

The Content Reform of Education for Sustainable Development

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Abstract: Ensuring of sustainable development of the society becomes more and more topical in the modern globalized society when the technologies develop rapidly, when all the branches of national economy modernize and the style and environment of every person change. One of the factors that will allow the society developing continuously and successfully is education. The aim of the article is to present the findings of the theoretical study that is based on the analysis of the strategic and normative documents of Latvia in different stages (history) of the education content reform. It found the expression in the depolitization of the education content at the beginning of the nineties of the 20th century. Initially the reforms were directed towards liquidating the Soviet traditions and democratization of the education content while developing a democratic society. Reforms in education move from sorting out the content of education to putting in order the network of educational institutions and their modernization taking into consideration the impact of globalization and caring for sustainable development. The competence approach, the development of problem solving skills and the critical thinking skills are topical today in the improvement of the education content. As the result of the reforms the education content becomes more diverse, differential and flexible, more corresponding to the demands of the modern environment and the national strategic aims. However, there are still problems that are connected with objective and subjective conditions and that are to be solved in the implementation of the reforms.

Key words: education, sustainable development, reform of education content, history.

Introduction

To ensure sustainable development of the society in the modern globalized world when technologies develop rapidly and all the areas of the national economy are modernized and the life style of every person changes becomes a more topical issue. One of the factors that will allow the society to develop successfully in long term is education. Since the beginning of the nineties of the 20th century the education content in Latvia has experienced continuous changes and reforms. The aim of the education content reforms has been to make the content of general comprehensive education and the framework of its implementation in accordance with the development of the 21st century skills and a learner-centred, competence-based modern teaching/learning process. M. Fullan speaks about the broadest social task – the formation of a learning society which forms the basis of all education reforms (Fulans, 1999). This also changes the understanding about the pupils' achievement. This is no longer the totality of concrete measurable knowledge and skills but the ability to apply them in diverse life situations (Prensky, 2014).

The guidelines on the development of education 2014 – 2020 define several aims that will promote sustainable development of the society. The first of them envisages the improvement of the quality of the educational environment by improving the content and developing the infrastructure. In order to achieve this it is planned to implement measures for increasing the quality of pedagogues' motivation and professional performance, the improvement of the education content according to the competences required in the society, the modernization of the educational environment and process as well as the implementation of the principles of inclusive education. The second aim envisages promoting the development of the individual's professional and social skills for life and competitiveness in the labour environment. To achieve this aim it is planned to develop the career education, to widen to possibilities of interest education for children and young people, to improve the adult education possibilities as well as to decrease the number of early school drop-outs. The third aim anticipates the improvement of the effectiveness of resource management by developing the institutional excellence of the institutions and consolidation of resources. In order to achieve this, the network of educational

institutions will be rearranged, the quality of monitoring system of education will be improved and a new model for remuneration of the pedagogues' work will be worked out (Bukovska, 2014).

The time has come to explore and further analyse the previous reforms in order to direct the education content reforms towards purposeful and sustainable development of the society. Therefore the further direction of the education content reform should be implemented under the guidance of education content, innovation policy and value education (Mūrnieks, 2014).

The aim of the article is to present the findings of the theoretical study that is based on the analysis of the strategic and normative documents of Latvia in different stages of the education content reform.

Methodology

Education for sustainable development

To ensure sustainable development of the society in the modern globalized world when technologies develop rapidly and all the areas of the national economy are modernized and the life style of every person changes becomes a more topical issue. One of the factors that will allow the society to develop successfully in long term is education. It promotes the formation of active, creative and productive attitude and the development of the necessary competences of every member of the society and especially the young generation.

One of the aims of sustainable development of the society in Latvia defines that Latvia has to develop the welfare society which appreciates highly and develops democracy, equality, fairness and the cultural legacy (Latvijas ilgtspējīgas..., 2010). It also defines the most important strategic principles that are to be observed facilitating the sustainable development of the country. They are – creativity, tolerance, cooperation, participation. These are the principles that are included in the school curricula. Some time ago H. Gudjon pointed out that the function of education is not only to lead the individual into the society and to exercise the observation of its rules but also to develop critical, reflexive distance (Gudjons, 1998). Well-considered education content reforms promote and ensure sustainable development of the society. They pay attention to the development of modern learning content emphasizing those school subjects that facilitate more profound understanding of the society's development, promote science competence and the acquisition of cognitive skills. Education for sustainable development is necessary for participation in the decision making about individual or collective actions on the local and global level to improve the life quality now without creating threats for the needs for the future generations. This is also defined by the Law on Environment protection of Latvia (Vides aizsardzības..., 2013). UNESCO in its turn, explains education for sustainable development of the society as education that develops and strengthens the ability, skills and willingness of separate groups of individuals and the society as a whole both on the level of organizations and the countries to make decisions and choices that would promote sustainable development (Education for Sustainable..., 2015).

