

kirkpatrick's learning and training evaluation theory

Donald L Kirkpatrick's training evaluation model - the four levels of learning evaluation

[also below - HRD performance evaluation guide](#)

Donald L Kirkpatrick first published his ideas way back in 1959, in a series of articles in the US Training and Development Journal. The articles were subsequently included in Kirkpatrick's book *Evaluating Training Programs* (1975), published by the American Society for Training and Development (ASTD), with whom Kirkpatrick still maintains (as at 2005) close connections, having previously served as president. Donald Kirkpatrick has written several other significant books about training and evaluation, and has consulted with some of the world's largest corporations.

Kirkpatrick's book *Evaluating Training Programs* defined his originally published ideas of 1959, thereby further increasing awareness of them, so that his theory has now become arguably the most widely used and popular model for the evaluation of training and learning. Kirkpatrick's four-level model is now considered an industry standard across the HR and training communities. The four levels of training evaluation model was later redefined and updated in Kirkpatrick's 1998 book, called '*Evaluating Training Programs: The Four Levels*'.

The four levels of Kirkpatrick's evaluation model essentially measure:

- ✂ **reaction of student - what they thought and felt about the training**
- ✂ **learning - the resulting increase in knowledge or capability**
- ✂ **behaviour - extent of behaviour and capability improvement and implementation/application**
- ✂ **results - the effects on the business or environment resulting from the trainee's performance**

All these measures are recommended for full and **meaningful** evaluation of learning in organizations, although their application broadly increases in complexity, and usually cost, through the levels from level 1-4.

[Quick Training Evaluation and Feedback Form, based on Kirkpatrick's Learning Evaluation Model - \(Excel file\)](#)

kirkpatrick's four levels of training evaluation

This grid illustrates the basic Kirkpatrick structure at a glance. The second grid, beneath this one, is the same thing with more detail.

| level | evaluation type (what is measured) | evaluation description and characteristics | examples of evaluation tools and methods | relevance and practicability |
|-------|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | reaction | <ul style="list-style-type: none"> ⌘ reaction evaluation is how the delegates felt about the training or learning experience | <ul style="list-style-type: none"> ⌘ eg., 'happy sheets', feedback forms ⌘ also verbal reaction, post-training surveys or questionnaires | <ul style="list-style-type: none"> ⌘ quick and easy to do ⌘ not expensive to gather and analyse |
| 2 | learning | <ul style="list-style-type: none"> ⌘ learning evaluation is the measurement of the increase in knowledge - before and after | <ul style="list-style-type: none"> ⌘ typically assessments or tests before and after the training ⌘ interview or observation can also be used | <ul style="list-style-type: none"> ⌘ relatively simple to do; clear for quantifiable skills ⌘ less easy for complex learning |
| 3 | behaviour | <ul style="list-style-type: none"> ⌘ behaviour evaluation is the extent of applied learning back on the job - implementation | <ul style="list-style-type: none"> ⌘ observation and interview over time are required to assess change, relevance of change, and sustainability | <ul style="list-style-type: none"> ⌘ measurement of behaviour change typically requires cooperation and skill of line-managers |

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| | | | of change | |
| 4 | results | <ul style="list-style-type: none"> results evaluation is the effect on the business or environment by the trainee | <ul style="list-style-type: none"> measures are already in place via normal management systems and reporting - the challenge is to relate to the trainee | <ul style="list-style-type: none"> individual difficult; t whole organisati process n attributin clear accountal |

kirkpatrick's four levels of training evaluation in detail

This grid illustrates the Kirkpatrick's structure detail, and particularly the modern-day interpretation of the Kirkpatrick learning evaluation model, usage, implications, and examples of tools and methods. This diagram is the same format as the one above but with more detail and explanation:

| level | evaluation type (what is measured) | evaluation description and characteristics | examples of evaluation tools and methods | relevance and practicability |
|-------|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| | | <ul style="list-style-type: none"> reaction evaluation is how the delegates felt, and their personal reactions to the training or learning experience, for example: did the | <ul style="list-style-type: none"> typically 'happy sheets' feedback forms based on subjective | <ul style="list-style-type: none"> can be do immediate the trainin ends very easy obtain rea |

