Laetus Lategan

Research, monitoring and evaluation in service learning: the distinct characteristics of research into service learning

This article argues that research, monitoring and evaluation in service learning cannot be placed on one conceptual level. Research is about the creation of new knowledge. Monitoring and evaluation deal with, amongst other things, quality control and the development of a process. Although research, monitoring and evaluation can complement each other, they cannot be treated as one conceptual activity, since their aims and objectives differ. The problem statement is that the meaning of research, monitoring and evaluation will be lost if they are all treated on the same conceptual level. The aims of this article are to identify the difference between research, monitoring and evaluation in service learning as well as to identify a framework for research into service learning.

Navorsing, monitering en evaluering in diensleer: die onderskeidende eienskappe van navorsing in diensleer

Hierdie artikel argumenteer dat navorsing, monitering en evaluering in diensleer nie op een konseptuele vlak geplaas kan word nie. Navorsing gaan oor die skep van nuwe kennis. Monitering en evaluering handel oor kwaliteitskontrole en die verloop van 'n proses. Hoewel hierdie aktiwiteite mekaar kan aanvul, kan dit nie as een konseptuele aktiwiteit hanteer word nie omdat die oogmerke en doelwitte verskillend is. Die probleemstelling is dat die betekenisvolle onderskeid in die doelstellings van navorsing, monitering en evaluering verlore gaan indien hierdie aktiwiteite gesamentlik op dieselfde konseptuele vlak hanteer word. Die doelwitte van die artikel is om die onderskeid tussen hierdie begrippe in diensleer te verstaan en om 'n raamwerk vir navorsing in diensleer daar te stel.

Prof L O K Lategan, Dean: Research & Development, Central University of Technology, Free State, Private Bag X20539, Bloemfontein 9300; E-mail: llategan@cut.ac.za

ervice learning (SL) can best be described as a curriculum approach that integrates learning with community service (community outreach) (cf Furco 1996: 2-6; Snyman 2004: 9; Swick 2001: 261-5). General characteristics of SL are that it enables a student to gain experience of the meeting of needs in the community; it incorporates reflection and academic learning and it contributes to students' interest in and understanding of community life. SL has as objective to combine volunteer work with education (Fourie 2003: 31).

Fourie (2003: 31) makes an interesting remark when she says that SL has succeeded in uniting the three core activities of higher education: teaching/learning, research and community service. She continues by stating that this unification of activities should be seen at an academic conceptual level. On this conceptual level basic and applied research link and merge into application and related forms of outreach.

SL prepares students to reflect on a real-life activity. Through SL students are introduced to real-life issues. Their learning is based on what is actually happening. It is not an abstract interaction with the world but a reflection on real-life activities. Reflection involves, amongst others, journal keeping, discussion, reading and writing papers (Gray *et al* 1999: 4).

SL holds merit for the delivery of academic programmes to students who are future employees of government, business and industry and at the same time members of social communities in dire need of development. Any efforts to foster new academic programmes to the benefit of their end-users should be applauded.

Although there is a close link between these three core higher education activities, service programmes are better known in the teaching and community service portfolios than in the research portfolio. Although Perold (1998: 51) mentions that there is a relationship between community service programmes and teaching and research, there is no clear definition of the relationship between community service and research. A lack of definition does not prevent students from doing their research into community problems as part of community service. This research will be to the benefit of the community: "The research identified a number of examples which suggest that community engagement can generate research which has the academic merit while simultaneously leading to community benefit" (Perold 1998: 73).

It is noticeable however that although SL is not a new concept, it is new on the South African higher education agenda. The National Plan for Higher Education (MoE 2001) has, for example, no in-depth discussion on the role and contribution of SL to curriculum reform. This does not take away the important role that SL can play in curriculum reform and universities' engagement with their broader communities.

