

International Entrepreneurship Educator's Programme

Entrepreneurial Learning - Pedagogical Note Series

38. Programme Evaluation

1. What is Programme Evaluation

Evaluation has three major conventional aims. First to feed forward to the future design of programmes. Second to feed back on the outcomes from programmes to deliverers, beneficiaries, sponsors and participants. Third, to feed back and forward on the management of programmes. The conventional use of evaluation is therefore as a post-hoc instrument to measure outcomes and process against planned objectives and ways of achieving them. A fourth, and perhaps most important component of an evaluation frame is as a basic instrument for: establishing programme concept, objectives and planned outcomes; creating a dynamic evolutionary learning framework; managing and monitoring the whole process; and communicating with all key stakeholders. This is demonstrated below.

Evaluation schema are conventionally divided into two distinctive parts, Formative evaluation and Summative evaluation.

Formative (Process) evaluation examines the processes by which the organisation(s) involved in the activity to be evaluated pursue it and manage.

Summative (Outcome) evaluation seeks to measure the various outcomes at different stages and facilitates judgement as to the degree to which they were the result of inputs.

The two are interdependent. The issues explored in Formative evaluation are those that impact directly on the outcomes shown in the Summative exercise. It is the Formative issues that will determine the capacity of the organisation to continue with the activity when the intervention is terminated. They focus equally upon issues of effectiveness as well as efficiency

Formative evaluations focus upon the following key questions:

1. Is there a clear concept behind the intervention -where is the targeted added value from the intervention and why is it needed? Has it been clearly set out?
2. Has there been a sound process of identification and selection of beneficiaries under the programme?
3. Have the needs of ultimate and immediate customers/clients (organisations and individuals) been analysed and grouped meaningfully?
4. How well have the products/services/programmes been designed to meet needs, covering:
 - the setting of programme objectives
 - the determination of detailed content
 - the design of any materials
 - the recruitment, selection and development of trainers/service providers
 - the proposed style of delivery
5. How sound has been the delivery process itself? Covering:
 - the competency of those delivering the programme/service
 - the process of any counselling, consultancy and follow up
 - the choice and use of networks and outside personnel
 - location and timing of programme activity
 - processes of assessment and accreditation
6. Is it clear how the deliverer will reach the market, identified in particular by the process of:
 - price setting
 - marketing mix chosen
 - channels used
 - PR
 - selling of the programme
7. Is there a clear process set out for evaluating success?
8. How well has the project been organised and managed in particular the strength of:
 - budgeting and financing
 - control systems and measures established
 - leadership and motivation

- organisation design – is it entrepreneurial?
- the scope established for innovation and new ideas
- the experience base behind the programme and its utilisation
- resource acquisition processes
- relevant stakeholder engagement
- strategic orientation
- planning processes
- communication to all relevant parties

Summative evaluation measures can be taken at various levels:

1. **Reaction** of immediate customers to the input, be training, counselling or a more direct service. This usually covers issues such as:
 - whether customers like the service
 - whether they think it is relevant to their jobs/institutions
 - whether they think they have learned something
 - whether they thought materials were sound
 - whether they like the tutors/ service providers
 - whether they like the location and amenities
 - whether there is lot or little they can use
 - whether they thought the workload was just right, too heavy or too light
 - whether they would like more and what
 - the highs and the lows overall

All the above except the last can be measured on a Likert scale 1 to 5 or 7.

2. **Learning Measures.** What has been learned by whom from the programme inputs in more detail. This can be measured by what asking different groups of participants in a programme at different levels what they think they have learned or what they and their organisation feel they are now competent to do. This can be done by interview, tests of learning as in an examination or demonstrated through observation of competency. The key issue here, often neglected, is whether the learning has been transferred into 'how to' in the recipient's own life and work situation as opposed to being regurgitated as per the input.
3. **Behaviour Measures,** measuring how and why people do things differently. This can be assessed by questions as to how individuals go about key parts of their work and what has changed as a result of the input. It can be checked by observation or processes of 360 degree review. In the case of emphasis upon personal behaviours in common situations (for example counselling) this may be tested by observation of events or video.
4. **Intermediate organisation change measures.** These seek to measure what has been changed in terms of organisation practices. For example in the context of micro finance, have there been new credit rating systems, new forms of marketing, new ways of dealing with customers in arrears etc In Business Development Service start up training there would be questions as to whether there has been start -up and how far down the track the business had proceeded since the programme.
5. **Ultimate level change.** This seeks to measure what impact the input activity has had on the ultimate performance of the organisation (in business context in terms of sales, profits, liquidity employment etc.)

It is clear that the further that one moves up the hierarchy of summative evaluation the more difficult it is to attribute results to any specific programme input, for two major reasons. First because of the passage of time needed for the results to permeate. Secondly, because of the difficulty of attribution resulting from the influence of numerous other factors. It is, for example, difficult in practice to truly attribute the impact of start up training course upon the growth and profitability of a business. Even to attribute the subsequent start of a business to a course may be difficult unless a perfect match experimental model is used, a situation which is almost impossible to achieve. Attempts to overcome such problems in order to take cost benefit measures of inputs are usually so contrived or alternatively so simplistic as to be less

than useful. They are nevertheless extensively used because of the need to justify the funding of programmes. High 'scores' in terms of start up results can of course be achieved by careful selection.

A major value of summative work therefore lies in using the 'hierarchy' in the process of setting up a programme of activity designed to help an organisation. For example, by enquiring what performance targets need to be achieved, what changes may be needed in the organisation to do this, whose and what behaviours need to change and what therefore needs to be learned, there will be better design of programmes.

