EDUCATIONAL ACTION RESEARCH FOR SUSTAINABILITY: SEEKING WISDOM OF INSIGHT IN TEACHER EDUCATION

Ilga Salīte, Ginta Gedžūne and **Inga Gedžūne**
Daugavpils University, Latvia

Abstract

The article presents experience from educational action research in teacher education, which was obtained by conducting an investigation with first year students during the first semester of their studies. The aim of this action research is focused on the concept of phronesis, which was theoretically substantiated by Aristotle and further elaborated by several contemporary scholars. The article emphasises the need to recognise different kinds of action research.

This study focuses on the investigation of specific characteristics of phronetic processes. The content of our educational action research is people's attitudes towards own and other species. It was considered a tool for investigating the research aim, which is to develop the ability to find wisdom of insight in phronesis. Three stages of prhonesis (A, B and C) can be distinguished in this educational action research. This article reflects the organisation of action research and evaluates the use of communicative space at the initial stage of research from the perspective of researchers and research participants. The article also contains evaluation of research outcomes concerning the extension of communication discourse and the evaluation of experiences regarding attitudes towards own and other species in various contexts. Finally, the article proposes a brief review of tendencies that reflect changes in the research participant opinions. Discussion and conclusions reflect the specific features of phronetically-oriented action research. The article presents the first experience from phronetically-oriented action research and seeks conditions for promoting wisdom of insight (phronetic skills) in communication and through discourse.

Key words: educational action research; phronesis; attitudes as content; communication through discourse; phronetic skills; wisdom of insight.

General context of research

This article discloses a fragment of a broader educational action research design for the learning environment that would facilitate teacher research skills in teacher education. At the same time, this educational action research attempts to highlight ways to promote the idea of the teacher-researcher in higher education. Thus, the general aim of this study is to promote reorientation of teacher education towards sustainability in educational action research.

Our experience with educational action research has led us to believe that each new case of educational action research confirms the general characteristics of this research approach. At the same time, each new action research calls for consideration of specific aims, content and values and requires the identification of frames of reference that correspond to the particular research case. It is the issue of diversity within action approach, or the *nuances* of specific action research cases that should be considered in every action research.

We believe that the concept of nuance permits persons to more deeply examine the diversity that can become more or less pronounced during co-action in action research. Identifying nuances in qualitative research, therefore, allows a more nuanced description of the obtained data. The concept of nuance is used in the works of Mezirow and his followers (Mezirow, 2000). These scholars consider the uniqueness of different frames of reference as their potential nuances.

Usually, the aim of action research is to discover new *knowledge* that can contribute to solving a particular problem. The aim of this action research does not emphasise creating traditional knowledge but is focused on seeking *wisdom*. The reason that prompted such a choice is the tendency that sustainability is frequently viewed as people's wisdom to live in harmony with the world.

Scientific articles published at the turn of the 20th-21st century reveal a tendency to refer to Aristotle's beliefs about the development of wisdom as the goal of education (Birmingham, 2004; Grint, 2007). In Aristotle's opinion, it is essential to acquire not only theoretical knowledge (*episteme*) and skills (*techne*), but also practical wisdom (*phronesis*) (Aristotelis, 1985; Birmingham, 2004; Flyvbjerg, 2004; Grint, 2007). Aristotle regarded experience supplemented by reflection as a source of *phronesis*. This term – *phronesis* – is translated in English as *practical wisdom*, *practical judgement*, *common sense* or *prudence* (Flyvbjerg, 2004). Aristotle calls it an intellectual virtue that envisages rationality and the ability to evaluate the context of the situation. It means searching for the good in order to act ethically and promote this good, if necessary referring to past experience and seeking there solutions to the problem at hand. A person who possesses practical wisdom (phronesis) knows how to act in specific circumstances, and this knowledge cannot be reduced to general truths (Flyvbjerg, 2004). As Flyvbjerg (2004) points out, a particular tendency of contemporary science is that it disregards the specific, the practical, and the ethical. The dominant presumption is that the purpose of scientific activity is discovery of universal truths or the creation of a general theory, and that it is impossible to generalise from a particular case. Therefore, phronesis (ethical practical wisdom that envisages ability to look into specific problem situations and use past experience when deciding upon the desired course of action) is relatively little studied. Curiously, even the notion of phronesis has not been preserved in any contemporary word while the other two intellectual virtues proposed by Aristotle (episteme and techne) have survived in such words as epistemology, epistemic, technology, technical.

As stated above, the notion of phronesis is generally translated as wisdom, which means "experience and knowledge together with the power of applying them" (Oxford Illustrated Dictionary, 2000, p. 957). We propose that in order to better express the essence of phronesis, the term *wisdom* should be supplemented by *insight*, thus coining the notion *wisdom of insight. Insight* means "the capacity of understanding hidden truths, etc. esp. of character or situation" (ibid., p. 418). We therefore view phronesis as wisdom of insight which we understand as the ability to use past experience for evaluation of specific problem situations in the present in order to make ethical decisions about the required course of action that would promote the collective good in the future for a greater number of people.

