

Evaluating training

What is Evaluation?

Evaluation is the very basis of all training. Training is costly, not only in design, preparation and training time, but in loss of production time as well.

In fact, training is VERY, VERY expensive. It is important then to determine whether the investment made in training has shown any return.

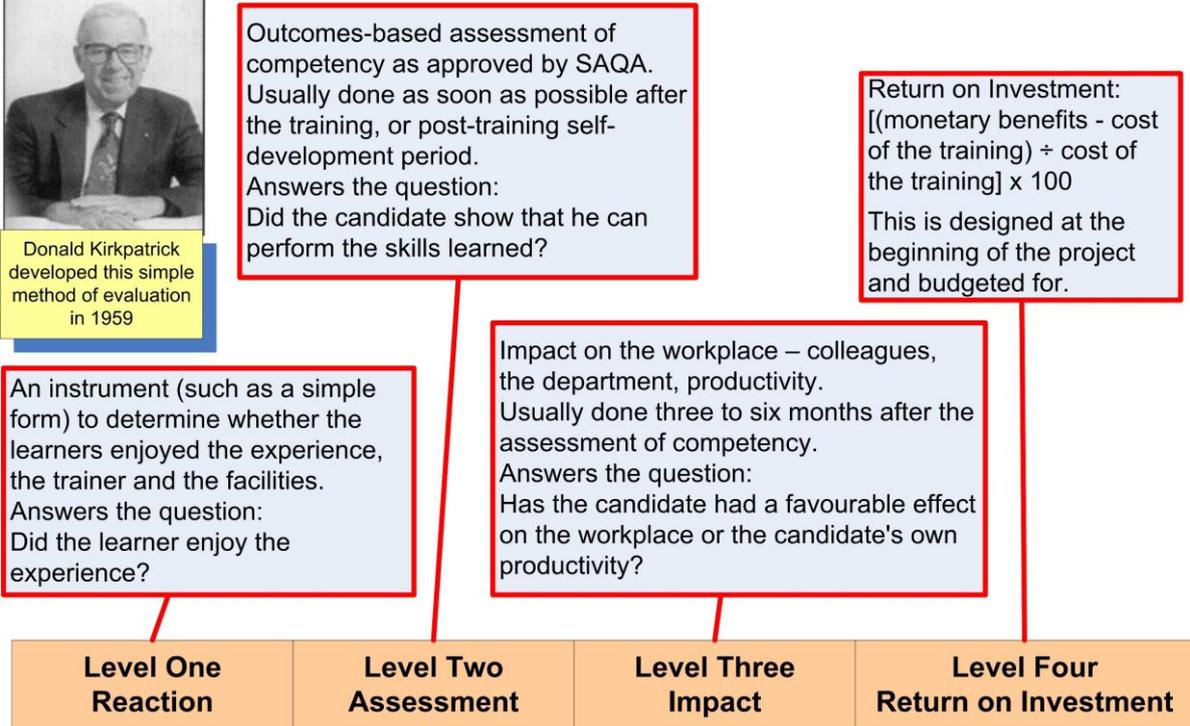
We follow the standard South African practices regarding evaluation of training, and that in turn follows the processes proposed by Donald Kirkpatrick back in the 1950's

Kirkpatrick saw evaluation taking place on four levels and in four different time frames:

1. Course reaction - this is the feel-good test. the delegates fill in forms at the end of the course and state how happy or unhappy they feel about the conduct of the course.
2. Assessment - this takes place during training (formative assessment) and after training (summative assessment), and is governed by the Assessment Guide for the training course.
3. Impact on the workplace - this takes the form of an impact study on the department, the worker's colleagues and the departmental results.
4. Return on Investment - this can only be calculated at the end of a period that allows for the training to realise its impact, usually after a year.



Donald Kirkpatrick developed this simple method of evaluation in 1959



The most common formula for ROI is

$$\text{ROI} = \frac{\text{monetary benefits} - \text{cost of the training}}{\text{cost of the training}} \times 100$$

This formula works in most commercial applications but there are interesting ways to apply this evaluation of ROI to cultural industries applications, funded interventions, broadcasting and film.

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it is not so much the accuracy of the mathematics, but the fact that the formula to be used is agreed in advance as how the training will be evaluated.

How to evaluate training

There is no way of getting away from the full extent of the 4-level system.

It is the only complete and effective way to evaluate. Only this system answers the questions:

1. Has our money been well-spent?
2. Was the training worthwhile?
3. Did it have any impact on the workplace?
4. Have we had a positive return on the investment we made?
5. What is this return?

You will never get answers to these questions from a course reaction sheet. Course reaction (Level 1) is no evaluation at all.

