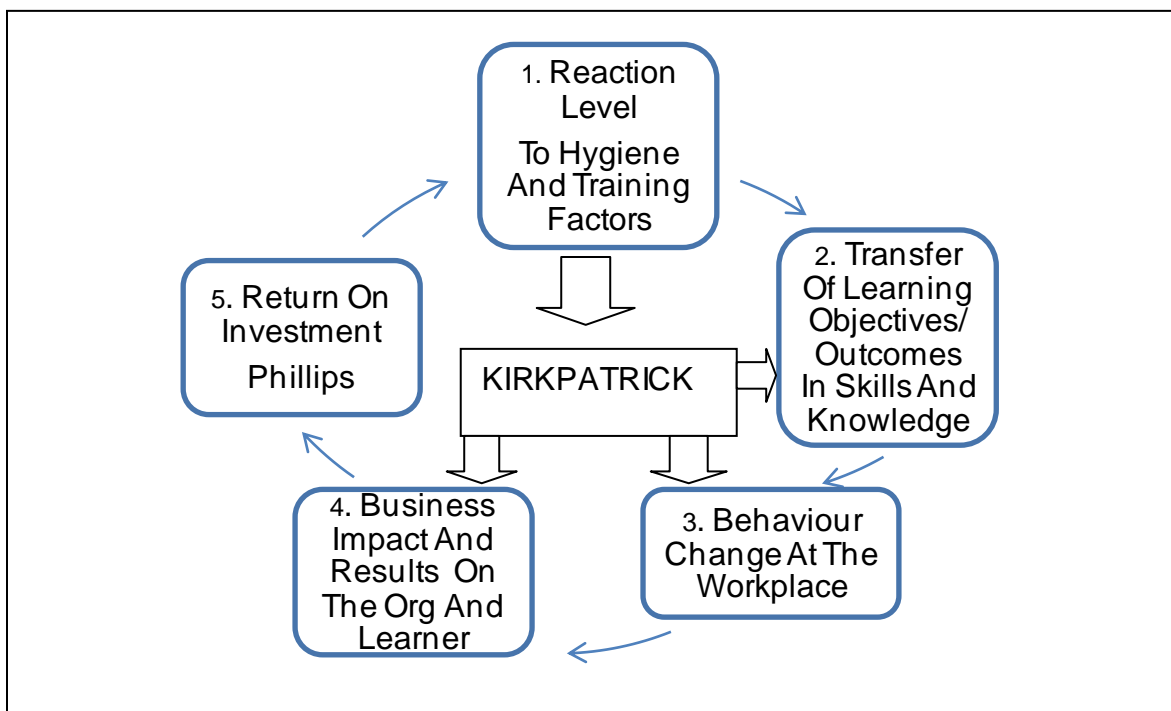
While the Phillips five-level framework seems to be well developed due to the interest in ROI, without including the four Kirkpatrick levels ROI evaluation will be difficult. Phillips has done many application case studies with the ASTD research in L&D in international organisations over the years and has refined the theory. Although the K/P framework is known, very few practitioners progress beyond level two of the evaluations as many are intimidated by the process. The quality controls and assurance systems do not provide data collection instruments or direction for the evaluation process. Therefore, ROI and ROE should not be an afterthought.

**Table 2.3 The Phillips five levels and objectives**

Level	What the level entails
0	input
1	Reaction, and planned actions- participants satisfaction and activities being planned

2	Learning- change in knowledge, skills and attitude
3	Behaviour change – transfer of learning from the classroom to the workplace
4	Impact on organisation- results, changes are measured in the business environment
5	Return on investment- comparison of program benefits and program costs

Source: (Phillips & Phillips, 2007a: 18)



**Figure 2.5 The Phillips Five Level Summative Evaluation Model.**

The figure 2.5 depicts Phillips five-level summative evaluation model, but four of the five levels were part of Kirkpatrick model. Source: (Phillips & Phillips, 2007a: 18)

Suggestions to investigate the use of evaluations have involved some of the other methods, but Opperman and Meyer (2008: 224) state that the practice of training evaluation is a planned and deliberate integrated systematic process

which reveals the value of learning in an organisation. Phillips and Phillips (2007: 3) have documented in various studies that the value created by learning has been proven to exist by professionals using models and systems in research.

#### **2.4.3.1 Return on investment (Phillips & Phillips, 2007a : 19-31)**

Return on investment (ROI) addresses the final step of the evaluation of processes according to Phillips five levels of training evaluation. According to literature somehow practitioners hardly attempt this level and yet, Internationally and locally it is time for the Human Resources Divisions to prove to Business that the budget invested yearly actually adds value and this is the opportunity to grasp and prove that value, amidst tough economic times worldwide. The evaluation of learning and development at all levels of Phillips framework provides stakeholders with value that is added to their business units, experts in the field especially the Phillips suggest only ten percent of programs according to their criteria should require ROI calculation.

In the implementation of the evaluation process Phillips found that for return on investment methodology (ROI) to be accepted as credible the evaluation should be centralised to the whole training cycle and not be merely summative. In other words, the evaluation that includes the diagnostic data value so that the summative data is not a post-mortem of the delivered intervention only (Phillips & Phillips, 2007b: 23, Stone, 2012: SU 324).

#### **2.4.3.2 Phillips learning value chain**

A training value chain Table 2.4 therefore needs to be documented and used in an organisation as part of its knowledge management system (Wick, *et al*; 2010: 306; Elkeles & Phillip, 2007: 15). The value chain of training, according to Elkeles and Phillips (2007: 15), is adapted in tabular format in table 2.4 below.

**Table 2.4 Researchers Learning value chain Levels, Measurement type and Key questions to seek value**

<b>Levels</b>	<b>Measurement</b>	<b>Key Questions</b>
Confirmative and Diagnostic Levels Stage one and two of Addie cycle.	Confirming training intervention is necessary.	Value of Investment (VOI): what will be the situation should the training not be done ?  Is it a training need or would other changes in systems and management help with the performance problem?
Formative Level Stage three and four.	Impact costs of the correct version of the training intervention.	What are the costs of developing a programme compared with a self-training intervention?
Input and Indicators. Level 0	Volume and efficiencies.	Number of participants, hours of training and cost of programme? And the baseline data for comparison.
Reaction and Planned Action. Level 1.	Participant satisfaction and action plans to use learning.	Was the learning relevant and useful to the learner and the occupational environment?
Learning. Level 2.	Changes in knowledge, skills and attitudes (SKAs).	Did Skills Knowledge and Attitude increase confidence to perform job or productivity?

Application Level 3	Transfer of learning for SKAs to the job and improves performance.	What did the participant do differently on the job to enhance performance?
Business Impact Level 4	Change in business performance.	What changes in output quality, costs, time and satisfaction have occurred?
ROI Level 5	Cost and benefit of investment.	Have the benefits been worth the investment?

**Source: adapted by the researcher from Elkeles and Phillips (2007: 15 &195)**

#### **2.4.4 Challenges with the Phillips Level Five or (ROI)**

The first four levels are very similar to the Kirkpatrick levels, but the return on investment (ROI) overshadows the transfer, results and impact that matter to the business. Although the ROI assess the cost benefit of the training investment by calculating the return on the investment for training it does not mean much without improvement in productivity, customer satisfaction and re-orders or new product development that ensure business growth. In other words business needs behavior change in SKA's . The conversion to monetary values concerns practitioners and Stone (2012: SU 324) also questions the credibility and quality of ROI. ROI has taken precedent in South Africa has there has been huge increase as stated in the (ASTDSA research report for learning and development 2010: 45).

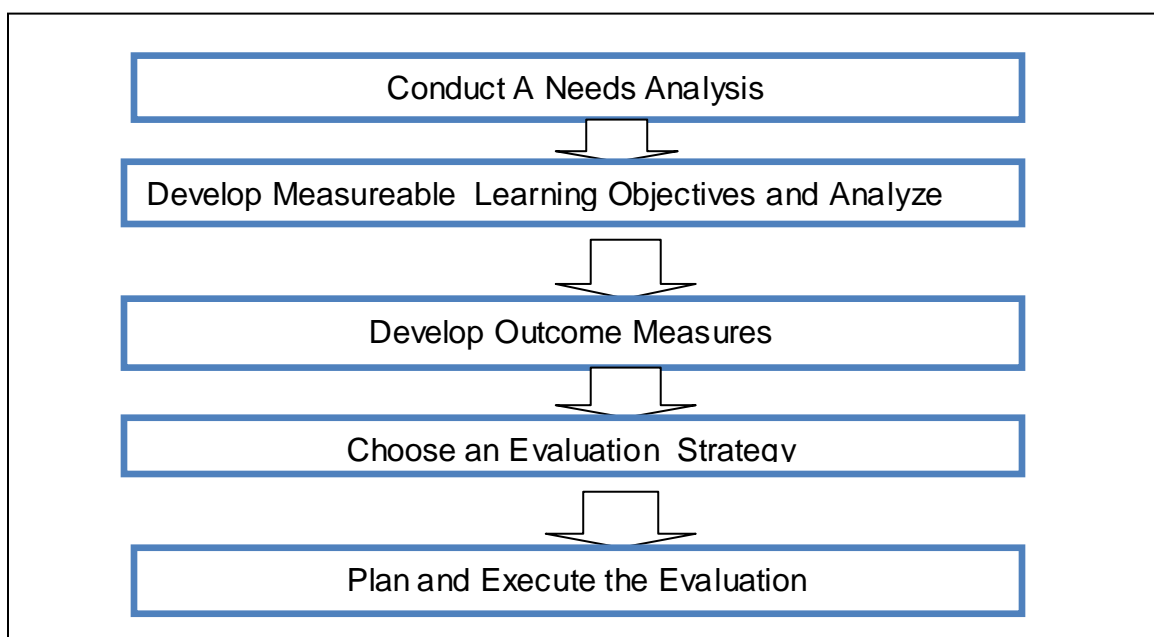
Patel (2011: 1) states that where and when the Kirkpatrick and Phillips five-level model of learning evaluation is involved as a metric, training evaluation is deemed a success. Training specialists need to implement the evaluation process in finding value for the organisation according to a selection criteria (Opperman & Meyer, 2008: 190). Learning value is produced in all the activities



of the training cycle and it is an imperative that the value chain is documented for reporting on the value of learning.

### 2.4.5 Evaluation Implementaion Process Map

According to Noe (2010: 219) understanding the evaluation process is crucial to planning the process and is stated briefly as follows and figure 2.6 depicts the flow plan for evaluation implementation.



**Figure 2. 6 The Evaluation Process Flow, Source: (Noe, 2010: 219).**

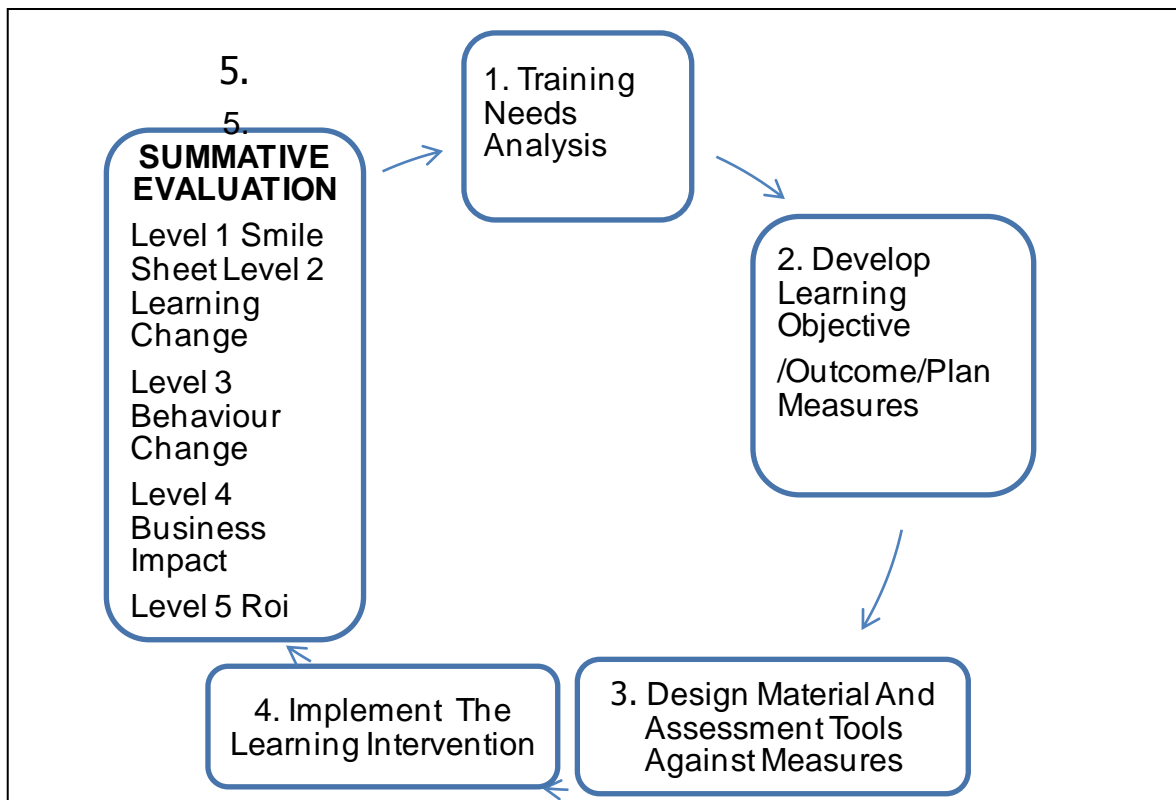
Kearns, (2005: 135-145) is against post training evaluation only as there is no baseline data to compare after the intervention has been implement. This alludes to the fact that the Addie training cycle is crucial in setting and collect baseline data for ROE, ROI or impact studies.

Summative evaluations are shortsighted on its own but combined with various other models it could stand up to the its critics. Terms such at the death evaluation, after thought evaluation or post training is given to summative evaluation practices. Training evaluation requires an authentic and credible

database to house all value data. The collection of baseline data is crucial for the purpose of comparison before and after an intervention in order to determine the impact.

## 2.5 Researchers View - The Combined Addie and Kirkpatrick/Phillips Models for Learning Value

This value chain is based on work by Elkeles and Phillips (2007: 15) and Elsdon (2010: 98) that has been adapted by the researcher for the organisation. Beevers and Rea (2010: 235) allude to the fact the stages of a training cycle must suit the organisation and its need. The figure 2.7 depicts Addie's activities and also places the K/P summative evaluation levels at stage five, therefore indicating the challenge of only summative evaluation.



**Figure 2.7 Adapted View Researcher: Combined Addie and Summative Evaluation Levels**



The four types of training evaluations are conformance, diagnostic, formative and summative. The Addie cycle also provides opportunity to practise the three types preceding summative training evaluations. The three types are included in the extended view of evaluations and the Addie factors that L&D should engage to create value for stakeholders. This is discussed in section 2.5.1 below.