In recent years, the notion of phronesis has come to be intensively used in action research theory because it permits persons to express the nuances of the deepest essence of action research. Analysis of Aristotle's beliefs in scientific publications proposes a conceptual and theoretical frame of reference that suggests searching for wisdom and conditions of its development in action research (Flyvbjerg, 2004). In a way, the notion of practical wisdom concisely describes the process of action research – *seeking practical wisdom through reflection.*

The notion of *phronesis* has found its place in leadership, education and action research theories. The notion of *phronesis* emphasises action (process and content), not merely reflection on experience. In leadership theory, it is related to the concept of *bricoleur* suggested by Levi Straus (see Grint, 2007). This concept refers to an original, creative, ingenious actor who can quickly react to changing circumstances and uses all available means and resources to ensure practical success. In leadership theory, phronesis is related to the leader's improvisation skills (Grint, 2007) and use of various techniques that generate energy in the system of mutual relations (Barge & Fairhurst, 2008). Improvisation skills are no less important for researchers in action research and teachers in pedagogical process. Hence phronesis is simultaneously a process that creates wisdom and aims at educating future teachers and action researchers. *Communicative space* (Gustavsen, 2001) is another concept related to phronesis. The notion of *open communicative space* is used in action research theory (Gustavsen, 2001; Wicks & Reason, 2009). It has been established that success in action research depends on what is happening in its initial phase. If at the beginning of researcher manages to open a communicative space (i.e. ensure that the research participants interact and openly discuss the problem, accept and promote diversity of opinions) participant involvement that reflects upon their personal experiences (phronesis) proceeds more successfully (Wicks & Reason, 2009). There are several studies about emotional experience and its role in communicative space (Newton & Goodman, 2009) and techniques to create a communicative space (Hyland, 2009).

The process and essence of communication is closely related to the concept of *discourse,* which is defined as practical use of language with a certain communicative purpose (Barge & Fairhurst, 2008). Discourse, however, reveals and contains not only the textual form of language that is used for information exchange, but also a culturally determined sets of ideas, beliefs and assumptions that are revealed in the communication process.

This article contains an analysis of experiences from a specific research case where participants were encouraged to involve and act in communication and through discourse. Communicative action was initiated by identifying specific experiences that reflect

people's attitudes towards plants, animals and other people. Responses were then evaluated from the perspective of various simplified frames of reference and complemented with extended discourse – adding or reducing the number of specific features in various types of attitudes.

Thus, the general context of research in this study focuses on the idea that phronesis requires the inclusive action of participants and attitudes that are essentially sustainable and oriented towards opening the communicative space. An exclusive approach is directed towards unsustainability and suggests a more closed communicative space.

Specific context and content of research

Specific considerations that prompted this research in teacher education were related to the necessity of introducing study courses where students could learn about the notion of sustainable education and become involved in the creation of practical wisdom as a basis for developing personally significant frames of reference for their future professional life.

Research was conducted within the study course *Environmental Pedagogy* that was created *on the grounds of educational action research* and is included in the first academic year of teacher education programmes. One of the topics in this course is attitudes towards own and other species. This topic was introduced to encourage students to evaluate their personal experience regarding attitudes towards own and other species and to involve them in the creation of personally significant frames of reference for their future professional life.

The *lived experience* of the research participants was used in this action research. In qualitative research, this concept is understood as *researchers' or the research participants' experiences, choices and opinions, and the way all these factors influence person's knowledge perception* (Boylord, 2008). In action research, lived experiences acquire additional nuances related to researchers' and the research participants' subjective characteristics that indicate self-knowledge and can help to answer greater social questions, thus creating an environment for storytelling, interpretation and sense-making. Lived experience represent a starting point for research, reflection and interpretation, and becomes the content of what is experienced (Manen, 2003; Whitehead, 2009).

For evaluation of the specific contexts of attitudes towards plants, animals and people, we selected a number of suggestions that helped to build the theoretical frame of this study. For this purpose, we examined Brereton's (2009) study where he: (1) analysed Dewey's model of evolutionary experience and included it in his anthropological theory and (2) further developed Dewey's theory (Brereton, 2009). In our opinion, it is a general frame of reference that can be applied for structuring the content of lived experience in a dialogue among researchers and the research participants. In Brereton's (2009) study, the essence of Dewey's model is expressed as a belief that experience has a phenomenal character, that it is a phenomenological whole with a multiplex nature, which is a structured unit that has certain levels and elements. Dewey distinguishes the following levels of evolutionary experience: pre-human level, human-social level and personally subjective level.

