

Changes in Estonian curricula (1987-1999) and thoughts about future curricula

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Introduction

Estonian experience of curricula reforms - both successes and failures - can be of international interest for the following reasons:
clearly demonstrates that curriculum is the central educational regulatory mechanism, and that is why at the turning points of history educational changes begin with curriculum reform;
adds proof to the fact that curriculum reform is successful when the support of both education participators and the general public can be mobilized, using the strategy and tactics specially developed for implementing this process;
shows that the support of political forces is vital for initializing and organizing the process of curriculum reform;
proves that when all the above mentioned conditions exist, the success of the reform process is defined by presence of intellectual resources and intellectual readiness to participate in the reform.

About Estonian education before the beginning of the reform in 1987

Until 1987, Estonian education system, including the curricula, was just a section of the extremely centralized and politicized education policy of the Soviet Union. Soviet state curricula was based on two foundations: 1) political ideology developed from vulgarized Marxism, the main goal of which was to ensure the supremacy of the communist party, which was hypocritically justified by the statement that the party is the only legitimate representative of the proletariat as "the historically prominent class" and "the new historical unity of men", i.e. the denationalized Soviet people; 2) knowledge based on natural sciences and mathematics, which, in addition to economic goals, aspired also towards the growth of the military strength of the Soviet Union. The common school system for the whole Soviet Union meant limiting to the minimum of the so-called "local peculiarities" and enforcing a common education and way of life from the island of Sakhalin to the Baltics.

Still it should be noted that the Estonian curricula and school system were able to preserve some peculiarities, many of which are similar with those in other Baltic states. The most essential peculiarities would in our opinion be the following:
mother tongue education on all levels of education, including higher education;
one year longer secondary education in comparison to the Russian language schools (until 1984 it was 11-year secondary school, and from then on it was 12-year);
a relatively wide differentiation of secondary education: extensive teaching of music, foreign languages, art, sports, etc. for talented children beginning either already with

- the first school year or in the later stages of secondary education;
- separate classes for slow learners in the framework of the state secondary education, with supporting them in learning when they catch up with their peers;
- original, Estonian language textbooks for several subjects (not translations of Russians authors, like it was the general custom in the Soviet Union);
- a relatively wide usage of active learning methods; didactical and methodical materials comprised by Estonian educational scientists for students and teachers;
- a greater proportion of art subjects (especially music) in comparison to the Soviet Union average;
- a greater proportion of foreign language education in comparison to the Soviet Union average (this stance could not be always successfully protected);
- a less favourable position of Estonian language vocational schools in comparison with Russian language ones: namely, because of the shorter learning time in the Russian language general secondary education, those finishing 3- or 4-year Russian language vocational schools had some advantages over Estonian language vocational school finishers, because the former's falling behind secondary school finishers was smaller, and at the same time a pupil in Estonian language vocational school had a larger amount of learning activities (up to 40 hours of study and practical work per week!); quite likely that it was one of the reasons of vocational school unpopularity among Estonians;
- in-service teacher training system, which embraced all teachers; every five years teachers had to participate in in-service training courses, at which the stress was sometimes on pedagogical and psychological, and sometimes on subject aspects of teaching; both on the republican and regional levels emerged the personnel who dealt with organizing and conducting such courses;
- research activities of teachers and an institutional system which supported them, teacher summer schools for facilitating research activities; publication of results; defence of academic degrees by teachers;
- a wider spiritual foundation of the key individuals who intellectually influenced Estonian education in comparison to such individuals in the Soviet Union: among Estonian educational scientists and subject specialists who were writing school textbooks lived on the ideas from the pre-WWII Estonian Republic about progressive, humanistic and democratic education; school learning was attempted to be adjusted towards the personality of the learner, differentiating and individualizing learning; some impulses had been received from the educational reforms in the Soviet Union in the 20-ies, and surely also from Soviet psychology and pedagogy (the Vygotsky school of thought, in connection with this also stressing the importance of categorizing activities; the concept of education as a cultural phenomenon), in the 60-ies there were also some distant and rare influences from Western sociology, social psychology and educational sciences.

