'Action research' and a VET framework of innovation (*)

A round table provided as part of the VETNET Programme at ECER 2004, Crete, 24 September 2004
Chair: Elly de Bruijn, Cinop, The Netherlands
Moderator: Waldemar Bauer, University of Bremen, ITB, Germany

Abstract

Panel members:
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Contributions

Participants in the discussion:
Volker Bank (DE); Elly de Bruijn (NL); Ludger Deitmer (DE); Wil van Esch (NL); Eduardo Figueira (PT); Philipp Grollmann (DE); Pekka Kämäräinen (FI);
Christine Teelken (NL); Petr Viceník (CZ)

Discussion

Concept of action research
Role of the actors: researchers, practitioners/ teachers, stakeholders
Process of action research
Final remark

Editor of the proceedings: Sabine Manning, Research Forum WIFO, Berlin

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ABSTRACT

_Elly De Bruijn_

Aim and significance

The relationship between educational research and practice is of continuing concern. In a recent study the OECD states, ‘…educational R&D was seen as fragmented, politicised, irrelevant, and too distant from practice.(..) Furthermore, the research was sometimes perceived as provincial and too little based on international experience.(…) Such a critique is still strong today… This is not to say that educational researchers have not produced new insights, but they have, in general, been less successful in synthesising this knowledge for application and action by practitioners and policy-makers.’ (OECD, 2003, p.10).

Although the OECD-report might reflect accurately the mainstream of educational research, there are promising, and perhaps neglected, examples of research projects in which educational practice gains from educational theory and research. In the proposed round table, we would focus on examples from the field of VET research and their implications for practice.

Theoretical framework

A central objective of the research projects to be discussed is the linking of theory and practice. Usually, innovation in vocational education and training involves implementing a particular concept in educational practice. Actors within schools and other training institutions may be inspired by a concept but act on the basis of their own interpretations. A systematic relationship between ‘the concept’ and the linked development of educational practice is lacking. Methodological approaches which genuinely link conceptual developments to innovating educational practice are, however, based upon this relationship.

The key issue in such approaches is that knowledge is seen as a multidimensional concept which has different ‘shapes’ and different ‘functions’. In modelling this multidimensional aspect and the relation between ‘concept’ and ‘practice’, a number of philosophical sources may be drawn upon. We refer to the work of Gibbons et al (1994), Nonaka and Takeuchi (1995) and Pickstone (2001) which address the issue from a ‘functional’ (i.e. epistemological) perspective. The multidimensionality of knowledge and the process of creating knowledge also presuppose an ‘actor’ approach in which for example the work of Gustavson (2001) on action research is relevant. In exploring the impact of research on innovation in practice, the position and function of the various actors involved in the process of knowledge creation is crucial (eg. Manske, Moon, Ruth and Deitmer, 2002).

Case studies > see Contributions
Organisation and discussion

The contributors to the round table would present short summaries of their methodological approach and reflections on their experiences. The following discussion would concentrate on three questions:

- Which roles and actors can we define in such methodological approaches, in particular with respect to the role and task of the researcher?
- To what extent and under what conditions could these methodological approaches lead to accumulation of conceptual knowledge?
- To what extent and under what conditions could these methodological approaches contribute to innovation in VET?

References


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CONTRIBUTIONS

The contributions held at the round table were based on the papers presented below, which are available for downloading from the VETNET website.

Elly de Bruijn & Anneke Westerhuis

Developing practical theory on competence based training in the Netherlands

Paper

CINOP is developing its own approach to knowledge production in connection with innovative practice in organisations. Projects have been organised so as to develop both new theories and new practice. Projects or groups of projects have organised in a dual bond wherein the development of new practices produces ‘Mode 2’ knowledge (Gibson et al 1994). This ‘Mode 2’ (local) knowledge can, however, be combined and organised as general concepts - in practical theories. Such theories are not blueprints; they offer validated concepts and a repertoire for practical action consisting of corresponding components: first, a system/model of connected statements, considerations and concepts in relation to a specific field (learning and training in VET); second, a set of instruments and action repertoires, consistent with the model, for all relevant actors (teachers, students, managers, trainers, companies); third, tools and instruments to implement model and action strategies in specific contexts, relevant within the field (eg, a department in a Regional Vocational College). This methodological approach has been practised since 2002 in an innovation programme on competence based training. Its implications for the process, whereby educational practice gains from educational theory and research and vice versa, will be discussed.