In educational action research conducted previously (Salite, 2002; Salite, Vanagele, & Jurane, 2005), we have discovered that people's specific attitudes towards own and other species can vary significantly. Undoubtedly, *in their consciousness people can*

perceive their connection with other species by becoming aware of themselves as included in the ecosystem, or as excluded from the contexts of the evolution of ecosystem and human evolutionary experience. Therefore, when studying person's attitudes, the researcher should identify its direction (inclination towards interaction or avoidance from interaction). Nowadays, one can frequently observe some people being increasingly aware of their inclusion in the ecosystem and/or their connection with its evolutionary processes, while others become alienated or exclude the contexts of ecosystem and/or evolutionary experience and avoid using them in daily actions and future plans.

Inclusion and *exclusion* as categories help explain educational and social relations. They have become the grounds for *inclusive and exclusive approaches*. These notions have been studied since the beginning of the 19th century (Buber, 2002), and even more intensively so during the last years (Kluth, 2000; Dymond, 2001; Aguirre & Martinez, 2002; Leo & Barton, 2006; Silverman, 2007; Angelides & Michaelidou, 2009). These approaches are viewed in broader and narrower contexts, e.g., in the context of ecosystem, the context of social relations and education. Interpretations of inclusive and exclusive approaches reveal the specific difference between these approaches, which are grounded in different attitudes, values, and epistemologies of knowledge acquisition (Hayden, 2009). Hayden distinguishes two types of knowledge acquisition epistemologies: (1) based on alienation (exclusion), when knowledge is obtained via objectification and generalisation of others and (2) based on togetherness (inclusion), when knowledge emerges through stories, discussions, answering questions, observations and interpretations of the way people act (Hayden, 2009). Undoubtedly, both these epistemologies can be easily recognised in educational practice since alienation-based epistemology has been retained in traditional education which aim is knowledge acquisition while inclusion-based knowledge acquisition is proposed in action research and inclusive education models. Each epistemology has a specific outcome: in the former case, it will be precisely *defined knowledge* or *defined wisdom*. In the latter case, it will not be wisdom as knowledge, but wisdom of insight, as we have previously termed, which can be understood as a solution gained through action, which corresponds to a particular situation.

This action research is based on the above-mentioned context and provides a possibility to investigate the research participants' lived experiences, initiate communication through discourse, use techniques for extending discourse and open a communicative space to advance the process of phronesis, offering the discovery of wisdom of insight seeking of more sustainable attitudes.

Research design

The participants consisted of three researchers and 38 (37 female students and one male student) from pre-school and basic school teacher education programmes (1st year students). The research was conducted in September-October, during the autumn 2009 semester in Daugavpils University.

Researchers worked out research design with the objectives of (1) organising educational action research grounded in the process or phronesis and (2) creating an open communicative space for dialogue *among researchers and the research participants in communication through discourse*. For implementation of dialogue and co-action, activities were planned at three stages of *phronesis* (A, B, C) (Figure 1).

(**A**) Identification of experiences regarding people's attitudes towards plants, animals and other people (most vivid cases of lived experience that illustrate people's attitudes towards plants, animals, and other people), content analysis of experiences in communication and through discourse.

> **The research participants** had to discuss, reflect upon and evaluate the identified cases, thus defining their characteristic features; the research participants had to name each of the evaluated experiences by writing down one key word and one sentence. This activity was performed in pairs or groups of three.

> *Researchers* summarised and qualitatively evaluated the content of attitudes towards plants, animals and other people and examined the approaches that the research participants had used for content formulation.

> Qualitative data analysis revealed that the research participants expressed the content of their experiences in four different ways: *(1) generalisations, (2) clichés, (3) 'flowery phrases' without deeper context, (4) phrases with traces of spirituality.*

(**B**) Evaluation of the identified experiences in the context of various types of attitudes (discourse evaluation in the context of simplified frames of reference, extension of discourse with own opinions and their evaluation in communication through extended discourse).

> **The research participants** were asked to evaluate the identified experiences in the context of various types of attitudes: (1) caring love, uncaring love, uncaring alienation and caring alienation, (2) caring inclusion, uncaring inclusion, uncaring exclusion, caring exclusion, (3) complementation of the initially (during stage A of phronesis) obtained discourse with participant individual contributions about attitudes towards plants, animals and other people in each type of attitudes, (4) evaluation of attitudes in communication through extended discourse.

> *Researchers* prepared qualitative analysis of data obtained in reflective activity.

(**C**) Seeking wisdom of insight: stages A and B (identification and evaluation of experiences) proceeded sequentially while stage C was conducted in parallel with stages A and B and comprised an evaluation of the process and outcomes of educational action research.