1. Problem statement

An important initiative to revise the curricula through SL comes from the Joint Education Trust Education Services Board (JET). During November 2002 the JET approved its CHESP Grant Strategy for 2003 and 2004 (JET 2002). In this grant strategy the aims and objectives of the CHESP initiative are outlined. The reason for this strategy is

to pilot programmes that give expression to the reconstruction and development mandate of the White Paper on the Transformation of Higher Education (DoE 1997) through appropriate community, higher education, service sector partnerships (JET 2002: 2).

The partnerships are crucial in meeting the aims and objectives of the grant. The grant strategy identifies three objectives of the partnerships (JET 2002: 2):

- the contribution towards the empowerment and development of local communities;
- to make higher education policy and practice more relevant and responsive to community needs;
- to enhance service delivery to participating communities.

The grant strategy makes provision for the monitoring, evaluating and researching of all CHESP SL modules. This should be the responsibility of "a more independent campus-based CHESP researcher with direct monitoring, evaluation and research responsibilities" (JET 2002: 4). Schedule 6 explains the purpose of the CHESP researcher:

To co-ordinate, facilitate and support the monitoring, evaluation and research activities of CHESP Module Convenors and to conduct independent research on the CHESP service learning modules in accordance with guidelines provided by JET (JET 2002: 17).

The CHESP grant strategy formulates no less than 14 key tasks for the campus-based researcher. These tasks revolve around the monitoring, evaluation and research activities of the campus-based CHESP researcher.

From the grant strategy and the responsibilities assigned to the campus-based researcher, it is quite evident that research, monitoring and evaluation are placed on the same conceptual level. The danger of such an approach is that research, monitoring and evaluation can easily be confused to be the same activity. Although these activities are related, monitoring and evaluation are not typical research activities. Evidence for this can be found in the key tasks assigned to the campus-based CHESP researcher. I mention two examples from the grant strategy to illustrate how research, monitoring and evaluation have been placed on the same conceptual level:

- "Review Narrative Reports [...] to ensure that they are an accurate reflection of the module and that they comply with the Narrative Report guidelines" [my emphasis, LL] (JET 2002: 17). Reviewing and complying are typical monitoring and evaluation activities and not a research endeavour. "Ensure" is quality assurance jargon and a quality function, not a research one. Monitoring and evaluation have to do with the how question: how is it done?
- "Conduct and document random *interviews* and *focus group discussions*" [my emphasis, LL] (JET 2002: 17). Interviews and focus group discussions are part of data/information collection which is part of a qualitative research approach. This is in line with the "why" question which is a typical research question: why is it done?

To me it seems that research, monitoring and evaluation activities are not always distinguished as distinct though related activities. This is not only evident from the grant strategy but also from literature in general. A good example is provided by Fourie (2003: 32), who defines research into SL as "structured reflection on the service learning activity". Reflection too greatly resembles the notion of looking at the surface and not looking at what lies beneath it. Conville & Weintraub (2001: 12, 44) say that reflection includes thinking, writing, discussion and analysis:

Whether written or oral, highly structured or free flowing, reflection is your students' chance to put into words how they see their experience at the service site making contact with the course material.

Research, however, is much more than just structured reflection. Research is an in-depth analysis of a problem to solve the problem (for a detailed discussion see section 2.

The problem statement of this article may be derived from these remarks and observations: research into SL (the "why" question) and monitoring and evaluation (the "how" question) cannot be placed on the same conceptual level. Doing so creates the impression that the "why" and "how" questions both deal with research. The "how" question has to do with routine work, process and quality assurance, which are not the same as research. These two questions can inform each other but they deal with two separate domains of academic activity. I would like to argue, therefore, that locating research, monitoring and evaluation on the same conceptual level limits research to knowledge application, when research should in fact be dealing with the generation of new knowledge.

In dealing with this problem, the aims of the article can be formulated as:

- developing an understanding of the difference between research, monitoring and evaluation in SL, and following on this
- setting a paradigm, framework and values for research into SL.

