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PRACTICE-BASED RESEARCH – A FORUM FOR TEACHERS, RESEARCHERS AND PRACTITIONERS

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ABSTRACT

This paper aims to reflect on the constructive role of practice-based and practitioner research (PBPR) in the context and collaboration of education, learning and development in schools and business. It also aims to represent EAPRIL, an international network and platform for those involved in practice-based and practitioner research to exchange and disseminate research, practice and products that make a difference for practice. EAPRIL's vision is that academic teachers, researchers, and practitioners are important in the process of sharing, constructing and creating knowledge in developing practice and theory.

RESEARCH AND PRACTICE-BASED PRACTITIONER RESEARCH

OECD (2002) defines research as follows: "Research and experimental development comprise creative work undertaken on a systematic basis in order to increase the stock of knowledge including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications". Traditional or fundamental research have been separated from practice, dividing them into the two different "worlds". Following this distinction, these "worlds" own different aims, practices, methods and actors. However, in the last decades the contexts of knowledge production have been diversified and new models in addition to the *(quasi) experimental-control-group design research* have been developed (Gibbons et al 1994).

Applied research refers to the original investigation undertaken to acquire new knowledge and primarily directed towards a specific practical aim or objective (OECD Frascati Manual 2002, 78). Moreover, Gibbons et al (1994) define two modes of knowledge production. Mode 1 and mode 2 research. 'Mode 1' type of producing knowledge refers to investigator-initiated and discipline-based research, whereas 'mode 2' type is more closely related to applied research in which theory and practice are tightly intertwined. 'Mode 2' type knowledge production refers to research in which knowledge is produced in the environment where the actions take place. Thereby knowledge is generated in the process of providing solutions to problems that are identified in this context of applications. In addition, 'mode 2' type research is identified as problem-focused, interdisciplinary, reflective and critical in nature and it crosses boundaries as well as contexts. Furthermore, 'mode 2' type knowledge production is evaluated according to its feasibility.

Practice-based and practitioner research (PBPR) represents the 'mode 2' type of knowledge production, stressing the aim that research contributes to the progression of the praxis. PBPR is therefore more than just applying existing so-called fundamental knowledge. It is much more a knowledge co-creation process of practitioners, researchers (or research-practitioners) and possible other stakeholders. In that sense it is connected to the currently upcoming approach of 'research partnerships', which was however already introduced by Ann Brown and Allen Collins in the nineties (Brown 1992; Collins 1992). It involves sustainable collaborations in which practitioners, stakeholders and researchers collaborate in creating knowledge and understanding through doing research together. PBPR represents knowledge that leads to evidence-informed practice and knowledge-in-use. It takes the nature of practice as a central focus. PBPR does not only recognise the utility of the research for and impact on practice but also its contribution to existing theory are of utmost importance.

WHY PRACTICE-BASED AND PRACTITIONER RESEARCH?

Higher education is challenged in many ways to "serve" the world of work. Training students, who are mainly employed in the local and regional labour market, asks for a tight collaboration between higher education and enterprises. In conducting research, which serves the needs of the labour marker, higher education can use practice-based practitioner research as an insight into the practice and hence produce knowledge that can be easily implemented into practice. In order to facilitate the flow of knowledge, higher educational institutions and enterprises should create principles and practices of knowledge co-creation and in doing so enhance the construction of a "Learning Region" (Florida 1995). In a Learning Region, individual and collective expertise and aspects emphasising communality are joined (Tynjälä 2006) and benefits are shared. In addition, Bielaczyc and Collins (1999), and Bereiter (2002), in striving a knowledge-building culture, stress the close collaboration between researchers and teachers. We emphasise this, adding however

also the practitioners and students into the research collaboration remembering that teachers can simultaneously act as researchers.

METHODS THAT PBPR ADOPTS

There are different research approaches that focus on PBPR, such as action research (Ponte & Brouwer 2008), design based research (McKenney & Reeves, 2012) cross boundary research (Zitter & Hoeve, 2012), change labs transformative research (Engeström, 1987) and ecological and trans-disciplinary inspired research (ETI) (Jong, Beus, Richardson, & Ruijters, 2013).

One key element is co-research. That is, practitioners and researchers become prepared to cross boundaries between research and practice in the co-design (Penuel, Coburn, & Gallagher, 2013) of knowledge, improvement of practice and products. Another key element is that practitioners are not a monolithic group. They vary greatly in their roles, responsibilities, and perspectives on problems of practice. Their role and practical wisdom is important to use in research as well as the different needs, interests, and skills of other stakeholders in the learning system. A third key element has a more epistemic character. Positivist research is mainly focusing on isolated facts. Knowledge is not isolated or linear. As in nature, past and future are always in the present. As a result, past and future are connected through the present. The same holds for knowledge. Information becomes knowledge in practice when it is related to all other factors that play a role parallel in the present of the praxis. Connectedness of the research and its research findings, e.g. the understandings itself, are crystalized moments of understanding, artifacts, e.g. connections, transcending knots of relations. Connectedness is one of the key basic tones of ETI-research.