Ludger Deitmer

Action Research in pilot projects - Interaction between VET practitioners and researchers for innovation and research

Paper

Presentation (MSPowerPoint slides)

The main theme of this contribution will be to what extend innovative changes in VET-institutions and on professionals can be supported by action research in terms of “Begleitforschung” (accompanying research). Within the BLK programme 22 VET school pilot projects experimented under the programme umbrella and made use of theory-practise interaction between: VET teachers taking part in the pilot project, accompanying VET researchers in the pilots itself and as well as the programme team based at the ITB, University of Bremen. The intention of this action oriented research and development programme was to develop curricula with a new quality of occupational action competencies; and following up holistic and self-directed learning arrangements. Outcomes and effects of these change processes were evaluated by action research tools. The contribution aims at reflecting on the relevance of this action research approach: Where are the specific strengths and weaknesses of the action approach? How
far did the instruments do they job? What kind of conclusions can be made for the European discussion and the OECD (see above) notion?. The programme evaluation concept is novel and was recently tested in the European research arena (Fetterman, Kaftarian, and Wandersmann 1996; Nyhan, Attwell, Deitmer 1999; Manske et.al. 2002; COVOSECO, 2004).

Pekka Kämäräinen

The role of ‘action research’, ‘accompanying research’ and ‘evaluation research’ in European research on vocational education and training (VET) - Reflections on efforts to develop a common European VET research culture

Paper (available soon)

This article tries to promote methodological reflection on action-oriented and co-participative research designs that are relevant for the development of European research culture in the field of vocational education and training (VET). On the one hand the article draws upon different evolutionary developments in national research cultures that have either promoted or sidelined the consolidation of such research methodologies. On the other hand the article is related to the parallel development of programme frameworks for European cooperation and to the shaping of project designs within the respective programmes. Finally, the article is related to the efforts of the author to stimulate European exchanges and cross-project collaboration within European VET-related research. In this context special emphasis has been given on trans-cultural dialogue and knowledge sharing on the contribution of research to VET-related developmental initiatives.
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DISCUSSION  >  Concept of action research  >  Role of the actors  >  Process of action research  >  Final remark

Concept of action research

Comment between the contributions by Elly de Bruijn and Ludger Deitmer

Pekka Kämäräinen

In this context I would like to look back at the development of the theme ‘action research’ and its relation to similar methodological concepts. From 1996 onwards, the issue has been discussed in several ECER symposia and in related Cedefop-supported events. At that time it seemed necessary to highlight the distinctions between the concepts ‘action research’, ‘accompanying research’ and ‘evaluation research’. During the latter half of the 1990s there was a need to discuss what kind of project designs could be proposed for European cooperation programmes.

Now, at this point of time, it seems more appropriate to discuss the parallel approaches as a methodological continuum. This requires, however, an understanding for different constellations between research, policy and practice. In some cultures the VET colleges may themselves be positioned as ‘owners of innovation’ and act directly as promoters of ‘action research’. In other VET cultures there are more complex patterns for promoting innovations with the support of ‘accompanying research’.

The aim of this bridging remark was to draw attention to the fact that – depending on the above mentioned institutional settings – research may appear in somewhat different intermediate positions between theory, policy and practice. Furthermore, the expectations on research may vary to a great extent: Is research in the position to develop a tradition of its own? Or: is research only expected to provide support for its respective clients? Regarding these questions the three parallel concepts provide slightly different answers.

Questions related to the contribution by Elly de Bruijn

Volker Bank

In your presentation you referred to ‘educational support structures’ - could you explain what exactly is meant by this?

Elly de Bruijn

I don't know whether you have this in other countries: In the Netherlands we had institutions that were funded by national government or local public authorities.
These are agencies to help schools implement new ideas, in particular in relation to new policies. On the local level you had the school advisory boards, and at national level you had national operating institutions, like CINOP, to support schools. Some ten years ago this education support structure has been (partly) privatised.

Wil van Esch

How does potential aid to this approach connect to the methodology?

Elly de Bruijn

Well, in several ways, because of our definition of the practical theory. It is not only research interrelated elements of a concept, but also translation into practice, or action instruments for practice. The concept has to have examples of how we do it and how we make a change. The other way is empowerment: our concept on competence based training is not only an idea on how to facilitate learning, but also on how school organisations are changing, how the teaching infrastructure has to change, how to make the change work.
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Role of the actors: researchers, practitioners/teachers, stakeholders

Elly de Bruijn

I have one question I really want to address, also in reaction to Ludger's presentation. I know action research, we have it in the Netherlands too, I know all this literature etc., but we didn't manage to find out what the role of research is in relation to both innovating practice and developing conceptual knowledge. My ambition with this new methodology, linking these two, is to develop operational strategies on how the researcher is more than only a transmitter, how the researcher has his or her own agenda also at the front of the process, and not only at the back, an agenda of also developing conceptual knowledge from this approach. That is what triggers me. This is another angle than action research has, because in action research you stay local, you can combine, but you don't have a concept which drives and joins the actors. That's my problem, so to say, how do you do that.

