CHAPTER THREE

THE KIRKPATRICK'S MODEL

3.1 Framework and Concepts

The most widely used model for evaluating training programmes is one proposed by Donald L. Kirkpatrick, a Professor of the University of Wisconsin and a consultant. In 1959, he published a paper that classified training outcomes into four levels.

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Reaction</th>
<th>Determines participant's reaction to the programme.</th>
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<tbody>
<tr>
<td>Level 2</td>
<td>Learning</td>
<td>Measures learners' achievement of the programme goals.</td>
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<tr>
<td>Level 3</td>
<td>Behaviour</td>
<td>Determines if learners' are using the new skills on the job.</td>
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<tr>
<td>Level 4</td>
<td>Impact</td>
<td>Measures whether training has a significant influence on an organisation's operations.</td>
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</table>

Levels 1 and 2 primarily focus on the training programme while levels 3 and 4 focus on the impact of the training on individuals at the workplace.
Level 1: Evaluating Reaction

Reaction can be measured through:

- observation
- questionnaires
- chance remarks
- discussions

Evaluating reaction is the same thing as measuring customer satisfaction (Kirkpatrick, 1994). This is a measure of how participants feel about the various aspects of a training programme including the topic, trainer, schedule and facilities. The participants' reaction is often a critical factor in determining whether to continue the training programme or otherwise. Responses on these types of questionnaire can assist in negating the extreme comments of a few very satisfied or dissatisfied participants. Reaction measures may not be related to learning and eventual performance on the job. It is possible for participants to enjoy the training but not to produce the behaviour that is the objectives of the instruction.

The questionnaire is a popular method of measuring participants' reaction and is commonly referred to as "smile sheet" or "happiness sheet". A sample is shown in Appendix 1. Some evaluation forms from various training organisations are given in Appendices 2, 3 and 4.
The advantages of evaluating participants' reaction is clearly that is widely acceptable and easy to administer in terms of scoring and interpretation. Measuring reaction also provide useful feedback on how to improve future programmes. In many training programmes, reaction sheets are given to participants at the end of the programme and sometimes well past the closing time of the programme. Some participants do not make any effort in filling up the forms as they are in a hurry to get home resulting in incomplete responses. Therefore, such forms should be given at the start of the programme to allow participants more time to go through the form. To encourage honest feedback, participants should not be asked to sign the forms especially for in-house programmes. This will reduce their reluctance to make critical comments for fear of repercussions.

Level 2: Evaluating Learning

This is a measure of the knowledge acquired, skills improved or attitudes changed due to training. One way of evaluating whether learning has taken place, is to review the original learning objectives of the course and incorporating them into some form of assessment procedure for participants. For example, participants are required to demonstrate the appropriate skills. A course on negotiation skills may require participants to act out in a role play, while an effective public speaking course might call participants to make a presentation to the group. Where principles, facts and techniques are the purpose of training, a written test can be used.
In any training programme, a trainer can impart three things: knowledge, skills and attitudes. Measuring learning is important because unless one or more of the learning objectives have been achieved, no change in behaviour can be expected. The measurement of learning is more difficult and time-consuming than the measurement of reaction.

To measure learning, the following can be implemented:

- The use of a control group

- Paper-and-pencil test to measure knowledge and attitudes, and a performance test to measure skills.

Use of a Control Group

A control group refers to a group which does not receive the training while the group that receives the training is called the experimental group. Any difference between the control group and the experimental group can be explained by the learning that took place because of the training programme.

In using a control group, care must be exercised in ensuring that the groups are equal in all significant characteristics. These may include the same job levels and the number of years of work experience.
Measuring Knowledge and Attitudes

Measuring knowledge and attitudes before and after the programme can indicate whether learning has taken place. An example of a knowledge type of test is given in Appendix 5. A tabulation of the post test responses to each item will tell the trainers whether the participants have succeeded in learning what is being taught. A pretest results will help the trainer to determine whether there is a need to cover any of the items in the programme. Therefore, the comparison of total score on the pre-test and post-test is one method of measuring increased knowledge or changes in attitudes.

Measuring Skills

A performance test is necessary to ascertain if the skills of participants have been increased. For example, in a presentation skills course, for the pre-test, each participant gives a short presentation before any training is given. The trainer can grade these presentations. During the programme, the trainer provides the principles and techniques for making an effective presentation. The increase in skills can be measured for each successive presentation. An evaluation of the skill after instruction would indicate whether the learning has taken place. In evaluating participants' learning, one is also measuring the effectiveness of trainers. Trainers may have to do better presentations or they need to communicate more effectively.
Level 3: Evaluating Behaviour

Level 3 evaluation determines the extent to which change in behaviour occurs because of a training programme. Evaluating Level 3 is more difficult than the first two levels because of the following factors:

- Trainees cannot expect to change their behaviour unless they have an opportunity to do so. For example, a trainee who has completed an effective interviewing skills programme cannot apply the learning until an interview is held.

- It is very difficult to predict when a change in behaviour will occur. Even if a trainee has an opportunity to apply the learning, he or she may not do it immediately.

- A trainee may apply the learning to the job and he can either use the new behaviour or go back to his old behaviour because his boss or time restraint him from continuing it.
To determine the effectiveness of a programme in behavioural terms, one can:

- make a systematic appraisal of performances on the job before and after the training.

- conduct a survey or interview the trainee, their supervisor, subordinates and peers who are knowledgeable about their behaviour.

- conduct post-training evaluation at least three months after programme completion to allow trainees sufficient time to practise and test their new skills and knowledge.

- use a control group.

Although Level 3 is more complicated and time consuming to measure, trainers should make an attempt to evaluate the effectiveness of the programme. One way is to simply ask a few trainees whether they are doing anything different on the job after attending the programme.
Level 4: Evaluating Results

This is a measure of the final results that occur due to training, including higher sales, reduced costs, less employee turnover, lower absenteeism and accident rate. Trainers relate the evaluation of results to organisational gains and improvements. To analyse the effects of the programme on the organisation, trainers compare pre-and-post training data.

Some training programmes are relatively easy to evaluate in terms of results. For example, in teaching word processing, one can measure the number of words per minute on a before-and-after basis.

Results evaluation measures the dollar impact of a programme. It is more difficult than the reaction measurement, but it has the highest value for the organisation. However, one should be aware that training is only one of the many variables that affect organisational performance. This explains why many organisations only undertake reaction, learning and behaviour evaluations. Yet Level 4 evaluation can be fairly easy. When data are routinely collected - such as number of hours worked and units produced, a Level 4 evaluation may be just a matter of obtaining, organising and analysing already available data (Shelton and Alliger, 1993).