What the four-level system requires you to do

Level	What it does	What you must do
1 Course reaction	Determines the success of the training conduct only	Design and have them complete a "Course Reaction Sheet". Then collate the responses, and analyse on a matrix.
2 Assessment	Determines if they learned skills	Conduct assessment and have all assessments moderated.
3 Impact on the workplace	Determines if they implemented and used their skills	Track the progress of the learners, and assess their impact on the workplace using an instrument that measures their impact before training, and after training.
4 Return on Investment	Determines if the investment was worth while	Calculate the monetary gains because of the training, and use them to calculate a return on the total cost of training

Here are the things you must do before you even start training.

The cost of tracing, databases and evaluation must always be included as a standard cost of training.

Training costs are NOT just the cost of the trainer.

Training costs:

1. Needs analysis
2. Impact assessment before training
3. ROI design
4. Development
5. Training materials
6. Quality assurance
7. Accreditation

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8. Training materials and conduct.
9. Down time while learners are taken off the job.
10. Training accommodation and meals
11. Assessment and moderation
12. Database and tracing
13. Impact assessment after training
14. ROI calculation and evaluation report

Training quotations that do not include all these elements are suspect, unless they are specifically not required by the client or the funder.

Contracts with learners

If the learners are already employed, and the training is at the expense of the employer, then there is no need for any special contract or tracing system

If, however the learner is at a school or training institution, is freelance or not yet employed then the learner must sign an undertaking to disclose employment particulars including remuneration for a full year after the end of the training. This includes learners who pay their own fees.

If the training is funded, then this undertaking must be signed as a condition of undergoing funded training.

Course reaction Sheets.

Design reaction sheets that gather information about what the learner's think they gained from the course. They must be made to assess what they knew before the course and assess what they can now do. The course must be interactive enough to allow this to happen. They must be able to make this assessment on practical exercises and experiences during the course and other formative assessment instruments that they experienced. The reaction must be made based on what they experienced, and not on how comfortable they felt and what they thought of the food.

Assessment guides.

Assessment guides, fully compliant with SAQA and OETD compliant, must be designed. They must be administered by the accredited assessors and moderated by accredited moderators. The learners can be assessed only as "competent" or "not yet competent".

Impact instruments

Impact cannot be calculated earlier than three months after training.

There are only four dimensions to workplace impact:

Dimension	What it means	How it is measured
Quality	How well were the outputs achieved?	The quality must be fixed against quantity, time and cost
Quantity	How many were achieved?	The quantity must be fixed against quality, time and cost
Time	In what time were they achieved?	The time must be fixed against quantity, quality and cost
Cost	How much did the outputs achieved cost?	The cost must be fixed against quantity, quality and time.

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The quality signifiers you agree on for measuring quality before training must be same as those used after training.

ROI calculation

There is only one way to calculate return on investment:

$[(\text{monetary benefits} - \text{cost of the training}) \div \text{cost of the training}] \times 100$

Production and productivity

The monetary benefits can be anything. In the case of sales, they are easy. It is simply value of sales after training, less value of sales before training.

In the case of manufacturing it is just as easy.

Production

In the case of contribution to a TV production, it is not as easy. But it can and **MUST** be done.

The training manager and the client, (or employer), decide on dimensions that they will use. You can even use opinion questionnaires, where you gauge the productivity from the both supervisors and peers.

Management

In the case of commissioning editors, it can be done on the value of content commissioned over a fixed period after training less that before training. This must also be weighted against no of errors (the top score being "no error".)

In the case of managers, it can be done based on "cost of errors before training compared to cost of errors after training. What is the cost of the errors? It doesn't matter, as long as you use the same formula to calculate before training as after.

However, you agree to do it, you must reach agreement before the training is contracted, and you must not change the ROI calculation criteria. You can make it as simple as you like, using fixed costs or as complex as you like (using the Repertory Grid Technique). As long as you do it in the way you agreed to do it at the beginning.

Funded training

This is the easiest of the lot.

Supposing the learner was earning R5 000 a month prior to training. After six months, his earning jumped to R10 000 a month. For the whole of the second year he earned R15 000 a month.

Thus, the total earnings after training were:

First six months	R5 000	R30 000
Second six months	R10 000	R60 000
Second year	R15 000	R180 000
	Total	R270 000

If we take an agreed estimate that this person will pay an average of 18% in tax, then the total tax paid after training is $R270\,000 \times 18\% = R48\,600$.

Supposing the government paid R25 000 towards the training, then the return on investment to the government after two years is 194%. Sounds like a bargain to me!

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Evaluation Resources

Fred Nichols 2000, an interesting essay on the perspectives

Evaluating Training and Results - Carter McNamara- good resources

Ten Rules for Perfect Evaluations - Jay MacNaught

Changing ways of Evaluating Training - Steven Brown

International books on Evaluation

South African books on Evaluation

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