Ludger Deitmer

Yes, I take the position that specific action research oriented tools are needed. These should allow a quite effective activity for the researcher to follow simultaneously scientific and practical objectives. So you need a double oriented instrument, a tool that is supportive to the actors in the pilot and also develops conceptual knowledge about the process for the researcher and his research activities like research publications. He may develop an 'inter-subjective concept of truth' (according to Fricke/Gustavson). This rather more subject oriented knowledge delivers, for example, an experience based conceptual framework for the implementation of a new curriculum as we face it in the curriculum discussion on 'learning arenas' or as a work based learning concept. It could be reflected experiences for the implementation of such kinds of curricula, but also theories of practice while comparing similar change processes at different VET locations and regions. In this sense it would be regional innovation research within VET, which describes important structural and social factors for successful change and the effects from this.

So this was my point: to say that we don't need, for instance, just a great chunk of quantitative data which is not relevant for the practitioners or for a qualitative interpretation and rather distant to the VET reality. It would be possible to do a rather distant oriented and summarising questionnaire survey after the end of an innovation process and to make use only of a small bit of that data in the final report. This might however be ineffective since there is little relevance for the shaping of the innovation process.

But what I want to point out is that the action research debate now-a-days is not so much an ideological discussion about action research as it was in former
times, but much more a pragmatic methodological discussion on relevant problem solving instruments and tools which can be used by the actors (for self orientation and supporting their own competencies for innovation processes) and which can at the same time be used for scientific conceptual development. In action research the practical and theoretical research processes are interwoven – the researcher takes part in the developmental problem-solving process and does innovation research about this process. He has to dismantle the interwoven processes and deliver better transparency.

*Philipp Grollmann*

We've heard a lot about innovation and very dynamic processes, about processes of accumulation of knowledge and action research. But what is the role of teachers? I know that from the German example, because I work for the same institute, so this questions is more addressed to the Dutch colleagues. There have to be structures for reflection and even reproduction of knowledge. So what place has that in your model? Also relating to what was said about Gibbons and Mode 1 and Mode 2. As I understand Gibbons, Mode 1 is a sort of precondition for development of Mode 2, in the sense that they say: the development of Mode 2 wouldn't be possible without the fact that there is much more participation in research and in higher education, which then, after a qualification period, spreads out to the world of practice.

*Elly de Bruijn*

Yes, that was my other point: what is the position of the various actors that are involved in this whole operation, including teachers and, maybe, including students too. What you said about Mode 1 and 2: I don't agree with you. In my view, the idea is that you have Mode 1 to develop formal knowledge, with respect to reliable knowledge, including traditional, classical knowledge sources and local knowledge sources being Mode 2 knowledge. The interesting thing for me is how to combine these sources in a new methodology directed at innovating practice and accumulating knowledge also in respect to Mode 1 knowledge.

*Philipp Grollmann*

What I mean is that the practitioners probably need to be enabled to articulate their Mode 2 knowledge on the basis of Mode 1.

*Elly de Bruijn*

My point is that in your discourse you have still the researchers knowing it, and the practitioners have to be informed about the formal knowledge, and then they can operate. In my idea, in this circle, in this community, there are also teachers participating and maybe some students. So you have these various actors and the researcher, all having an agenda for participating. The agenda of the researcher is also addressed to developing conceptual knowledge, concepts which he or she wants to develop further, but from the agenda of the teachers other knowledge can be important, and together they make a new concept. So in our approach we have circles, knowledge circles, in which teachers participate,
managers, researchers, consultants. They all participate in that, with the ambition of making and using the knowledge which works in relation to their own targets. So in this new methodology the ambition is to use these different targets to make the process work.

Philipp Grollmann

But who is going to solve the concerns, the practical theory, where would be the place to conserve this knowledge?

Elly de Bruijn

That was indeed one of my discussion points: someone has to coordinate the whole operation. In our example we have particular researchers or consultants, people that have more or less both expertise, that coordinate those communities.