The stars and spokes are explained in some detail as follows:

### **2.5.1 Stage one**

#### **Analyse the need – confirmative and diagnostic evaluation of learning value**

- Value produced are personal growth and development plans.
- Value to the supervisor and manager taking ownership of staff development by setting expectations, supporting the employee before, during and after to transfer skills
- Value developed is partnerships, expectations set, saving training costs, time and investment calculation.
- Value desired are optimal investment, planning and being proactive in needs analysis
- Value expected will be measurement data, working relationships, support of training and transfer of learning which is critical for the impact level and return on investment/expectation (ROI/Roe).

According to Kiley (2007: 254) and Wick *et al*; (2010: 317) all data and evidence should be documented for integrated reporting of value. Beevers and Rea (2010: 174) state the timing of evaluation efforts are critical to allow for change in behaviors for impact to be realised, and subsequently used within an ideal plan to provide a comprehensive report on the value of learning (Noe, 2010: 231 and Wick, *et al*; 2010: 263).

## **2.5.2 Stage two**

### **Developing measurable objectives and expectations to add value to learning**

- Value created is an evaluation strategy and planning developed at stage one will indicate up to what K/P level the evaluation must be completed. Beyond level two, not all evaluation may be necessary for some programmes. Evaluation is costly and requires a budget as well.
- Value for knowledge management by documenting and saving for inclusion in value reporting (Wick, *et al*; 2010: 265).

## **2.5.3 Stage three**

### **Design and development – diagnostic and formative evaluation of learning value**

- Value is created by eliminating wasteful expenditure and producing training based on business objectives.
- Value for sourcing of vendors requires proper specifications to be developed and selection of the best and most appropriate provider.
- Value created in managing external vendors from selection to delivery using service level agreements and standard contracts that save expenditure on overruns and prevent costs due to poor implementation.
- Value produced by including measurement tools in the form of pre- and post-training tests, post-training assignment portfolio of evidence (POE).
- Value of piloting programmes for refinement saves reputation and costs.
- Value in document savings for inclusion in a value report after the training or project.

#### **2.5.4 Stage four**

##### **Implementation of training – formative and summative evaluation of learning value**

- A well-developed programme that is sequenced is valuable and provides value to all stakeholders. The measurement tools to assess the competencies are always included.
- The pitch or difficulty of the programme must be correct so that learners are challenged and fully engaged and there is no time wastage.
- Development costs are crucial to facilitation success. All aspects of learning methodology accommodate all types of learners and their learning styles. The relevance to the individual and job environment needs leads to satisfaction.
- The action plans for transferring new SKA's to the job is increased if relationships have been built with managers and supervisors. Leaving managers out of the learning process creates problems for implementing the learnt skills and knowledge. Managers should be provided with observation and recording tools for each learner.
- Success factors should be documented during facilitation for reporting later. Not only volume contributes to the value of learning but creating a momentum to continue SKA development is crucial to success. Collect reviews for further enhancing programmes and continuing with a program.

#### **2.5.5 Stage five**

##### **Summative and post-evaluation learning value**

- Complete level one and two evaluations and assessment of competency for initial reports and determining the value of the learning intervention after training in the classroom.

- Well-developed programmes provide an evidence-gathering process and procedure tools for successful collection at each level.
- Measurement tools or metrics are known and standardised for all training providers in organisations.
- Evaluation does not stop at level one or two. A well-developed strategy on evaluation provides the foundations for each programme evaluation beyond basic two levels according to proposed best practice.
- The behavior change or application of knowledge, skills and attitudes should be driven by the learner/employees managers and supervisors with support from training.
- The decision to move to the higher levels of training evaluation must be determined well in advance, for example, at the analysis or design phase of the programme.
- Generally, levels one to three require full compliance, while levels four and five of the K/P framework require less strict compliance due to the costs of training evaluation. Therefore, funds must be put aside during the budget planning phase for evaluation success.

### **2.5.6 Stage six**

**Longitudinal evaluation for post-learning value and predictive value** (Kiley, 2007: 278; Beevers & Rea, 2010: 174; & Kirkpatrick & Kirkpatrick, 2010: 8 ).

- The evaluation phase will require a well-planned approach. Levels 3 to 5 require sufficient practice for implementation of learning, proper SKA transfer and for results, impact and return on investment to manifest, as well as for evaluation to collect meaningful data.
- Levels three to five must be implemented after the SKA's have become embedded in or are second nature to the learner. Six months to a year will be sufficient time to determine if there is a difference in behaviour or not (cycle of competence).

- Apply Brinkerhoff's success case method. The survey found that 90percent of practitioners know the methods and procedures to collect data on successful employees as they produce value for learning (Lawson, 2009: 259).
- Collect data from all business systems to make assertions on the probability of learning having an impact on business productivity and revenue increase.
- Document all data and evidence and provide a comprehensive report within a year on the value of learning.

## **2.6 OVERVIEW OF ALTERNATIVE EVALUATION METHODS**

There a number of models that have their origins in the Kirkpatrick model according to Yeo (2011: 1) but proposes that evaluation should evaluate the Pillars Model and move beyond Kirkpatrick. The Business Impact Model developed by Bersin (2008: 73) evaluates different elements to the K/P framework. However, evaluation received form and character in the Kirkpatrick model which Phillips and others could continue improving and adding to, and later moving away from the previous paradigms (Kirkpatrick & Kirkpatrick, 2010: 1). Maybe Kirkpatrick did create a paradigm that evaluatees and the evaluand find difficult to leave behind.

According to Opperman and Meyer (2008: 205) the Nadlers critical events model was one of the earliest models that recognised the importance of Evaluation and given it a central position to all designing elements. The model is different to the summative models of Kirkpatrick and Phillips but looks at the very systems driven approach to mulitple factors and the division as well.



ASTD and (i4cp) Research report (2009: 9) and Kirkpatrick and Kirkpatrick 2010: 32 ) cites Brinkerhoff's (2006/2008) case study method, in terms of which successful learners' tell their stories which are combined with the Kirkpatrick/Phillips model. The combined approach produces or exposes data on the value produced by learning. Kirkpatrick and Kirkpatrick (2010: 32); Bersin (2008: 68) both cite the Brinkerhoff's Conceptual Site Model (CSM), which assesses learners who have taken responsibility for the successful transfer of learning on the job.

According to Kirwan (2009: 115) when learning transfer dies on the job, due to whatever reason, the results, impact or ROI mean nothing. The management support of learners before, during and after training creates on-the-job SKA transfer. This method used on its own is not effective unless added to the K/P model in order to enhance the data and application value.

Bersin (2008: 73) provides a Business Impact Model that values training impact using a seven model framework measurement standards. Bersin (2008: 71) has developed the Impact Measurement Model that incorporates the Kirkpatrick, Phillips, Brinkerhoff and Six Sigma designs to overcome some of shortcomings of all the models used in this research.

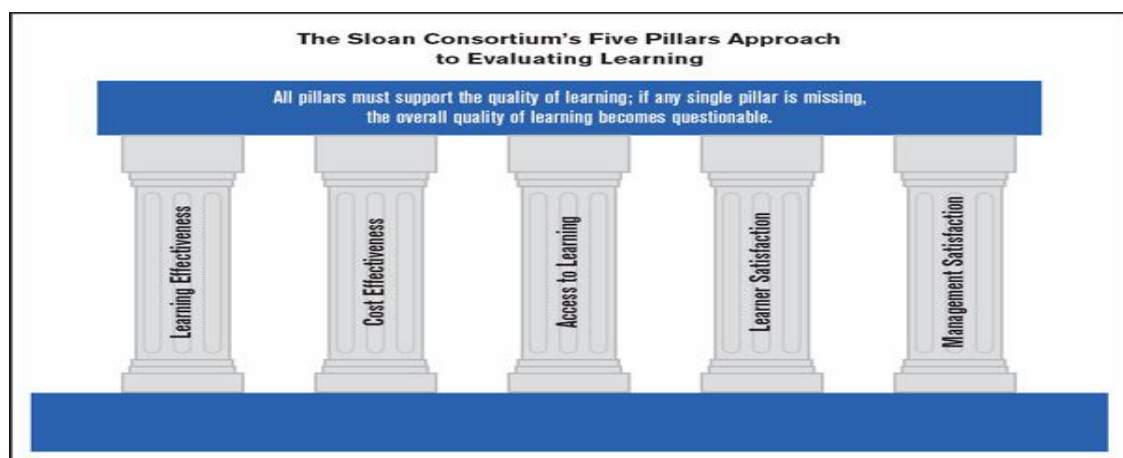
Kearns (2005: 1) Baseline method adds depth to evaluation by setting a baseline measurement for comparison after the interventions. This model and the ROI method require baseline data established before the intervention is implemented. Similarly, the latest Kirkpatrick (2012: SU 124) method includes ROE or creating a "strong chain of evidence".

Wick *et al*; (2010: 1) provide a model called the "Six Ds" for training evaluations. It is unlike the K/P and more like the Addie training cycle evaluation system. It is

therefore more than a summative system rather, it is a comprehensive system for training evaluation that was proposed in 2006 but refined in application in the 2010 version. The six D's are as follows:

- Define- outcomes
- Design- the whole experience
- Deliver – the expectations
- Drive- transfer of skills, knowledge and attitudes on the job
- Deploy- value created in training to enhance bottom-line impact
- Document – all processes, outcomes and results are document as part of the knowledgement system.

Yeo (2011: 1) represents training evaluations as pillars and advises practitioners to go beyond the K/P framework. The model of the fives pillars in the article “measuring Organizational Learning: Going Beyond measuring individual Training Programs” also questions the fact when evaluations are discussed it always seems to gravitate to the Kirkpatrick/Phillips models which evaluates single interventions or projects very well. Whilst measuring the quality of learning in the whole organisation is not addressed in general. The Sloan’s Five Pillars is aligned to quality principles and also is supported by the Kirkpatrick’s model.



**Figure 2.9 The Sloan Consortium's Five Pillars Model Source: (Yeo 2011: 1)**

The figure 2.9 Sloan's five pillars evaluates the following: learning effectiveness cost effectiveness, access to learning, followed by learner and management satisfaction to determine learning value and it is in contrast to the Kirkpatrick based evaluation models. Yeo (2011: 1) states in most discussions on training evaluation people are always thinking and or using the Kirkpatrick/Phillips models, and therefore proposes the use of the Sloans five pillars as a different set of criteria to engage in evaluating training. The Sloans model is little known but learner and management satisfaction needs more details on the application, impact on productivity and return on investment.

**Table 2.5 Models that are based on the Kirkpatrick/Phillips framework**

Level	Hamblin	Warr, Bird & Rackham CIRO	Laird	Stufflebeam CIPP Model	Elsdon Model
0				Context	Input
1	Reaction	Content	Opinions	Input	reaction
2	Learning	Input	Learning	Product impact	Learning transfer
3	Behaviour	Reaction	Use	Sustainability	Learning application
4	Organisational impact	Outcome	Impact	Effectiveness	Learning impact
5	Ultimate value			Portability	Learning results
6					Learning predictive Level

**Source: (Opperman and Meyer, 2008: 204-207, Bozarth, 2008: 195 and Elsdon, 2010: 98).**

The above-mentioned models were also developed or based on the Kirkpatrick framework and are summarised in table 2.5 but two have moved before training is provided and one goes long after training is implemented, being Elsdon model.

**Table 2.6 The Researchers Value view model to overcoming barriers to systematic training evaluations.**

Addie system	<p>The Addie cycle from analysis to evaluation creates observable value for learning. Change from reactive to proactive practice in providing training.</p> <p>Create standardised templates/tools for confirmative, diagnostic and formative evaluation. Selects evaluation criteria at the design phase. Collects all baseline data upfront.</p> <p>Each stage provides value for L&amp;D. If training is not the solution then resources are saved.</p>
Linking with line managers	<p>Builds relationships as training and evaluation is a social activity. Line managers are a resource for informing L&amp;D of the training required. Line managers support what they request.</p> <p>Provides observational recording tools for managers and supervisors.</p>
Managing of budget and resources	<p>Training and evaluation need a specific budget with correct resources.</p> <p>Trainers have skills to evaluate training using surveys and questionnaires.</p>
Level 1	Learner response review. Learners complete course evaluation forms.

	Develop a standardised template with collation forms and a system to house the results in a collation report.
Level 2	Learner achievement. All assessors and moderators complete assessment reports as part of quality report.
Level 3	Transfer SKAs to work. Supervisor/learners complete questionnaires. Interview and publish high flyers names.
Level 4	Productivity/service delivery improved. Examine quality, quantity, cost and time. Control wastage and reformulate programme.  Manager/learners complete questionnaire. Production statistics provided. Access systems information or Business Intelligence.
Level 5	Profitability impact on the organisation as a whole.  Manager/Systems Design Committee reports on impact versus expenditure. Calculate Roe and ROI.
Level 6	Broad social and economic impact. Register unit standards covered in the learning session. Predict growth of learners.  Training manager reports progress according to National Skills Development Strategy and Qualification Framework (NSDS/NQF) impact indicators.

**Source: Adapted by researcher from Elsdon (2010: 98).**

Table 2.6 outlines a system that places learning evaluation as a system. It makes use of the Addie and K/P models.

Elkeles and Phillips (2007: 196), the ASTD, the South African Qualifications Authority (SAQA) and National Qualifications Framework (NQF 2008) have

average compliance standards which are shown in percentages in table 2.7 Comparative best practice on evaluation targets for South Africa, ASTDSA and the United States of America (USA) are also given.

**Table 2.7 The training Industry best practice guidelines for the practice of evaluation levels: recommended acceptable practice percentage per level per benchmark.**

<b>Accredited Bodies/Level and Survey Percentages</b>	<b>SAQA 2006</b>	<b>ASTDSA 2010:41</b>	<b>ASTD &amp; (i4cp) 2009</b>	<b>U S A</b>	<b>Phillips best practice</b>	<b>Kirkpatrick best practice</b>
0 Input	-	-	-	-	100	-
1 Reaction	100	80	92	100	100	100
2 Learning	100	35	80	100	60–80	60
3 Job application	100	30	50	30	25–30	30
4 Business results	20	17	37	20	10–25	10
5 ROE/ROI	10	38	18	10	ROI/6–10	ROE/ 5

**Source: ( Elkeles and Phillips 2007: 196); ASTD & (i4cp) Survey (2009)**

ASTD & (i4cp) research on the Value of Evaluation developed a tool called Evaluation Success Index (ESI), from the findings of international organisations responses to the survey in (2009). The ESI gives an indication of what constitutes a successful and effective evaluation and the nine items are tabulated

below in table 2.8. The ESI would also form part of a comparative analysis against the research organisation responses to assess what are the reactions to the items as a effective evaluation strategy to be discussed further in chapter four.

**Table 2.8 Evaluation Success Index (ESI)**

Evaluation Success Index Nine Items	Percentages
Our learning evaluation techniques should help us meet our organization’s learning goals.	41.39
Our learning evaluation techniques should help us meet our business goals.	36,5
We get a solid “bang for our buck” ( return when it comes to using the Kirkpatrick/Phillips learning metrics.	25,6
Follow-up focus groups are great source of data.	9,1
Performance records monitoring great source of data.	24,3
Follow-up surveys of Participants provides data.	31,09
Learner/Employee perceptions of Impact is important.	36,3
Actual business outcomes (e.g. revenue, sales) is important data.	22,4
Proficiency/Competency levels is impartant data.	33,0

**Source: The ASTD and (i4cp) Group Research (2009) The Value of Evaluation Success Index (ESI)**

Making Training Evaluation Effective the nine items that the ASTD findings proposed as items that organisations survey agreed are important part of training evaluation. also be used on findings from this research questionnaire. Used with permission from ASTD.

