

“Education is all about hope”

Envisioning the Future: Bachelor’s and Master’s Degree Students’ Perspectives

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Abstract

Education is a future-facing activity. Therefore, universities need to engage students in building alternative and preferable future scenarios and reveal features of unsustainability, as well as open spaces for students to participate in discussions and negotiate new meanings. This paper reveals the future visions bachelor’s and master’s degree students from one of the regional universities in eastern Latvia have of education and focuses on a sustainability analysis (sustainable and unsustainable) of societal aspects and education. The authors conclude that thinking about preferred futures make students more aware of the positive changes that could be made and their personal responsibility to contribute to these changes. In this connection, the need to take a broad, integrated and holistic view of the future and its social and personal significance is of utmost importance.

Key words: preferable futures, feared futures, features of unsustainability, features of sustainability, higher education

Sustainability Framework Envisioned

In 2002, world leaders reaffirmed the principles of sustainable development at the World Summit on Sustainable Development in Johannesburg, emphasising the role that education plays in defining future orientations. As stated in the United Nations Educational, Scientific and Cultural Organisation (UNESCO) World Conference for Sustainable Development “Learning Today for a Sustainable Future” that took place in 2014 in Nagoya, Japan, educators are called upon to promote attitudes and behaviour congruent to a culture of sustainability. This puts an imperative to enhance the agency of each and every educator to use sustainable pedagogical approaches to empower youth to assume responsibility for creating a sustainable future. Iliško (2007) also emphasises the need for teachers to become active agents themselves in the process of “cultural reconstructions and educational re-conceptualization” (p. 17).

Structural, political, economic and systemic changes in Latvia promote new ways how to view knowledge, foster new ways of interacting with people via information technologies and bring about a new meaning of the conceptualisation of the word “world”. Ratcliff (2004) argues that serious rethinking, accompanied by a more holistic

view of a reform processes in education is essential. This, of course, needs to be followed by “further modification and fine-tuning” to generate “a discourse leading to new changes previously not envisioned” (Ratcliff, 2004, p. 108). Young people need a ‘*new framework*’ to meet their potential as future-oriented human beings (Wheeler & Bijur, 2000). The question is how universities are preparing students to create a more just, humane and sustainable world. Fien (2002) argues that a vision of sustainable schools encompasses a vision that is not only ecologically, but also socially, economically and politically sustainable. This new framework of the future school and society, as a whole, needs to be based on local community contexts. Fien (2002) emphasises that a vision of a sustainable society and schools needs a holistic approach and an educational rethinking that involves a practice-based interdisciplinary curricula, problem-solving strategies, the integration of sustainability principles throughout the curriculum and attention to both local and global contexts.

A Framework for a Sustainable School

This becomes more evident when schools and universities are among the slowest and most difficult institutions in which to implement sustainability agenda. Universities play a major role in training teachers to work in future schools. The perspectives related to sustainability require re-evaluating the whole idea of the schools, teaching and practices inherited from the past (Sterling, 2005).

This requires innovations and organisational change rather than just integrating the concept of sustainability into already existing curriculum. UNESCO is the leading agency to define the United Nations (UN) Decade of Education for Sustainable Development (DESD) (2005–2014) that emphasises integrating values and practices of sustainable development at all stages of education in order to address the social, economic, cultural and environmental problems of this century. Future schools need to equip students with necessary skills and competencies to live in an increasingly globalised world and to understand the unique contribution each of them can offer. Schools and universities need to find a way for the four pillars: *Learning to know*; *Learning to do*; *Learning to live together*; *Learning to be* can find their equal place in education. Young people who enter the labour market in the upcoming decades will play a significant role in facilitating sustainable development to better meet future challenges.

Consequently, schools need to equip learners with the skills and values needed to cope with present and future demands. UNESCO (2009) defines education for sustainable development (ESD) as a complex notion combining knowledge, competencies, skills, values and behaviours. Schools need to help to equip students with greater humility, respect for the all forms of life and future generations, the capacity to think systematically, challenge unethical decisions and increase awareness, knowledge and the necessary tools to create a sustainable future. Davies, Devin and Mariana (2011) argue that students need a completely different set of skills to be able to adjust to evolving requirements. Some of these requirements include transdisciplinarily, new literacies and adaptability. Dede (2010) adds such skills as critical thinking, creativity, innovation skills, collaboration skills, contextual learning skills, self-direction and communication skills, all of which should be fully integrated throughout the curriculum. Teaching such life skills should be done through discovery-oriented teaching methods, team work and active participation of students in curriculum planning (Jiminez, 2006).