Participation of Latvia's pupils in international comparative studies allows assessing the effectiveness of the education reforms that is directed towards sustainable development of the society. The achievement of Latvia's pupils is mainly average, a bit better achievement is in mathematics as it is proved by the latest OECD (Geske, Grīnfelds, 2007) and TIMSS (Geske, Mihno, 2008) studies. Only 0.3% of all the 15 years old pupils involved in the OECD study are able to identify purposefully, explain and apply science knowledge and knowledge about science in different life situations, to substantiate their opinion, to demonstrate clearly their scientific thinking and judgement, to apply their science understanding to be able to find solution in different new situations.

Education for sustainable development is characterised by (Baltic 21E, 2002):

- integrated approach to economic and social development;
- basing on the diversity in culture, everyday life and economy;
- responsibility for the people's life conditions and environment;
- participation of the society in the decision making;
- observance of regional, national and global contexts;
- integrated teaching/learning process.

D. Tilbury and D. Wortman, in their turn, (Tilbury, Wortman, 2004) describe the essence of education for sustainable development in the following way:

- imagination: the ability to imagine a better future because if we know where we are going then we can choose the best ways to achieve it;
- critical thinking and reflection;
- systemic thinking that allows solving problems more successfully;
- developing of partner relations, learning to work together;
- participation in the decision making.

Education for sustainable development envisages that there should be orientation from providing knowledge to the solution of problems. (UNECE strategy..., 2005) The traditional orientation to separate subjects is preserved and at the same time the exploration of the multi-field and inter-field real life situations is performed. This influences the education content reform.

Education for sustainable development requires also a principally another solution to different problems from the individual. The education content reform anticipates that pupils' independence in judgement, open and flexible thinking, readiness to perceive each piece of new information with clear vision and careful evaluation as well as the readiness to reassess one's opinion and not taking solutions as final and irrevocable is being developed.

Education content reform

The education content reforms since the beginning of the nineties of the 20th century have been oriented towards ensuring sustainable development. Initially the reforms were directed towards the elimination of the Soviet traditions and democratization of the educational institutions when forming a democratic society. The freedom of schools in developing their curricula increased. Optional subjects as well as a number of new school subjects, e.g., economics, environment studies, health, civic education, informatics, history of culture, politics and philosophy, optional foreign languages etc., were introduced in schools. During the end of the nineties of the 20th century the transition from free selection of subjects in the secondary school to four secondary education curricula ensuring a balanced acquisition of all school subjects (including – physics, chemistry, biology) took place. On the turn of the centuries and at the beginning of the 21st century more attention was paid to the content reform of basic education, digitalisation of the education system and introduction of bilingual education in the Russian language instruction schools.

Nowadays we have to ensure the competitiveness of the education system with restricted resources. The reforms are moving from arranging the education content to the arrangement and modernisation of the institutional network taking into account the impact of globalisation and caring for sustainable development. The competence approach, the solution of problem situations, the development of critical thinking skills is topical nowadays in the improvement of the education content.

The results of international comparative studies of pupils' knowledge and skills and their analysis, e.g. OECD, TIMSS, etc., have great importance in the education content reform. OECD studies in education show that Latvia, for instance, does not reach the level of Finland; at the same time, taking into consideration the miserable funding per pupil we are at the same place as such super powers as the USA, France or Russia (Matisāne, 2011). This serves as evidence that the direction of the started education content reforms deserves positive assessment; it is directed to sustainable development of the society and education. Also one of the findings of the study that was performed in Riga Education and Management Academy under the supervision of professor Ausma Špona indicates that Grade 11 pupils expect from school knowledge and purposeful development of their abilities. (Špona, Igoņins, 2011) This actually coincides with the aims of the Education Development Guidelines 2014 – 2020 which define further advance of education content reforms.

Results and discussion

Several important stages in the education content reform in Latvia can be singled out.