## 2.7 CHAPTER SUMMARY

Training evaluations are a generic but valuable tool to meet the requirements of L&D value proposition and must be implemented according to a well-established systematic programme. The various systems and activities within the L&D function need to be leveraged for value. Organisations cannot make excuses for non-compliance in training evaluation. There are many models available, as discussed above, and each one has its advantages and disadvantages. Combinations of models can enhance evaluation practices with enriched data for making a judgement on the value of learning.

The Addie training cycle is currently an effective and efficient model to use in the search for learning value. The number of stages or steps could be unique to an organisation in meeting the training need. Kirkpatrick's model deals with summative evaluation only, so the diagnostic and process criteria for formative evaluation are lacking. The Philips framework looks at training evaluations summatively, similar to Kirkpatrick's model, but adds a fifth level. Phillips also proposes that training evaluations be centralised to all stages of the Addie cycle.



## **CHAPTER 3**

### **THE RESEARCH DESIGN AND METHODOLOGY**

#### **3.1 INTRODUCTION**

In this chapter, the research design and methodology will be explained in detail. A quantitative descriptive study will be applied to resolve the stated problem and reach the research objectives.

According to Hofstee (2006: 85), a research problem may be defined as something that is undesirable but not simple or trivial. Accordingly, the problem needs the application of an applied research process to conclude a result. This means that the problem cannot be an anecdotal query, but requires information on the subject from other individuals and researchers in order to make inferences or to report findings descriptively. The information provided by the research population will help prove the assumptions made about the stated problem.

#### **3.2 RESEARCH OBJECTIVES**

##### **3.2.1 Generic Objectives**

To assess the current training evaluation practice and ascertain empirically whether an effective systematic evaluation practice is being practiced, to declare the learning value in the organisation, secondary questions will need to be answered first. The questions in section 3.2.3 will need to be investigated so that a comprehensive solution to the main question will be found. The responses and answers to the questions posed in the questionnaire will provide diverse views on the current state of training evaluations.

Further assumptions will be made on whether there is a valid connection between the use of the Addie training cycle, the Kirkpatrick/Phillips framework and finding the value of learning. The responses to specific questions will help determine whether the current evaluation practice is systematic in its approach. In other words, the question to be asked is whether it is possible to apply a holistic view of evaluations and not summative practice only. Therefore, the three training evaluation types, diagnostic, formative and summative, will be part of the focus.

### **3.2.2 Specific Objectives**

There are three specific objectives for the study.

- Firstly, to conduct a literature review of training and development, training systems, the Addie training cycle and training evaluation frameworks, especially those of Kirkpatrick and Phillips.
- Secondly, to conduct a literature review on training evaluation and its impact on learning value in organisations.
- Thirdly, to conduct a review of training evaluation studies and research from ASTD and CIPD on effective international training evaluation practices for improvement and review.

### **3.2.3 Research Questions**

Leedy and Ormrod (2013: 3) and Maree *et al*; (2007: 25-26) agree that certain questions that need to be explored so that the comprehensive total of the answers will provide a complete or more precise view on whether there is a valid connection between learning value in the Addie training cycle (a systematic approach to training) and the training evaluation types (diagnostic, formative and summative).

An adapted survey questionnaire on effective evaluation practices will help determine the answers to the following sub-questions:

- i. How does the Addie training cycle support the systematic training evaluation practice i.e. assess, develop, design, implement and evaluate? To be assessed in question 1-10 of the survey.
- ii. How the Kirkpatrick/Phillips (K/P) model support the effective summative data collection process? To be assessed in questions 11-23 of the survey.
- iii. What are the problem areas, barriers or challenges in effective training evaluations? To be assessed in question 24 of the survey.
- iv. How can the training evaluation process be improved in the future to be more systematic, effective and efficient? To be assessed in questions 25–31 of the survey.

These sub-questions along with the research findings are to be discussed further in chapter four.

The research study will use a quantitative cross-sectional survey because the project follows a non-experimental and descriptive design. A descriptive design is suitable because it has a high degree of representativeness in obtaining data from the research population (Leedy & Ormrod, 2013: 184). The data obtained from the survey population group will enable the researcher to describe their perceptions in terms of their application of an effective systematic training evaluation practice in search of the value of learning. The study will provide an understanding of the Addie training cycle as a premise to the systematic approach to training evaluations. The summative training evaluation practice will apply the K/P framework.

### **3.3 RESEARCH DESIGN**

Hofstee (2006: 85) state that the research includes the actions occurring during the problem-solving process in order to conclude whether the assumptions that have been made are true, or false, or have no link with the variables whatever. Hofstee (2006: 113) and Mouton (2001: 55) concur that the research design is a holistic process plan for eliciting views, opinions and perceptions on individual experiences. The unique tactics of the study are illustrated through the research design.

According to Leedy and Ormrod (2013: 74), the research design is a comprehensive plan explaining how the study will proceed in order to reach a conclusion regarding the identified problem. The selection of the design is based on the most appropriate way of collecting valid and useful data for solving the problem.

A quantitative research design was selected to address the research objectives as this type of design collects data for assessment and in order allows for inferences to be made. From the request for training, or at the needs analysis stage up to the summative evaluation stage, data is collected. A quantitative research design involves individuals from a group who have certain characteristics in common and whose opinions will be used to prove or disprove assumptions about the phenomena or variables under scrutiny (Leedy & Ormrod, 2013: 189).

### **3.4 RESEARCH METHOD**

Hofstee (2006: 107) and Leedy and Ormrod (2013: 7) call the general route or technique the research takes the methodology. In this research, information was collected from the identified target population using a structured questionnaire from 20<sup>th</sup> November 2012 to 30<sup>th</sup> April 2013.

The survey method gives all practitioners an opportunity to be part of the research. Thus, all Human Capital Management (HCM) training practitioners will be given an opportunity to provide responses to the questions. The original target population was fewer than 100. Subsequently, the employee relations, organisational development and talent management practitioners were added to provide an approximate total of 120 which is even so a fairly small group. The quantitative method requires a response rate of 30 percent or higher or the reliability will be negatively affected.

### **3.4.1 Population and Sampling**

Maree *et al*; (2007: 147,172), Hofstee (2006: 116) define research population sampling as the total group or unit of analysis. The researcher will invite responses from all of the selected population members, in order to make assumptions and to generalise the findings related to the problem. The total population is selected because of their higher level of education and experience in the training field. They were required to refer to studies on training systems, the Addie cycle and training evaluations practices.

Leedy and Ormrod (2013: 215) cite Gay, Mills and Airasian, (2009: 135) guidelines for population sampling that state that for smaller numbers of the research population the whole population should be surveyed and which is also known as the census method. According to dictionary.com census is defined as inclusion of a all members of the population similar to government census. A census survey method was employed and no sampling took place as the research population had been reduced, due to high levels of attrition, over the past three years. All current trainers from head office and the six regions were given an opportunity to contribute in an online survey (Leedy & Ormrod, 2013: 159).

The corporate university of the organisation is the centralised strategic hub, but the regional spokes implement training interventions and evaluations. Secondly the regions participation in this quantitative survey will support the reliability issue of surveys. The main eligibility criteria for inclusion in the survey population required an individual to:

- Be a member of HCM, including managers, practitioners and administrators.
- Provide training to the organisation's employees.
- Must have a further education and training (FET) or an occupationally directed education training development practice (ODETDP) qualification.

**Table 3.1 National HCM Research Population Target Group**

<b>Region</b>	<b>Geographic Area</b>	<b>Method</b>	<b>Managers</b>	<b>Trainers</b>
Head Office	Midrand Head Office	Survey questionnaire	11	10
Gauteng South Wits	Wits Region of LI	Survey questionnaire	1	15
Northern Region	Pretoria	Survey questionnaire	1	15
Central Free State	Bloemfontein	Survey questionnaire	1	15
Western Cape	Cape Town	Survey questionnaire	1	15
Eastern Cape	Port Elizabeth	Survey questionnaire	1	15

KZN	Durban	Survey questionnaire	1	15
Subtotals			17	100
Total Research Population <i>N</i> 117				

**Source: HCD Employee Resource System (ERS) (September 2012)**

Accordingly, employees above were included who have had exposure to training systems and training evaluation models and who know the value they add through training. They are also aware of the challenges, problems and barriers in training evaluation and may be able to provide input on possible ways to improve training evaluation. The table 3.1 depicts the targeted.

**3.4.2 Data Collection**

Mouton (2001: 104), Hofstee (2006: 117) and Leedy and Ormrod (2013: 95) state that the data collection process involves the approach, method, process and instruments used. The process is conducted in order to gather input and resolve a research problem. Accordingly, a structured data collection questionnaire in quantitative research was employed. The permission of the head of Human Capital Management was requested to survey the employees and this was granted. It was requested that the organisation's name not be used in the research and that company time not be taken up by the survey (see Appendix A).

An on-line survey company was utilised to reach the target population. Technology provides support for quantitative surveys due to the amount of data collected (Leedy & Ormrod, 2013: 159). The survey questionnaire was sent to the participants via an e-mail and was requested to access the on-line format by following a special link. This method had features to start and stop as and when

time was permitting, but it provided basis for data collection, which would not intimidate the target audience. The respondents remain anonymous as only a response code was supplied to them to protect them.

### **3.5 MEASURING INSTRUMENT**

Maree *et al;* (2007: 156) states that the survey questionnaire is a data collection method. The instrument was partially based on the ASTD (2009: 1-65) and (i4cp) instrument but adapted by the researcher due to literature on the systematic approach. The 2009 survey reached a large number of international organisations evaluating the current evaluation practices, on the value of evaluations and how they might be made more effective. The researcher selected items from the ASTD questionnaire to assess the metrics, timing and approaches. The comparison between the ASTD ESI survey and the findings from this research will be attempted. The comparison will be attempted to evaluate the attitudes on what makes for a successful evaluations between international study and the attitudes of the research organisations towards the same issue. However, Leedy and Ormrod (2013: 293) state that correlations do not indicate causation and this must be borne in mind.

The Questionnaire is divided into two sections: A and B. These sections are discussed briefly here and table 3.2 below gives an overview of the questionnaire. For a fuller description see Appendix B.

Section A included an introduction, confidentiality statement and request for permission to use the data supplied. The demographic details of participants was also part of section A, so as to determine a few non-contributory variables. Mainly nominal data will be gathered in this section.

Section B posed a large number of fixed and well-defined questions. The five-point Likert scale was used for the majority of the questions. Participants could choose one of the following options for these questions: not sure, strongly disagree, disagree, agree and strongly agree. Aspects of evaluations were also



rated as not in use or of small value, moderate value, high value or very high value.

The table 3.2 illustrates the sections, the item numbers, measurement types, nominal, and ordinal and aspects covered in each question Maree, *et al*; (2007: 148).

**Table 3.2 Survey questionnaire overview**

<b>Section</b>	<b>Number of Items</b>	<b>Measurement types</b>	<b>Aspects covered</b>
<b>Introduction</b>	0	None	Information about the survey.  Researcher's information including contact numbers for queries.  Permission to use data supplied.  Confidentially clause.
<b>Section A</b>	7	Nominal scale	Biographical data.
<b>Section B</b>			
Research sub-question 1	10	Ordinal scale	Covers the Addie training cycle support in systematic training evaluations.
Research sub-question 2	11-23= 13	Ordinal scale	Covers the training evaluation models including the five Kirkpatrick/Phillips levels. Tests the frequency of data collection instrument used. Asks when the evaluations take place. Value of levels 1-5 is rated.
Research sub-question 3	24	Ordinal scale	The frequency of use and problems with training evaluations. Manager and supervisor involvement in training and evaluation.
Research sub-question 4	25-31	Ordinal scale	The benefits and value of evaluations and possible future improvement.

### **3.5.1 Piloting the Instrument**

The instrument was first piloted with the target population over a two-week period. Seven trainers from the head office site completed the questionnaire and a few queries were addressed. The two different statisticians and the research supervisor were sent the survey questionnaire before the launch and were provided with an opportunity to give feedback on sentence construction and language use. The questionnaire was then reviewed or refined from the feedback to improve its readability and validity.

### **3.5.2 The Reliability of the Instrument**

The reliability of the instrument, according to Leedy and Ormrod (2013: 91), indicates the ability of the instrument to elicit the same response to a question from a large group or for over 30 questionnaires (Maree, *et al*; 2007: 216). This will mean that the Cronbach's alpha score for reliability of above 0.700 must be realised. The reliability of the ASTD and (i4cp) survey was established at 0.800. (ASTD, 2009: 65).

### **3.5.3 The Validity of the Instrument**

Leedy and Ormrod (2013: 89) define the validity of an instrument as the extent to which it measures what it intends to measure and cite four types: face, content, criteria and construct validity (Maree, *et al*; 2007: 217). Face validity of the instrument was established because it makes use of the work of the ASTD expert research team in conjunction with (i4cp) statisticians conducted in (2009: 65) The ASTD and (i4cp) survey reached international organisations and looked at the value of effective evaluations. By customising the questionnaire for this research with the specific organisation in mind, reliability was also established.

### **3.6 CHAPTER SUMMARY**

The preceding chapter discussed the research design and method in detail as the tools that direct the researcher towards solutions for the stated problem. The survey questionnaire was briefly summarised. The following chapter will unpack findings and results of the survey responses.

## CHAPTER 4

### RESEARCH FINDINGS AND RESULTS

#### 4.1 INTRODUCTION

In the preceding three chapters the proposal of the research problem was addressed followed by a literature study in the field of training, learning and development. The field was studied with a view to obtaining relevant information on theories, models and frameworks designed by experts and practitioners that would be of use in reaching the research objectives.

The third chapter detailed the research design and methodology for the research project. This chapter will include the descriptive analysis of data, its representation and an interpretation of results. The results were obtained from an empirical analysis performed to test the research questions using the data obtained from the responses to the research survey questionnaire.

The statistics generated are analysed, discussed and presented descriptively. The statistical analysis was generated by the SAS JMP version 10.1 software package, for calculating percentages, probability and averages (Leedy & Ormrod, 2013: 302). The design, which deployed a survey questionnaire, was a descriptive quantitative design and required a statistical software package to analyse the data so that inferences could be made.

According to Maree *et al*; (2007: 167) the Likert scale is the most widely used and is convenient to measure constructs. The five-point Likert scale was applied in 28 of the questions. Questions 12 and 14 required a yes or no response, whilst questions 30 and 31 were qualitative inputs. The data collected measured the

current training evaluation practices to assess whether they are effective and systematic in collecting evidence of the value of learning in the organisation.

The questionnaire was a adapted, self-developed and self-administered survey targeting training practitioners in the research organisation. The questionnaire was adapted from the ASTD and (i4cp) international survey on effective training evaluations (2009) (see Appendix C).