According to UNESCO (2005) definition, “*The overall goal of DESD is to integrate the values inherent in sustainable development into all aspects of learning, to encourage changes in behaviour that allow for a more sustainable and just society for all*” (p. 6). This definition places emphasis on the dimension of practice dimension; in other words, how the concept is practiced, its impact on students’ behaviour and how to live in a more sustainable manner. Education helps students to understand the world in which they live by addressing the complexity and interconnectedness of problems (UNESCO, 2002). Education is a “future-facing activity” (Facer & Sandford, 2010, p. 74). Therefore, universities need to engage students in building alternative and preferable future scenarios and to reveal features of unsustainability, as well as open spaces for students to participate in discussions and negotiate new meanings (Hedley, 2001; Sterling, 2002). As stated in the renewed version of the European Strategy for Sustainable Development (European Council [EC], 2006), the success of revealing and “reversing unsustainable trends to a large extent depends on a high-quality education for sustainable development at all levels of education” (p. 22).

This also requires flexibility within the different academic disciplines. Reforms aimed at sustainability in higher education foresee the students to be more actively involved in individual and collective activities. This, in turn, requires university teachers to adopt new roles, as well as a more holistic and systematic way of thinking (Iliško, 2005; Iliško, Ignatjeva, & Mičule, 2011; Salite, 2008; UNESCO, 1997).

Students’ Beliefs about the Future

Setting goals for the future and exploring possible future scenarios is natural for every human being. As persons mature, they formulate more specific and more conscious future plans that motivate their everyday actions. Every student possesses his/her specific set of beliefs. Beliefs provide people with a framework of how to interpret the world and act, determine which priorities to choose. Students constantly refine and change their beliefs as a result of the influence of significant others or important events in their lives. Education needs to develop students’ capacity to believe that their beliefs influence their daily choices and actions. Future orientations refer to the images persons have about themselves, their personal individual future as reflected in their goals, plans and strategies.

Universities need to prepare students to play a significant role in society. Each student lives within the interconnected framework of political, cultural, economic and ecological dimensions that influence them in significant ways. Each student is imbedded (located) within a particular culture with its specific heroes, series and meanings. The meaning each person makes is both deeply collective and personal. Therefore, each student creates his/her personal future vision and his/her personal meaning. Students choose metaphors about the issues that are significant for them and select those which make more sense to them. Students develop a moral vision of a social order of the educational system and a future society by expressing moral sensitivities about their detachment from a natural world, the urge to live a healthier and a more sustainable life in all its dimensions, leading to the congruence of personal and global well-being.

Education is a future-oriented activity. This involves deciding what to study, what is important to learn and what will be necessary for the students in the labour market after their graduation. Unfortunately, the possibility of alternative futures remains largely

unarticulated at universities. In line with Facer and Sandford (2010), Inayatullah (2008) and UNESCO (1997), this is essential to engage educators and students in the process of envisioning the future for developing more nuanced and alternative trajectories of possible and preferable future scenarios with defining responsibilities and consequences of one's personal actions. The set of tools and suggestions designed by Eckersley (2002), Fien (2002) and Hick (1995, 1998) for teachers and teachers' educators need to be taken into serious consideration by engaging students in envisioning the future since education in the broadest sense plays a pivotal role in bringing about more profound changes, in both tangible and intangible ways (UNESCO, 1997). Facer (2009) and Scott and Gough (2003) argues that educators need to be aware that there will be no single educational response to how to prepare learners for potential future developments. Therefore, educators need to prepare a template of "a school of a future" which might inspire students and bring about "a commitment to creating a diverse ecology of educational institutions and practices" (Facer, 2009, p. 8).

Methodology of the Study

For the purpose of this study, the authors carried out 1–1,5 hour-long life story interviews with eight bachelor's and eight master's degree students about how they envision possible and probable future scenarios. The students are representatives of the different faculties – "The Faculty of Natural Sciences and Mathematics", "The Faculty of Humanities", "The Faculty of Education and Management", "The Faculty of Music and Arts", "The Faculty of Social Sciences". Two students from each area voluntarily agreed to participate in this study. Instead of closed questions, we opted for open-ended life story interviews which lent themselves to thorough and detailed discussion. This method offered the researchers greater flexibility to explore more areas in depth by generating further questions during the conversations, followed by the four focus group interviews ($n = 65$). The students who participated in the focus group interviews comprised a sample representing students who were matriculated in the master's degree programme "Education". The sample of bachelor's degree students was composed of the students who were enrolled in the bachelor's degree programme "Education" and consisted of preschool and primary school teachers.

