

PROGRAMME EVALUATION: THE CASE OF ENTERPRISE IN HIGHER EDUCATION

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This article outlines the evaluation strategy for the Enterprise in Higher Education (EHE) programme in the University of Ulster. It does so with reference to the discussion document on local evaluation strategy for EHE prepared by the Tavistock Institute. The article sets the evaluation strategy for EHE in the University by i) examining the conception of local evaluation at Higher Education Institution level, ii) identifying the need for a framework in which to set local evaluation and iii) relating what is happening in the University of Ulster.

Introduction

The aim of the Enterprise in Higher Education programme in the University of Ulster, within the framework of its Charter and Mission Statement, is to provide each full-time undergraduate student with the opportunity to develop his or her enterprise competencies as an integral part of their academic programme. The definition of Enterprise adopted is a broad one, and not confined to the narrow popular conception of the term which equates it with entrepreneurship in a business setting. Rather it emphasises the development in the undergraduate population of a repertoire of personal transferable skills – including creativity, teamwork, leadership, negotiation and persuasion, problem solving, social, community and

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economic awareness, achievement motivation, communication and information technology. In short, a base from which students can leave the University equipped with the confidence, the ability, and the motivation to take on the challenges of the world of work in the 1990s and beyond, and to make an effective contribution to the social and community environment.

In December 1989 the Employment Department: Training Agency produced a document, "Enterprise in Higher Education. Guidance for Applicants", the aim of which was to provide guidance for those organisations and institutions wishing to participate in the third and fourth rounds of EHE starting in the academic years 1990/91 and 1991/92 respectively. This stated that proposals for funding must include "clear arrangements for evaluating and monitoring ... design, processes, outcomes and value for money" and must also "show how the result will feed into the programme's continued improvement." Due to the identification of uncertainty and confusion among HEIs involved in the first round of the EHE contracts as to the purpose and priority local evaluations should be given within their institutions, the Training Agency's Higher Education branch requested the Tavistock Institute to prepare a discussion document on a local evaluation strategy for EHE. It is with reference to this document that this paper will attempt to set the evaluation strategy for the Enterprise in Higher Education in the University of Ulster by:

- i. An examination of the conception of local evaluation at HEI level.
- ii. Identifying the need for a framework in which to set local evaluation.
- iii. Relating what is happening in the University of Ulster.

The Conception of Local Evaluation at HEI Level

The Tavistock Institute and the National Foundation for Educational Research carried out national evaluations of the first and second years of the EHE initiative respectively (see Table 1). Local evaluation was seen by them to have a role in the overall evaluation of EHE and it was accepted that without the cooperation of local EHE Directors neither of these bodies could have successfully undertaken their task. They viewed the role of local evaluation as an active one in that,

- it provides information for the use of others;
- it generates information for the specific HEI's own use.

As the initiative progresses and HEIs are required to prepare annual reports the necessity and importance of local evaluation is being highlighted.

Table 1: Conceptions of Local Evaluation

- Evaluation is viewed as synonymous with existing course review and validation procedures.

This is an instance of the “we are doing it already syndrome” when local evaluation is seen as integral with what the HEI already undertakes by way of course review and no further action is taken. Tavistock infers that these processes are largely confined to polytechnics.

- Evaluation is equated with the provision of data to meet the TA’s requirements for performance indicators.*

In this instance local evaluation is seen as the provision of facts and figures because of a contractual obligation rather than for internal utility.

- Evaluation is equated with student assessment. Here local evaluation rests heavily on “before” and “after” assessments of students with regard to factors such as attainment levels and the skills acquired.
- Evaluation is identified with the way the management of an HEI monitors its own effectiveness.

The conception here is that local evaluation is concerned primarily with target attainment and expenditure. (Tavistock Institute 1989)

* Performance indicators have been identified by the Training Agency. These include; numbers of students, staff and courses involved in the programme, the increase or enhancement of employer participation and contributions, staff development activities and unit costs per participating student.

The main sources of difficulty being experienced by HEI’s are also being identified.