## **4.2 RESPONSE RATE OF THE SURVEY**

An online survey organisation was engaged to launch the questionnaire online. The survey company converted it into an electronic online format and distributed the questionnaire to 117 employees on 20 November 2012. The participants were requested to complete the survey by 30 November 2012.

By 30 November 2012 the response rate had only reached five percent. This could have been as a result of the original period of time (ten days) being too short and the fact that it fell into the busy year-end period. More time was thus required and the deadline was extended to 14 December 2012. However, by this date the response rate was still relatively low at 18 percent and an additional two weeks was given for partially completed questionnaires. Reminders were sent out by the online consultant between 19 and 31 January 2013. The problem here could have been the fact that it coincided with the festive season and practitioners were on leave.

The final feedback from the online provider was received on 26 March 2013, because of the various disadvantages of survey methods (Hofstee, 2006: 133). The project researcher established that, for the data to be reliable and valid, a response rate of 30 percent for quantitative methods is sufficient. The response rate was at only 25 percent. In a further attempt to improve the response rate it was decided to distribute hardcopies or e-mail copies to the regional managers

to distribute copies to staff who indicated that they did not take the electronic survey.

Finally, the questionnaire was handed out or emailed between 15 and 30 April 2013 with a request to return them by 30 May 2013. An additional 15 completed questionnaires were then received. Subsequently, the total number of questionnaires returned was 41, which includes the 26 from the online survey.

All information that was received by hardcopies was captured on the online spreadsheet by the researcher.

### **4.3 QUANTITATIVE ANALYSIS**

The empirical objective of the research study was to examine the current training evaluation practice to determine whether it is effective and systematic. The results were analysed and described for each section of the questionnaire (Appendix B) (Hofstee, 2006: 148). The questionnaire produced quantitative data that was analysed with the help of the SAS JMP version 10.1 analysis package (Leedy & Ormrod, 2013: 302).

A quantitative cross-sectional survey design was employed. According to Leedy and Ormrod (2013: 188), this is a cost-effective and widely-used data collection tool. The survey method can be used to sample a large number of respondents who answer the same questions. The research survey results can measure many variables, some as simple as age, but simpler questions ease respondents into taking a survey. Surveys that request information about the individual have been found to be appealing, because respondents are asked questions about themselves. This indicates to them that they are being regarded as individuals and not just as a means to an end.

The statistics from the survey questionnaire will be represented and discussed further. This study tested multiple hypotheses on participants' characteristics, opinions, behaviour and experiences. The relationship between the variables was assessed using the data from the responding population.

Maree *et al*; (2007: 186) state that the analysis of quantitative data examines the number of times a variable was selected to reach a numeric value. The frequency distribution was calculated in the data analysis and a description of the variables was then given.

## 4.4 RESULTS AND INTERPRETATION OF FINDINGS

### 4.4.1 Response Rate of the Target Population

The response rate for the questionnaire is given below in table 4.1.

**Table 4.1 Comparison of Distribution and response rate per region**

Geographic Area/Regional Satellite	Managers	Training Practitioners	Response rate managers-practitioners		Total received	Percent per region
Head Office	11	10	8	10	18	44
Northern Region	1	15	0	8	8	20
Southern Gauteng (Wits)	1	15	0	7	7	17
Central Bloemfontein (FS)	1	15	1	2	3	7

Western Cape	1	15	1	1	2	5
Eastern Cape	1	15	0	1	1	2
KZN	1	15	0	2	2	5
<b>Total</b>	<b>17</b>	<b>100</b>	<b>10</b>	<b>31</b>	<b>41</b>	<b>100</b>

*Distributed = N117- Responses =N41*

The total number of responses was 41 out of N117 which resulted in a percentage of 35 percent. However, the employee relations (ER) staff did not respond, thus making the target population 41/90, which resulted in a 45 percent. This rate can be judged to be acceptable for reliability.

#### **4.4.2 Description of the Target Population**

The demographic information of the participants obtained from Section A of the questionnaire is presented in table 4.2 below. This information describes the target audience who are trainers and training evaluators. Of the 117 questionnaires distributed, 41 questionnaires were returned only from the training practitioners and training managers. These will be used to make all the statistical deductions for this study.

Leedy and Ormrod (2013: 91) state that the internal consistency reliability is the extent that a single instrument provides the same results. The internal consistency of the responses was assessed using Cronbach's coefficient alpha values. The reliability test for value was done against the following questions 20, 21, 28 and scores estimated were 0.94, 0.92 and 0.92 confidence levels for responses to questions on Level three and four of the Kirkpatrick/Phillips (K/P) model respectively. The response on question 29 the evaluation success index (ESI), the reliability score was thus well above 0.8, which is deemed acceptable



(Maree, *et al*; 2007: 215). These scores therefore indicate a sufficient degree of reliability.

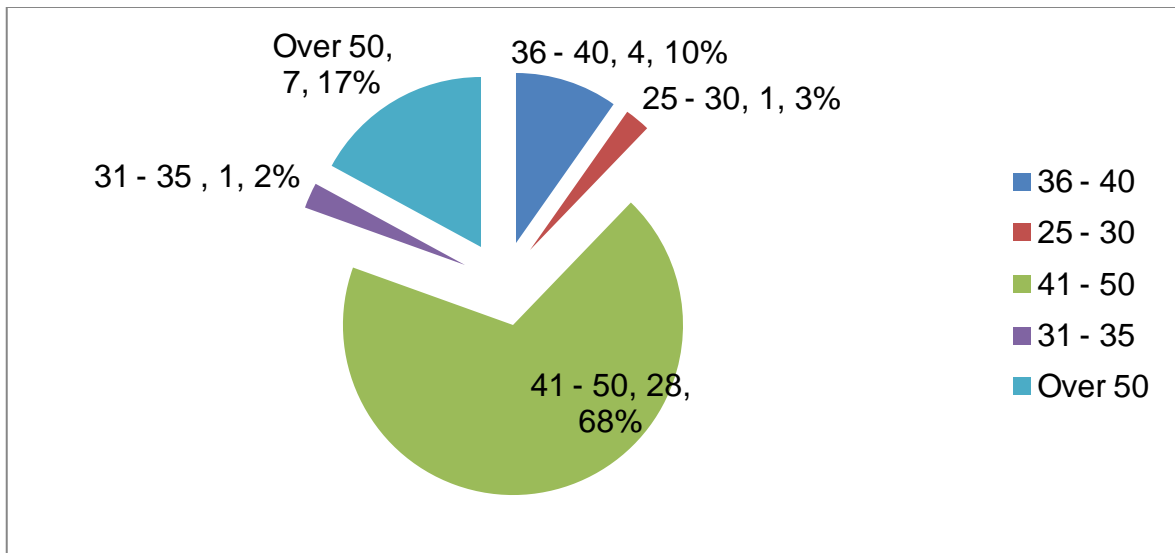
**Table 4.2 Frequency and Demographic characteristics of survey respondents**

Items	Category	Percentage
Age	25–30	3
	31–35	2
	36–40	10
	41–50	68
	50+	17
Gender	Female	46
	Male	54
Race	African	59
	Coloured	7
	Indian	15
	White	19
Rank	Manager	24
	ETDP	76
Region	Central Gauteng	7
	Eastern Cape	2
	Head Office (Midrand)	44
	KZN	5
	Gauteng North	20
	Western Cape	5
	Gauteng South (Wits)	17
Employment	0–5	7
	6–10	22

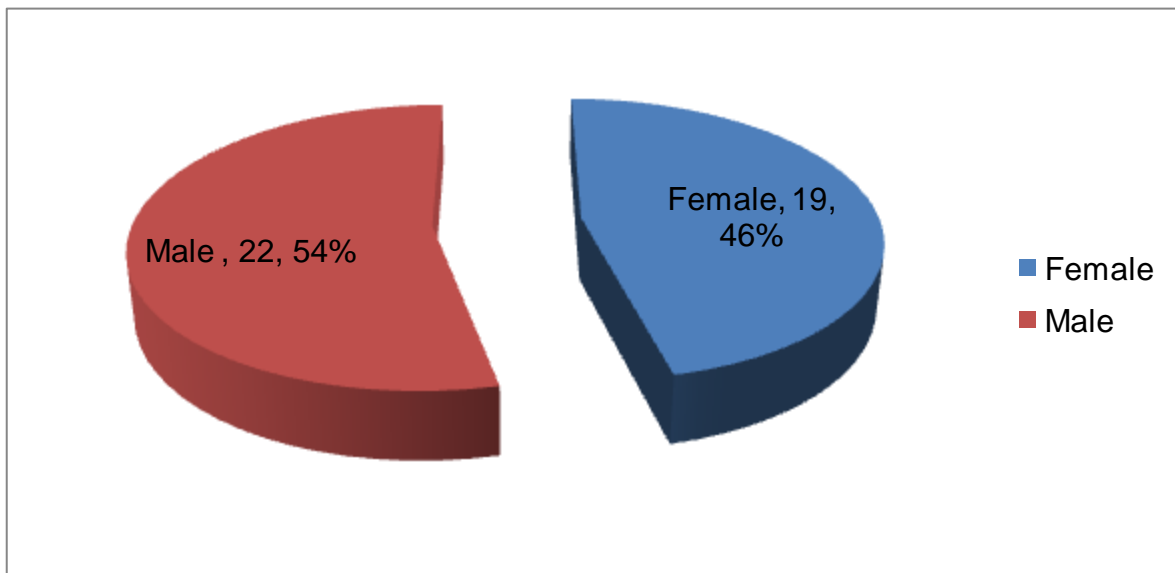
period in years	11–15	37
	16–20	17
	21–30	17
Qualification	Bachelor's degree	24
	BHRD (Bachelor of Human Resource Development)	10
	BTD (Bachelor in Training)	12
	Grade 12	5
	Master's Degree	3
	ODETDP Level 5 (Occupationally Directed Education Training Development Practice Qualification)	39
	ODETDP Level 6 (Occupationally Directed Education Training Development Practice Qualification)	7
	Doctorate	0

**The graphic illustration of of demograhic data of respondents is as follows:**

Figure 4.1 Depicts the age of the respondents which is a pertinent message to management of LI to hire more graduate interns as can be seen 68 percent of the national staff are in the age groups 41-50. Once the over 50's are included the percentage of aging practitioners jumps to a whopping 85 percent. A definite aging group of practitioners.

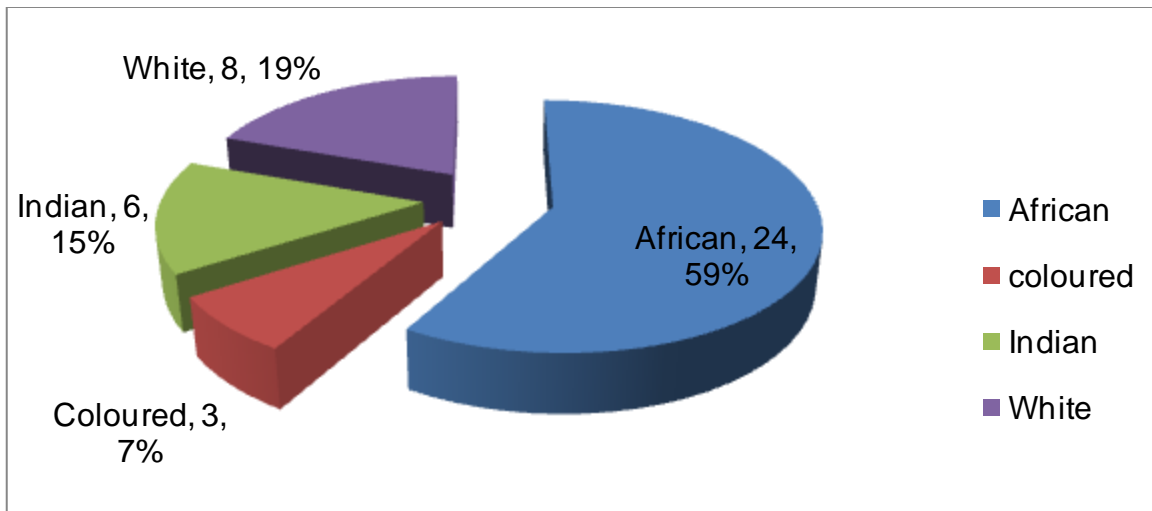


**Figure 4.1 Age of respondents**



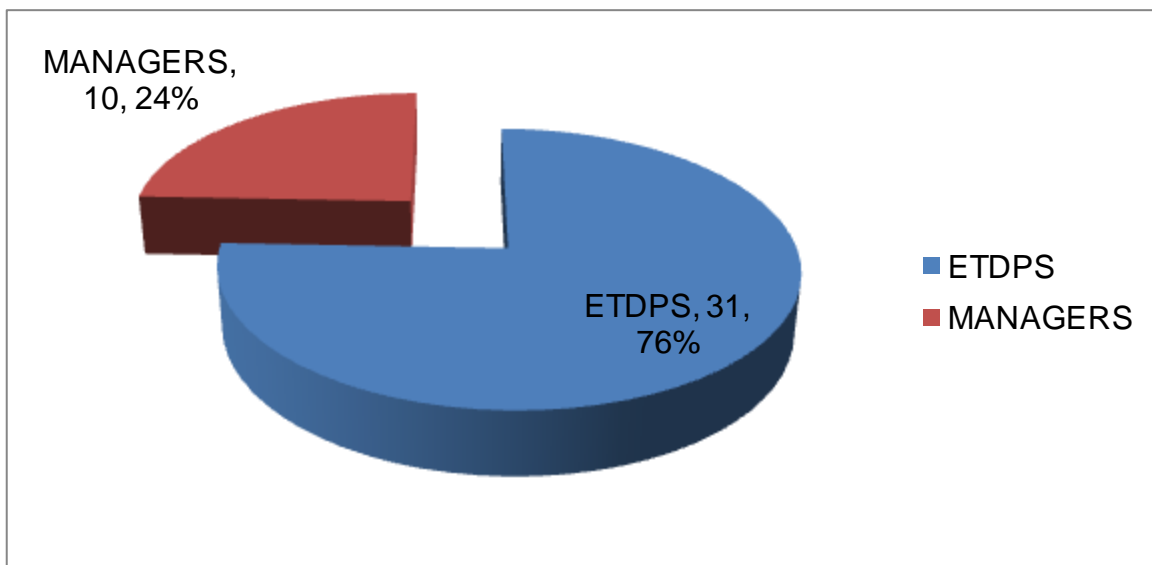
**Figure 4.2 Gender of respondents**

Figure 4.2 depicts the Male respondents comprised of 54 percent and Females 46 percent. Which indicates a reasonable balance in responses as it does not reflect any gender biases towards training evaluation practices.