2. **How can an exercise be constructed?**

This is best demonstrated via a Summative example, of evaluation of a broad based Entrepreneurship University Development Programme.

Ultimate Level Outcomes

For the University to contribute substantially to the long run competitiveness of the economy and social cohesion in UK society via a process designed to enhance its contribution to the Enterprise Culture. The measurable outcomes must be based upon the notion that UK competitiveness in the long run will be enhanced by the capacities of the graduate population to contribute more substantially to the development of the independent business sector and to the entrepreneurial design of public and private institutions.

Key measures might include?

1. Graduate business starts in line with average US university experience
2. Increase in the number of graduate- led independent growth businesses.
3. Increase in number of graduate led science based independent businesses
4. Increase in number of export oriented graduate led businesses.
5. Higher satisfaction rates of graduate recruiters as to entrepreneurial capacity.
6. The university meets the criteria for entrepreneurial status.
(checklist).
7. There is wider understanding by stakeholders as to their role in fostering the enterprise culture and active engagement in this process.

Intermediate Outcomes

Key measures might include:

1. Numbers of graduates involved in entrepreneurship education (mapping survey).
2. Degree of penetration across departments (mapping survey).
3. Pro-VC responsible for enterprise (mapping)
4. Number of departments with key staff responsibility for enterprise (mapping).
5. Enterprise built into strategic plan (mapping).
6. Number of programmes that meet NCGE Outcomes criteria (sampling plus 'standards' reporting)
7. Number of programmes that meet NCGE quality standards criteria. (standards reporting)
8. Numbers of trained enterprise teachers (mapping).
9. Clear IP policy (mapping)
10. Detailed engagement strategy with Science and Technology parks (mapping)
11. Amount of R and D funding attracted as opposed to pure research funding (mapping)
12. Leverage ratio – public to private funding of the university (mapping).
13. The number and level of activity of multi-disciplinary centres (mapping).
14. The number and scale of joint ventures with the private sector (mapping).
15. The number of visiting fellow posts for entrepreneurs and the level of engagement of entrepreneurs with the university (mapping).
16. The number of professors of practice or/relevant entrepreneurial adjunct professor/fellow equivalents (mapping).

Behaviour outcomes

Of Graduates: key measures might include an increase in the number of graduates who:

1. Explore strongly a career option in entrepreneurship (annual sample survey).
2. Seek a freelance, networked and self employed career (survey and career information).
3. Seek to work in the independent (SME) business sector (survey and careers data).
4. Seek out enterprise support facilities in the University and elsewhere (survey data).
5. An increase in the number of graduates that opt for entrepreneurship courses
6. An increase in the number of students who seek to develop an idea from their research and seek to protect it

Of Staff: measures might include;

1. Number of staff who seek to set up a business
2. Numbers who register a patent
3. Numbers who seek external consultancy
4. Numbers who become partners in business

Learning outcomes

(see the ncge learning outcomes)

Measures might include and increase in the number of graduates and staff who:

1. Understand the how to's of designing entrepreneurial organisations of all kinds and the importance of this (survey).
2. Thoroughly understand the benefits and dis-benefits of a self employment or 'own business' career (survey)
3. Know where to find ideas
4. Know how to evaluate an idea
5. Know how to protect an idea
6. Know how to determine the appropriate scale for a business
7. Know how to develop a business plan for different stakeholder purposes
8. Know how to negotiate (and who with) to get into business
9. Know how to set up the basic systems and deal with the various regulatory requirements
10. Understand how to anticipate most of the problems to be experienced in the first years and how to avoid them or deal with them
11. Know how to network effectively

Reaction Outcomes (to various programmes)

Measured by conventional Likert Scale indices as below:

(please score by circling number - 1= low and 7=high)

1. The programme was highly relevant	1	2	3	4	5	6	7
2. I learned a great deal	1	2	3	4	5	6	7
3. The materials provided were very good	1	2	3	4	5	6	7
4. The tutors were very good	1	2	3	4	5	6	7
5. I had ample opportunity to practice	1	2	3	4	5	6	7
6. There was a lot I could use	1	2	3	4	5	6	7
7. I felt strongly motivated at the end of the programme	1	2	3	4	5	6	7
8. At the end I felt fully equipped for the task	1	2	3	4	5	6	7
9. The programme would be useful to my institution	1	2	3	4	5	6	7
10. All necessary items were covered	1	2	3	4	5	6	7
11. The location was excellent	1	2	3	4	5	6	7
12. The amount of time was just right	1	2	3	4	5	6	7
13. I felt the right people were on the course	1	2	3	4	5	6	7
14. The programme was designed to meet my needs	1	2	3	4	5	6	7
14. Overall I found the programme most useful	1	2	3	4	5	6	7
15. The support after the programme was fine	1	2	3	4	5	6	7

The above exercise provides the basic targets for the programme design as well as a focus for evaluation at various summative levels. A Formative evaluation of the same programme would follow the format as noted earlier.

3. Relevance to Entrepreneurial Learning

Entrepreneurial learning is essentially focused upon 'doing things'. The evaluation framework described above is outcomes focused as well as entrepreneurial process focused. It has been noted above that the main value of the framework is in its use in the initial design of the programme not just a means of post-hoc measurement. By this means, even though it may not be possible to convincingly demonstrate the impact of a programme on outcomes at higher levels of the summative hierarchy, it will be possible to demonstrate that the programme was clearly focused in its design upon these.

4. Outcomes

The main outcome is a tool that can be used to clearly focus a programme right from the beginning and to demonstrate to sponsors what can and what cannot be usefully measured.