TEACHER EDUCATION FOR SUSTAINABILITY-INSIGHTS INTO EVOLVING STUDENT TEACHERS ` IDENTITIES

Rea Raus, PhD

Student, MA Educational Sciences Tallinn University, Estonia

Abstract: Teacher Education for Sustainability- Insights into Evolving Student Teachers` Identities
The concept of sustainability is often discussed as an ecological, environmental concept but it is more complex and interdisciplinary concept. Ospina (2000) states that sustainability is not only a scientific concept, but more of a moral precept so when we discuss sustainable development of human societies, we come to the question of values and education.
A teacher, his/her values, attitudes, personal philosophies form a lens through which learning-teaching process is approached to, therefore teacher identity is of particular interest in this research. My research has the central question- how future teachers can be assisted in becoming aware of their potential to construct their own identities for sustainable worldview and to become a teacher with a holistic understanding of the world as one ecosystem. The key focus is therefore on student teacher`s personal philosophies about sustainability in the framework of evolving teacher identity. The results should give recommendations for teacher education curriculum to support the construction of teacher professional and personal identity towards sustainable worldview, including the development of relevant practices to be implemented through teacher education studies.
The ongoing research is a longitudinal qualitative research and takes the phenomenological approach, where the main methods are written narratives and in-depth interviews with case discussions. The sample includes a group of 9 student teachers (grammar school) to be studied over the 5 year period of initial teacher education programme.

Key Words: Sustainability, Teacher Education, Identity, Education for Sustainability

Introduction

Different research as well as the public voice in the world have been growingly speaking for a need to change our mind-sets for sustainability, the concept speaking for well-being of individuals, societies and the world in a holistic manner. Moore (2005) argues, referring to Fien (2002) that we should discuss sustainability as reconciliation of social justice, ecological integrity and the well-being of all living systems in our world. We can only agree with Cortese (2003:16) that in that case we need fundamental, transformative shift in thinking, values, and action by all society, in this case teacher educators.

Therefore, when we discuss sustainable development of human societies, we quickly come to the question of values, e.g. Ospina (2000:32) states that sustainability is not so much as scientific concept, but more of a moral precept. So, conveying certain values for the future generations is a matter for education and teachers to be dealt with. When **one central purpose of schooling and education could be supporting students to contribute to the development of a sustainable society, teacher candidates need to be prepared for that purpose (Babiuk & Falkenberg, 2010).** Insights into student teachers evolving professional as well as personal identities are therefore focusing on student teachers personal philosophies regarding sustainability.

Theoretical framework

Jennings (2008) summarizes the research from different authors that modern educational systems are reinforcing unsustainable lifestyles (Bowers, 1995; Cortese, 1999; Orr 2004-cited by Jennings 2008) pointing out that if we want to survive as human species we need to educate current and future generations to live sustainably.

When conceptualizing sustainability as a matter of values and responsibility we come to the question, what kind of educational systems are necessary to both focus on e.g. teacher education as well as schooling in a broader sense. The necessity to transform all levels of education is discussed by many authors e.g. Cortese (2003), who points out that we should move towards more integrated, interdisciplinary and co-operative thinking as opposed to our present approach which is fragmented and oriented to competition. Cortese (2003:17) rightfully reminds us, that higher education institutions have the responsibility to increase the awareness, knowledge, skills and values needed to create our sustainable future. Therefore, more holistic approach in educating future teachers for sustainability is needed. Huckle (1993) discusses challanges related to holistic approach on education for sustainability, bringing into attention the importance of interdisciplinarity between social and natural sciences which means that teacher identities should also be viewed as multiple, flexible and interacting in the context of different disciplines. A teacher in that case should not merely be a subject teacher but a conveyer of more holistic, interdisciplinary approach.

According to Bullough (1997: 21, referred to by Schepens et al 2009) there is no doubt about the role of teacher education in identity formation of beginning teachers: 'Teacher identity – what beginning teachers believe about ...... self-as-a-teacher – is of vital concern to teacher education; it is the basis for meaning making and decision making". Teacher education must begin, therefore, by exploring the teaching self. There are different, yet similar definitions and conceptions of identity by different authors e.g. personal identity (Korthagen 2004) and self-understanding (Kelchtermans 2005). Mead (1934), the author of well-known concept of self, says that:

Self arises in the process of social experience and activity, i.e. develops in the given individual as a result of his relations to that process as a whole and to other individuals within that process.

(Mead 1934:135)

Jenkins similarily points out that:

all human identities are by definition, social identities.Identifying ourselves or others, is a matter of meaning and meaning involves interaction: agreement and disagreement, convention and innovation, communication and negotiation... Identity is a practical accomplishment, a process that has internal and external dimension.Your external definition of me is an inexorable part of my internal definition of myself-even if I only reject or resist it- and vice versa

(Jenkins 2004: 17,46, 47)

Research also shows that teacher identitites are socially constructed and influenced by the process of existing social structures (Korostelina, 2007:16). Gee (2001) argues that identity is a way of behaving, acting, believing and understanding oneself and others in a meaningful way. In our changing world, where we have to re-define also teacher identities, Stibbe proposes (2011:88) instead of taking on a fixed disciplinary or professional identity,student teachers should develop more fluid identities that allow them the flexibility to respond to the changing conditions of the 21st century. Constant dialogue and interaction, both inner and with others, creates, according to some authors, new different aspects of identities, or multiple identities (Akkerman &Meijer,2011).