**Figure 4.3 The graphic illustration of the respondents Race Groups.**

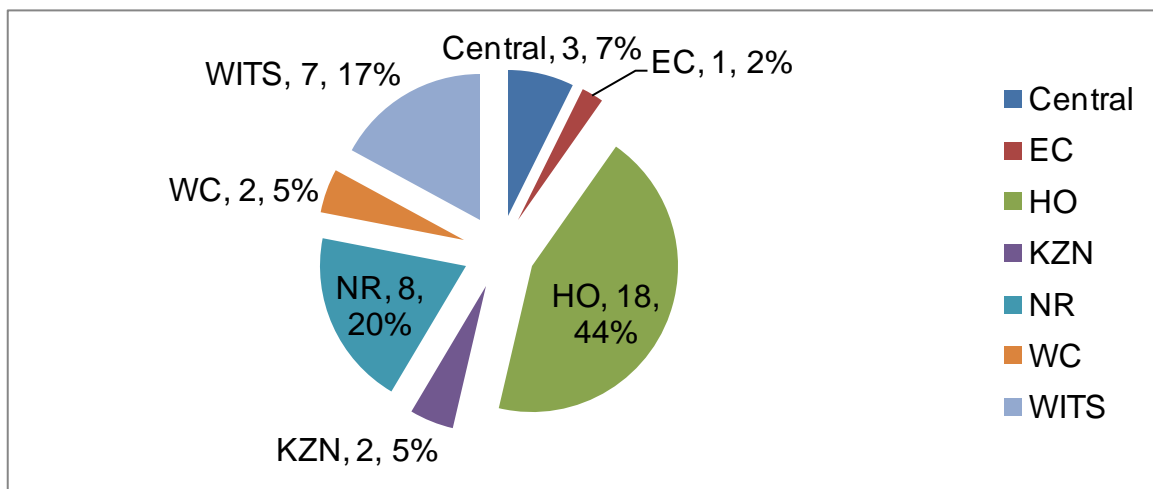
All races are represented and therefore the responses will not be skewed to one racial group views, although the African group is the largest and this reflects the EE targets in the country. HCM has done a great job on representation.



**Figure 4.4 Ranks target population of managers and practitioners**

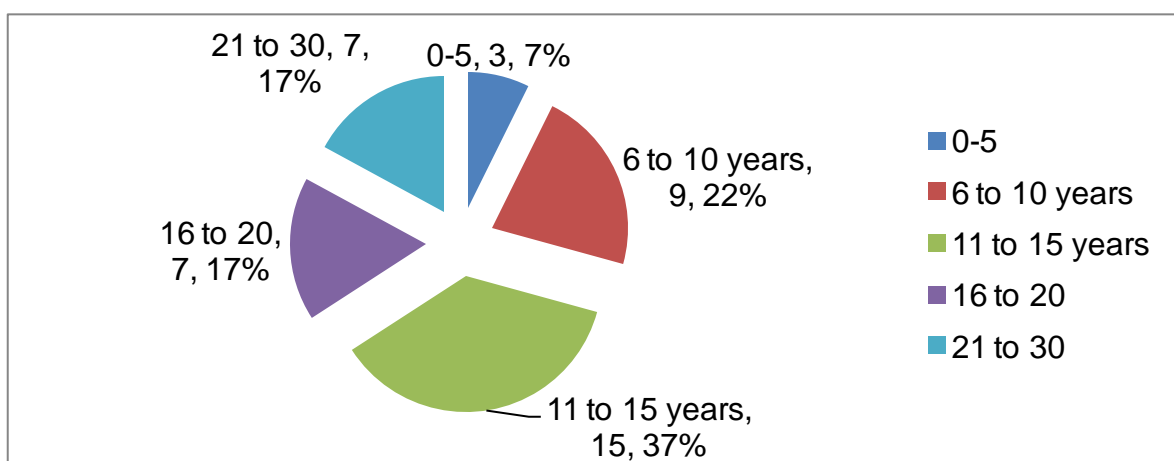
Managers comprised 24 percent and the education training development practitioners (ETDPs) 76 percent. Which indicates the implementers are in the largest percentage of 76 percent which is also good for the data gathering for this research, because the managers are controllers of the training interventions, resources, budgets and reports, while the ETDP's conduct and evaluate training

in the organisation. But it's the managers that use the evaluation findings in reports.



**Figure: 4.5 Depicts the Regional response rate in numbers and percentages**

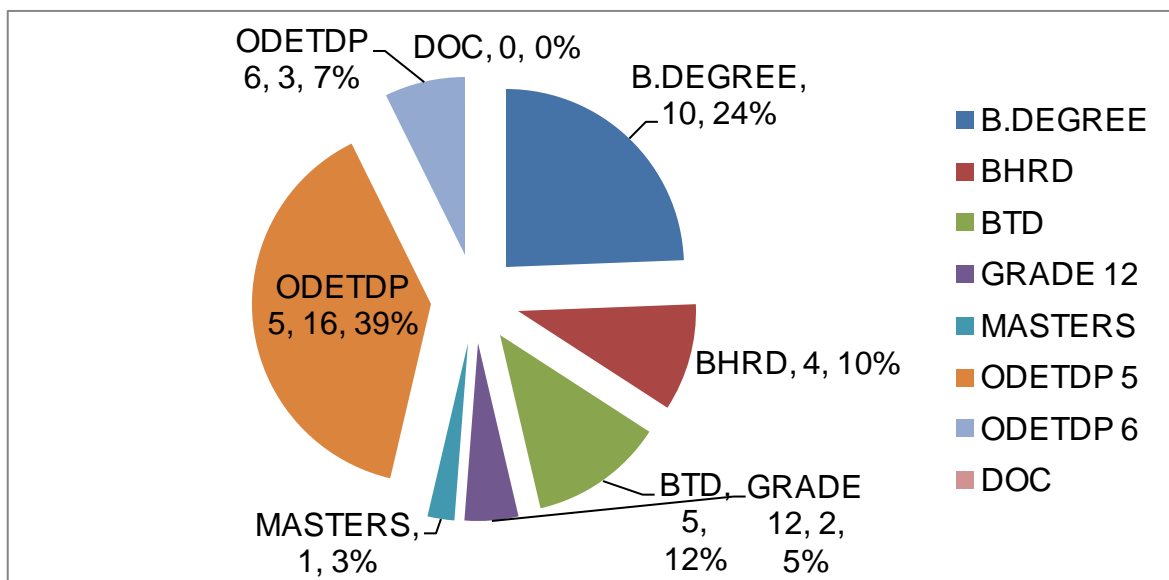
All regions were represented that were targeted but Eastern Cape had the least response of two percent while Head Office had the most responses at 44 percent. The response rate was the highest from Midrand team which is encouraging as this group are the strategic members who develop strategy, policies, the training systems and compile the Annual Training Report (ATR) and Workplace Skills Plan (WSP).



**Figure 4.6 Tenure of Respondents**

The tenure is indicative of experience in the field of training and the application of training evaluations. The largest percentage is 37 percent and have a average tenure of 11-15 years which is a fairly long period for practices to become embedded. The next is 16-30 tenures have 34 percent while of 6-10 years is next at 22 percent of the total.

This basically means employees have stayed loyal for a long time and this could indicated a good organisation that satisfies their needs or they were not employable outside the organisation due to the follow reasons, one mainly being tertiary education qualifications, two being close to pensionable age or three the economy and the current job market.



**Figure 4.7 Educational Qualification of respondents**

The qualifications of respondents is crucial as it confirms the strategy the learning organisation implemented in 2002 to upskill the then functional trainers to a basic of occupational directed education and training practitioners Level five (ODETDP L5). The basic requirement stipulated by SAQA to be a trainer. Many of the trainers have moved beyond the occupational levels to Bachelors degrees in training. This means that the survey audience would not find the survey questions difficult because training evaluation practices form part of the syllabus of occupational directed education training and development (ODETDP).

### 4.4.3 Survey Questionnaire Responses

This part of the study will look at the responses to questions in Section B of the questionnaire. The main research question posed at the beginning of the study was “Is the current training evaluation practices effective, efficient and systematic in providing evidence to determine the value of learning?” The analysis of the data below will aim to answer this research question. Specific parts of the survey were aimed at answering one of the four secondary questions stated below. Answers to each secondary question will be reached here with reference to the participants’ responses.

#### 4.4.3.1 Research sub-question I

*How does the Addie training cycle support the systematic training evaluation process to assess, develop, design, implement and evaluate? Questions 1 sub-questions 1 to 10*

The question one has one to ten statements which asked the participants to respond to the value of the Addie cycle in systematic training evaluations. The Likert scale ranged from strongly disagree to strongly agree.

**Table 4.3 Importance of the Addie cycle in training evaluations - the top five questions with which respondents strongly agreed.**

Statement	Rank	Number of strongly agree responses	Mean
2. Training needs should be diagnosed to confirm that the need requires a training intervention.	1	28	4.46
5. In order for training evaluation to be credible it should be well planned from the needs analysis stage to evaluation stage.	2	26	4.37
6. Training evaluation practices which include diagnostic, formative and summative techniques assist to declare the value of learning at all stages	3	24	4.37

of the training cycle.			
8. Training evaluations should have a learning metric (measuring tool) that works within the organisation.	4	25	4.34
10. Training effectiveness impacts all performances (e.g. organisation, team and individuals).	5	24	4.24

Table 4.3 indicates the five top question responses and generally all ten statements on the Addie training cycle indicated that the practitioners agree strongly that Addie cycle will support the systematic evaluation of training towards a more effective practice. Addie as discussed in chapter two, is a systematic approach to training (SAT) model that approaches a training request systematically. (SAT) also promotes systematic training evaluation according to Barbazette (2008: 88). The five statements with the most responses have a mean above 4.00. according to Maree *et al;* (2007: 187) the mean is the most commonly used measurement of location or central tendency which means that there was a general agreement and the acceptance of value of support for Addie in systematic training evaluations is fairly high.

#### **4.4.3.2 Research Sub-question II**

*How does the Kirkpatrick/Phillips model support the effective summative data collection process?* Questions 11 to 23 and sub questions.

Table 4.4 below relates to question 11 of the survey. It indicates the percentage of respondents who know and use each of the four training evaluation models. Because the research had to establish that the Kirkpatrick and Phillips is known and used as the five level framework for summative evaluation was selected to assess/examine the current practice. If the Kirkpatrick/Phillips model was not known or not in use by the respondent it would have been difficult for responses to the questions that followed.



**Table 4.4 Models known and currently used to establish (Question eleven)**

<b>Model/Framework</b>	<b>Known</b>	<b>Used to some extent</b>	<b>Known and used</b>
Kirkpatrick	32 %	54 %	15 %
Phillips	80 %	20 %	-
Nadler	85 %	15 %	-
Brinkerhoff	92 %	8 %	-
Stufflebeams CIPPS	0 %	0 %	
War, Racham and Bairds CIRO	0 %	0 %	

The research did establish that of all six models given that Kirkpatrick and Phillips were known and used the most in the organisation, so the survey could continue with reasonable comfort. In other words the survey had to confirm which of the models are not only known but are also used as a metric. The Kirkpatrick model is used to some extent by 54 percent and also known by 32 percent, while Phillips, is known by 80 percent of respondents and used by 20 percent. What is encouraging is that 92 percent know about Brinkerhoff models but used it the least. The Ciro and Cipps models did not garner any response. Kirkpatrick and the Phillips models in this study are central to the the survey questionnaire for the summative evaluation of training.

Question 12 asked if the participants make use of any other evaluation methods besides the six mentioned in the previous question. Most of the respondents, i.e. 98 percent, replied “no”. The probability rate for this question is thus 0.975, which means a high level of confidence that the response was reliable.

Question 12 and 13 were linked if yes was the response to question 12 then question 13 asked what are other metrics or tools. No response was noted.

The training industry best practice standards both internationally (ASTD, CIPD) and locally (SAQA) provide guidelines to practitioners for applying the K/P levels in effective evaluation as was dicussed in chapter two Table 2.7. The research organisation compares well at all levels with all of the benchmarked best

practices. The compliance with the SAQA requirements is particularly important as it is a South African regulatory requirement for training providers. SAQA requires the first three K/P levels to be evaluated at 100 percent (Meyer, *et al*; 2012: 467). The first three K/P levels are part of competency certification, because learning then adds value to employees that are deemed competent and therefore increases their employability and career mobility (NQF Act Amended 67 of 2008).

**Table 4.5 Best Practice Evaluation guidelines in Comparison of Research organisations Evaluation per level practice**

Level	Kirkpatrick & Phillips Best Practice Guidelines	ASTD (i4cp) Survey (2009)	SAQA Requirements	Survey responses for this research	Value of the level	Mean for level value
1	100 %	92 %	100 %	95 %	High	3.10
2	60 %	80 %	100 %	80 %	High	3.00
3	30 %	50 %	100 %	38 %	-	1.51
4	10 %	37 %	20 %	50 %	-	2.08
5	5 %	18 %	10 %	23 %	-	1.26

Table 4.5 summarises the responses to questions 14 and 15. These questions relate to the application of current summative level practices. Percentage comparisons between the research organisation and best practice standards. As can be seen, the practice levels in the organisation decreased at K/P level three and four. The K/P level three is the transfer to the job. This means if transfer is not driven from management and learning there would be poor impact (Meyer & Orpen, 2012: 183, Kirwan, 2009: 18).

Moreover, the responses for level four and five seem disproportionate to the organisations Level three at 23 percent. Whilst the other bodies seem to decrease gradually lower to level five. The impact may however only be anecdotal impact and cannot be attributable to training (Philips & Phillips, 2007a:

239). The value for level one and two are high but no value for level three to level five and this corresponds with the Phillips findings (2009: 1) in measuring what matters to C-Suite.

Also noteworthy is the fact that the responses show that levels three to five are not in use when the value is questioned. Levels four and five require only ten percent and five percent compliance according to Elkeles and Phillips (2007:196). According to Phillips and Phillips (2009: 1) Chief executives (Ceo's) believe that learning adds value, but do not require feedback on performance for all interventions or all levels and what is important is measure what matters. Perhaps the L&D strategy for training evaluations should specifically indicate which programmes need to be evaluated at all five levels or plan at analysis level of Addie on the strategy for training evaluations.

**Table 4.6 Kirkpatrick/Phillips evaluation practice and probability scores in the research organisation confirms application per level.**

K/P level	Number of responses to question	“Yes” reply Percentage	Probability score	“No” reply Percentage
1	39	95 %	0.95122	5 %
2	32	80 %	0.8000	20 %
3	15	38 %	0.38462	62 %
4	19	50 %	0.5000	50 %
5	9	23 %	0.23077	77 %

Table 4.6 looks specifically at question 14. K/P level evaluation practices indicate that levels one and two are mostly in use. This means that the traditional approach to training (TAT) is practiced, rather than the systematic approach (SAT) (Barbazette, 2008: 88). What is eerie is that level three is evaluated at 38 percent which is evaluating the transfer of the learning to the job. The transfer data is crucial to calculating ROI. SAQA requirement at level three is 100 percent but only 38 percent is reached. Maybe assessment of learning is lacking.

Question 15 requested the respondents to indicate the value of each level of K/P and Level one and two indicate some value and high value again, but what is concerning is that it is a value for the training division. Bingham and Jeary (2007: 30) state that communicating value to chief executives (Ceo's) should be top of mind, and Phillips and Phillips (2010: 1) concurs that Ceo's want value of results and impact or measuring what matters to business. Also what is a further concern is that Level three to five responses indicate a high degree not in use.

The level three findings stands at 38 percent which is far lower than required to assess behaviour change and application of training. To be noted is that in South Africa competency assessments take place at level three, further it also indicates collaboration problems and lack of relationship between training and management. Further it is an indicator that management has not taken responsibility for transfer of learning on the job.. This is confirmed in responses to question 24.