This article contains only part of the analysed data and researcher observations. The included data permits us to identify the essence of phronesis and its correspondence to educational action research where we tried to answer the question: how higher education can promote implementation of the idea of teacher-researcher.
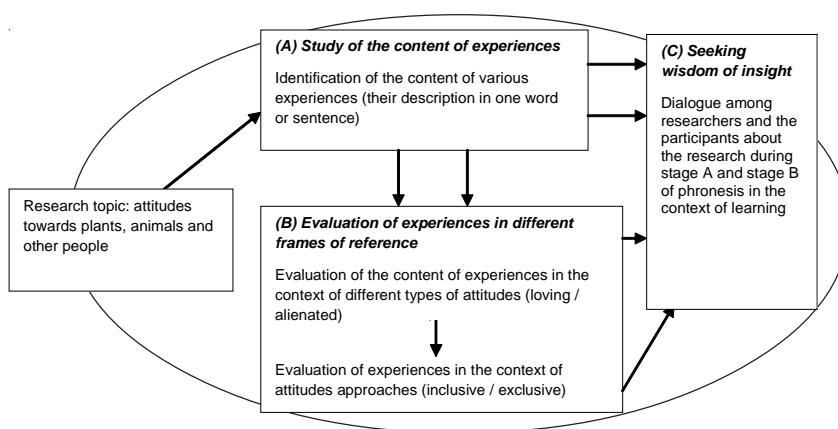
Figure 1. Stages of phronesis (A, B, C) in educational action research about person's attitudes
towards plants, animals and other people.

Qualitative analysis of the results

(A) Study of the content of experiences

During stage A of phronesis, researchers obtained the discourse from participants' lived experiences. For qualitative discourse analysis, researchers distinguished four approaches to describe experiences in written protocols.

- *Approaches to the description of lived experiences*
(1) Generalisations of lived experience were most frequently used to describe attitudes towards animals, least frequently used to describe attitudes towards people. All in all, researchers identified a wide range of frequently contradictory features for describing generalised attitudes (Table 1).

Table 1. Generalisations of lived experience

Types of attitudes	Features of attitudes
attitudes towards plants	*one word* – from care to carelessness; *one sentence* – person's temporary, irresponsible attention to plants without really caring about them;
attitudes towards animals	*one word* – a wide range of emotionally charged utterances (cordiality, charity, hardheartedness, friendliness, love, ruthlessness, violence, inequality, cruelty); *one sentence* – a wide range of activities based on egocentrism, anthropocentrism and various feelings (irresponsible behaviour, responsible interaction, estrangement, loving attitudes, superiority etc.);
attitudes towards people	*one word* – respect indifference, love; *one sentence* – don't care about others, think about themselves, want to be noticed, want to be respected, take care about their kin etc.

(2) For characterisation of lived experience, clichés were most frequently used to describe attitudes towards people, least frequently used to describe attitudes towards plants and animals. Use of clichés to describe attitudes also revealed a wide range of frequently contradictory features; impersonal attitudes towards plants; use of warnings, declarative statements and anthropocentric suggestions to describe attitudes towards animals; use of warnings and advice and identification of egoism when describing attitudes towards people (Table 2).

Table 2. Use of clichés for description of lived experience

Types of attitudes	Features of attitudes
attitudes towards plants	*one word* – good attitudes, fear, recognition of inner value, being against extravagances; *one sentence* – impersonal expressions (you can never have too much of a good thing, too much – too bad, you can never know what to expect from plants, beauty lies in simple things around us);
attitudes towards animals	*one word* – from fear to love, cruelty, violent attitudes manifested in action; *one sentence* – warnings against unethical behaviour, declaring friendly relationships, love towards our 'little brothers';
attitudes towards people	*one word* – love, friendship, indifference, loneliness, cruelty; *one sentence* – warnings against hurting, advice for ethical attitudes, urging to love other people, identification of egoism.

(3) Characterisation of lived experiences by using 'flowery phrases' without deeper context was most frequent in descriptions of attitudes towards plants, least frequent in description of attitudes towards people. Use of 'flowery phrases' without deeper context revealed a wide range of features concerning attitudes towards plants and people, but attitudes towards animals was described only with positively oriented features that revealed deep interconnection between people and animals (Table 3).

Table 3. Use of 'flowery phrases' without deeper context for description of lived experience

Types of attitudes	Features of attitudes
attitudes towards plants	*one word* – positive attitudes, respect, care, love, waste, anthropocentrism; *one sentence* – praising beauty, declaring the need for respect, attitudes towards plants mirror attitudes of the world in general, figurative expressions about pollution;
attitudes towards animals	*one word* – care, love, charity; *one sentence* – deep love, deep connection and people's ability to sacrifice themselves for the sake of animals, care and protection, from fear to love and cruel, violent attitudes that are manifested in action;
attitudes towards people	*one word* – love and competition; *one sentence* – praising the noblest feelings and declaring fight for one's place under the sun.

(4) Characterisation of lived experiences by using phrases with traces of spirituality
     was most frequent in descriptions of attitudes towards plants, very rare in description
     of attitudes towards people (Table 4).

Table 4. Use of phrases with traces of spirituality for description of lived experience

Types of attitudes	Features of attitudes
attitudes towards plants	*one word* – admiration, considerateness, interest, beauty, care; *one sentence* – deeply emotional and figurative expressions, deeply felt connection between plants' and people's souls, human spiritual mission, caring attitudes and admiration of plants that enrich one's life;
attitudes towards animals	*one word* – love, irresponsibility; *one sentence* – reminder about responsibility for what/who we have tamed and about loving them;
attitudes towards people	*one word* – values; *one sentence* – conclusion that person's inner world is a value.