Philipp Grollmann

That is what I found interesting with Ludger, because you were talking about action researchers and practitioners; my conception of action research was always that the practitioners are actually the researchers.

Ludger Deitmer

Yes, that's absolutely right. It may have been not so clear in my presentation, but really what we want to do is to support the practitioners by action research driven concepts and tools, so that they are able to do also their own research. There is a need for moderation and facilitation by the researchers in this accompaniment process. It could be too much for the practitioners to be also researchers at the same time, because they are more or less developing curricula, they are preparing new learning arrangements, they are looking for methods, they are implementing these methods, they are experimenting with these - so they have rather a constructive and developmental orientation. The researchers could have a supporting role, for example providing the criteria for shaping the learning arrangements. Criteria delivery, which is rather complex and a theory driven task, could be one of the accompanying roles of the researcher undertaken in such action research processes; or delivery of metadata on how to structure the teaching material; or analysing the conditions for the change process, the pre-knowledge for the change process. All this is more an activity on the side of the researcher; but he may discuss this with the practitioners.

Elly de Bruijn

Teachers are not researchers. Yet, they are creators of knowledge - that is the difference. That's why I don't talk about action research, that's why I want to invent a new term.

Pekka Kämäräinen
I will try to respond to the question of researchers’ own agendas. I would argue that a general concept of ‘action research’ may lead to a blurring of possible roles whereas the more focused concept ‘accompanying research’ may provide some clarification.

Regarding the role of researchers, it strikes me that the concept ‘action research’ is often used in a sense that plays down the need of theoretical thinking. For example, in the Scandinavian action programmes for promoting innovations in working life, action research was introduced as an instrument to facilitate democratic dialogue. The researchers insisted on being facilitators of dialogue between the interest groups in working life. Thus, the researchers tried to support the creation of a social space for dialogue without making explicit use of their conceptual tools.

As a contrast, several projects of ‘accompanying research’ have had the task to work with new educational concepts that have been drafted at the level of policy development. Thus, the projects have faced the challenge to interpret the pilot concepts as cornerstones for actual implementation and to re-conceptualise them in terms of providing feedback for further policy development.

Recently, the German accompanying research projects have played such a role in the pilot projects that have introduced the curricular innovation concept ‘learning arena’ (Lernfeld). The concept stands for the combination of subject-based learning and practice-related learning and for the shaping of collaborative learning environments. When working with such concepts, accompanying researchers are not merely passive observers or facilitators of debates between educational authorities and practitioners in the field. Instead, researchers are needed as co-developers and as providers of conceptual support within open-ended innovation processes. This kind of involvement has been documented by the report of the pilot project SEDIKO that worked with the introduction of the new ICT-related occupational profiles. By exploring the possibilities to shape connective (ICT- and substance-related) learning arenas the project reached a genuine intermediate position.

_Petr Viceník_

I think that Elly is solving the action research at a macro-level, it means changes in curricula at national level, so that all partners are involved. It’s important to let the partners work, so all mechanisms that are used in the communication to find some solution must be functioning. We did some similar research in the middle of the 80s, during the communist period, so it was a little bit different, relations between different partners, but they were also functioning. But we as educational researchers made a very simple mistake, we followed only our aims, if a new curriculum will be functioning or not. At the end of the 80s there was a revolution, and immediately after that the concept of our reform was generally refused, because social partners were not accepted. But this concept was in fact very good, it was well prepared, so after two years all schools returned to the concept of the reform. So it’s very important that all social partners are in function. It would also be important to involve researchers from other disciplines, sociologists etc., to follow the movement between the social partners.
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Process of action research

Christine Teelken

I think we should stop talking about what action research is, because it’s such a broad concept. I also think we should not discuss any longer whether it’s important or not, because everyone agrees on that as well. The major thing is how it should be taken care of. The main questions in Elly’s presentation were ‘how’, and Ludger posed some ‘how’ questions as well. I particularly like one of your overheads where you make a comparison between the traditional scientific research and the features of action research. Perhaps we should head for a new kind of protocol in action research where we combine traditional features of methodology, responsibility, validity – all these things, and the more sophisticated features of action research. Perhaps you should try to aim for that. I think that’s much more interesting to talk about than what action research is.

Eduardo Figueira

I quite agree with this idea to develop research and to create knowledge, with the different involvement of actors. I agree with this concept. My question, my problem is: how can we conceptualise the different agendas and the different aims of the different actors?