The first stage of Estonian curriculum reform: 1987-1989/1990

Obviously, a noticeable weakening of the Soviet regime began in the mid 80-ies with the so-called "perestroika" and, what is more important from the viewpoint of education, with the accompanying "glasnost", which enabled a greater degree of free exchange of opinions, than it had been possible before.

In **March, 1987**, took place the Congress of Estonian Teachers with almost 1000 participants. It was the turning point in Estonian educational life, initializing a wide reform movement. Before the congress happened a noticeable mutual approach between educational administrators of Estonian Soviet Socialist Republic (led by the minister of education E. Gretchkina) and Estonian educational scientists (led by H. Liimets, educational scientists and teacher teachers working in research and in-service training systems, including these authors), as a result of which a decision was made that the minister's opening speech would instigate reform instead of reporting ESSR's "successful steps in the field of education" to the central powers, like it was prescribed for such meetings of educational workers. The most essential keyword became **centering on the individual** (student), which was symbolized by the minister's deep bow to the student (which of course deeply shocked the representative from Moscow's central authorities who was present there). Educational total centralization was most strongly condemned by the congress speakers, behind which was, although not directly expressed, the delegates' demand to restore **sovereignty of Estonian national education through curriculum reform**. It should be by all means noted that, somewhat surprisingly, the active supporters of curriculum reform at the congress were **secondary school teachers and administrators** and representatives of the intelligencia, mainly **writers**; on the contrary, **representatives of vocational and higher education** refrained from taking a clear stand on this matter. The congress passed in an elevated mood and sent a clear message to society: it has been decided to start secondary education curricula reforms in Estonia according to the local views and not on the basis of instructions received from Moscow.

Thus the Ministry of Education (to be more exact, ministry of primary and secondary education, because vocational and higher education branches had their own ministries, both in Moscow and in the republics) took upon itself the responsibility for reforming the secondary education curriculum. They had to act fast because no one could then know how long that period of relative freedom of decision-making would last. After approximately a month and a half – **in the middle of May, 1987** – a nationwide representative meeting was called with the task of defining the factors in the curriculum and in the system of education, which were hindering their development. The list of the people invited was compiled on the basis of a cross-section of society, as viewed from the aspect of education: a) people outside of education, representing culture (including scientific culture) and economy; b) people involved in education – teachers/lecturers, pupils/students, school leaders and administrators. The goal was to get a result as soon as possible in order to send a clear signal to the Estonian and Moscow party leaders that there was no turning back from the upcoming reform. The meeting was conducted with the help of leading Estonian specialists in the form of a specially constructed

brainstorming technique. The results of brainstorming in groups were fixed and reported on the plenary session, the results were summed up in press publications. The small size of Estonia allowed it to create quite a precedent: give an evaluation of the curriculum and educational policies in the form of a **nationwide brainstorming**. (...) Probably this was in the given socio-political context a good if not one of the best possible solutions.

The next step was perhaps even more of a precedent: **the framework of the new curriculum** was also done **at a public meeting**. Namely, the Ministry of Education, after the above mentioned brainstorming, announced **a competition of projects for the new curriculum**. Participation was unbelievably active and the commission received 21 projects of the new curriculum (I-XII grades) from different sources (schools, educational departments, of course universities and research facilities), and in addition also fragmentary proposals for changes in a subject or a grade curriculum. The projects selected by the commission as the most suitable candidates for the new curriculum were then evaluated in the form of groupwork **by almost 400** representatives of Estonian society, including of course scientists and teachers, and one project was finally selected to become the foundation for developing in more details the new secondary school curriculum. This selection procedure lasted two days – **June, 22-23**, and ended in the late evening when here and there fires were already being lit. Namely, it was the Estonian national festival of Jaanipäev, which means that a fire is lit on the village common, and there is dancing and singing. The gathered experts considered the common interest so important that even the upcoming festival did not prevent them from finishing their work. The most essential innovative proposals of the selected project were the following:

- 1) **change the structure of the secondary school**: instead of the former system – 4 years of primary education, 5 years of secondary education, lower stage (i.e. 9 years of compulsory education) and 3 years of secondary education, upper stage (4+5+3) – it was desired to switch to the system: 5+5 (compulsory) + 2;
- 2) decentralize education supervision and give to schools, for development of their own **study profile**, almost a third of the study time for X-XII grades; initially it was planned to introduce the real sciences, the humanitarian and the so-called "general" branches – the latter for a more detailed study of some subjects already present in the study plan; so the proposal concerned curriculum differentiation school-wise;
- 3) change **subject listings**, namely introduce a new content block, the so-called "human studies";
- 4) substantially **decrease the Russian language teaching** (used to start in the second half of the first school year) and make as much room as possible for studying **fashionable Western languages** (English, German, French, etc.);
- 5) **decrease the portion of natural sciences** and use the freed room for additional studies of foreign languages, art, and humanitarian subjects in general;
- 6) **get rid of** the so-called "production studies", which meant that Moscow demanded for students of the senior grades to spend one day every week at a factory or on a collective farm field, practically engaged in auxiliary activities meant for unqualified labour force, or, if the responsible facility could not organize their work, the students

would just spend time loitering;

- 7) release from the communist ideology was not yet then – in 1987 – clearly written into the project, but rather was stressed the need to change education into more humane, individual-centred, etc., and the actual hidden goal was to remove ideology from the curriculum and return to the European and national education; thus the strategy then did not mean demonstration of oppositional attitudes (although it did happen, especially in verbal attacks), but rather winning room for seemingly small content areas (e.g. Western languages); increasing the role of individuals, schools and the republic to make decisions about curricula, also getting rid of some of the most large development hindrances (production education, bloated proportion of the Russian language teaching).

There and then, on June, 23d, were created **on a voluntary basis the so-called "subject commissions"**, who were ready to develop new subject plans for the new curriculum. (By the way, Moscow set as one of the conditions for Estonia's implementation of the new curriculum the existence of subject plans that would be in harmony with that curriculum.) The initiators of the subject commissions were the people who had come into contact with curricula before through writing original textbooks or compiling learning materials. It is obviously useful to note that the winning project was compiled by **professional educationalists**. Thus, it was once again confirmed that for an efficient curriculum reform is necessary the co-inciding of the political will, the strong and unanimous support of the public, and the professional competence.

As time passed, there were some new essential corrections made in the curriculum, mostly concerning usage of study time. At various meetings in the Ministry of Education it was decided to shorten the school week to 5 days (instead of the former 6), the official permission was given to experiment with the study time within the school year by dividing it into trimesters (instead of the usual four study year quarters), also was permitted to experiment with fulfilling the study plan in the primary grades at 35-minute lessons (instead of the former 45-minute ones). Essential was the brainstorming for the representatives from Russian schools in **August, 1987**, because approximately one third of Estonia's pupils were conducting their studies in Russian at that time. The main issue for Russian schools was understandably the introduction of the equal with Estonian schools study time – 12 grades. The world-renowned Tartu University's semiotic and the profound specialist of the Russian culture, Juri Lotman gave a speech for the Russian schools' representatives. He recommended that Russian language schools should in their own interests go along with the school innovation initiated by Estonians. The majority of the Russian school leadership remained passive ("wait-and-see"), but not hostile. Some schools announced for certain that they are ready to go further - to switch to the 12-year study time immediately. (These schools now tend to be among the generally recognized strongest Russian language schools.)

The work of the subject commissions progressed in the context of stormy political

changes. The recognition of the need for the educational system reform grew. In 1988 the Ministry of Education organized a competition of educational renewal programs and scenarios, and participation was again enthusiastic. As a result of these works, continuous educational discussions, etc., the reform of the secondary school curriculum was begun to be viewed, more than before, in the context of **lifelong learning** (of course, this concept was familiar even before 1987, but seemed utopian and not likely to be implemented in USSR). Became clear the need for a systematic renewal of education and curricula, because an educational reform would be only a half reform if it does not include higher and vocational education. The attitude towards regional aspects of education became more attentive. Also the handicapped began to be noticed more than before, as well as the need to create different curricula for them. The understanding began to take shape that making subject plans pre-supposes developing of a certain policy and methodology concerning how it would be useful to compile a subject plan. Here the initiators were the physics teachers, who began making their subject plan, employing the help of a considerable number of active teachers. They also tried to base their activity on a certain theoretical foundation (which then seemed to be the Bloom taxonomy). The necessary institutional basis was provided by Teacher In-Service Training Institute, it was also the only group who obtained substantial for that time financial support. The majority of subject groups worked practically for free or for a purely symbolic fee.