Phrases with traces of spirituality in descriptions of lived experience revealed only
positively oriented features in attitudes towards plants, a wider range of features in
attitudes towards animals and traces of inner values in attitudes towards people.

● *Summary of the content identified in the research participants' experiences*

The participants were encouraged to enter the communicative space with their expe-
riences about people's attitudes towards plants, animals, and other people. Researchers
identified four different ways in which the research participants entered the commu-
nicative space and engaged in a dialogue. In this case, the content (experiences regarding
people's attitudes towards own and other species) was used as a tool for communication.
As previously mentioned, this research objective – organisation of educational action
research on the basis of which the process of *phronesis* is being implemented.

     The research participants offered their lived experience and evaluated and
generalized its content that, when brought into communication, revealed the diversity
of lived experience. The research participants summarised the essential features of a
person's attitudes towards plants, animals, and other people.

     In attitudes towards plants, the participants emphasised *indifference and a lack of
interest, admiration of the beauty of plants, careless, irresponsible and destructive activity,
pollution of the environment, care and tending.*

     In attitudes towards animals, the participants emphasised *people making use of
their superiority (breeding and using for satisfaction of own needs), inability to assume
responsibility for the animals that they have tamed (throwing away as an unnecessary
thing), love and care for animals (treating them as family members or best friends),
avoidance or violence towards animals caused by fear and alienation.*

     In attitudes towards people, the participants emphasised *indifference, every man
for himself, compassion in mere words, jealousy, competition, evil, cruelty, violence,
love, kindness and the need for intimacy, friendship and respect.*

• *Researcher observations and conclusions about participant involvement in the research process or in communication through discourse*

Researchers analysed their observations and concluded that during the first stage of phronesis, participants *initially positioned themselves for a cautious and alienated selection and description of the content of their experiences*. During the process of experience identification and evaluation, a gradual increase in participant interest was observed and communication became more open.

During the stage of cautious positioning, researchers evaluated the use of communicative space and lived experience and observed the following tendencies:

· Positive, deep and, at times, deep-ecological attitudes during positioning in communicative space were identified in cases when the participants expressed their experiences regarding attitudes towards own and other species by using 'flowery phrases', without deeper context or phrases with traces of spirituality.

· Most comments during the stage of cautious positioning were suggested in the form of impersonal observations, warnings, advice and declarative statements.

· Attitudes towards plants were chiefly described in 'flowery phrases' without deeper context and phrases with traces of spirituality. Attitudes towards animals were chiefly expressed in generalisations; attitudes towards other people were mostly suggested in clichés.

Additionally, the participants revealed their views about stage A research of phronesis in the context of learning.

• *The participant views about the research of stage A of phronesis in the context of learning*

The participant views about the research of stage A of phronesis were submitted in written form at the end of the initial stage of action research. Research data analysis permitted us to identify five categories that reveal characteristic features of the process of phronesis at the beginning of this research (Figure 1, C):

(1) Opportunity for communication and cooperation.

> *"I discovered a great way to cooperate with my newly-met course mates. I learnt how we can instigate person's activity and encourage communication with others. Identification of experience teaches to listen to other people and their thoughts."*

(2) A chance to engage in research and draw conclusions from this process.

> *"I learnt how to study interpersonal relations. I noticed how we can quickly get to know various opinions and make 'statistics', how to group people's opinions and discover the beliefs of majority and minority. I learned to evaluate my attitudes towards others, be honest and analyse not only my attitudes towards others, but also attitudes of others towards me, what it is like and why?!"*

(3) Introspection and reflection.

> *"I learnt to express my feelings towards plants and animals.*

> *I reflected upon my own and other people's views and the various ways we react to self-evident things that we face daily.*
> *I reflected upon what I, being one of God's creatures, think about other God's creatures. Although we are all created for this world, people with their thinking suppress and try to govern everything else around them. They do it both deliberately and unaware."*

(4)   Identifying diversity.

> *"Everybody may think and perceive the world differently. Relationships may be different. They can be loving, friendly and caring or unfriendly and violent. What matters most is upbringing and education because they reflect family values. After this activity I understood how different people are and how different our opinions and our attitudes towards things can be."*

(5)   Observing the interconnectedness of everything in this world.

> *"I was given a chance to look into other people's attitudes and relationships with nature, animals and people. We live in a world that we share with each other, people and animals. This division is ethically significant. Like every person, every animal also needs freedom. Animals are conscious beings, the same as people. People treat plants and other things very differently – well and badly. I believe that people should be told about it more rather than simply made to read things. Nowadays people are very different. It happens that stronger ones survive though everybody struggles for existence. We must learn to live with ourselves and with the surrounding environment. We should all join hands to help each other. We have everything in common and we ought to be able to deal and live with it correctly, to love ourselves and others."*

The participant impressions from the first activities of educational action research permit us to conclude that the participants evidently sought broader metacontent gains and lessons learnt. Moreover, the outcomes of the research on stage A of phronesis in the context of learning reveal peculiarities of the process of phronesis: communicative action through discourse, introspection, highlighting the contexts of family and interconnectedness of all. In this action and content, the basis of wisdom of insight is seen. These cognitions are rooted in the evaluation of lived experiences. In this initial positioning, and with the cautious presentation of the content stage, the research participants viewed these research outcomes at a metacontent and purpose-oriented level.