Students' stories revealed their meanings about the world that were particularly significant for them. Students revealed from where they generated their life purposes and aspirations. The limitations of this perspective were accepted as part of the research. Questions and themes were similar in all the interviews, but the interviews enabled the authors to explore the themes that arose in a more nuanced manner. The interview transcripts provided diverse meanings in which interviewees described certain phenomena. The analysis of all the interviews was carried out, and a number of themes with regard to a preferable future were singled out. Quotes from the interviews were used to illustrate the essence of the category. A number of variations (descriptors) were singled for each category. Life story interviews with the bachelor's and master's degree students allowed initial categories or descriptions to emerge. A phenomenological approach allowed the researchers to capture diverse ways the students describe future scenarios. These variations were grouped in descriptive categories that reflect the essence of various phenomena.

All the students possessed a coherent set of beliefs that described their lives and future plans. The students were encouraged to think about the possible and preferable future and discuss the actions that schools and each of them could carry out to bring about their vision. They were asked about the main constraints and obstacles faced in attempting to reach a sustainability vision. The authors used questions that helped them to uncover students' worldviews: *How do you envision a future society? What is a good future perspective for you? What are the features of sustainability and unsustainability in your future scenarios? What are your visions of a future school?* By doing this, students learned how they come to believe what they believe and how those beliefs are present in their daily lives. Students were, then, asked to consider what is possible and desirable, and they were encouraged to discuss the factors that they considered to be significant determinants in reaching their future visions.

Research Findings

The future visions of students are framed by their system of beliefs. Students selected the factors that affected their future visions; they traced lines among the different factors, and how they intertwine and influence each other. Students were encouraged to reflect on their worldviews in the individual interviews. The worldviews of students are different from the ones that the teachers and their parents hold. Most of their stories are shaped by the media and somewhat less by books. As the interview data reveals, the future visions and ambitions of students have more to do with economic well-being than the common good or justice.

The envisioned 'preferable future' scenarios of the students helped them to discover new relationships and possibilities in the moral and social domains. The development of constructive and systematic beliefs and the acceptance of social responsibility for a sustainable future was a contributing factor in this particular study. A vision of the future can be seen as a powerful device that can promote change in the present and empower students to make decisions about a possible future. As it is stated by UNESCO (1997), all practices that are not sustainable should be identified. Possibilities for correcting them can then be discussed and explored by the students. It is critically important that the entire community be involved in the discussion.

Creative envisioning also stimulated students' moral reasoning, allowing them to move beyond conventional levels of thought and helping alternative relations among the concepts to emerge that were congruent with higher levels of moral reasoning. This exercise in imagination allowed the students to immerse themselves in multiple contexts and to respond to the situation as a whole person.

This research highlights the most frequently mentioned hopes and constraints for implementing future visions of a sustainable society and a school as viewed by bachelor's and master's degree students, which are related to political, economic, social, ecological, cultural and environmental dimensions.

Among the most frequently mentioned constraints with regard to the future, the bachelor's and master's degree students mentioned the following aspects: economic (fear of unemployment; poverty; competitiveness in the labour market), political (lack of strong leadership; lack of agency and engagement in decision-making processes concerning future planning of local and global futures; overwhelming bureaucracy; school leaders' limited autonomy; leaders' fear to initiate sustainable changes in school and

society; the culture of civic passivity; alienation and lack of voice), social (gap between the rich and the poor; exclusion-oriented culture; segregation), culture (growth of a consumer culture), ecological (ecological devastation; health issues; unsustainable live hood and materialism).

Among the 'feared future' dimensions mentioned in life story interviews was a political dimension (lack of agency and engagement in the decision-making process concerning future planning of local and global futures; the need for stronger leadership; reducing bureaucracy; increasing autonomy of school leaders; the courage to initiate changes in school; the present culture of civic passivity; alienation and silence; the need for stronger leadership). Some extracts from student essays illustrate their worries and future hopes.

A Need of Wise Leadership in Building a Future Society

There are no real and charismatic leaders that can find the solution in the spheres of life. Today leaders need new competencies and a capacity in bringing a vision of a sustainable society a reality. They need to fight less among themselves over a domineering position in politics but rather to work cooperatively over implementing a sustainability agenda.