In their discussion paper the Tavistock Institute (1989) found four main overall conceptions of local evaluation within the eleven institutions in the first round. Taken in isolation these conceptions produce only a partial evaluation of EHE within an institution. All should feature as part of a comprehensive local evaluation strategy. However the Tavistock Institute concluded that the individual HEIs lacked a framework within which they could relate these conceptions together and, consequently, the overall pattern emerging was that of partial

evaluative activity rather than an overall evaluation of the initiative within an institution.

The difficulties experienced by HEIs and highlighted in the Tavistock Institute's discussion document are familiar to those involved in the management of the EHE initiative in the University of Ulster. A critical dimension to the success of the programme within the University is seen to be the attitude, empathy and support of staff not only in exploring how the concept of being enterprising can be legitimately and properly incorporated in their courses, but also in their cooperation in assisting in the evaluation process itself. The ease with which data can be gathered, the immediate value of the material collected for organising ongoing enterprise activities and the resource implications are all factors that have to be taken into account in any local evaluation. In the case of the University of Ulster it is envisaged that as the scale of EHE activities increases throughout the remainder of the programme, responsibility for administering the project evaluations will increasingly fall on the project teams themselves.

The Tavistock Institute discussion paper also unveiled differences in the way in which the 11 institutions involved in round one designated staff to be responsible for evaluation. In some institutions part time staff, other than managers or personnel directly involved in the delivery of EHE, were responsible for evaluation or else a member of the EHE team had, alongside other activities, responsibility for overseeing evaluation. These arrangements were regarded as being far from ideal in promoting the effectiveness and furtherance of a local evaluation and it was noted that attitudes within a number of these institutions were changing in that local evaluation was now being viewed as an activity in its own right and, as such, needed to be resourced and possibly required additional resources. Furthermore, there was seen to be a necessity for objectivity and a long term view if the evaluation was to be effective.

The way in which staff resources have been assigned to the evaluation of EHE within the University of Ulster will be discussed later. However at this point it is worth noting that the spatial isolation experienced by the University from the rest of the U.K. Higher Education Institutions has made it difficult to lock into existing networks, particularly those which are emerging on a regional basis, rather than U.K. wide – which is important for the exchange and sharing of information and ideas. Furthermore, for almost the whole of the first year contract the University has not had the assistance of a Higher Education Adviser who could

have played a vital role in information exchange and advice. This has now been rectified. The University is not alone in terms of receiving guidance and expertise to help it develop a local evaluation strategy. This lack of support to HEIs was a criticism voiced by the Tavistock Institute when they stated:

“Neither pre-proposal (in Guidance Notes to Applicants), nor in the run up to contract, was local evaluation systematised and given salience except possibly in terms of performance indicators. To that extent it is not surprising that some HEIs have so far failed to come up with coherent and consistent local strategies of their own.”

This criticism was based on information gleaned from Higher Education Institutions participating in the first round of EHE. Recently, at the first Scottish Enterprise in Higher Education (SEHE) Conference held in Edinburgh, the desire to “get it right” with regard to a strategy for evaluation was apparent through the presentation of a number of workshops the objectives of which were to stimulate debate and share information.

The Need for a Framework

Civil Service managers – unlike EHE managers – have access to a guide intended to help them evaluate policies and programmes for which they have a responsibility. The difficulties that have been encountered by HEIs in the local evaluation of EHE emphasises their need for a similar guide and a framework in which to place local evaluation. How this could be achieved in such a way that it would bridge the gap between the requirements of a local and a national evaluation of EHE was addressed by the Tavistock Institute. They identified five key questions that a framework of this kind needs to answer.

- Who is the local evaluation for?
- What are the stages in a local evaluation?
- What are the overall and specific purposes of a local evaluation?
- How should a local evaluation be staffed? and
- What methods are most suited to a local evaluation?

It would seem appropriate at this stage to look at how the monitoring and evaluation of the EHE programme is being undertaken in the University of Ulster in order that the strategy developed for evaluation within the institution may be related to each of these five key questions.