Having reviewed research about teacher professional identity, Beijaard et al (2004:108) show that researchers conceptualize professional identity differently, investigating varying topics within the framework of teachers`professional identity and pursue a diversity of goals. After studying 22 selected studies on professional identity, they pointed out problems/questions related to the conceptualization of professional identity (pp. 124-125), which included the confusion about the concepts of „self" and „identity", too little attention paid to the influence of the context on professional identity formation, unclarity in defining features of teachers`professional identity. Beijaard et al (2004: 122) identified also four features as essential for professional identity and they suggested that they can be used as general framework in future research on teachers` professional identity. First, according to Bejaard et al (2004:122) professional identity is an ongoing,dynamic process, answering the question „Who am I now?" but also the question „Who do I want to become?". Second, professional identity implies both person and context, i.e. teachers differ in the way they deal with professional characteristics, depending how they value them. Third, teacher`s

professional identity consists of interacting sub-identities. Fourth, agency is an important element of professional identity, teachers are active in this process. These features are forming a flexible framework how to look into different identities constructed by different student teachers, also for the purposes of the present research. In addition to the authors discussed above, Babiuk &Falkenberg (2010) give a recommendation that faculties of teacher education should make working with teacher candidates `self (living sustainably) and professional identitites (teaching and learning for sustainability) one of the central foci of their programmes.

To sum up, teacher identity can be conceptualized according to dialogical approach as simultaneously unitary and multiple, continuous and discontinuous, individual and social. Therefore, finding ways, how to support the development of evolving teacher identitites, professional and personal, towards sustainability, is the aim of the present study and the framework proposed by Bejaard et al. (2004) is used for studying the construction and re-construction of student teachers identitites.

Research methodology

My research is guided by humanistic paradigm. Humanists believe that it is necessary to study the person as a whole, especially as an individual grows and develops over lifespan. The study of self is an area of particular interest, as a primary purpose of humanism could be described as the development of self-actualized,autonomous people in a co-operative, supportive environment (De Carvalho, 1991). Lamont (1965) has outlined 10 central propositions of humanist philosophy e.g. one of them stating that humanism believes that individuals attain the good life by combining personal growth and satisfaction with commitment to the welfare of the entire community. Although, my critique towards Lamont`s statement that human beings have no conscious survival after death, remains because it excludes the notion of human spirituality and therefore a certain kind of „eternal" responsibility for our future generations as well.

In the present research, I am guided by the methodology of transformative human inquiry (Reason, 1988) which derives from an understanding of the deep connectedness between people and nature as well as people and people. Choosing the methods for the research I considered, that language is a tool for emerging identity perceptions, through language the field of mind emerges (Mead, 1934:133, Vygotski 1978), therefore written and oral language is being investigated in narratives and interviews.

The present study focuses on the following questions:

- identifying conditions for constructing and re-constructing teacher identity during teacher education;
- identfying aspects of evolving teacher identity- personal philosophies and understandings-in the context of sustainable worldview;
- how should an interdisciplinary, holistic teacher education curriculum be designed?What pedagogical and structural changes should be made to teacher education programmes?

The sample consists of 9 student teachers of Tallinn University, initial teacher education programme to be studied over the period of 5 years of their studies to identify the changes that take place with regard to evolving teacher identities.

The participants were informed about ethical considerations, e.g. using coded names and the data only for a scientific purpose. As Gay at al. (2006) have adapted from Smith (1990) there are certain ethical guideposts to take into consideration in the qualitative research. Confidentiality, constructive and objective interpretation of data together with participants are among the guideposts for the present research.

The data collection methods include:
- open-ended questions, to collect background data, information about the family,school experience and understandings of an ideal teacher. The data was collected during entering teacher education;
- in-depth inteviews,to investigate the personal philosophies of being a teacher, the feelings of mission, responsibility of a teacher. The interviews are taking the form of personal discussions, where interaction between the researcher and the interviewee is contributing to the openness and deepness of the data collection.
- written narratives, for collecting data about experience gathered during 5 years of studies in teacher education programmes

Results

As the research is ongoing, only preliminary results can be discussed. The first set of data has been analysed, which included background information about student teachers, their feeling of mission and motivation to become a teacher and their vision of an ideal teacher. Two student teachers distinguished from the rest of the group, who expressed altruistic motifs to become a teacher stating that they feel a mission to „*make a world a better place...*" (ST2), „ *I feel I have to help my students to become better people...*" (ST5). This indicates the existance of the broader understanding of a mission a teacher has, where he/she is not merely a conveyer of knowledge but a personal guide, who helps the student to become a better person and to contribute to the society as well. The same students also described the ideal teacher as a „*light in the dark..who is an example, a person with virtues*"(ST5) and „*someone who could help me make right decisions in life, to raise above selfishness*" (ST2). One of the students has also religious background. As in-depth interviews are yet to be conducted, it is too early in this stage of the research to reach to certain conclusions, although it seems of particular interest if the abovementioned two students outstand from the rest of the group after the analysing of interview data. Presumably, after two years of studie (when the interviews are conducted), student teachers are better able to articulate their personal teaching-learning philosophies as well as the essence of them being future teachers. During the interviews also teacher education curriculum will be discussed with student teachers, to identify what has supported the development of teacher identity during first years of studies.