Students emphasised the need of new qualities of school and societal leaders to think systemically and to challenge unethical decisions and actions. Despite of predominantly self-centred and career-oriented future goals, some students expressed their willingness to contribute to the political well-being of the country.

I want to become the head of the school. I don't want just to occupy the position but to support young people and to encourage them to do their best for a well-being of the town, the school and the country. I want to be a contemporary leader who is up to date and who serves other people.

Among the descriptors of economic dimensions, the following can be named: poor living conditions, unavailability of jobs and high competitiveness in the labour market. In life-story interviews, the majority of students placed emphasis on prosperity and economic well-being, with their narrow aim oriented towards self-fulfilment, self-indulgence and the realisation of the American dream.

Self-centred, Egoistic Future Perspectives

I try to visualise my future. I have a poster of my possible future in front of me in my room which captures my dream of having a nice home, an Audi car, preferably white.

Another student stated, "I want to enjoy my life. I want to do the things I like. I want to get a well-paid job, to travel and to enjoy my life. I want to enjoy my life to a full extent and to enjoy the fruits of my success."

Despite the economic difficulties in the country, some students hold a positive future perspective.

Learning the Skills for Life in the 21st Century

I want to find my place in this life where I can succeed. I am optimistic, positive and always in motion. I want to stay in my country and to realise my potential. I know it will take time and lot of efforts to reach something.

The unemployment issue was well pronounced in all the interviews, the consequence of which is the brain drain. Despite this, the students expressed their hopes to start small businesses and their belief in the power of entrepreneurship. They linked those themes with the economic and political processes in the country.

Bridging the Gap of a School and a Local Community

The majority of students expressed their concern that what they are learning at schools is not compatible with the requirements in the labour market outside the formal education. They expressed hopes that future schools will develop skills and competencies in areas required for the next stage of their lives, like more intensive integration of information and communication technology (ICT), teamwork and other life skills.

The other factor that was singled out in students' responses was an ecological dimension revealed as a misuse of natural resources, overconsumption, unsustainable relations and unsustainable environment: fragmented, discipline and result-oriented learning environment at school. Some students pointed to their contribution to the ecological sustainability of the earth.

Care for Future Generations

In some interviews one can trace intergenerational connectedness and a care for their future.

I want the world to be a more beautiful place for future generations as well. I enjoy spending my time in nature, I enjoy its beauty. I want this to be available for my children as well. ... I have a feeling that people live without any concern about the future. They live as if tomorrow never comes. They are simply enjoying the present day.

Care of the surrounding environment. Environmental motives were the most pronounced aspects in the students' essays. One of the students said, *"I try to live in a harmony with nature. I am trying to give a second life to some of my used things. I do not throw those things out. I use eco-friendly washing liquids."*

Another student responded, *"It is quite painful to see a deserted countryside. Young people are leaving the country for better jobs or leave for big cities. Still, I can mention some good examples. I see how people try to cultivate their land. They grow their own vegetables. I do not think if a return to an agrarian society is the best solution, but rootedness in one's land may be a solution for us."*

Concern about the ecological problems. Almost all students have raised the issue of human beings causing harm to nature and the surrounding world. Among all the dimensions of sustainability, the other most pronounced was a social dimension (competitiveness; alienation in all levels; marginalisation; exclusion; undemocratic power structures; intolerant attitude; life in a multicultural society).

In both interviews and focus group interviews, students pointed to the issue of exclusion of some groups of people from the societal and political processes in the country.

Exclusion of Some Groups from the Societal and Political Processes and Depriving Them a Voice

... some groups of people are excluded from societal processes, like people with special needs, retired people or unemployed people. They live almost under the poverty line. There are almost no guarantees or hopes for them. They are simply locked in their apartments.

The students expressed their hopes in government initiatives to involve marginalised groups of people in societal decision-making processes. One of the interviewed students pointed to a school and university graduates as a vulnerable group of society.

... the graduates of universities are facing a most painful situation. They are energetic and enthusiastic to implement their newly acquired knowledge but there is no availability of job placements and they are forced to leave the country. The government has invested in them for the future development of the country, but they are forced to make a decision to leave the country.

The most positive aspects mentioned in students' essays were related to a culture dimension. The students mentioned features of a sustainable future, such as strong cultural traditions, rootedness in cultural wisdom and reality of a newly emerging multicultural society. As one of the bachelor's degree students commented, "A good thing to tell is about our cultural heritage and traditions that have survived throughout the centuries and that keep our culture alive and resilient to any changes."