The Level four and five seem to be better than the figures of SAQA and ASTD but is this a true reflection according to the responses, but if budget and resources are a barrier in question 24 how then is Level four and five implemented better than Level three. This means that for effective systematic training evaluations to be conducted it has to be planned in the design of the training. Maybe guidelines for each intervention should be set upfront and Noe (2010: 7) concurs otherwise practitioners will attempt levels according to what is deemed acceptable. Phillips and Phillips (2007a: 29-30) provide selection guiding principles for level evaluation.

**Table 4.7 Location and timing of Kirkpatrick/Phillips evaluations for levels one and two currently practiced**

Location	Timing	Level 1 "Yes" Responses	Level 2 "Yes" Responses
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		Number	%	Number	%
Classroom	After training	38	93	34	85
On the Job	After training	12	32	18	50
Classroom	Before training	10	26	20	51
Classroom	During training	7	18	25	65
On the Job	Before training	5	14	-	-

Question 16 and 17 asked where and when level one and two evaluations are practised. Options were ranked from highest to lowest. Levels one (93 percent) and two (85 percent) evaluations are popular in the classroom after training is concluded, Level one evaluations generally used an institutional questionnaire. According to the respondents it is the most commonly evaluated. Maybe the assumption could be because a tool is provided for evaluation it is therefore easy to implement.

Level one is the most useful level for the L&D division but decision-makers and senior management would prefer that level three to five evaluations be done in order to judge the value of learning for business (Philips, 2009: 1).

Question 18 queried what evaluation assessment tools are used for level two of the K/P model and provided options for the participant to choose from. Table 4.8 shows the results of this question.

**Table 4.8 The current most popular assessment tools**

Assessment Tools	Number of responses	Percentage of Responses
Tests	37	93 %
Presentations	32	80 %
Simulations	30	77 %
Role-plays	30	75 %
Others	0	0 %

Tests, presentations, simulations and role-plays are the preferred tools in that order, to assess the learning in the classroom.

The results of question 16, 17 and 18 show that evaluations mainly take place in the classroom after training and make use of all the mentioned tools in Table 4.8. From the empirical results it was evident that tests were mentioned more often than the others, but some tests only employ recall, but the practical application is important as well.

Question 19 relates to when level three learning evaluations, with the intention to determine timing evaluations in behaviour changes or transfer of SKA's take place after training (Kirkpatrick & Kirkpatrick, 2010: ix); Elkeles & Phillips, 2007: 196). The two tables below, 4.9a and 4.9b, show the responses to this question in comparison to responses to the ASTD 2009 findings.

**Table 4.9a Timing of level three evaluations: positive responses**

<b>Evaluation timing for level 3: "yes" responses</b>	<b>Number of responses</b>	<b>Percentage</b>	<b>ASTD ESI Percentage (2009) findings</b>
Short-term: two months after training	17	45 %	56 %
Any time after training	15	39 %	-
Long-term: after training	15	36 %	52 %
Immediately after training	13	35 %	38 %

The percentage of respondents who indicated that evaluation for level three takes place two months after the training is 45 percent and the ASTD and (i4cp) 2009 finding for this option was a 56 percent agreement, whilst the long-term being six to twelve months is fairly low at 36 percent in the organisation, which suggests that value that is created in the long term is ignored and yet this where individuals are using SKA's at an unconscious competent level (Nielsen, 2009:1)

**Table 4.9b Timing of level three evaluations: negative responses or not taking place.**

<b>Evaluation Timing Level 3: “No” Responses</b>	<b>Number of Responses</b>	<b>Percentage responses does not take place</b>
Short-term: two weeks to two months after training	21	55 %
Long-term: after training	23	63 %
Any time after training	23	60 %
Immediately after training	24	65 %

The “no” and “not applicable” responses are shown in table 4.9b above. This table indicates that over 50 percent of participants do not conduct level three evaluations at any time after the training. The ASTD ESI findings are fairly similar to the findings here for the timing of level three evaluations. What is concerning though is the large number who indicated that longitudinal evaluation does not take place. The “no” responses for each question are very large and once the “not applicable” responses are added, it can be deduced that Level three evaluation is not taking place as a general rule.

The next question being 20 considers the approaches used to collect post-learning data. The evaluation approaches are tested for level three indicate that none of these methods are used very often. This confirms the responses to question 19.

**Table 4.10 Approaches for level three evaluation**

<b>Evaluation Approaches L3</b>	<b>Not at all</b>	<b>Small extent</b>	<b>Moderate extent</b>	<b>Large extent</b>	<b>Very large extent</b>
Follow-up survey for learners	35 %	33 %	23 %	10 %	0
Follow-up survey for managers/supervisors	33 %	44 %	13 %	10 %	0
Interview with participant	32%	32 %	20 %	12 %	5 %

On the job observation	24 %	27 %	17 %	27 %	5 %
Interview with manager/supervisor	40 %	30 %	15 %	10 %	5 %
Follow-up focus groups	55 %	18 %	18 %	10 %	0
Action planning	49 %	24 %	17 %	10 %	0
Programme follow-up session	68 %	15 %	13 %	5 %	0
Performance record monitoring	34 %	39 %	15 %	12 %	0
Success story collection	51 %	32 %	12 %	5 %	0

Table 4.10 indicates to what degree the listed methods or approaches at Level three are used to gather evidence. Only three items at five percent each to a very large extent (VLX) is a very small percentage while not at all percentage is indicative of development need in the learning organisation.

Question 20 responses show that the level three approaches are little used except for on-the-job observation, which is used to a very large extent in 27 percent of cases. However, for evaluation to be effective the approaches should be on par with the ASTD findings, which show that all these methods are well used. The responses confirms the lack of relationships with line on the part of training and the lack of accountability for training from line management, therefore training evaluation is hampered or does not get the attention it deserves. Table 4.11 queried the L4 evaluation approaches:

**Table 4.11 Approaches to level four evaluations**

<b>Evaluation approaches L four</b>	<b>Not at all</b>	<b>Small extent</b>	<b>Moderate extent</b>	<b>Large extent</b>
Business unit supervisor perceptions	51 %	24 %	12 %	12 %
Employee relations records	49 %	29 %	17 %	5 %
Promotion/resignation records	46 %	34 %	17 %	2 %
Employee satisfaction surveys	37 %	29 %	29 %	5 %



Pre- and post-performance ratings	37 %	17 %	32 %	15 %
Learner/employee perceptions of impact	37 %	39 %	10 %	15 %
Productivity indicators: time, cost, quality and quantity	33 %	28 %	23 %	18 %
Proficiency/competency levels	32 %	32 %	27 %	10 %
Customer satisfaction logs	22 %	29 %	29 %	20 %
Actual business outcomes	32 %	32 %	24 %	12 %

Table 4.11 shows the results of the extent to which level four approaches are used. The options “not at all” or to a “small extent” were the main responses which is indicative of the lack of systematic data collection at this level. The options for “moderate” and “large extent” of use were also selected in a few instances.

The findings with regard to the results of question 22 and 23 also indicate the infrequency of programme evaluations across business units and portfolios. This means that evaluations are not in line with best practice guidelines therefore not effective nor systematic which means data on value is not gathered sufficiently. (see table 4.5).

#### **4.4.3.3 Research sub-question III**

*What are the problem areas, barriers or challenges to effective training evaluations?* Question 24.

A general concern regarding training evaluation implementation is that 60 percent of respondents who are categorised as training practitioners and managers indicated that they are faced with each of the 17 problem areas and barriers mentioned in the study to some degree (Phillips & Phillips, 2007a: 3). The table below gives the most common barriers to evaluation faced by practitioners. The findings from this research are compared with certain results from the 2009 ASTD and (i4cp) study (ASTD, 2009: 1-65) (See appendix C). The

table below states the seven problems and barriers that are most often described as challenging to a “very large extent”. They are placed in order from the most to the least commonly selected item of the seven options.

**Table 4.12 Most common problems and barriers to training evaluations**

<b>Problems and Barriers</b>	<b>Number of responses: a very large extent (VHX)</b>	<b>Percentage of responses</b>	<b>ASTD ESI responses</b>
Stakeholder involvement - no management participation	24	59 %	-
The learning management system does not have a useful total function to support training evaluations	22	54 %	41 %
No standardised collection instruments are available	17	41 %	
Evaluation data is not standardised to be used in function and system comparisons	17	41 %	38 %
Management does not request evaluations for impact or results	17	41 %	24 %
Evaluation levels are not determined at the needs analysis stage and it is difficult to foresee this past levels 1 and 2	15	37 %	-
Consultants do not go beyond level 2 evaluations	13	32 %	-

The findings thus show that these specific problems and barriers require attention as above 30 percent in all these responses is a concern as these could hamper effective evaluation practices. This is indicative that effective and systematic training evaluations are at risk due to the non involvement of pertinent stakeholders especially the line management and L&D team (Noe, 2010: 196) state that management that drives the success of training and therefore the learning value. The learning management system is not supportive of evaluation

efforts and yet according to Biech (2008: 795) and Bersin (2008: 31) technology is an enabler in today's economy and needs to make training operations easy.

According to Meyer and Orpen (2012: 278) an evaluation success depends on the standardised collection instruments and manager involvement. According to Phillips and Phillips (2007a: 5 & 270) the data to be collected must be agreed upon and selected at inception of the need as well as levels of evaluation and whether the management request evaluation training or not but should provide a report. In the absence of the aforementioned effective and systematic evaluation suffers and therefore value is lost. All these common problems create an environment of chaos and non-delivery by practitioners. Learning organisations are compelled to remove barriers, (Senge 1990) as cited by Phillips and Phillips (2007a: 134). Finally external consultants and providers generally also just evaluate only with classroom tests or portfolio of evidence and rarely do workplace follow-ups, nor calculate impact of their provision. Maybe it's the contracting or service level agreements that are not comprehensively contracted.

#### **4.4.3.4 Research sub-question IV**

*How can the training evaluation process be improved in the future to be more systematic, effective and efficient?* Questions 25-31 and sub-questions.

Questions 25 and 26 consider how the results of evaluation efforts are utilised to improve the organisation's programmes and processes. The results for these two questions are compared in table 4.13.

**Table 4.13 Current and future use of training evaluation results (i)**

<b>Use of evaluations results currently and against the future practice</b>	<b>Current practice % Q 25</b>	<b>Future practice % Q 26</b>	<b>ASTD ESI comparison %</b>

To gather performance data about trainers	39 %	51 %	53 %
To improve overall business results	34 %	78 %	48 %
To review external providers' performance	30 %	61 %	-
To help meet performance goals of employees	27 %	66 %	36 %
To make decisions on continuing with effective programs	27 %	56 %	-
To make decisions on discontinuing programmes of little value	27 %	56 %	-

The current situation indicates that evaluation results are used below 40 percent of the time for business improvement and secondly for employee development, but in future there will be a need to increase the use above 50 percent and higher so that evaluation efforts become more focused on value of learning. Noteworthy is the future use of training evaluation results to improve business results is at 78 percent.

Generally evaluations findings in all future endeavours need to be used as indicated by all seven items above 50 percent for an effective and systematic value. Also there is need to use evaluation findings to create transformation and change. The systematic reporting needs to be utilised both for the business and its employees. In comparison the ASTD international study (2009) on future improvements found similar findings to this study. What this means is that if evaluation results are used above 50 percent training evaluations become a demand, but if not used or used less than 40 percent training evaluation value also could decrease.

**Table 4.14 Current and future use of training evaluation results (ii)**

<b>Use of evaluations results currently and against the future practice</b>	<b>Percentage for option: “Does not happen in current practice” Q 27</b>	<b>Percentage for option: “Needs to happen in future practice” Q 28</b>
For setting goals with employees prior to training	32 %	54 %
For setting goals with employees after training	29 %	54 %
For giving employees opportunities to apply new skills, knowledge and attitudes	32 %	63 %
For developing personal development plans	29 %	61 %
For determining pre- and post-training performance	29 %	48 %

The opinions on future improvement in question 27-28 in Table 4.14 regarding manager and supervisor evaluation accountability indicate that this should be increased in order to add value to the learning evaluations. The fact that improvement is warranted may in some instances be due to the fact that the Addie training cycle is not being used. The reactive nature of training, the use of the traditional approach to training (TAT) or managers who do not have enough staff to assign to certain training duties may also be the problem. Concerning this, Eraut (2011: 195) expresses the importance of the role of line managers in the training value chain for transfer, results, impact and return.

#### **4.4.4 Correlation Analysis**

The comparison of international practices with the results of this study regarding the value of evaluations is outlined below in Table 4.15 and figure 4.1. refer to question 29 of questionnaire which request responses to the nine items on what is deemed an effective training evaluation practice.

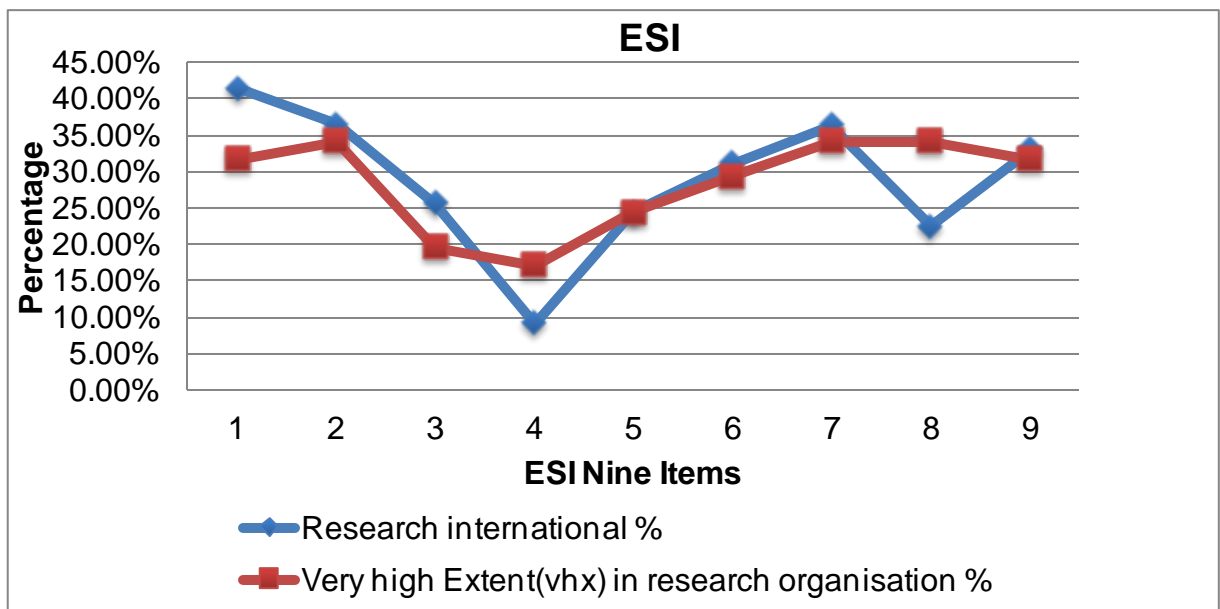
**Table 4.15 Evaluation Success Index (ESI) Comparison between the ASTD AND the Research organisation**

<b>Evaluation Success Index Items</b>	<b>Percentage findings International participants to ASTD Research (2009: 1-65)</b>	<b>Percentage findings to a very large extent (VLX) in Research Organisation</b>
1. Our learning evaluation techniques should help us meet our organization's learning goals.	41.39 %	32 %
2. Our learning evaluation techniques should help us meet our business goals.	36,5 %	34 %
3. We get a solid "bang for our buck" ( return when it comes to using the Kirkpatrick/Phillips learning metrics.	25,6 %	20 %
4. Follow-up focus groups are great source of data	9,1 %	17 %
5. Performance records monitoring great source of data.	24,3 %	24 %
6. Follow-up surveys of Participants provides data.	31,09 %	29 %
7. Learner/Employee perceptions of Impact is important.	36,3 %	34 %
8. Actual business outcomes (e.g. revenue, sales) is important data.	22,4 %	34 %
9. Proficiency/Competency levels is important data.	33,0 %	31 %

**Source: The ASTD and (i4cp) Group Research (2009) The Value of Evaluation Success Index (ESI) Making Evaluations More Effective. Used with permission from ASTD.**

The findings from the research organisation and the international research of (ASTD 2009) are very similar meaning that generally training practitioners want a training evaluation that is effective.