The hypothesis is that an in-depth understanding/clarification of the difference between research, monitoring and evaluation will improve the practice of SL, especially since it is a new concept in South African higher education. The advantage could be that the development of SL will be effectively managed once the management team knows exactly what they need to manage as regards the research, monitoring and evaluation of SL.

The next section will consider why research, monitoring and evaluation cannot be placed on the same conceptual level.

2. The conceptual levels of research (why?) and monitoring and evaluation (how?)

In general, research has to do with the creation of new knowledge. The creation of new knowledge is the result of a systematic analysis of a problem, and ensuing from the analysis, to solve the problem. Basic research investigates a problem against the background of the basis

of a subject. The knowledge gained from this analysis is then used to solve the problem. This is known as applied research (cf Lategan 2003: 1; Lategan et al 2004: 34 & 2005: 25). Research looks into the way in which concepts, theories and trends are related. This is done through scientific investigation based on critical enquiry, discovery, systematisation of facts and evidence and the formulation of new theories. The research done is based on a stated paradigm and method and has as objective the solution of an existing problem and/or the identification of a new problem. In research, the question "why?" is frequently asked. The "why" question normally looks into the reasons for a particular activity. It implies that the investigation is into the fundamentals ("mechanics") of an issue and not into the process and/or outcome of the issue. Research is all about the unpacking and the solution of a problem: the systematic analysis of a given problem to identify ways for solving a particular problem. Knowledge is produced in the context of application and is transdisciplinary in nature. This approach is referred to as "Mode 2 Knowledge Production" (Gibbons 1997: 21).

Based on this conceptualisation of research, two obvious research questions at the heart of SL will be:

- Why is it necessary to integrate academic learning with authentic community service?
- What are the effects of differences between a classroom-centred approach, SL and co-operative education?

It is clear that the focus is not on the process of how SL is being done, but rather on the reason for which it is being done and, subsequently, the results. The latter will necessitate an understanding of curriculum, community service and different learning styles and delivery modes. A good example of this is found in the recommendations of Gray *et al* (1999: 100). To encourage future research they state that

[m]ore research is needed to determine the effects of the [...] investment in capacity-building and, in particular, whether and when capacity-building pays off in terms of higher quality, larger, or more sustainable programs.

Strauss's view of science as analysis is particularly helpful in assisting with the why question in SL. Strauss (2001: 4-5) argues that science investigates identification (similarities) and distinction (differences).

To identify and to distinguish are to analyse, and analysis is the exact function of science. If one relates analysis to research, then it is clear that in the research process one focuses on a particular issue. In doing so, one has to identify. This is only possible if distinction is drawn into the equation. Analysis has to do with why? things are as they are. Analysis contributes to the creation of new knowledge. Take for example one of the research questions outlined above: Why is it necessary to integrate academic learning with authentic community service? A research approach will unpack the question by investigating the reasons why? there are links between academic learning and community service.

As stated before, quality assurance is a typical monitoring and evaluation activity which usually deals with the how? side of things. How effective is the implementation of the SL modules? How do SL modules relate to the future employability of the student? My argument that monitoring and evaluation are quality assurance activities can be traced back to quality assurance itself. Quality can be defined as fitness for purpose (Harvey 1995: 8-12 & Lategan 1997: 98-9). Quality confirms whether a particular activity meets the stated objectives and extent to which goals have been achieved. It also confirms whether value has been added to/by an activity. In the context of monitoring and evaluating in SL the question is whether a module meets the stated outcomes and to what extent a goal has been achieved. The necessity of monitoring and evaluation is that it ensures that SL meets the set minimum requirements (standards) and the required quality.

It should be stated that not all research questions are formulated as "why?" questions. Consider the following examples as research questions provided by Perold (1998: 147):

How do the programmes benefit the students' knowledge of the field in which they are studying? What skills do the programmes provide to students? Do the programmes promote social awareness and understanding, especially of the poor and of South Africa's social problems?