The students pointed also to some unsustainable aspects that need to be considered in the envisioned future perspectives. Two of the most often mentioned included a predominantly materialistic culture and the need for more humane relationships.

I hope people will not focus too much on materialistic aspects. They need to become more human, they need to turn to spiritual values.

In my envisioned future, I want people to be more humane and to build much healthier relations among themselves. ... I want them not to live in hatred, but in solidarity and a mutually supportive atmosphere.

Table 1 summarises aspects of unsustainability gained in the envisioned future orientation of bachelor's and master's degree students in their life story interviews.

Table 1

Content Analyses of Unsustainability Aspects in Society as Obstacles in a Feared Future – Orientations of Bachelor's and Master's Degree Students

Unsustainability Dimensions	Content Categories (N)
Political	Lack of agency and disengagement of people in decision-making processes concerning future planning of local and global futures (10); lack of strong leaders (9); overwhelming bureaucracy (6); limited autonomy of schools' leaders (5); fear of initiating changes in school and society (8); the culture of civic passivity (7); alienation (6)
Economic	Poor living conditions of the majority of population (14); unavailability of jobs in the labour market (9); unemployment (8); poverty (9); immigration; demographic situation (9)
Ecological	Unsustainable relationships (13); unsustainable environment: fragmented, discipline and result-oriented school environment; (5) ecological devastation (8); health issues (10); consumerist lifestyle (7); modified foods (7); health problems caused by environmental damage (6); disinterest in global issues (4)
Culture	Growth of a consumer culture (7); culture of ignorance (6); disbelief in the future (9); lack of skills to live in a multicultural society (8); intolerance to other ways of life and traditions; xenophobic sentiments towards other cultures
Social	Competitiveness (10); marginalisation of some groups of society (9); gap between the rich and the poor (7); exclusion-oriented culture (9); segregation (6); aggression, violence among people (9)

'Proactive Futures' – Responsibilities Reflected in the Future Visions of Students

The 'preferred future' perspectives reflect a scope of responsibilities towards the planet Earth. Students' preferred future models are rooted in a global and ecological perspective with all the dimensions involved (ecological: sustainable lifestyle; care for the surrounding environment; comprehension of interconnectedness; social: respect for diversity of human experience; economic: inclusion of disadvantaged and marginal groups; political: agency; awareness of responsibilities; participatory democracy; freedom of choice; global responsibility; cultural: respect and ecological sensitivity to the diversity of cultures and worldviews).

In the focus group discussions, it was evident that the present state of the Earth's development is unsustainable. Students located their future visions within the interconnected network of political, intellectual, social and international frameworks that put certain demands on their lives.

The most frequently mentioned aspects of unsustainable education as mentioned by the students are given in Table 2.

Table 2

Facets of Unsustainability of Current School Practice Prospectus

Ecological	Careless attitude to nature; cruelty; overemphasis on indoor learning; consumerist attitude; health issues of students caused by the unhealthy consumption of junk food; environmental pollution; lack of resources
Socio-political	Disrespect to other people; mobbing; competition; class division; alienation; marginalisation of some groups of students; exclusivist and xenophobic attitudes towards the 'other'; alienation among the people caused by the overdependence on technologies; overemphasis on the cognitive dimension in school curriculum rather than on value education and spirituality; fragmentation
Political	Lack of agency of teachers and students in decision-making processes; undemocratic decision-making processes; bureaucracy; centralised structures; political tensions
Economic	Overconsumption; dominant consumerist value orientation; low prestige of the teaching profession; unmotivated teachers in introducing changes; low teachers' salaries; outdated technologies at schools; lack of resources; a dangerous demographic situation; low quality education; students' emigration; unemployment of graduates; lack of skills of school graduates to enter in the labour market; globalisation
Socio Cultural	Lack of skills to live in a multicultural environment; intolerant attitude towards other cultures, languages, ways of living and thinking; intolerance; xenophobic attitudes; racism; class society; brain drain; emigration to economically prosperous countries

The 'preferred future' scenarios of the bachelor's degree students are quite optimistic, in a way a little bit naïve, as compared with master's degree students, whose visions are more pronounced and well-grounded in the current reality.