Figure 4.8 depicts the response percentages of the international research organisations in the ASTD survey to the nine Evaluation Success Index (ESI) items in the colour blue and the red depicts the research organisations response to the nine items of the Evaluation Success Index (ESI). The correlation with the international findings from the ASTD and (i4cp) research and the research organisation is significant on what makes evaluations effective is shown for the nine items that were selected by the ASTD as being crucial to a successful evaluation.



**Figure 4.8 Comparison with ASTD international research and the current findings for the research organisation on the value of the Evaluation Success Index (ESI).**

A Pearson correlation analysis was conducted to examine whether there is a relationship between responses of the nine evaluation success index (ESI) within the international organisations participating in the ASTD (2009) and the local research organisation. The results revealed a significantly positive relationship ( $r = 0.7393$ ,  $N = 9$ ,  $p = 0.028$ ) (Leedy & Ormrod, 2013: 291). There is thus a strong correlation between the two. The findings suggest that the research

organisations participants also agree strongly with the same nine items of the ASTD (2009). The ASTD assessed the international research organisations respondents on what would constitute an effective evaluation practice that makes value tangible and credible. The correlation test was to ascertain whether the research respondents also value the nine items that indicate an effective evaluation practice. Thus, certain factors should be considered when implementing systematic training evaluations. These factors will now be discussed.

The ASTD and (i4cp) research findings indicated that if the Kirkpatrick/Phillips models are used, the evaluation practice should be able to declare the value of the learning (Appendix c). The population that is part of this research generally agrees that if training evaluation strategy follows the ESI it will provide proof of learning value. The use of the Brinkerhoff Success Method in combination with K/P according to researchers enhances evaluation value. There are a number of models that evaluate training but the organisation needs to choose what suits it best to get value from evaluations. The barriers must be effectively dealt with for evaluations to be effective. Managers of line and L&D need to drive success and make evaluations effective by collaborative strategies.

#### **4.4.5 Open ended questions responses**

Question 30, requested the survey participants for their general views on the value of training evaluations, meaning whether they value it or not.

Table 4.16 requested respondents for their views on training evaluation and following is the views of managers of training divisions.

#### **Table 4.16 Managers views on training evaluations**

Evaluation is an important and necessary tool to collect data for decision-making. Evaluation is an important activity to declare the value of learning. Reach the agreed levels for all interventions.
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Important tool and must be used to value training interventions for declaring the value of learning for the individual, team and organisation.
If done correctly it will serve as a valuable source of data that can be used for justification and reporting.
Evaluation does not take place, as it should. My opinion is that practitioners are not aware how to do the evaluation and the analysis thereof.
Evaluation effectiveness must have a ripple effect on the total business starting with the individual and touching finally on the overall business goal set. Hence, such evaluation must include indicators for all levels: individual, section, unit/business and company effectiveness and impact after learning has taken place.
If done according to an evaluation strategy it helps harvest value for L&D must have a plan per intervention because not all training needs to be evaluation at all levels.
In the organisation where reactive learning is, the order of the day and proper evaluation fell through.
If applied correctly it will be effective in that improvement on learning content and facilitator maybe done in order to improve training effectiveness tools.
If performed, monitored, and aligned properly, it can be a source of valuable information for any company.

The management group responded that they strongly see value in implementing training evaluations systematically.” In others words they want training evaluations to take place. Table 4.17 indicates the view of education training and development practitioners (ETDP’s) on the value of training evaluations.

**Table 4.17 ETDP Views On Evaluations as stated.**

Very effective
This will assist all the stakeholders to have a better understanding of their contribution to the organisation.
That training evaluations are crucial to the organisations strategy and optimisation.
In the Post Office, evaluation is not effective as expected and it does not serve any purpose. Every Region has its own evaluation template that is why our Training Department is not standardised. As much as already stated earlier I believe if as a department (L&D) can use standardised format of evaluation template, training and development will eventually produce productive

employees as expected and the organizational ROI will definitely increase.
Conduct Evaluation using techniques and an instrument, which is sub-standard, non-existent therefore, evaluating effectiveness, can be a skewed indication of results! Implement a standardised (well-developed) effective tool for systematic evaluation purposes.
For evaluation to be effective, I think there should be after care service, since after evaluations, we trainers do not see if the employees apply the learning on the job.
Helps to have competent and knowledgeable workforce
It is imperative that I understand what the purpose of conducting an evaluation is. An evaluation answers whether the training program met a fundamental requirement. Run a diagnostic checkpoint for problems before moving ahead to the next level.
No evaluation process is in place.
Implement Diagnostic, formative, and summative evaluations.
Evaluation is critical for T&D and for the learner. Interventions, trainer, learner, and the organisation need to know how well the intervention was 'accepted'.
When evaluation is use properly, we will not have a repetition of interventions with no culture change and business improvement.
Our organisation needs to improve on evaluation methods to meet the organisational goal, increase productivity and employee satisfaction.
Formative or ongoing evaluation/ assessment are integral to the progress of any training program and summative evaluation/assessment is required to gauge the program's ultimate efficiency and effectiveness. In order to achieve evaluation effectiveness in SAPO, practitioners will require standardised, detailed, updated, well-maintained evaluation/ assessment tools/ training matrix for all training programs.
Evaluation process needs implementing in its entirety systematically to have notable impact.
Evaluations should indicate the training impact. Evaluations need quantified outcomes for line and stakeholders to understand.
Evaluation process needs planning at the beginning of the training cycle. Regions to develop training materials based on regional needs analysis gaps.
If the P.O. can implement effective evaluations on all levels, it will benefit the organisation and surely improve performance if it linked to an appraisal system.
Good tool to utilize but it monitoring at all times is important for an impact.

Evaluation is crucial, linked to business goals and performance management of employee and management.
It is an excellent tool for learning and development.
It is a good tool to measure training effectiveness and impact.
It is a critical component of the training cycle but expensive depending on delivery, it helps the trainer, managers, and learners see if training has met and applied.
I see the process of evaluation as a critical part of the training cycle and needs to proper management in order to provide the desired information in order to establish the effectiveness of the trainer and program. This will assist in improving the training and ensuring that the workforce is properly equipped in order to perform their job functions to the best of their ability and in turn will lead to a happy workforce and a profitable company.
In Sapo, evaluation is not effective as it should be. In the first, please we do not have a tool to measure correctly, whether training has taken place and that employees are applying what they have learnt back at their workplace. Our LMS should make provision for evaluation option because currently we are training for the sake of numbers hence evaluation is not working.
If managers and supervisors learn about the evaluation system, I am sure they well are able to use it. The instruments are not in use because is not known.

The practitioners also value training evaluations but want an effective, systematic practice that is managed, strategised, planned and monitored by managers. The need for standardised tools is also apparent and could be a reason for not implementing training evaluation effectively. Question 31 depicted in Table 4.18 Training and development needs of respondents in systematic evaluation practices.

**Table 4.18 Development needs**

D31.1	D31.2	D31.3	D31.4
How to calculate ROI/ROE	Learn about Sam method	Draw up evaluation strategies	Design data collection instruments to implement evaluation
A+	N+		

Calculate return on investment (ROI)	How do design data collection instruments	Using new methods and strategy	Writing analytic reports on training.
Evaluation of Level 5 Kirkpatrick Model	Analysing data for better evaluation	Current ODETD model	
Honours			
Leadership style	Managerial skills	Inter-Personal skills	Communication skills
Needs analysis	ROI		
To develop questionnaires and observation tool			
Management - planning	Course design		
Relevant standards	Approach to evaluating the impact of technology-based professional	Re-training on measuring RIO and implementations	
Development	Gathering of evidence		
Designing short and precise questions	Fair time measurement for evaluations		
Value adding needs analysis	Pre-learning assessment	Formative evaluation (on the go)	Post training evaluation
Building a evaluation strategy	Selecting an appropriate model to us I&d	New models like sam	Do a ROI calculation that is credible
Reaction	Learning		
Training qualification	Etdp roles		
If Kirk Patrick's model for evaluation is			

followed - none			
Attend refresher training on Evaluation	Implement evaluation as part of learning development process		
Get more practise in evaluation	Design more training and evaluation tools		
Hr management			
ROI			
Experience level 3-6			
Behaviour evaluation	Put practices/processes in place in my BU for evaluation	ROI	
Should be put into practice	Should be done after each learning event	Should be done after each learning event	
Design and development of training material		Mentoring and coaching	
Project management	Development programs		
ROI	To have knowledge of other evaluation models		
Knowledge and use of other training evaluation models beside Kirkpatrick	Design digital evaluations	Evaluations models besides Kirkpatrick	And be able to draw findings and interpretations of- responses electronically
More exposure in moderation processes	More exposure in skills development facilitation processes		

Leadership skills	Labour Law	Management development	Computing skills
Behaviour evaluation	Results	ROI	

The final question in the survey asked participants to state their training needs. The training needs indicated by 95 percent of responses were in the skills; knowledge or attitude domains pertaining to training evaluation.

Apart from a few participants, the majority indicated that training evaluation models and ROI assessments are requirements.

Generally most respondents wanted to be trained on various types of training evaluation models, frameworks and processes.

#### **4.4.6 Overall Findings**

The main question posed was: “Is the current training evaluation practice effective, efficient and systematic in providing evidence to declare the value of learning?”

The research found that the practitioners see value in the systematic approach based on the Addie cycle but, the reactive approach in the organisation causes practitioner to adopt short cuts or ignore the system to meet the training need. The current training evaluation practice in the organisation is implemented mainly at the summative levels as assessed using the Kirkpatrick/Phillips framework. The Level one(1) and Level two(2) are implemented in the classroom after the training. Test are mostly used to assess Level two(2). This is indicative of the traditional approach to training and not the systems approach. The Level three(3) is performed at 38 percent of the time and the problem is managers should take responsibility on job, but training has not supported the effort nor formed meaningful relationships nor collaborations for the value of learning to be tangible.

The data is not gathered systematic especially using set approaches for Level three(3) and Level four(4). However, this does not prove that the training is not adding learning value; rather, it means that the measurement and the evaluation strategy, tools and instruments need to be improved to collect evidence of that value. There is a definite relationship between training evaluation and learning value because the types of evaluation and levels conducted did provide proof of value add of L&D. Evaluation tools which collect data is a great need indicated by the practitioners. The use of the results is far below required guidelines.

The assessment did not address the utilisation of diagnostics, confirmative and formative evaluations but respondents strongly agree that the Addie training cycle is a great system to base a holistic or systematic approach to training evaluations. However, what is concerning is that the current practice lacks comprehensiveness as the summative Level three(3) to Level five(5) is not fully attempted due to the barriers and challenges faced in the practice. Due to the reactive practice of training, relationships, collaboration and ownership a key element to successful evaluations is lacking.

#### **4.5 CHAPTER SUMMARY**

This chapter presented the results mainly in tabular format. Statistical analysis was used to describe the data in the tables. In conclusion a comparison was made between current ineffective practices and more effective practices that should be used in future to collect evidence for declaring the value of learning.

## CHAPTER 5

### CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 INTRODUCTION

The L&D function has an important contribution to make to the bottom-line of the organisation, because employees enter the workplace with high expectations of success; however, measuring this contribution remains a challenge (Bersin, 2008: 1). The workplace has become a very competitive environment which is impacted by technology-driven systems that operate in a global context. Therefore, the speed and lack of longevity of information is resulting in the need for more training more often (Beevers & Rea, 2012: 29).

According to Lawson (2009: 268), the learning function is at a disadvantage because the value of investments in training has not been properly proven to stakeholders. Accordingly, evidence is mostly anecdotal or incidental and not generally obtained according to a scientific method, despite the fact that there are models and frameworks that promote and assist in the training evaluation practice. These are used in proving effectiveness, improving efficiency and reducing costs of training.

According to Guerra-Lopez (2008: 27), training evaluations support organisations in determining which interventions work and which do not produce results. Wick *et al*; (2010: 1) agree that the systematic approaches aid organisations in rooting out ineffective learning programs. The need for managing an effective systematic training evaluation practice in search of learning value is ignored or overlooked in the fast-paced learning world. However, value is sought from all investments and this applies to training as well (Thorne & Mackey, 2007: 138). Accountability is a



requirement from executives because of the various demands of the organisation (PFMA, 2008; Kirkpatrick & Kirkpatrick, 2010: 12-13).

Barbazette (2008: 3), Thorne and Mackey (2007: 138) agree that both the audit and evaluation of the L&D function as a system which includes the trainers should be periodically undertaken. The evaluation of interventions should take place according to a well-developed method that forms part of managing the function and its value proposition (Coetzee, *et al*; 2007: 387).

The Addie training cycle, an instructional systems design (ISD) was proposed as the structure for evaluating training systematically. The evidence for the value judgement must be collected throughout the training cycle and not just summatively (Bozarth, 2008: 4). Systematic training evaluations are proposed as an evidence gathering practice to prove, improve and review the value of learning. The Addie cycle is the structure to gauge or measure the value-adding activities of the training function in meeting a training need.

This research followed a quantitative descriptive survey design and attempted to deal with the main research question: “Is the current training evaluation practice effective, efficient and systematic in providing evidence to declare the value of learning?”

Four sub-questions stemming from the main research were analysed individually along with the survey results in the previous chapter (Leedy & Ormrod, 2013: 36). The following areas were investigated and appraised in the analysis:

- The support provided by the ISD or Addie training cycle in the systematic approach to training assessments for diagnostic, formative and summative evaluations.

- Use of the Kirkpatrick/Phillips (K/P) framework for summative training evaluations.
- The problems experienced with the process, procedures and data collection methods.
- What is deemed effective and systematic training evaluation practice according to the evaluation success index (ESI) and the ASTD and (i4cp) evaluation research (2009: 1-65).
- The probable future state of the practice in providing data to prove learning value.