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| <p>1</p> | <p>reaction</p> | <p>trainees like and enjoy the training?</p> <ul style="list-style-type: none"> ⌘ did they consider the training relevant? ⌘ was it a good use of their time? ⌘ did they like the venue, the style, timing, domestics, etc? ⌘ level of participation ⌘ ease and comfort of experience ⌘ level of effort required to make the most of the learning ⌘ perceived practicability and potential for applying the learning | <p>personal reaction to the training experience</p> <ul style="list-style-type: none"> ⌘ verbal reaction which can be noted and analysed ⌘ post-training surveys or questionnaires ⌘ online evaluation or grading by delegates ⌘ subsequent verbal or written reports given by delegates to managers back at their jobs | <p>feedback</p> <ul style="list-style-type: none"> ⌘ feedback i expensive gather or analyse fo groups ⌘ important know that people we not upset disappoint ⌘ important people giv positive impressior when rela their experience others whi might be deciding whether to experience same |
| | | <ul style="list-style-type: none"> ⌘ learning evaluation is the measurement of the increase in knowledge or intellectual | <ul style="list-style-type: none"> ⌘ typically assessments or tests before and after the training ⌘ interview or observation can be used before and after although this is time-consuming | <ul style="list-style-type: none"> ⌘ relatively simple to : up, but m investmen thought required tl reaction evaluation |

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| 2 | learning | <p>capability from before to after the learning experience:</p> <ul style="list-style-type: none"> ⌘ did the trainees learn what was intended to be taught? ⌘ did the trainee experience what was intended for them to experience? ⌘ what is the extent of advancement or change in the trainees after the training, in the direction or area that was intended? | <p>and can be inconsistent</p> <ul style="list-style-type: none"> ⌘ methods of assessment need to be closely related to the aims of the learning ⌘ measurement and analysis is possible and easy on a group scale ⌘ reliable, clear scoring and measurements need to be established, so as to limit the risk of inconsistent assessment ⌘ hard-copy, electronic, online or interview style assessments are all possible | <ul style="list-style-type: none"> ⌘ highly relevant and clear-for certain training such as quantitative or technical skills ⌘ less easy for more complex learning such as attitude development which is famously difficult to assess ⌘ cost escalation if systems poorly designed, which increases 'required to measure & analyse |
| | | | <ul style="list-style-type: none"> ⌘ observation and interview over time are required to assess change, relevance of change, and sustainability of change ⌘ arbitrary snapshot | |