Table 3

Facets of Sustainability of the 'Preferred Future' School Scenarios

Ecological	Teaching care for the planet; sustainable life styles; care for the surrounding environment; awareness of the interconnectedness; healthy food; safe environment; recycling; growing concern about the ecological issues
Social	Safe physical and psychological environment; cooperation; kindness; recognition of the needs of each student; values education; community-oriented outreach; spiritual values; ICT as a tool for global interconnectedness
Political	Mutual decision-making processes; agency; awareness of individual responsibilities; participatory democracy as the best form of leadership and governance; freedom of choice; awareness of a global responsibility; sustainable thinking; expanding the borders of school community to a local community; community outreach
Economic	Competition in the labour market, which might raise teachers' competencies and qualifications; engagement of schools in sustainability projects; support for children from disadvantaged and dysfunctional families; investments in education; integration of technologies as a tool for quality education
Culture	Respect and care for other cultures and languages; overcoming xenophobic attitudes; language acquisition; learning tolerant attitude; widening the labour market; competitiveness; more opportunities for academic mobility; the use of ICT as a means to learn about other cultures

Sequel to Table 3 see on p. 98.

Sequel to Table 3.

Socio-political	Acceptance of different opinions; worldviews; informed participants; competitiveness in the labour market; raising the quality level of professionals; expressing one's own ideas; listening to others; respecting each other; respecting other people's views; cooperating; taking personal responsibility; reflecting and participating; testing one's arguments; having a critical and open mind; making democratic decisions
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Students' dreams about the future school included the need for greater flexibility in otherwise rigid and standardised school structures, the integration of ICT, more interconnectedness, less formality, more looseness, as well as the need of wise leaders with the system thinking and a sustainability vision.

Students' envisioning their future helps them to create a picture from their imagination in their minds of what they want to bring into existence. The future school is imagined by the students as resilient, non-hierarchical and driven by sustainable leaders.

The more pronounced aspects of the future school scenarios include modern and contemporary infrastructure, equipped with the latest technologies: *My future school has a huge and modern gym. All classrooms are equipped with modern lighting and comfortable furniture, sliding boards and audio-visual equipment.* Some ideas represented are quite futuristic: *We shall study geography virtually, each child will have his/her own computer. In 50 years, children will come to school by spaceships and airplanes.*

The more pronounced aspects of the future school scenarios also include a child-centred school with a democratic decision-making governance: *Children will be able to express their opinions, to make mistakes without being punished for them. If they make a mistake, teachers will correct them pedagogically.* One student noted, *"Children will feel that they are a part of school."* Another student commented, *"The future school is a place where everyone comes back and remembers school years with love."* The students' personal involvement in democratic decision-making governance: *The walls of the school are painted by the children themselves to make them feel they are a part of the school.*

The students also considered the physical environment – schools as safe and green learning places: *There are trees in front of school area, a park, flowers, recycling places. My future school has a welcoming atmosphere, large library and healthy food.*

They dream of future schools as places where children feel welcomed; this is the kind of school that offers healthy food and is concerned about environmental issues: *We shall have a large dining room where we can eat fresh, healthy and natural food.*

As far as teachers working in these schools are concerned, the students see them as professionals with *a decent salary who educate future responsible citizens of a great country.* Moreover, *teachers must be balanced, merry, educated and cheerful so that they can inspire and comfort children when necessary.* All students want their teachers to be competent, friendly, supportive and responsive to the their students' needs.

And friendly learning environment is favourable for learning: *The atmosphere must be friendly. All children should respect each other, help and feel at school as they do at home.* Future schools are envisioned as favourable places for learning, involving outdoor learning experiences, based on the philosophy of holistically raised children, paying attention not only to the cognitive aspects of learning, but also to values.

Schools that equip children with the skills needed for life in the 21st century are of great importance: *We will learn important things about life, as well as survival skills.* Students pointed to the need to narrow the gap between what is taught at school and the skills needed for survival in the 21st century.

Suggestions for Teacher Trainers in Engaging Students in Envisioning the Future

Young people need to be given time and space to envision future scenarios in order to be involved actively in the process of creating their own meaning and in making a sustainable education a reality. Young people need to be encouraged to think continually in new ways and to question present trends, ways of living and think about the planet Earth. The most important aspects in teaching is experiential education, employing students' personal experiences and beliefs and applying them to develop practical wisdom which can lead them to live as open and sensitive individuals. This will lead to changing students' beliefs and behaviours.

Students' skills and competencies required to live in a future society includes: expressing one's own ideas; listening to others; respecting other people's views; cooperating; taking responsibility; reflecting and participating; testing one's arguments; having a critical and open mind and making democratic decisions. This will equip youngsters with the skills that would enable them to build a sustainable future.