## **5.2 OVERVIEW OF THE STUDY**

The problem identified was the need to declare the value of learning when taking into consideration the annual training funding and expenditure. The main focus is: Is the current training evaluations an effective systematic practice that is being leveraged to harvest the value of learning. This meta-analysis of the current training evaluation practice was intended to determine whether the practice is sufficiently effective, efficient and systematic in gathering comprehensive evidence of value (Guerra-Lopez, 2008: 118).

## **5.3 FINDINGS OF THE STUDY**

The four sub-questions had to be assessed first before the main question could be answered. These four sub-questions are answered below.

### **5.3.1 Research Sub-question I**

How does the Addie training cycle support the systematic training evaluation process to assess, develop, design, implement and evaluate?

The proposed use of the Addie training cycle was well received as the structure on which to base the evaluation process and outcome. The Addie cycle provides the confirmative, diagnostic, formative and summative opportunity for collecting data, instead of only summative tools which lack credibility (Bozarth, 2008: 190; Phillips & Phillips, 2007a: 22).

The Addie cycle reinforces the need to build relationships with all stakeholders who can contribute to the establishment of the value of learning (Eraut, 2011: 195 and Noe, 2010: 197). Addie starts at the beginning or genesis of the need and ends at a value report. Training analysts, designers and trainers must provide services that add value to learning. For example, learners must be able to transfer SKAs to the job and improve productivity for individual and group performances (Elkeles & Phillips, 2007: 22).

### **5.3.2 Research Sub-question II**

How does the Kirkpatrick/Phillips model support an effective summative data collection process?

The K/P framework was confirmed as the model in use in the organisation. Therefore the application, approaches and processes derived from the levels was easy to assess in practice. The findings indicate that levels one and two are on par with general research benchmark best practice. But, the practice does not go beyond level two nor at the required levels that chief executive officers (CEOs) demand. Ceo's want training evaluation to also provide proof of value from levels three to five, which gives evidence of individual, team and organisational results and the bottom-line impact (Phillips & Phillips, 2009: 1). Practitioners have indicated calculation of return on investments at an acceptable percentage, but this is doubtful due to lack of preceding levels comprehensiveness.

### **5.3.3 Research Sub-question III**

What are the problem areas, barriers or challenges to an effective training evaluations?

The seventeen general challenges cited by Phillips and Phillips (2007a: 3) and others exist in the research organisation as well. These challenges prevent evaluations beyond level two.

The general practice barriers impair effective systematic training evaluations. The respondents' opinions indicate that the known and diverse evaluation models should be applied in practice to enhance the collection or harvesting of the value of learning.

To improve training evaluations supervisor and manager involvement needs to increase before, during and after the training to create learning value for all stakeholders. The views of Brinkerhoff (2006: 1) and Wick *et al;* (2010: 174) indicate that learning fails to transfer to the job environment when management does not reinforce the use of new skills (Kirwan, 2009: 17). Training specialists and line managers therefore need to build relationships for the good of learning value and the organisation's bottom-line (Eraut, 2011: 195; Noe, 2010: 197). The Addie steps reinforce interaction between critical stakeholders (see researchers view in chapter two 2.4)

### **5.3.4 Research Sub-question IV**

How can the training evaluation process be improved in the future to be systematic, effective and efficient?

The results of an evaluation are not addressed, maybe or most probably because the practice has no credibility or trainers lack evaluation skills beyond level two.

Although line management is not involved in L&D processes, the respondents from L&D stated that the manager should be involved as a critical stakeholder or

value judge. The question arises as to what L&D has provided to business management to garner support regarding level three to five evaluations.

The ESI items were determined by the ASTD and (i4cp) (2009) from a survey of a number of international organisations. The correlation between the ASTD study and the organisation researched for this report is very high at 95 percent. This positive correlation further indicates that the success of effective evaluations is important for the research organisation in declaring the value of learning.

The views of respondents both managers and practitioners of training were very positive towards training evaluations, but the challenges need to be dealt with. The use of the LMS and other systems need to support the process, otherwise it does become time consuming. The lack of the use of the ISD/Addie to provide training also makes training reactive instead of a proactive issue. Respondents believe that an effective systematic training evaluations practice will help declare the value of learning.

## **5.4 VALUE OF THE STUDY**

This study was of great value to the researcher firstly in providing insight on training evaluations and the value of learning for both the organisation and learning stakeholders. The study will inform changes and transformation of the current training evaluation practices towards a more effective state. The study will make recommendations on an effective systematic training evaluation practice for the organisation.

The results of the study indicated that the value of learning is not effectively established. The current training evaluation practice does not systematically collect the data needed in order to make a judgement on the value of learning

(Guerra-Lopez, 2008: 27). Although the lower level evaluations are implemented, the higher levels that executives will trust are not attempted by the L&D function. The current practice lacks a full implementation evaluation plan and strategy. There is a need to implement training evaluations consistently as part of L&D deliverables.

## 5.5 LIMITATIONS OF THE STUDY

This study was based on a single research organisation and the target population was only training practitioners and managers. The survey did not include external providers of learning nor the line managers. The findings are unique to the research organisation but could be used in the South African ASTD State of the Industry Report to compare the results for K/P levels one to five. The findings can also be compared with other similar sized organisations in South Africa.

The practice of the diagnostic, confirmative and formative evaluations levels were not examined indepthly but formed part of Addie question as no tools were used. There are a number of other evaluation models which were not part of the survey but, could add much to the process in future. There are a large number of well known theorist and models in the field some were discussed in chapter two but, these are a few that can support furture training evaluation towards an effective and systematic practice as follows:

- The “Six Ds” design by Wick *et al*; (2010).
- Bersin’s Impact Measurement Framework ( Bersin, 2008: 72).
- Kirkpatrick’s return on expectation or Business partner Model ( Kirkpatrick & Kirpatrick, 2010: 32).
- Yeo’s five learning pillars (2009).
- Brinkerhoff’s Successful Case Method (2006) .

- Allen's Successive Approximation Model (Sam) (Allen & Sites, 2013).

## 5.6 FUTURE RESEARCH

The training provided in an organisation should produce value and, thus, value creation should always be borne in mind (Wick, *et al*; 2010: 8). L&D needs to be proactive and not reactive, as reactive training is a barrier to both training evaluation and the declaration of learning value. When reporting on training value, managers often produce anecdotal value.

However, if a needs analysis is conducted proactively at the inception of training, it will promote systematic training evaluations and value demonstration as the baseline data is collected upfront, for comparisons to be made about changes in training quality, quantity, time and costs (Phillips & Phillips, 2007a: 13 ).

The practice of systematic training evaluations will require a strategy to be established which must be known to all providers of training (Opperman & Meyer, 2008: 224). This strategy will also communicate to trainers and others what is required of them. Phillips and Phillips (2007a: 22) agree that the strategy should be planned from the inception of the process. It should include selection criteria for programmes of evaluation up to an agreed level and all data collection tools for surveys, questionnaires, tests, observation and checklists need to be included.

The research could be enhanced if the tools that are currently being used to collect evidence are investigated further, because an evaluation is only as good as the data collected. The unit standards on training evaluation states that to conduct a training evaluation the tools are given to evaluators (Meyer & Orpen, 2012: 278-279). Further investigation is required to follow up with implementers

at higher levels, that is, levels three to five, to provide data harvesting tools and findings/reports for drawing up a standardised template. Wick *et al*; (2010: 25) state that the whole experience must be designed in advance of training launch.

The value of learning could also have been ascertained by surveying the business managers and the learners in the last three years to ascertain their views on the value of learning. The following possible area should be addressed in future studies:

- The alignment of learning to business strategy and its outcomes.
- Problem diagnosis at the needs analysis stage.
- Formative evaluation of interventions in meeting the learning /training need.
- The relationship between management and L&D that supports learning transfer and ownership.
- Training as the catalyst for change, productivity and growth.
- Collecting and publishing successful learner stories after training.
- How the transfer of learning to the job should be driven by management and not learning itself.
- How learning and behavioural tools are used to assess changes and application.
- When evaluations take place, for example, longitudinal evaluations that allow SKA's to become behaviour before determining the value of learning.
- The change in skills, knowledge and attitudes.
- The impact and result on individuals, teams and the organisation.
- Systems that provide data on productivity, as well as cost benefit analysis.



- Combine different evaluation models to collect quantitative and qualitative data.
- Use control groups and determine the value of learning from the learners and supervisors perceptions.
- The increase in revenue due to training interventions must be investigated (Thorne & Mackey, 2007: 133; Lawson, 2009: 254).

## **5.7 RECOMMENDATIONS**

The findings indicate that although training evaluations, have been implemented, they are not managed effectively as a systematic practice. Simply stated, the practitioners perceive the current practice as being haphazard and not being managed to produce value: because the practice does not collect pertinent data from managers and learners pre and post learning for comparison: do not make use of valuable data obtained during the training needs analysis stage (process criteria to outcomes criteria) (Agarwala, 2012:365). Most of the respondents concurred that a fully-fledged systematic training evaluation practice is lacking due to partial application. However, if as such systematic training evaluation were to take place, it would be of great value to all stakeholders.

### **5.7.1 Recommendation i**

The L&D policy needs a training evaluation strategy for the organisation that has a purpose, a plan and selection criteria for each type and level of the K/P model of evaluation for each intervention. The current practice is summative and therefore a systematic approach to training evaluation must be undertaken to garner holistic value for learning. This means that evaluation is part of meeting the need and is therefore part of the planning (Noe, 2010: 7).

Systematic training evaluations should be implemented by using the Addie training cycle for revealing the value added to the organisation. Consequently, an

alignment of training to business outcomes during the Addie cycle would prevent reactive training provision (Wick, *et al*; 2010: 5). Hence, the function should be managed according to a systems approach to training (SAT) and the instructional systems design (ISD) or Addie training cycle should be used to meet the training needs in the organisation. The implementation of training evaluations will require a set of evidence gathering tools, e.g. survey questionnaires for individuals, teams, groups and the use of the learning management system (LMS).

The investigation into the current training evaluation practice indicates that the practice is known but not fully applied. The implementation of evaluation utilises the K/P model which is goal-based and constitutes a systematic approach to evaluation. However, the model is not leveraged fully and stops at the traditional approach to training (TAT) levels being levels one and two. Although the K/P levels one and two are commonly assessed owing to their simplicity, data on the higher levels of the K/P model three to five also needs to be gathered to calculate value for the C-Suite.

Although all responses are above a mean of 3.0, for Addie adding value in the systems approach needs to be applied. There is therefore, a strong indication that it can support training evaluation to become more effective, efficient and systematic. It can therefore be concluded that an integrated holistic approach to evaluation will serve the purpose of systematic evaluations (Opperman & Meyer 2007: 185). Use tables 2.4 and 2.6 as a guide to an effective systematic practice.

### **5.7.2 Recommendation ii**

It was also found that the evaluation results are not used by the organisation to improve the activities of L&D nor for business sustainability. It was noted that a high percentage of respondents indicated that there is a lack of involvement by line managers in L&D activities. The needs analysis stage and when the learning

is transferred to the job especially lacks support. This indicates that the Addie cycle is not being used thoroughly. This is confirmed by some of the research responses on their views which stated that training in the organisation is reactive and not proactive. This has the potential to create a one-sided approach or the traditional approach or a situation of them and us between training and business. The vacuum in relationships and accountability is apparent because to a large extent managers in line do not take the responsibility for developing their staff. Moreover, it could prevent longitudinal training evaluations on levels three to five occurring and could be the cause of CEOs' not having reports on value of learning because these levels are ignored.

### **5.7.3 Recommendation iii**

The age demographics indicates an aging group of practitioners and has become a concerning issue for HRD staffing. This could have an impact on attracting the generation Y or millennials and adapting to their technology savvy learning requirements. There is a need to hire younger practitioners as an aging group could create a vacuum in the L&D division very soon. Moreover, new L&D trainers do not provide value from day one of appointment. For this reason continuous investment in the development of practitioners is necessary to create value for learning (ASTD New Competency Model, 2013).

### **5.7.4 Recommendation iv**

Data collection should be housed on the learning management system (LMS) it has at its disposal (Bersin, 2008: 31). The LMS must support training evaluations in collecting on-line data from all stakeholders or 360 degree. In the Organisation under study, line managers are not involved due to the possibility that L&D has not been inclusive of stakeholders. It can then be assumed that L&D has not provided them with training to support training evaluations or provided templates for needs analysis and data collection. The follow-up surveys, interviews with learners and managers is an important information gathering method and should

be leveraged. Training is reactive so some Addie stages are skipped in lieu of procurement processes. Further requesting ROI at the death of an intervention is wishful thinking. ROI is not an afterthought methodology as it depends on a robust effective system, efficient data harvesting training evaluation practice.

### **5.7.5 Recommendation v**

According to Bersin (2008: 34), training evaluations should be undertaken because they are part of what trainers have signed up for and not a separate requirement. Just do training evaluations as a priority. Provide training to all stakeholders but training practitioners should be top of the list as their needs indicate that they would like to be trained in a number of aspects of training evaluations.

An effective systematic training evaluation practice will require L&D to formulate: a plan, a value proposition. Further refine levels one to three and meet the demands of SAQA/NQF, before moving to the higher levels four and five. The method should start with the training needs analysis and continue through all of the Addie stages for selected interventions. Addie maybe adjusted to shorter or longer stages to meet L&D's need for speed of delivery. Metrics that should be include is the value to L&D, learner, on the job productivty, impact of learning on profit, but a business intelligence system (BI) will be necessary for gathering value data for analysis from all systems.

Marketing and education should be provided on evaluation methods, processes and procedures to all stakeholders. Credibility will be enhanced if evaluations are carried out by different regional trainers. All findings should be documented and templates standardised for evaluators whether they are practitioners or line managers. The ESI correlations showed a very high degree of agreement on what is deemed an effective and successful training evaluation practice. Simply

stated the respondents in this research organisation agree strongly that an effective practice of training evaluations produces value for the organisation.

## **5.8 CHAPTER SUMMARY AND CONCLUSION**

The respondents strongly agree that the Addie training cycle is a great system to base a holistic or systematic approach to training evaluations. The respondents are finding it difficult to move beyond the K/P level two evaluations due to a number of known challenges faced by training stakeholders. Therefore it can be concluded that the current practice somewhat lacks comprehensiveness in collecting data on learning value as not the whole system is interrogated.

Training evaluations must be implemented to conclude and submit a final report to business no matter the level at which it is conducted, as it is an L&D deliverable. The evaluations beyond level two must become a practice in future. Reports about value must be corroborated by line managers, learners/employees and evaluators. Training cannot depend on anecdotal or incidental evidence to promote its value: it needs to use scientific methods to arrive at conclusions. Biech cited in Kirkpatrick and Kirkpatrick (2010: viii) state that training evaluation is both science and art. The existence of L&D could be in question if learning professionals do not practise their profession. L&D must partner with business as a strategic partner or as a learning partner (Kirkpatrick & Kirkpatrick, 2010: 32).

The qualitative feedback from respondents insists that training evaluations be done strategically to add value for all stakeholders and not only the training function. This move towards systematic training evaluation will require a change management intervention to implement an effective systematic practice to in future declare the value of learning.

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