ECOLOGICALLY AND TRANS-DISCIPLINARILY INSPIRED RESEARCH (ETI) APPROACH IMPROVING PRACTICE RESEARCH

ETI-research is an approach aiming to add methodological research principles to the standards of positivist research in order to overcome the implicit gap that positivist research generates between research and practice. It is an endeavor to do research in such a way that it contributes directly to the progress of practice. This approach is based on the idea that the theory of education or development of professionals is not only a matter of 'techne' (instrumental knowledge) but also a matter of 'phronesis (practical wisdom). Positivist research aiming at finding the most effective 'means ends' practice cannot bring us that far so that we are able to improve practice, resulting in a readiness of your students, sons or daughter as adults, of your neighbours and of your colleagues for the 21st century. Because of this gap between educational science (Broekkamp, Hout-Wolters, 2006) and practice, it seems that

reform-educational-research needs a different though complementary methodological way of thinking and maybe even a different epistemic basis.

Educational theory that is progress-oriented needs research in a 'design mode', rather than only an 'explain mode'. *Ecologically and Transdisciplinarily Inspired Research* approaches entities in relationships with their environment, e.g. other entities, to advance the understanding of these effects in their ecology, i.e. the relations between the phenomena and the diversity in the manifestations. The authors (Jong et. al, 2013) are inspired and take stock of an 'ecology' and trans-disciplinary point of view in thinking through a methodological redirection. It resulted in a manifest of six principles and two basic tunes.

Six ETI-research principles[1]
At the moment the ETI-research approach consists of six principles and two bases tunes: the six principles concern wisdom, knowing your self (self-knowledge), ecological error, collective development, narrativity and nature. The base tunes are ecology and transdisciplinarity. Principles and base tunes are grounded in the need to transform research in such a way that it really contributes to practice, that builds theory with impact and that supports teachers becoming practice-based researchers. The principles do not replace positivist or practice-based research, but they are another intentional orientation towards the world. Before describing the base tunes we first will shortly typify the six ETI-principles.

Wisdom
The fact that everything is connected with one another implicates that research should not only gather data (taking) but also leave insights and empowerment for development (bringing) and change to the practitioners and their praxis. Peterson and Seligman (2004, p. 106): "…/…(*wisdom*) *is the ability to take stock of life in large terms, in ways that make sense of oneself and others. …/…(wisdom) is the product of knowledge and experience, but more than the accumulation of information*. It is the coordination of this information and its deliberate use to improve well-being. It implicates the responsibility to take the opportunity to contribute to the expanding of the well-being of others and yourself (Sternberg, 1990).

Knowing yourself (Self-Knowledge)
The idea of objectively doing research without any influence of the researcher is impossible, especially in the humanities. A researcher is not a being-in-the-world

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[1] The §'s related to ETI-research are based on and can be more extended read in: Jong, de, F., Beus, de, M., Richardson, R., & Ruijters, M. (2013). Ecologically and Transdisciplinarily Inspired research: Starting Points for Practitioner Research and Sustainable Change, In: T. Zohar Harel (Guest Ed.) Special issue: Sustainability: Mulit-Disciplinary Perspectives. *Journal of organisational transformation & social change, vol 10, 163-177. http://www.maneyonline.com/doi/abs/10.1179/1477963313Z.0000000008*

such as an ashtray beside a telephone; in his intentionality of doing, he is oriented towards the phenomena (Ponty, 1945). Therefore, self-knowledge helps to know the history of the researchers' cognitive development (formal and informal). It helps to know his conceptions in order to consider them as one source of influencing what he hears, sees and feels. Awareness of explicating this 'Self' is necessary to see the obstacles and limits in and of the research, as well as to interpret results. The research itself and the self of the researcher are interconnected (Maso, 2008).

Ecological error
The ecological information of a subject under study is an important source for the interpretation of the phenomena, the individual deviations as well as for the interpretation of the so-called 'error'. 'Error' is seen as important information when interpreting the relationship of the individual to the issue and its specific context. After all, groups are heterogeneous in their character, as is indicated by the deviation of the mean and error. Interpretation of this heterogeneity is as important for understanding the phenomena being studied as the mean as model or regression line as model of the praxis. Aggregated data interpretation should be checked on possible, implicit but distinguishable (sub)populations (Freedman, 1999; Schuessler, 1999). Consider value diversity, when interpreting a phenomenon instead of stereotyping. Take personal and individual uniqueness into consideration (Robinson, 1950). In the ultimate end, education is about developing person's uniqueness (Biesta, 2006) in any domain or practice instead of the average. Pay attention to this in the research design and include it in the research report analysis and interpretations of the observed error on the basis of the individual's ecology by meaningfully interpreting within group variance, diversity and uniqueness of subjects. Educational practices are not only a story of means but certainly also of diversity of teacher's and students.