(B) Evaluation of the identified experiences in the context of various types of attitudes

Evaluation of experiences in the context of various approaches and the extension of discourse based on individual opinions initiated a more energetic and open communication through a more broadened discourse. It was marked by a transition from evaluation of the features and manifestations of attitudes towards the participant self-instigated insight in the contexts and causes of people's values and experiences. This

tendency can be illustrated by the nuclei of various types of attitudes that the research participants distinguished after the extension of discourse:

In caring and loving attitudes the research participants identified:
- *love as core value and manifestation of human nature (in attitudes towards plants, animals and people),*
- *awareness of the **world as a unified system** (plants, animals, people, interconnectedness of everything, which leads to the need to care for everything alive),*
- *care and considerateness as manifestations of love,*
- *understanding and tolerant acceptance of **diversity**,*
- *intimacy as a basic human need,*
- *person's **responsibility for** conservation of the **ecosystem** (wellbeing of plants and animals), understanding that person's activity affects the ecosystem,*
- *respect towards life and life sustaining system.*

In caring and alienated attitudes:
- *love towards the known and the close; fear of the unknown followed by estrangement and avoidance, reserve,*
- *negative past experience as cause of reserve and fear,*
- *orientation towards the positive in the values system (e.g. tendency to love) which is not manifested in action due to **fear and idleness**,*
- *care which is based on **anthropocentrism**, egocentrism and wish to satisfy one's needs,*
- *idleness, not wanting to assume responsibility,*
- *positive feelings and their manifestation in action **perceived as weakness** (fear to appear weak).*

In uncaring and loving attitudes:
- *lack of knowledge (and stereotypes) that **prevent from caring activity** (one does not know something and is afraid or does not know how to care for it properly),*
- *inadequacy between attitudes expressed in words and actual behaviour (hypocrisy),*
- *laziness and need for comfort and easy life as basic determinants of human behaviour, which cause estrangement – avoidance of negative aspects, ignoring them, indifference towards what happens around, irresponsibility. Even positive flashes of behaviour are **inconsistent**,*
- *egoism as a basic human trait (**using others for the sake of one's own benefit and satisfaction of one's needs at the expense of others – nature and other people**).*

In uncaring and alienated attitudes:
- *fear is caused by lack of knowledge and provokes destructive activity – turns into aggression,*
- *egoism and irresponsibility as causes of violence and **person's estrangement** from the life system (plants, animals and people),*
- *violence is caused by **lack of values and humaneness** – a negative values system is the **result of negative experience**,*
- *anthropocentrism (person's imagined superiority over other species), which causes violent use of other species for satisfaction of one's needs,*

- · **competition as lead motif of person's existence** *(fight for survival, natural selection - the physically strongest survives),*
- · *inability to empathise (***lack of empathy***),*
- · **considerateness springing from fear of losing what you have** *(fear of estrangement provokes considerateness and care).*

These pieces of practical wisdom were formulated during the research of stage A of phronesis in open communication. In this form of communication, declarative statements, admonitions and clichés are not prevalent. During this stage of communication, features of attitudes were 'woven' into contexts. A close examination of these contexts reveals causes of attitudes and interrelations of various contexts that prevent the use of unequivocal and declarative statements. Content evaluation of the extended discourse reveals the dominance of contextual nuances that were identified by the research parti-cipants and a deeper insight into personal attitudes towards plants, animals and other people. This stage of phronesis can be metaphorically called **weaving the nuanced pattern of the contextual content of communication,** where the participants integrated their experiences with metacontent (values, target orientations and personal opinions).

(C) Characterisation of inclusive and/or exclusive approaches in open communication

Evaluation of concrete experiences in the context of various types of attitudes intensified participant involvement in research activity. Researchers encouraged the participants to describe *inclusive and exclusive* activities and approaches. Thus, the participant gradually came to recognise these two phenomena and describe them with nuances from their individual frames of reference.

- • Inclusion and alignment were identified as open activity and person's need for it.

  Inclusion, I believe, is reaching towards someone, extending your hand. Most certainly, it is also a friendly and open attitude. A person is open to the world. He/she is friendly, well-disposed and wants to participate in the social and natural processes.

  Alignment is grounded in positive emotions that bring joy and brightness into life, on sympathy and personal inner needs, on attitude towards the world, on love, care, pleasure, interest, understanding and considerateness towards everything that is alive – by caring, sparing, looking after.

- • Inclusive relationships among people, animals and plants.