Table 2: Evaluation Approaches Developed

- The quantitative approach to the formative evaluation of programmes for programme developers and to the summative evaluation of programmes required by programme sponsors and funding agencies. This approach has emphasised the collection of standardised data from large samples to produce aggregated, standardised and technically rigorous information on programme processes and outcomes.
 - The qualitative approach to programme evaluation which was more explicitly geared to understanding the unique characteristics and processes within local settings and which leads to in-depth understanding of unique programme configurations crucial to programme improvement aims.
 - The utility focus approach to evaluation emphasises the utility of evaluation findings in seeking to address the interests of a particular stakeholder.
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The University of Ulster: Programme Evaluation – The Case of EHE

The field of evaluation research has evolved rapidly over the last two decades, and a number of different models of the evaluation process and of the role of the evaluator within it have been developed. Three particular evaluation approaches have been developed.

The evaluation of the EHE programme in the University of Ulster is set in the context of these approaches to evaluation (see Table 2 above). The evaluation strategy adopted is both comprehensive and eclectic: comprehensive in its coverage of all aspects of the EHE programme (including formative evaluation, summative evaluation and outcome studies) and eclectic in drawing on the full range of approaches to evaluation available today.

At the University of Ulster the monitoring and evaluation of the programme will be undertaken on two levels: that of the course team/ department in relation to particular initiatives and developments; and that of the University as a whole (see Table 3 opposite). The major task at both levels of evaluation, however, is to investigate the extent to which the aims and objectives of the programme are being realised. Whilst monitoring gives a summary account of the progress of the initiative, through the development of an appropriate set of performance indicators on all aspects of the Enterprise in Higher Education programme, the assessment of the overall impact of the programme is the major task of the evaluation procedures.

Table 3: Areas Evaluation Needs to Address

- The extent to which student awareness of enterprise competencies and their application has been enhanced.
 - The extent to which curriculum development is meeting the need for student learning in enterprise competencies.
 - The extent to which the links between the University and the local industrial community have been enhanced; and
 - The level of overall institutional change.
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Ongoing monitoring and evaluation of projects and course developments is undertaken as an integral part of the EHE programme. The University, as part of its contribution and commitment to the EHE programme is also undertaking a longitudinal study to assess the overall impact of the Enterprise in Higher Education programme in the University of Ulster. This longitudinal study has the following objectives:

- provide a benchmark of current attitudes to enterprise and enterprise competencies among both staff and students across the University at the outset of the Enterprise in Higher Education programme, and assess student aspirations, including career aspirations;
- develop and apply a range of appropriate evaluation instruments to assess the impact of the Enterprise in Higher Education programme in changing attitudes to enterprise among staff and students;
- assess employers' experience of and attitudes to graduate recruitment in general and to the Enterprise in Higher Education programme in particular.

Ultimately the study should indicate to what extent the key aim of the EHE programme within the University as initially proposed – i.e. bringing about long term, institution-wide changes which will have enabled all staff and students to develop the knowledge, skills and personal qualities appropriate to the concept of enterprise as originally defined – has been realised.

The question to be addressed now is how does this two-level strategy for evaluation of the EHE programme in the University of Ulster fit into the framework and answer the key questions as posed by the Tavistock Institute in their discussion paper?

Question 1. Who is the local evaluation for?

In the case of the University of Ulster local evaluation is for those bodies outside the University which have a vested interest in EHE. These would include the Training and Employment Agency who are the funders and have a responsibility to ensure that public money is being spent wisely. Also included would be employers and educationalists: employers who are the consumers of the products produced by the University, i.e. graduates; educationalists who may be responsible for directing the "raw materials", i.e. undergraduates, to the institution. Both of these, employers and educationalists are interested in the quality being offered and along with the funding bodies are, to some extent, stake-holders in the evaluation of EHE and may themselves set some of its goals. The University itself is also a stake-holder and as such has an interest in the local evaluation of the EHE programme. Within the University of Ulster the ongoing monitoring and evaluation of the programme by the EHE unit is of a formative nature, whilst that of the longitudinal study which will be evaluating and assessing the impact of the initiative within the University will be summative. Local evaluation is also shared nationally through institutional liaison and the dissemination of information (journal articles, conference papers, etc).