1990 – 1994 - are years that are characterised by decentralisation and democratisation of the education system and its management. Education content during this stage is being de-politicised which is promoted by the adoption of the Law on Education in 1991. The national education content which defines the development and implementation of the school subject standards is being developed. A 10-point scale for assessing pupils' academic achievement is introduced and accreditation of educational institutions that allowed following the education reforms in the aspect of sustainability is commenced.

1995 – 2002 – the education content reform the framework of which in basic education was defined by the new National Standard of basic education is started. The content of education is more and more adjusted to the needs of the society. New subjects are introduced in the content of learning – civic education, economics, health education, ethics, and Christian studies. English is defined as the first foreign language. The main idea of the reform is that education must ensure the balance between theoretical knowledge and the skill to live in the real world and to solve concrete life tasks (Izglītība Latvijā, 2015).

The advance of reforms was consolidated by the new laws in education – Law on Education (1999), Law on General Education (1999), Law on Vocational Education (1999) and Law on Higher Education Institutions (1995) as well as the Conception on the Development of Education of Latvia (1995). The transition to the principle of education curricula according to which secondary education implements four different kinds of education curricula – general educational programs, humanitarian and social education programs, mathematics, science and technical education programs, vocationally oriented education programs is implemented during this period. The introduction of minority education programs is started during this period. Guidelines of preschool education are being developed. The state examination and testing system is established. Besides, the descriptive assessment is introduced in Grades 1-3 of the primary school. The renewal of the infrastructure of education that serves as the basis for ensuring the sustainability of the education content reform is also started (Izglītības likums, 2015).

2003 – 2005 – the education content reform continues which is characterised by the introduction of the new subject standards and the state centralised examinations in basic education. Secondary schools that implement minority programs start the transition to tuition in the Latvian language. A unitary system of assessing the work of schools and the external assessment system that allow following the course of the education content reform and its quality are worked out in the country. New information technologies are introduced rapidly in the educational institutions and this has a crucial impact on the education content reform thus ensuring the development of sustainable education.

2006 – 2011 are years when mandatory preparation of 5-6 years old children for the acquisition of basic education in the preschools or specialised groups organised in schools is implemented. At the same time the education content reform continues. The school network is being rearranged- smaller schools are closed or merged with/ added to larger schools. Regional methodological centres in state gymnasias that provide substantial support to the implementation of the education content reform are established. Evaluation of higher education study programs to prevent the duplication and to arrange the network of higher education institutions as well as the work on arranging the network of vocational education institutions is started. Competence centres of vocational education that provide methodological support to the education content reform in vocational education are established. The cooperation of vocational education institutions with employers, professional associations and municipalities that is directed towards ensuring sustainability strengthens. Besides, distance learning finds its way not only in higher education but also in general secondary education. Transition to competence approach in education that gives new advance to the education content reform in the sustainability aspect is commenced. Higher education institutions are offering more studies and separate courses in e-format. E-class where parents and pupils can receive immediate information about the academic achievement and the acquisition of the learning content is developed which serves as a good support to the reforms and allows following its quality.

2011 – 2014 – the education content reform still continues. Now it is characterised by the competence approach in the State education standards and the curricula of different levels (MK Nr. 468, 2014; MK Nr. 281, 2013). Value education is paid particular attention. The arrangement of the network of vocational education institutions continues and dual education model is introduced in vocational education.

Conclusions

It is possible to judge about positive outcomes in the education content reform not by the course how the new reforms are being historically implemented but by how these changes influence the future of the people, the economy of the country and the quality of life in short-term or long-term perspective. The current education content reform is directed towards ensuring sustainable development of the society.

However, reforms at some point could have been too rapid. New subject standards were developed; the Law on Education anticipated that each teacher had the rights to develop his/her own subject syllabus or choose some of the developed programs. The new education standards were followed by immediate introduction of the state testing system and centralised examinations. There was not sufficient time for the approbation of the standards and programs. Teachers lacked methodological support in the implementation of the new teaching/learning content.

At the same time digitalisation of schools, more extensive application of new technologies in the teaching/learning and the study process, the accessibility of learning materials in the e-environment, introduction of distance education not only in adult education but also in schools an opening of distance education classes deserve positive acknowledgement. This pays off in today's situation when many inhabitants of Latvia under the impact of the economic crises had sought employment and residence in other countries. Their children have the possibilities to continue education in Latvia in the form of distance education in the e-environment.

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