  Inclusion is primarily grounded in love, care, responsibility, cordiality. Inclusion means understanding, friendliness, love, respect and consider-ateness. If there were no relationship among the living creatures, there wouldn't be any common life or World peace. It is crucially important to be a good-natured person.

- • Unfortunate experiences and person's reserve can affect the wish for inclusion.

  Non-alignment proceeds from unfortunate past experience, from complying with the will of others or submitting to the circumstances. Person's wish for

> *inclusion also depends on the degree of his/her openness to other people and the world in general.*

• Exclusion is not easy; it is a choice; it hurts the other. Ignorance of the world is the road to exclusion.

> *Exclusion is grounded in irresponsibility, indifference, violence, envy, hatred. It is chiefly associated with negative emotions. If we experience such attitudes, we often react in the same way. But rejection is not easy, because you first need to meet and get to know what you are rejecting and only then decide whether you should reject it or not. It is a very cruel behaviour.*

> *Exclusion is grounded in betrayal, hatred, envy; in dislike towards people, animals and plants; in a combination of duty, indifference and insensitivity; in closeness, fear and not wanting to let anyone or anything approach you; in fear, ignorance, antipathy, egoism. Person excludes what he/she does not need or find interesting. This way others get hurt; the natural ways of the world get destroyed and wasted.*

> *A feature of exclusion is fear from a particular creature, thing or situation.*

> *The typical feature of exclusion is a person's fear from the world. The world seems strange, cruel, prejudiced. Ignorance of the world – that is the road to exclusion.*

A thorough examination of these comments and of the nuances in the opinions reveals that open activity and a person's need for it are the keywords of inclusion. Exclusion is not easy, because then we choose to feel the inner burden of exclusive activity. Hence, each person's needs and choices are the grounds for different attitudes. The research participants concluded that unfortunate past experiences and external circumstances can become insurmountable reasons for adopting exclusive behaviour or being excluded.

Discussion and conclusions

Educational action research, which has been discussed in this article, has made researchers reflect on the fact that action research can be characterised by certain nuances. These nuances may encourage re-evaluation of personal experiences and beliefs about action research, in general. Our previous action researches were conducted under the assumption that the construction of new knowledge is a reflective activity, as mentioned at the beginning of this article. Having studied publications where action research was analysed with reference to Aristotle's theory and especially to the process of phronesis and its use in action research, we observed that this perspective brings about the need to answer several questions that lead to a re-evaluation of prior beliefs.

We concluded that, in educational action research, it is impossible to define wisdom and answer the question: what wisdom has the research participants created? This question can only be answered in traditional epistemologically-oriented action research. In phronetically-oriented educational action research, it is impossible to define wisdom as knowledge (also practical), because phronetic wisdom is the ability to find solutions

in concrete circumstances on the grounds of past experiences and a common target-orientation that would benefit the majority. Such wisdom can only be found through insight. When constructing the theoretical framework of this study, we discovered that phronetic wisdom is essentially different – it is not the application of knowledge, it is the ability to create wisdom. This can be defined as wisdom of insight, emphasising that the roots of this wisdom are fundamentally different. It is neither knowledge, nor a skill of applying knowledge; it is the ability to find a wise solution for the particular situation.

Development of phronetic skills in action research introduces a new nuance in its structure – the need to find a strategy that can permit us to extend and open communication through discourse in order to promote development of phronetic skills. The aim and outcomes of phronetically-oriented action research will be different. The context of this study suggests an answer to our general research question: how can higher education promote implementation of the idea of teacher-researcher? In teacher education, it is possible to propose educational action research that is grounded in the process of phronesis or a strategic approach for development of phronetic skills. These skills can help the teacher in cooperation with the diverse partners in his/her professional environment which is characterised by variety of discourse.

Phronetically-oriented educational action research requires reflection on the interconnection between research content and the process of phronesis. In this case, the chief aim of research is to create a communicative space that helps develop phronetic skills. On the way towards reaching this aim, specific research content serves as a tool for finding specific solutions and highlights the need for seeking wisdom of insight.

People's attitudes towards own and other species is an issue that is closely related to their life wisdom. In teacher education discovery of life wisdom is crucial since it encourages striving for sustainable aims

Discovery of life wisdom in co-action (phronesis) is one of the opportunities of educational action research. Phronesis as moral practical activity which is directed towards achieving the collective virtuous good and educational action research as reflective activity for formulation and implementation of shared action aims are complementary in their nature.

In the process of phronesis, it was observed that lived experience (its content as a person's attitudes towards own and other species), openness of communicative space and energy generated in co-action transformed into an evaluation of attitudes towards others and oneself in the context of the ecosystem. This research suggests that there is an opportunity to discover different frames of reference during the study of lived experience – the ecosystem or evolutionary context. The context of the evolutionary process, however, was not discovered. There are probably lived experiences that weaken the connection between the ecosystem and its evolutionary processes.