Collective development (knowledge creation)
ETI goes beyond doing research together. It is doing research in such a way that both process and product come into a movement of collective development as a basis for sustainable change of the practice. Thus, the product, each individual as well as the community profit from the collaboration. It is all about knowledge creation (Bereiter, 2002; Jong, 2006). It is about the willingness to listen and to understand each other and putting your own efforts to be understandable. Research is much more an activity of co-research and knowledge co-creation with the practitioners, e.g. teachers, students, managers etc. It is a process of individual, collective and community learning building and expanding the collective intelligence.

Narrativity
The story of the researcher and the research, and the choices that are made, are too often lost in the violence of academic principles. Both in the exploration of the questions and in doing research and providing insights depth and complexity deserve to be held. Ensure a rich context description of the research in which recognition

plays an important role. It concerns a continuous reflection on the story as a researcher (Boje, 2009). Continuous attention is needed for the dialogue about and within the research, as well.

Nature

Ecology without nature is a dry and uninspired metaphor (Krebs, 2008). In ETI the knowledge of nature helps to see patterns, systems and mechanisms (Bateson, 1972). Experiencing our natural origin inside and outside ourself opens the mind to explore a different way to give meaning to our experiences. Nature inspires and illustrates in such a way that new insights and ways of thinking come to mind. Being in nature brings quietness and contemplation for reflection. The use of metaphors and analogies from nature make new insights accessible. Being inspired by nature connects nature and culture. Being astonished by life and discovering connectedness and context connects self and nature. Using metaphors and examples of nature makes it all intelligible (Schouten, 2005).

Basic tune 1: Ecology as connectedness (sinus)

Connectedness is the first underlying idea to the ETI-approach, the total approach and the essence of each principle. Ecology is not about 'entities' e.g. facts, objective independent objects but about connectedness. Actually, it is the epistemic basis of the ETI-orientation to the world. It is contrasting to the modern Cartesian technical orientation of the current western citizen to see a human being as an information processor of a world, e.g. reality, as a universe of facts (Coolen, 2012). According to Naess (1956), reality cannot be understood without interacting with that reality. Entities, moments of insight are not propositions but actions (Tuinen, 2012).

Connectedness stands in contrast to a dualistic deterministic separation between the object and the knowing subject. It is the connectedness between theory and practice instead of separating them. It is complementary to the view that everything is knowable, that everything is caused by something. It is complementary to reductionism of reality to quantities of what can be known. It is complementary to the view of a calculated reality as the only knowable reality.

ETI-research acknowledges that every situation is unique in relation to a previous one. Reality is always in a move. Dividing it in objects, fact, propositions etc. is artificial. Reality is a dynamic constantly change of connections. Entities are just temporarily connections, expressions of reciprocal dependency.

Ecosystems are open (living) connections between elements. Reciprocal relations are the essence of living systems, such as in humanities. Interventions can have big consequences for the system (Engeström, 1987). Therefore, it is important to know the system in which you intervene. Zooming out in order to oversee the whole and

to foretell the expected effects is an important character of this principle and ETI-based research.

Understanding the complex reality goes beyond knowing and understanding entities by interpreting the relations, the connectedness between the different entities and their reciprocal dependencies. It enriches the paradigm of giving meaning, naming, and describing entities (Libbrecht, 1995). Relations, especially in humanities, can have a qualitative value so intuition and imagination as a way of thinking comes to play a role in interpreting relations. In the end the drive to understand, the question pops up of what *'is'*, that connects and what *means* the connection that makes up reality in all its complexity?

Humans are active beings in an interactive relation to their environment; they act towards things on basis of the meanings they ascribe to those things; Meanings arise out of the social interactions with others and society; Meanings are the result of an interpretive processes by a person while dealing with his environment and nature. In a sense, this connects to symbolic interactionism basic premises like (Blumer, 1969)

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Basic tune 2: transdisciplinarity
Our basic statement here is: *Research issues can, by definition, be approached from a multitude of perspectives and disciplines. It is precisely this dialogue and interaction between these perspectives and disciplines we pursue in ETI-research besides an ecological view. Through this dialogue and interaction, new transcending insights arise.*

Overall we can conclude that the implicit system and organic thinking and epistemic base in which knowledge is not approached as stand-alone insights (i.e. truths) but as temporary connected artefacts, helps to improve the practical impact of research and does not obstruct valid and reliable research. On the contrary, it makes valid and reliable research more valuable for practice because it brings research insight 'in-to-use'. It forms a basis for sustainable change of practice because it empowers practice. ETI-research contributes to change of practice in a sustainable way by knowledge production among those participating.