Ludger Deitmer

This certainly is our question too, and it is not too easy to answer that. These are processes which go on for two or three years. First of all, the actors are in the centre of this accompaniment process. The researchers are not at all just observers, but they are also active in the process, by using specific tools to derive new data. This sounds very technical, but the aim is to get research insights out of that process. Self-evaluation of the different agendas is needed to know how and what kind of specific new knowledge has developed under the individual and collective perception of the innovation process. We in the ITB have developed actor centred evaluation methods (the EE-Tool within the COVOSECO project) to find that out.

On the other hand, we need to be clear that at the moment there is nobody who will finance a project accompaniment where the researcher can visit all project meetings for three years. The researcher person days he can invest are rather limited. So he may concentrate on catalytic and reflexive tasks. These could include more or less supportive self-evaluation among practitioners, in which he stimulates project actors in an evaluation workshop. In this workshop the actors undertake a criteria led assessment process of their past action,
facilitated by the researcher. The researcher can derive insights from the project under investigation, in relation to specific criteria. This is then documented, and followed by a feedback discussion to develop a new agenda with the practitioners.

Then you have a double process. You have something which may be relevant for the practitioners, because they have reflected on what is consent and dissent in assessing relevant knowledge within their network or pilot, what is on the agenda at the moment, what are the new knowledge insights and what should be on the future agendas. This reflection in action could be very relevant for the researcher too, because he could do similar activities in other innovation networks or pilots. A comparison of networks or pilot perceptions on innovation processes could be the result, which can deliver theories of practise. New context-bound knowledge could be derived as a result of this group discussion. This dialogue between scientific and local actors could help to overcome organisational problems within VET institutions.

*Elly de Bruijn*

Maybe we can learn from policy research, because the new generation of policy researchers explicitly work with actors having different agendas, and they are concerned with the issue of how to address these various agendas in order to make valuable contributions/research for policy processes. But I agree with Ludger, it’s very difficult, because that is our question too. If you really want to do it you need lots of money.

In these later concepts of our new programme, which is about strengthening vocational education by intensive cooperation in the region aiming at diminishing drop out rates and stimulating progression to higher vocational qualifications, we dare try to work with what I call knowledge communities. We use several instruments, tools of the consultant to do that. These knowledge communities consist of people of the enterprises, people of schools, project managers, researchers, experts and consultants. By confrontation of examples from various local practices, external knowledge sources and research results these communities are working on new knowledge that is useful for innovating practice, but has general value too. There are various knowledge communities addressing to particular themes and problem areas, for instance competence based training, pro-active regional knowledge infrastructures, co-makership, career education and so on. We have a kind of intake period in this concept, of some months, and we go talking with all those contributors to that community, on their expectations and the agenda, to come to a consensus of how we work and define the precise results we aim for. We have six of those circles, and I expect every circle is going to work differently, because the agendas are different. We apply much of the competences and the tools of consultants to facilitate these work processes and combine this with the competencies of researchers to validate and explicit the knowledge products that we aim for.
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Final remark

Pekka Kämäräinen

With my final remark I would like to raise two points regarding the further development of the debate. Firstly, it is not my intention to promote a scholastic debate on definitions of ‘action research’, ‘accompanying research’ or ‘evaluation research’. In this respect I welcome the change of perspective that was proposed from the audience that the European research community should start developing a common methodological protocol on action-oriented and innovation-oriented research. This would give the main emphasis on criteria of good practice regarding participation, involvement in dialogue, methodological transparency and theoretical explicitness. The work with a common protocol (and with illustrative cases) could possibly provide a real step forward with trans-cultural research dialogue.

Secondly, however, it is necessary to note that the future of action-oriented and innovation-oriented VET research is not only dependent on the methodological self-understanding of the research community. Regarding the experiences that the VET research communities have made both at the national and European level, we could conclude that we are not experiencing the most flourishing evolutionary phase in the history of European VET research. Therefore, there is a need to stimulate trans-cultural research and development dialogue that could link the progress in innovation-oriented research to the needs of practitioners, policy-makers and other stakeholders related to VET. The research communities have to find new ways to demonstrate how research-based knowledge development could promote innovations – not only within the field of VET but in a broader context that links VET to its industrial, regional and socio-cultural environment. If the research communities can make their case – both in their national contexts and at the level of European programme development – this would have consequences for funding, for project duration and for transfer-promoting measures. Therefore, we need to develop our internal dialogue, but we need to learn how to address our concerns on broader societal arenas that may link the future of VET to the future of European innovation policies.