Question 2. What are the stages in a local evaluation

The Tavistock institute discussion paper suggests that ideally an evaluation considers three stages of a programme; the design stage, progress and implementation, and outcome and effects. In the context of the University of Ulster, the design stage involved carrying out a systematic and detailed curriculum audit for every full time undergraduate programme in each of the seven faculties in the University. This yielded a detailed picture of the current activities in each year of these programmes in relation to the institution's defined enterprise competencies. The importance of the audit was that it established a base line from which can be evaluated any changes brought about by the Enterprise Initiative and it identified existing areas of good practice. A further activity was a pilot survey of employers who recruit graduates.

Table 4: Aims of Employer Survey

- To ascertain the competencies employers looked for in graduate recruitment.
 - To ascertain the level of employer satisfaction with the quality of their graduate recruits.
 - To suggest areas for improvement in the education of undergraduates vis a vis enterprise competencies.
 - To obtain an initial response from employers to the Enterprise Initiative.
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A small-scale survey of 1988/89 University of Ulster graduates representing all Faculties of the University was also undertaken.

Table 5: Aims of Graduate Survey

- To ascertain the competencies they considered relevant to obtaining employment.
 - To ascertain the extent to which their University education equipped them with these competencies.
 - To analyse the level of consonance/dissonance between competencies looked for by employers and those actually utilised in the employment situation.
 - To obtain responses to the Enterprise Initiative.
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This, along with other work, laid a foundation upon which an evaluation strategy was built. As stated earlier the design of the monitoring and evaluation of the programme is being undertaken on two levels: *level one* being that of the course teams/departments and *level two* being that of the University as a whole. Monitoring will give a summary account of the progress and implementation of the programme whilst evaluation procedures will address the effects and outcomes – a cornerstone of the evaluation process being the longitudinal study. Whilst evaluation at level one will tend, primarily in the early years, to be of a formative nature contributing to the development of the initiative, level two evaluation will be summative in that it will be concerned with drawing conclusions with respect to the impact of the initiative in the areas of student awareness of enterprise competencies and their application, curriculum development and the links between the University and the

local industrial community. Furthermore it will take account of overall institutional change.

Question 3. What are the overall and specific purposes of a local evaluation?

Three main purposes of a local evaluation have been identified. These are;

- that local evaluation should contribute to the effective management of EHE at a local level.
- that local evaluation contributes to accountability.
- that local evaluation supports and promotes organisation learning.

The overall and specific purposes of a local evaluation have been accounted for within the University of Ulster in that the management of the Enterprise Initiative has been undertaken on three levels:

- i. The Management Committee – the membership of which reflects the high value the University places on the maintenance of education/industry links, and the integration of such links within the University itself.
- ii. The Enterprise Unit – consisting of the Director of Enterprise, a Research Officer and a clerical assistant, all of whom are full-time. Attached to the Enterprise Unit on a consultative basis are a Training Co-ordinator and a Research Co-ordinator.
- iii. The Faculty Enterprise Advisers – attached to the Enterprise Unit for approximately one day per week.

These three are interlinked in that the Faculty Enterprise Advisers liaise with the Director of the Enterprise Unit who in turn liaises with the Executive Director for Enterprise (who is attached to the Unit on a part-time basis). The Executive Director for Enterprise acts as a link between the Enterprise Unit and the Management Committee. The Enterprise Director is responsible for the day-to-day management and implementation of the EHE programme and consequently the Enterprise Unit is central to the whole process. It is in this Unit that the responsibility for information gathering with regard to what is happening is placed. The collection of relevant data, whether this be quantitative or qualitative, the interpretation and dissemination of such and liaison and sharing of information with all interests are some of the ways in which the purposes of local evaluation as outlined earlier – to contribute to the effective management, to contribute to

accountability and to promote organisation learning – are met within the University. Review and reflection are also necessary ingredients of this process.

Question 4. How should a local evaluation be staffed?

The Tavistock Institute discussion paper puts forward three main “models” of staffing examples which they found within the first round HEIs.

The first model was where local evaluation is undertaken by *programme participants*. This is a form of self-evaluation when evaluation is carried out by those responsible for the management and implementation of the overall EHE programme, e.g. in the University of Ulster this would be by members of the Enterprise Unit.