ETI and the other mentioned practice-oriented approaches. Also other approaches such as design-based, practice oriented, cross boundary, transformative, research partnerships etc. might have this aim, orientation.

EAPRIL A FORUM FOR PBPR

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EAPRIL, the European Association for Practitioner Research on Improving Learning, has been established in 2006 to answer to the challengers that society, education and working life were facing. Rapid technological changes, immigration, international competition in our societies were among the many developments influencing education. More and more, researchers, teachers and developers in education believe that new ways are needed to understand these developments and finding solutions for them. They believe that 'traditional' or 'fundamental' educational research may not address the complexity of these changes. Furthermore, they feel that new venues are needed for practitioners and researchers to talk to each other. However, research-based practice as well as practice-based research are both equally needed. In other words research that is relevant to practitioners. More specifically, the association promotes practice-based research on learning issues in the context of initial, formal, lifelong and organisational learning with the aim to enhance practice.

In addition, EAPRIL encompasses different contexts (such as schools of various educational levels as well as organisations and corporations across fields, such as engineering, medicine, nursing, business, and teacher education), at different levels (individuals, teams, organisations and networks), and in different stages of life (from kindergarten over students in higher education to workers at the workplace). As a result, EAPRIL is unique in its kind to address this need on a European scale and this for a variety of themes on education and learning. Furthermore, the link between education in educational institutions and schools and learning on the workplace is extra highlighted in EAPRIL. These two ecologies are interrelated and share more than they are both aware of. EAPRIL aims to stimulate the boundary crossing between these entities.

Members of EAPRIL are e.g. academic and practitioner researchers, teachers, educators, professional trainers, educational technologists, curriculum developers, educational policy makers, staff developers, learning consultants, people involved in organisational change, HR managers or representatives, corporate learning directors, academics in the field of professional learning, etc. According to EAPRIL's vision, these members are equally important players in the process of constructing and creating and sharing knowledge in developing new practices and theory. They are members in the multi- and trans-disciplinary research process as problem-definers, researchers, data gatherers, interpreters, and implementers. Overall, EAPRIL is a community for academics and practitioners that aim at the progression of practice by approaches such as design-based, practice-oriented, cross boundary, transformative, and research partnerships. Being an international organisation, it aims to bridge practice and research and to cross the boundaries between educational and working life

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Similar to Erasmus, EAPRIL contributes as an international network to the professionalisation and empowerment of education, learning and development in business. By its means, EAPRIL offers an excellent platform and community to communicate and disseminate research results, outcomes, developed practices and products and other activities, e.g. of ERASMUS projects, that make a difference for practice. Each year projects are submitted and nominated for the 'Best Practitioner Research Award'. All of them truly represent examples of the collaboration between teachers, researchers and students (see www.EAPRIL.org)

EAPRIL CONFERENCE AND ITS ACTIVITIES

To address the aforementioned needs EAPRIL is organising an annual conference in the last week of November. Its programme is focused on education & learning and learning & development in organisations. Furthermore, various activities were launched over the past years to increase learning and networking opportunities for members during the conference, e.g. school visits in order to get to know more about European school cultures, thematic activities, Speed dating activities, Corporate Learning cases studies, a dynamic EAPRIL E-platform for presentations and discussion, and a lot more. In addition, EAPRIL is organised into two special divisions, which can be seen as two complementary and interconnected communities: Education & Learning (formal education), and, Learning & Development (Post-formal/professional/organisational learning in companies). With these two complementary and interconnected communities, EAPRIL achieves the connection of two ecologies of learning and development in its association.

Furthermore, EAPRIL provides in thematic sub platforms, so-called Clouds, which works during, and in-between conferences. These clouds have a specific conference programme, although specialised open for all members. Each year, EAPRIL awards the Best Research and Practice Project Award to a true practice-based research project. Amongst others, the collective and shared development of researchers and practitioners involved in the project should be highly stressed. Finally, the options are currently explored to start an open access journal for practitioner-research.

CONCLUSION

The practice-oriented, incorporated and sometimes explicit research activities in ERASMUS projects, which result in support for progression of the education and learning practice, are important to disseminate over Europe. In the steady growth of EAPRIL members and conference participants EAPRIL is an unique international European platform and community to catalyse such a dissemination. By means of this platform, research, education, learning and working-life are able to meet each

other. Consequently, EAPRIL hopes to keep on inspiring and contributing to the international world of Practitioner-based Research.

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