This study suggests experience of implementing phronesis in educational action research. Evaluation of its procedure was viewed in the context of openness or closeness of communicative space and generation of energy in co-action. Accordingly, we argue that two stages of phronesis have been discovered: (1) cautious positioning with a gradual opening of communication and increase of interest, (2) active evaluation of contextual nuances (search for the valuable) in co-action or weaving the nuances of contextual communication pattern in the process of phronesis.

References:

Aguirre, A., Jr., & Martinez, R. (2002). Leadership practices and diversity in higher education: Transitional and transformational frameworks. *Journal of Leadership & Organizational Studies*, *8*(3), 53-62. DOI: 10.1177/ 107179190200800305.

Angelides, P., & Michaelidou, A. (2009). The deafening silence: Discussing children's drawings for understanding and addressing marginalization. *Journal of Early Childhood Research*. SAGE publications, *27*(1), 27-45. DOI: 10.1177/ 1476718X 08098352.

Aristotelis (1985). *Nikomaha ētika [Nicomachean Ethics]*. Rīga: Zvaigzne.

Barge, K. J., Fairhurst, G., T. (2008). Living leadership: A systemic constructionist approach. *Leadership*, *4*(3), 227-251. DOI: 10.1177/1742715008092360.

Birmingham, C. (2004). Phronesis: A model for pedagogical reflection. *Journal of Teacher Education*, *55*(4), 313-324. DOI: 10.1177/0022487104266725.

Boylord, R. M. (2008). *Lived experience*. In The Sage Encyclopedia of Qualitative Research Methods. SAGE Publications. Retrieved October 9, 2009, from http:// sage-ereference.com/research/Article_n250.html

Buber, M. (2002). *Between man and man*. London, New York: Routledge Classics.

Dymond, S., K. (2001). A participatory action research approach to evaluating inclusive school programs. *Focus on Autism and Other Developmental Disabilities, 16*(1), 54-63. DOI: 10.1177/108835760101200113.

Flyvbjerg, B. (2004). Phronetic planning research: Theoretical and methodological reflections. *Planning Theory & Practice*, *5*(3), 283-306. DOI: 10.1080/ 146493504 2000250195.

Grint, K. (2007). Learning to lead: Can Aristotle help us find the road to wisdom? *Leadership*. *3*(2), 231-246. DOI: 10.1177/1742715007076215.

Gustavsen, B. (2001). Theory and practice: The mediating discourse. In P. Reason & H. Bradbury (Eds.), *Handbook of action research: Participative inquiry and practice* (pp. 17–26). London: SAGE.

Hayden, B. (2009). Displacing the subject: A dialogical understanding of the researching self. *Anthropological Theory*, *9*, 80-101. DOI: 10.1177/ 1463499609103548.

Hyland, N. E. (2009). Opening and closing communicative space with teachers investigating race and racism in their own practice. *Action Research, 7*, 335-354. DOI: 10.1177/1476750309336717.

Kluth, P. (2000). Community-referenced learning and the inclusive classroom. *Remedial and Special Education, 21*(1), 19-26. DOI: 10.1177/ 074193250002100103.

Leo, E., & Barton, L. (2006). Inclusion, diversity and leadership: Perspectives, possibilities and contradictions. *Educational Management Administration & Leadership, 34*(23), 167-180. DOI: 10.1177/1741143206062489.

Manen, M. van (2003). Lived experience. In Encyclopedia of Social ScienceResearch Methods. SAGE Publicattions. Retrieved October 9, 2009, from http://sage-ereference.com/socialscience/Article_n504.html

Mezirow, J. (2000). *Learning as transformation: Critical perspectives on a theory in progress*. New York.

Newton, J., & Goodman, H. (2009). Systems psychodynamics and communicative space. *Action Research*, *7*(3), 291-312. DOI: 10.1177/1476750309336719.

Oxford Illustrated Dictionary (2000). Rīga: Zvaigzne ABC.

Salite, I. (2002). Teachers' views on the aim of education for sustainable development. *Journal of Teacher Education and Training*, *1*, 68-80.

Salite, I., Vanagele, E., & Jurane, A. (2005). Organization of learning for sustainable education. In Proceedings of 19th International Conference of Learning Organization in A Learning World (ICLORD), 18-22 April 2005 (pp. 873-881). Bangkok, Thailand.

Silverman, J. C. (2007). Epistemological beliefs and attitudes towards inclusion in pre-service teachers. *Teacher Education and Special Education: The Journal of the Teacher Education Division of the Council for Exceptional Children, 30*(1), 42-51. DOI: 10.1177/088840640703000105.

Whitehead, J. (2009). Generating living theory and understanding in action research studies. *Action Research*, *7*(1), 85-99. DOI: 10.1177/1476750308099599.

Wicks, P. G., & Reason, P. (2009). Initiating action research: Challenges and paradoxes of opening communicative space. *Action Research, 7*(3), 243-262. DOI: 10.1177/1476750309336715.

Correspondence:

Dr Ilga Salīte, Institute of Sustainable Education, Faculty of Education and Management, Daugavpils University, Parades 1, Daugavpils, LV-5400, Latvia. Email: ilga.salite@du.lv