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| | | | <p>3</p> <p>behaviour</p> <ul style="list-style-type: none"> ⌘ behaviour evaluation is the extent to which the trainees applied the learning and changed their behaviour, and this can be immediately and several months after the training, depending on the situation: ⌘ did the trainees put their learning into effect when back on the job? ⌘ were the relevant skills and knowledge used ⌘ was there noticeable and measurable change in the activity and performance | <p>assessments are not reliable because people change in different ways at different times</p> <ul style="list-style-type: none"> ⌘ assessments need to be subtle and ongoing, and then transferred to a suitable analysis tool ⌘ assessments need to be designed to reduce subjective judgement of the observer or interviewer, which is a variable factor that can affect reliability and consistency of measurements ⌘ the opinion of the trainee, which is a relevant indicator, is also subjective and unreliable, and so needs to be measured in a consistent defined way ⌘ 360-degree | <ul style="list-style-type: none"> ⌘ measurement of behavior change is easy to quantify a interpret t reaction a learning evaluation ⌘ simple qui response systems unlikely to adequate ⌘ cooperati and skill o observers, typically lii managers, important factors, ar difficult to control ⌘ managem and analy: ongoing st assessmer are difficu and virtua impossible without a designed system frc the beginr ⌘ evaluation implement and applic is an extre important assessmer there is lit point in a reaction a |
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| | | | | <p>of the trainees when back in their roles?</p> <ul style="list-style-type: none">⌘ was the change in behaviour and new level of knowledge sustained?⌘ would the trainee be able to transfer their learning to another person?⌘ is the trainee aware of their change in behaviour, knowledge, skill level? | | <p>feedback is useful method and need not be used before training, because respondents can make a judgement as to change after training, and this can be analysed for groups of respondents and trainees</p> <ul style="list-style-type: none">⌘ assessments can be designed around relevant performance scenarios, and specific key performance indicators or criteria⌘ online and electronic assessments are more difficult to incorporate - assessments tend to be more successful when integrated within existing management and coaching protocols | | <p>good incre in capabili nothing changes b in the job, therefore evaluation this area is vital, albei challengin</p> <ul style="list-style-type: none">⌘ behaviour change evaluation possible g good supp and involveme from line managers trainees, s is helpful t involve th from the s and to ide benefits fc them, whi links to th level 4 evaluation below |
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| | | | <ul style="list-style-type: none"> ⌘ self-assessment can be useful, using carefully designed criteria and measurements | |
| 4 | results | <ul style="list-style-type: none"> ⌘ results evaluation is the effect on the business or environment resulting from the improved performance of the trainee - it is the acid test ⌘ measures would typically be business or organisational key performance indicators, such as: ⌘ volumes, values, percentages, timescales, return on investment, and other | <ul style="list-style-type: none"> ⌘ it is possible that many of these measures are already in place via normal management systems and reporting ⌘ the challenge is to identify which and how relate to to the trainee's input and influence ⌘ therefore it is important to identify and agree accountability and relevance with the trainee at the start of the training, so they understand what is to be measured ⌘ this process overlays normal good management practice - it | <ul style="list-style-type: none"> ⌘ individual results evaluation not partic difficult; a an entire organisati becomes \ much mor challengin not least because o reliance or line-managem and the frequency scale of changing structures responsibi and roles, which |

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| | | <p>quantifiable aspects of organisational performance, for instance; numbers of complaints, staff turnover, attrition, failures, wastage, non-compliance, quality ratings, achievement of standards and accreditations, growth, retention, etc.</p> | <p>simply needs linking to the training input</p> <ul style="list-style-type: none"> ≠ failure to link to training input type and timing will greatly reduce the ease by which results can be attributed to the training ≠ for senior people particularly, annual appraisals and ongoing agreement of key business objectives are integral to measuring business results derived from training | <p>complicate the process of attributing clear accountability</p> <ul style="list-style-type: none"> ≠ also, external factors greatly affect organisational and business performance which cloud the true cause of good or poor results |
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Since Kirkpatrick established his original model, other theorists (for example Jack Phillips), and indeed Kirkpatrick himself, have referred to a possible fifth level, namely ROI (Return On Investment). In my view ROI can easily be included in Kirkpatrick's original fourth level 'Results'. The inclusion and relevance of a fifth level is therefore arguably only relevant if the assessment of Return On Investment might otherwise be ignored or forgotten when referring simply to the 'Results' level.

Learning evaluation is a widely researched area. This is understandable since the subject is fundamental to the existence and performance of education around the world, not least universities, which of course contain most of the researchers and writers.

While Kirkpatrick's model is not the only one of its type, for most industrial and commercial applications it suffices; indeed most organisations would be absolutely thrilled if their training and learning evaluation, and thereby their ongoing people-development, were planned and

managed according to Kirkpatrick's model.

For reference, should you be keen to look at more ideas, there are many to choose from...

- ✂ Jack Phillips' Five Level ROI Model
- ✂ Daniel Stufflebeam's CIPP Model (Context, Input, Process, Product)
- ✂ Robert Stake's Responsive Evaluation Model
- ✂ Robert Stake's Congruence-Contingency Model
- ✂ Kaufman's Five Levels of Evaluation
- ✂ CIRO (Context, Input, Reaction, Outcome)
- ✂ PERT (Program Evaluation and Review Technique)
- ✂ Alkins' UCLA Model
- ✂ Michael Scriven's Goal-Free Evaluation Approach
- ✂ Provus's Discrepancy Model
- ✂ Eisner's Connoisseurship Evaluation Models
- ✂ Illuminative Evaluation Model
- ✂ Portraiture Model
- ✂ and also the [American Evaluation Association](#)