The answers to all three research questions will contribute to an indepth understanding of the problem. These answers will also contribute to the creation of new knowledge — which is a typical research activity. Research can therefore also draw on the "how?" if it contributes to the creation of new knowledge. Although there is a conceptual difference between research, monitoring and evaluation in SL, these processes can

inform each other. To mention once again how the research questions provided by Perold (1998: 147) may assist understanding:

How does the programme benefit those for whom the service is provided — both individuals and communities? How does the programme address local social problems?

To identify how this benefit is derived, research is needed. To assess continuous benefit to the individual and community, monitoring and evaluation are needed.

According to Gray *et al* (1999: 33) research methods are also needed to describe the relation between research, monitoring and evaluation activities. Researchers make use of questionnaires, site visits, focused group discussions and individual interviews. Research is helpful in providing an in-depth insight into the answers on the "why?" questions as well as in understanding the process and the assessment of the process (monitoring and evaluation) ("how?" questions).

It should therefore be clear that there is a conceptual difference between research, monitoring and evaluation in SL. The philosophy of science will be helpful to outline the distinct characteristics of research into SL.

3. The unique characteristics of research into service learning in the context of the philosophy of science

Mouton (2002: 138-40) identifies the "three worlds framework" in science. These frameworks and their characteristics are:

World framework	Characteristic
The world of lay knowledge	Common sense, wisdom, know-how
World of science	Truthful knowledge/epistemic interest of science
World of meta-science	Reflections on the nature of science

The value of the third framework is the continuous assessment of the scientific practice. Meta-science involves reflection on the nature of science. In this sense science is a "self-correcting enterprise". Decisions are subjected to quality checks in order to attain truthful and valid results (epistemic interest of science). Proponents of meta-science are

the philosophy of science, research methodology, research ethics and the sociology and history of science (Mouton 2002: 138-9). These exponents can be helpful for various reasons. One prominent reason is that the philosophy of science looks into the paradigm from which a scientist is arguing a particular viewpoint.² The philosophy of science outlines the dominating paradigm at a given time. The paradigm followed in this article is an analytical approach based on identification and distinction. I therefore propose that research into SL should be understood against this paradigm. The value of this paradigm is that it not only identifies and distinguishes between related and different activities within the research process itself but also assists in distinguishing between research, monitoring and evaluation.

The philosophy of science also questions the objectivity of knowledge (objective knowledge à la Karl Popper). Every scientist is influenced by a particular scientific tradition such as rationality, irrationality, positivism and pragmatism. This is evident from a variety of scientific traditions. As examples I can refer among others to Descartes (cogito ergo sum), Kuhn (paradigms), Popper (objective knowledge), Chomsky (innate idea), Dooyeweerd (ground motives). One cannot but conclude that there is no such a thing as objectivity in science. The researcher into SL will have his/her own a priori paradigm. The way in which the paradigm influences the "objective look" at facts should be borne in mind when a researcher's analysis of a particular SL problem is analysed. Based on this argument, one may arrive at the conclusion that one's science view, for example, will influence the paradigmatic point of departure in SL. I, for example, hold the view of cosmonomic concepts in reality which are distinct but related to each other. According to this view various activities can be identified that are unique in themselves. This framework acknowledges the universal and individual existence of entities within reality; that there is a structure to entities and that these entities can be known by their structure. By means of conceptual knowledge, it is

2 The concept "paradigm" originates from Thomas Kuhn's The structure of scientific revolutions (1962). With this concept, Kuhn has in mind a scientific framework, characterised by a particular scientific tradition. In a follow-up edition of his book (1970) and in The essential tension (1977) he uses the concept "disciplinary matrix." This concept refers to those factors which should account for the relative agreement in a scientific group.

possible to refer to these entities. Reality unfolds in various societal structures (such as the university) undertaking activities such as teaching, research, and community service. Each of these activities has its own individual and universal character. By individual is meant that, for example, teaching is not preaching. Universal refers to the way in which teaching styles might influence learning styles (Strauss 1980: 27-30).