References :
Alsup,J.(2006) *Teacher Identity Discourses. Negotiating Personal and Professional Spaces.*Lawrence Erlbaum Associates Inc.
Akkerman, S.F., Meijer P.C. (2011). *A dialogical approach to conceptualization teacher identity.* Teaching and Teacher Education 27, pp. 308-319.
Anspal, T., Eisenschmidt, E., Löfstöm, E. (2011) *Finding Myself as a Teacher- Exploring the shaping of teacher identities through student teachers`narratives.* Teachers and Teaching: Theory and Practice, 1-20.
Beijaard, D. , Meijer, P.C., Verloop, N., Vermunt, J.D. (2000). *Teachers`perceptions of professional identity: an exploratory study from a personal knowledge perspective.* Teaching and Teacher Education 16, pp. 749-764
Beijaard, D. , Meijer, P.C., Verloop, N. (2004). *Reconsidering research on teachers` professional development.* Teaching and Teacher Education 20, pp. 107-128
Babiuk, G & Falkenberg, T.(2010) *Sustainable Development and Living through Chaning Teacher Education and Teaching in Manitoba.*Research Report.
Bowers, C. A. (1995). *Education for an Ecologically Sustainable Culture. Rethinking Moral Education, Creativity, Intelligence and Other Modern Orthodoxies.* State Univeristy of New York Press.
Bullough, R.V. 1997. Practicing theory and theorizing practice. In *Purpose, passion and pedagogy in teacher education,* ed. J. Loughran and T.Russell, 13-31. London: Falmer Press.
Cortese, Anthony D. (1999) *Education for sustainability: The university as a model of sustainability.*Second Nature, Inc.

Cortese, A. (2003). The critical role of higher education in creating sustainable future. Planning for Higher Education. http://scholar.google.com/scholar?q=Cortese+2003+interdisciplinary+thinking&btnG=&hl=en&as_sdt=0%2C5

DeCarvalho, R. (1991) The humanistic paradigm in Education. *The Humanistic Psychologist 19 (1), pp.88-104*

Erikson, E.H. (1968). Identity, youth and crisis. New York: W.W.Norton&Co.

Gay, L.R; Mills, G.E; Airasian, P. (2006). *Educational Research. Competencies for Analysis and Applications.*Pearson Merrill Prentice Hall.

Gee, J.P. (2001) *Identity as an Analytic Lens for Research in Education.* Review of Research in Education, Vol. 25 , pp.99-125. American Educational Research Association

Huckle, J. (1993). *Environmental education and sustainability: A View from critical theory.*Environmental Education: A Pathway to Systainability (Ed. J.Fien). Deakin University.

Illeris, K. (2011). *The Fundamentals of Workplace Learning.Understanding how people learn in working life.* Routledge

Jenkins, R. (2004) *Social Identity.* Routledge

Jennings, A.(2008). Community Development Supporting Sustainability Education. *Paper presented at the New Zealand Association for Environmental Education Conference „Connections and Action, Dunedin.*

http://www.newcq.org/pdfs/62/ncq%20sust-ed%2062.pdf

Kelchtermans, G. (2005). Teachers`emotions in educational reforms: self-understanding, vulnerable commitment and micropolitical literacy. *Teaching and Teacher Education Vol. 21. pp. 995-1006*

Korostelina, K.V. (2007). *Social Identity and Conflict.* Palgrave Macmillan, USA

Korthagen, F. 2004. *In search of the essence of a good teacher: Towards a more holistic approach in teacher education.* Teaching and Teacher Education Vol.20.pp. 77-97.

Lamont, C. (1965). *The philosophy of humanism.* Ungar, New York

Mead, G.H (1934).*Mind, Self and Society.*The University of Chicago Press

Moore, J. (2005). *Seven recommendations for creating sustainability education at the university level.* International Journal of Sustainability in Higher Education Vol. 6 No. 4, 2005, pp. 326-339, Emerald Group Publishing Limited

Ospina,G.L (2000). *Education for Sustainable Development. A Local and International Challange.* Prospects, Vol. XXX,no.1

Reason,P. (1988) Human Inquiry in Action: Development in new paradign research. London: Sage Publications.

Schepens, A, Aelterman, A. & Vlerick, P. (2009), Student Teachers' Professional Identity Formation: Between being Born as a Teacher and becoming one. *Educational Studies. Vol. 35, Nr 2*

Stibbe, A. (2011) *Identity reflection: students and societies in transition.* Learning and teaching in Higher Education, issue 5, 2010-11.

Vygotski, L. (1978). *Mind in Society. The Development of Higher Psychological Processes.*President and Fellows of Harvard College