Also look at [Leslie Rae's excellent Training Evaluation and tools](#) available on this site, which, given Leslie's experience and knowledge, will save you the job of researching and designing your own tools.

evaluation of HRD function performance

If you are responsible for HR functions and services to internal and/or external customers, you might find it useful to go beyond Kirkpatrick's evaluation of **training and learning**, and to evaluate also **satisfaction among staff/customers with HR department's overall performance**. The parameters for such an evaluation ultimately depend on what your HR function is responsible for - in other words, evaluate according to expectations.

Like anything else, evaluating customer satisfaction must first begin with a clear appreciation of (internal) customers' expectations. Expectations - agreed, stated, published or otherwise - provide the basis for evaluating all types of customer satisfaction.

If people have expectations which go beyond HR department's stated and actual responsibilities, then the matter must be pursued because it will almost certainly offer an opportunity to add value to HR's activities, and to add value and competitive advantage to your organisation as a whole. In this fast changing world, HR is increasingly the department which is most likely to see and respond to new opportunities for

the support and development of the your people - so respond, understand, and do what you can to meet new demands when you see them.

If you are keen to know how well HR department is meeting people's expectations, a questionnaire, and/or some group discussions will shed light on the situation.

Here are some example questions. Effectively you should be asking people to say how well HR or HRD department has done the following:

- ✗ helped me to **identify, understand, identify** and **prioritise** my **personal development needs** and **wishes**, in terms of: **skills, knowledge, experience** and **attitude** (or personal well-being, or emotional maturity, or mood, or mind-set, or any other suitable term meaning mental approach, which people will respond to)
- ✗ helped me to **understand** my own **preferred learning style** and **learning methods** for acquiring new **skills, knowledge** and **attitudinal** capabilities
- ✗ helped me to **identify** and **obtain effective learning** and **development** that suits my preferred style and circumstances
- ✗ helped me to **measure** my **development**, and for the measurement to be clear to my boss and others in the organisation who should know about my capabilities
- ✗ provided **tools** and **systems** to encourage and facilitate my **personal development**
- ✗ and particularly helped to optimise the **relationship** between **me** and my **boss** relating to assisting my own personal development and well-being
- ✗ provided a working environment that **protects me** from **discrimination** and **harassment** of any sort
- ✗ provided the opportunity for me to voice my **grievances** if I have any, (in private, to a suitably trained person in the company whom I trust) and then if I so wish for proper consideration and response to be given to them by the company
- ✗ provided the opportunity for me to receive **counselling** and advice in the event that I need private and supportive help of this type, again from a suitably trained person in the company whom I trust
- ✗ ensured that **disciplinary** processes are clear and fair, and include the right of appeal
- ✗ ensured that **recruitment** and **promotion** of staff are managed **fairly** and **transparently**
- ✗ ensuring that systems and activities exist to keep all staff **informed** of company plans, performance, etc., (as normally included in a Team Briefing system)
- ✗ (if you dare...) ensuring that people are **paid and rewarded fairly** in relation to other company employees, and separately, paid and rewarded fairly when compared to market norms (your CEO will not like this question, but if you have a problem in this area it's best to know about it...)
- ✗ (and for **managers**) helped me to ensure the **development needs** of **my staff** are **identified** and **supported**

This is not an exhaustive list - just some examples. Many of the examples contain elements which should under typical large company circumstances be broken down to create more and smaller questions about more specific aspects of HR support and services.

If you work in HR, or run an HR department, and consider that some of these issues and

expectations fall outside your remit, then consider who else is responsible for them.

I repeat, in this fast changing world, HR is increasingly the department which is most likely to see and respond to new opportunities for the support and development of the your people - so respond, understand, and do what you can to meet new demands when you see them. In doing so you will add value to your people and your organisation - and your department.

See also:

[Howard Gardner and multiple intelligences theories](#)

[Bloom's Taxonomy of Learning Domains](#)

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