Envisioning the future needs to begin with the exploration of participants' world-views and beliefs, and it needs to be carried out in a systematic and authentic way. Future visions can empower individuals to make decisions about their preferred futures, which would involve clarity of underpinning values, rather than simply working along a predetermined path. There is a need for a clear accounting of whose voices that are being represented in future visions and the ways those visions are produced.

The future school should be a mission driven towards the goals of sustainable education. The schools' accountability is based on a mission statement about how to make a vision of a sustainable school a reality. Schools should have a capacity to empower young learners to fulfil their sustainability vision in the learning environment and beyond. To meet the needs of a younger generation, schools need to place emphasis on teamwork, participation, sharing responsibility, empowering, along with a new kind of managerial structure possessing a long term strategy.

Schools require changing the culture of teaching and learning in ways that enable students to become responsible for the future school and society. The future school needs to commit itself to the goal sustainability and to be responsible for promoting ecologically sustainable local communities.

Schools need to initiate ecologically sustainable everyday practices. Sustainable changes in education require redefining a mainstream curriculum that will enable students to become aware of unsustainable practices around them and to accept the responsibility of envisioning and bringing forward a more sustainable society. Teachers' autonomy and direct involvement can be ensured in various ways, namely, by identifying the most problematic aspects of schooling that need to be changed, as well as their greater involvement in the improvement of current instructional practices.

Schools should play a crucial role in assisting change towards a sustainable future. Schools should model sustainable thinking and behaviour for the students, fostered by

their sustainable policy and everyday strategies. The major task of schools, apart of forming solid knowledge base, is to develop students' beliefs by forming values and constructive attitudes to an envisioned perspective of a sustainable community.

Concluding Remarks

Envisioning the future is a complicated and transformative challenge set for university educators. Although it is not possible to predict the future, university students together with their teachers can envision and create the future they want to live in.

Integration of a learning experience that fosters the development of skills needed for the future society such as critical thinking, problem solving, creativity and innovation skills, collaboration skills, contextual learning skills, self-direction, as well as communication skills is essentially important in making sustainability a reality.

The data gained via individual interviews and focus group interviews indicate that the students expressed powerlessness and despair about the future with regards to unemployment, environmental issues and the lack of inspiring and sustainable leadership. Life story interviews were chosen to uncover deeper and underlying attitudes, thus placing this negativity in perspective.

Students' '*feared futures*' (Boulding, 1988) were related to political, environmental, social, economic and cultural unsustainability, particularly the lack of sustainable leadership, agency, environmental degradation, exclusion, the predominantly materialistic and consumer culture.

Students' '*preferred*' and '*desired futures*' highlight a hope of sustainable leadership for promoting the well-being of the planet, equity, greening and caring for the environment. The '*preferred future*' scenarios of bachelor's degree students are quite optimistic, in a way a little bit naïve, as compared with the master's degree students whose visions are more pronounced and well-grounded in current day reality, while '*proactive futures*' (Hutchinson, 1994) provide images of society where each individual undertakes initiative and responsibility in building a more sustainable school and a society.

The '*envisioned preferable future*' scenarios by the students helped them to discover new relationships and possibilities in moral and social domains. The development of constructive and systematic beliefs and the acceptance of social responsibility for the sustainable future was a contributing factor in this particular study. By engaging in envisioning the future, the students have learned how they come to believe what they believe and how those beliefs permeate their daily lives.

We believe that this is essential to provide spaces and new, open-minded, reflective and participative learning cultures where each participant can explore his/her potential for a sustainable future. In line with Rieckman (2012) and Lambrechts, Mula, Ceulemans, Molderez and Gaeremynck (2013), the authors see the potential of university educators to create learning environments favourable for engaging students in co-creating a preferable future.