Development is the leading ideology within SL. Development refers to the development of the community, the student and the curriculum. Three remarks support this observation.

First, Furco (1996: 4-5) and Snyman (2004: 24-6) argue that SL benefit both the provider and recipient of the service, the service being provided and the learning taking place. This is confirmed by Swick (2001: 261-5) who defines SL as an educational technique for combining authentic community service with integrated academic outcomes.

Secondly, the aims and objectives set for the CHESP initiative (cf section 1 above) are in favour of development.

Thirdly, certain definitions also support the notion of development. Common to these definitions is the notion that the student, the curriculum and the community (as end-user) should be developed through the SL projects:

Service learning focuses on providing service and creating opportunities for individuals and groups to reflect upon and learn from the service experience (Troppe 1994: 1).

Service in higher education could be broadly defined as social responsiveness to the developmental needs of South African society [...] This suggests that a service activity must respond to a need identified by the community which is not addressed through an existing institution or agency (Perold 1998: 1).

Words and phrases such as identified needs, promote, enhance, reflect, and appreciate are typical of developmental vocabulary.

This section has argued that for research into SL it is important for researchers to identify their paradigm, to take cognisance of the fact that there is no objectivity in a research paradigm and that SL will have a dominant ideology. These matters should be taken into consideration when a research framework for SL is being set.

4. Applying the philosophy of science to service learning

The philosophy of science is applicable to research into SL. Consider the following example: one SL module being offered at the Central University of Technology, Free State is the SL module in clothing production. The major outcomes of this module are to master sewing techniques, new designs, and business planning.

The mastery of certain skills and knowledge are important for certain reasons. In teaching others how to sew, students transfer their knowledge to someone else. Transferring knowledge and skills is a typical teaching activity. It is, however, meaningless to master a new skill if you are not able to apply and sell it. Therefore new designs are important. Designs have to match the needs of the fashion industry. Needs ensuing from the industry are new styles, new sizes (clothes currently manufactured according to European sizes), new designs and new fabrics. Part of the module involves teaching communities how to draft a business plan in order to sell the clothes.

Typical questions ensuing from this approach will be:

- What was the effect of the interdisciplinary approach to clothing?
- Were the people successful in selling their clothes?
- How did this module address community needs?
- Did this approach enhance entrepreneurial and innovative skills?

All of these questions relate to monitoring and evaluation activities. Now compare these monitoring and evaluation questions to typical research questions:

- Why is an inter-disciplinary approach in SL important?
- What factors contributed to the success of the sales?
- In what way were community needs addressed?
- What impact have entrepreneurial and innovative skills had on the dressmaking?

"How" questions and "why" questions differ methodologically. The above-mentioned set of questions reveal that research questions have the reason for an activity in mind whilst monitoring and evaluation questions

focus on processes and outcomes. This can be substantiated through the philosophy of science.

SL in the context of the philosophy of science can best be explained by using the following two questions as an example:

- What was the effect of the interdisciplinary approach on clothing? (Monitoring and evaluation question.)
- Why is an interdisciplinary approach in SL important? (Research question.)

In asking the research question the researcher is looking for a reason. According to the Frascati categories of research, a reason for the abovementioned research question can be related to basic, fundamental, strategic and applied research (Bawa & Mouton 2002: 315). The following should assist in explaining this:

- From a basic research perspective more complete knowledge on the reason(s) why will be provided. In answering why an interdisciplinary approach is necessary in SL? Sociology will explain the contribution of group cohesion (student and community) in the learning process. Psychology will clarify the effect of community interaction on the individual's (read student's) behaviour. Higher education will elucidate the variety of learning styles and their link to the curriculum. These and many more disciplines will provide a complete answer on the question asked. In addition, basic research perspectives can be enhanced through using the "Mode 2 Knowledge Production". This Mode requires that solutions to research problems should follow an interdisciplinary approach.
- A fundamental research approach will deal with the in-depth advancement of knowledge on a particular problem. This approach will look closely at those reasons which essentially explain the research question and its possible solutions. A fundamental research approach is not interested in the application of the results to practical problems or the transfer of the results to sectors responsible for their application. An example of a fundamental research approach is that there is no point in mastering a technique, or tailoring new clothes if no market exists to sell them.
- The strategic research focus is carried out with the expectation that it will produce a broad base of knowledge likely to form the back-

ground to the solution of recognised current or future practical problems. The usefulness of this focus is evident from the fact that African sizes might differ to American and European sizes. A size 10 European dress is not a size 10 in African or American clothing.

Applied research is the application of research results to solve a problem. To discover that clothing sizes differ on the various continents is not useful if the sizes of the clothes are not adjusted accordingly. To adjust the sizes is not a research activity, but identifying and solving the problem certainly is.

The above-mentioned research approaches will be used to analyse a problem and to solve it. These research categories are not used in the monitoring and evaluation of research, but may be useful when the results of the monitoring and evaluation's outcomes have to be explained.

In return monitoring and evaluation can be used to substantiate the research results. The monitoring and evaluation of the quality assurance cycle of input → process → output → outcome → impact is a handy partner in supporting research results. This cycle relates to Ramsden's (1995: 207-26) evaluation of research. He distinguishes between four related but distinct ways of evaluating research performance: impact, quality, importance, and quantity. To apply this to SL and the monitoring and evaluation question above:

- Impact is a measure of the influence of a piece of research. Research cannot assess its own impact. The impact has to be done by another approach (research cannot be a role-player and judge at the same time). Take for example the manufacturing of clothes, where the monitoring and evaluation process can confirm that an interdisciplinary approach creates a market for the clothes.
- Importance and quality are evaluated through expert value judgements, typically using peer review. Neither quality nor importance can be captured through numeric indicators alone since they are dealing with people's perceptions and value judgements. The need for these categories (importance and quality) is vested in the observation that the student has mastered a skill such as interdisciplinary work, and the community has gained by selling their products. Both parties have gained a sustainable insight into the problem.

 Quantity is the simplest of the measures. It concerns the number produced. The success of an interdisciplinary approach will be evident through the sales figures.

From these examples it is evident that the concept of quality is determined by the person or body that sets the goals and objectives (Hegarty 1983: 81-92; Scott 1983: 32-7). Quality relates therefore to the notion of fitness for purpose. In dealing with this concept, one will always ask why? is it fit for its purpose and how? is it fit for its purpose. Quality — as with any other concept or problem — is therefore not limited to either a research or a monitoring and evaluation category only. The place of any concept or problem is determined by the question of what you want to find out or investigate.

Conclusion

No one can deny that SL is an important new development in South African higher education. This places an even greater emphasis on why it is imperative to understand the objectives of research into SL and why the distinct difference between research, monitoring and evaluation as related but different processes in SL should be honoured.

I have argued that research deals with the creation of new knowledge while monitoring and evaluation are reated to processes and quality assurance. Research is interested in why things are happening. Monitoring and evaluation are looking into how an activity is taking place. Although there is a conceptual difference between research, monitoring and evaluation, these activities are interrelated and can inform each other. This argument is founded on the philosophy of science. Following on this, a framework for research into SL was set. For research into SL a paradigm is needed and a distinct framework for SL should be set. The researcher should continuously ask if new knowledge is produced. Here the various forms of research can be helpful.

The hypothesis is that an in-depth understanding of the difference between research (as new knowledge generation), monitoring and evaluation (as quality assurance) will improve the practice of SL especially since it is a new concept in South African higher education. I have shown that research, monitoring and evaluation are related but different approaches and that each approach leads to a more complete understanding of SL.

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