The second model was when someone from *within the HEI* but *not from within the EHE Unit* undertook the evaluation. Examples of this occurred when researchers from other departments, e.g. education or a business school, provided evaluation inputs for EHE as a whole or in part as in conducting a survey of students or examining curriculum development.

The third model was when local evaluation was undertaken by *an outsider*. In other words the evaluation of the EHE programme was contracted out but the outsider was still answerable to EHE’s own management within the HEI concerned. This could be to undertake a full or partial evaluation of the EHE within the contracting HEI.

All of these models were viewed as having strengths and weaknesses. Doubts around the objectivity of a local evaluation could be raised when the evaluation is undertaken by insiders; and yet on the other hand merit was seen in management engaging in self-evaluation in terms of its overall effectiveness. The discussion paper further implied that “formative” evaluations probably needed some degree of independence although they recognized that they also required a familiarity with the context that staff from elsewhere in an HEI, but external to the EHE personnel, may be best equipped to provide. Demands with regard to public accountability they viewed as best being met by outsiders after careful negotiation with insiders.

Local evaluation of the EHE programme within the University of Ulster is a combination of the first two models outlined in the discussion paper. The Enterprise Unit employs a full-time Research Officer who has been responsible for implementing the monitoring and evaluation activities of the programme in

conjunction with the Research Co-ordinator and under the overall guidance of the Enterprise Director. As the number of projects and activities within the programme increases monitoring and evaluation will become, of necessity, the responsibility of the course team or department involved in the particular initiative.

A second Research Officer working in conjunction with the Research Co-ordinator, (based outside the Enterprise Unit but in the University's Business School), is undertaking a research project which involves a longitudinal study. The objective of this study, which is funded by the University in addition to the Training and Employment Agency's funding of EHE, is to evaluate and assess the overall impact of the Enterprise in Higher Education programme in the University of Ulster. Thus at this point in time, the University's local evaluation includes elements of two of the three models identified.

Question 5. What methods are most suited to a local evaluation?

This was the final question posed in the discussion paper. The respective merits of quantitative and qualitative methods and of the advantages and disadvantages of standard instruments or of case studies and long term research were discussed. However the conclusion reached was that it is not possible to specify a single method or approach that would meet the needs of all of EHE's local evaluation agenda. This is not surprising when account is taken of the differences there are within and across HEIs and the fact that the focus of EHE programmes varies from institution to institution.

Within the University of Ulster several of these methods are being employed. The information and data being gathered is of both a qualitative and quantitative nature and long term research in the form of the longitudinal study is being undertaken. There is ongoing work also in the area of developing and evaluating a range of instruments for use in the Enterprise programme.

Conclusion

This paper attempted to explain the evaluation strategy for the Enterprise in Higher Education programme within the University of Ulster by referring to the Tavistock Institute's discussion document (1989) on a local evaluation strategy for EHE. Four main overall conceptions of local evaluation were elaborated and the need for a framework in which to set evaluation was identified. Five key questions that a framework for local evaluation needs to answer were posed and what was happening within the University in relation to these five questions was outlined.

Table 6: Operational aims of NFER Project

- To investigate the the feasibility of measuring outcomes of the initiative.
 - To base its findings on the perceptions of those involved in the initiative.
 - To adopt a strategy in which qualitative and quantitative approaches complement each other.
 - To concentrate on changes which the initiative is bringing about, particularly in curricular provision and in students' acquisition of personal transferable skills.
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Finally, the University of Ulster is now in the third year of its EHE programme. It is gratifying that much of the work, both prior to securing the contract and now being undertaken, (particularly in relation to the longitudinal study), parallels the approach adopted by the National Foundation for Educational Research (NFER) (see Table 6 opposite) in their national evaluation of the second year of EHE.

These match fairly closely, as set out earlier, the aims of the monitoring and evaluation of the EHE programme in the University of Ulster. A flaw of the longitudinal study is that it would have been better if the first observation could have been made when the subjects were in their lower sixth forms, before they began to apply for entry to higher education, but of course this would not have been feasible. However, if any real meaningful measure of the outcomes of the initiative within the University of Ulster is to evolve, the subjects followed through their undergraduate courses need, at some later date, to be involved in graduate follow-up surveys.

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