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References

- Boulding, E. (1988). Image and action in peace building. *Journal of Social Issues*, 44(2), 17–37.
- Davies, A., Devin, F., & Mariana, G. (2011). *Future work skills 2020*. Phoenix: The University of Phoenix Research Institute.
- Dede, C. (2010). Comparing frameworks for 21st century skills. In J. Bellanca & R. Brandt (Eds.), *21st Century skills: Rethinking how students learn* (pp. 51–76). Bloomington, IN: Solution Tree Press.
- Eckersley, S. (2002). Future visions, social realities and private lives: Young people and their personal well-being. In J. Gidley & S. Inayatullah (Eds.), *Youth futures: Comparative research and transformative visions* (pp. 31–42). Westport, CT: Praeger.
- European Council (EC). (2006). *Review of the EU sustainable development strategy (EU SDS) – renewed strategy*. Retrieved October 30, 2014, from <http://register.consilium.europa.eu/doc/srv?l=EN&f=ST%2010117%202006%20INIT>
- Facer, K. (2009). *Educational, social and technological futures: A report from the beyond*. Retrieved August 10, 2014, from <http://www.beyondcurrenthorizons.org.uk/wp-content/uploads/final-report-2009.pdf>
- Facer, K., & Sandford, R. (2010). The next 25 years? Future scenarios and future directions for education and technology. *Journal of Computer Assisted Learning*, 26, 74–93. doi:10.1111/1365-27292009.00337
- Fien, J. (2002). *Education and sustainability: Reorienting Australian schools for a sustainable future*. Retrieved from http://www.acfonline.org.au/sites/default/files/resources/tela08_education_%20for_sustainability.pdf
- Hedley, B. (2001). *Creating the future school*. London & New York: Routledge.
- Hick, D. (1995). Envisioning the future: The challenge for environmental educators. *Environmental Education Research*, 1(3), 1–9.
- Hick, D. (1998). Identifying sources of hope in post-modern times. In D. Hick & R. Slaughter (Eds.), *World yearbook of education 1998: Future education*. Kogan Page: London.
- Hutchinson, F. (1992). Making peace with people and planet: Some important lessons from Gandhian tradition educating for the 21st century. *Peace, Environment and Education*, 3(3), 3–14.
- Iliško, D. (2005). Pedagogical challenges for implementing holistic curriculum in Latvia. *Journal of Teacher Education and Training*, 5, 28–39.
- Iliško, D. (2007). Teachers as agents of societal change. *Journal of Teacher Education for Sustainability*, 11(7), 14–27.
- Iliško, D., Ignatjeva, S., & Mičule, I. (2011). Teacher-carried research as a tool for teachers' professional growth. *Journal of Teacher Education for Sustainability*, 13(2), 87–103. doi: 10.2478/v10099=011-0016-y
- Inayatullah, S. (2008). *Alternative futures of education: Pedagogies for the emergent world*. Rotterdam: Sense Publishers.
- Jiminez, E. (2006). *World development report 2007: Development and the next generation*. Washington, DC: World Bank.
- Lambrechts, W., Mula, I., Ceulemans, K., Molderez, I., & Gaeremynck, V. (2013). The integration of competences for sustainable development in higher education: An analysis of bachelor programmes in management. *Journal of Cleaner Production*, 48, 65–73.

- Ratcliff, J. L. (2004). Re-envisioning the change process in general education. *New Directions for Higher Education*, 125, 97–115.
- Rieckman, M. (2012). Future oriented higher education: Which key competencies should be fostered through teaching and learning? *Futures*, 44(2), 127–135.
- Salite, I. (2008). Educational action research for sustainability: Constructing a vision for the future in teacher education. *Journal of Teacher Education for Sustainability*, 10, 5–17.
- Scott, W., & Gough, S. (2003). *Sustainable development and learning, framing the issues*. London: Routledge Falmer.
- Sterling, S. (2002). *Sustainable education: Re-visioning learning and change*. Bristol: Green Books.
- Sterling, S. (2005). *Linking thinking: New perspectives on thinking and learning for sustainability*. In S. Sterling, D. Irvine, P. Maiteny & J. Salter (Eds.), *Linking thinking – new perspectives on thinking and learning for sustainability* (pp. 56–84). WWF: Scotland.
- UNESCO (United Nations Educational, Scientific and Cultural Organisation). (1997). *Educating for a sustainable future: A transdisciplinary vision for concerted action*. Retrieved October 10, 2013, from http://www.unesco.org/education/tlsf/mods/theme_a/popups/mod01t05s01.html
- UNESCO (United Nations Educational, Scientific and Cultural Organisation). (2002). *Education for sustainability – from Rio to Johannesburg: Lessons learnt from a decade of commitment*. Retrieved October 30, 2014, from <http://unesdoc.unesco.org/images/0012/001271/127100e.pdf>
- UNESCO (United Nations Educational, Scientific and Cultural Organisation). (2005). *United Nations Decade of Education for Sustainable Development (2005–2014)*. Paris: UNESCO.
- UNESCO (United Nations Educational, Scientific and Cultural Organisation). (2009). *UNESCO world conference on education for sustainable development*. Bonn: UNESCO.
- Wheeler, K. A., & Bijur, A. P. (2000). (Eds). *Education for a sustainable future: A paradigm of hope for the 21st century*. New York: Knower Academics.

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