In the autumn of 1988, an Estonian delegation went to the Soviet Union-wide conference of educationalists in Moscow already with an educational platform of their own, which stressed the principles of democracy, humanism and education as a value in itself (in opposition to the concepts of politicized or utilitarian education). Still, it should be admitted, that although the loudest voice at the conference was Lithuanian delegation's protest against Soviet "educational occupation", with thousands of signatures gathered in support of educational sovereignty, Estonia still was the flagship of USSR's educational reform. Already in 1987 appeared a Russian language compilation about the experience of Estonian secondary school curriculum reform, and in the autumn of the same year in Estonia the USSR Ministry of Education organized Soviet Union-wide brainstorming sessions for educationalists, where Estonia witnessed the general fermentation in the field of education and presented its already developed points. Of course it is difficult to say how large was the real influence of Estonia's educational renewal and curriculum reform on other Soviet republics. But there exists concrete proof that it did not remain unnoticed and must have given some impulses for educational reforms outside Estonia.

By school year 1989/90 the new secondary school curriculum was ready for Estonian language schools and became the official schoolwork basis in the same study year. It should be noted that 20 schools had switched to the new curriculum a year earlier, using the then still not legalized curriculum project. In the official version of the curriculum were included almost all the innovative proposals of the winning project of 1987 (with minor modifications). The indoctrinating attitudes of the communist ideology were simply and without hesitation eliminated. But the 5+5+2 idea remained unimplemented

due to the resistance of the public, especially the humanitarian intelligencia, which was amplified by the press. The main argument against it concerned the shortening of gymnasium education by one year – to just two years instead of the former three. With hindsight, it seems that keeping the 3-year gymnasium education was indeed expedient, especially for economic reasons. Otherwise, the 10-year compulsory school would have meant more state expenditures. Behind the idea of increasing the compulsory study time was at that time also the need to protect Estonian children from being sent to vocational schools in a too early age, because there used to be the so-called "vocational commission" in every school, which was obliged to send about 50% of the students to vocational schools. This problem disappeared with the abolition of these commissions. So by the beginning of the 90-ies in Estonian education occurred this situation when the secondary school reform went far ahead of reforms in other parts of education. Up till then higher and vocational education had not yet given any sign of its readiness for reforms. As for adult education, then there did exist some areas of contemporary development, such as the courses for raising the leadership qualifications, but a more massive adult education had not yet emerged.

The second stage of Estonian curriculum reform: 1990 - mid 90-ies

With the regaining of Estonian independence in 1991 began a new stage in the development of all social institutions. Among the central questions of building an independent state certainly belongs the creation of legislative acts which would be suitable for the new order. In the areas where new laws had begun to take shape already in the end of the 80-ies, this process went noticeably further. On account of public activeness and union of all forces, the field of education was one of the most active in this respect: most arguments about concepts had already happened, many legislative drafts had already been prepared. In the spring of **1992**, approximately half a year later after regaining independence was already passed the Estonian Republic's Law on Education, which was the framework for all the following legislative acts in this field. It should be noted that **curriculum** (next to the concept of property) is **the central concept** of this law, which is still in force today. Using this concept, the regulative principles of the structure, functioning and changes of the system of education were formulated, e.g. the availability of education (read: curriculum), etc.; the school is viewed in the law as the institutions which implements the curriculum, and there can be several curricula in one school at one given time (both levels and types). The section of the law that foresees the enforcement of **state educational standards**, is also inseparable from the curriculum. Of course these standards were still to be developed; the law stated that this standards' description should be given in following regulatory documents.

The conclusion is that with the curriculum reform in Estonian education nearing completion, the next step was to create a document, on the basis of which general educational standards could be enforced or formulated in such a way that the republic's government could accept them. That is, new curricula acceptance according to the new

law was in the government's area of competence. Only a professional group could execute such a task. Thus, curriculum development lost its public and political character and became paid work for the experts. This quite logical solution was complicated by the fact that Estonia practically lacked professional curriculum makers because in the days of the Soviet Union it had used to be the undivided privilege of Moscow. It was made even worse because Estonia began experiencing a swift economic decline, making Western scientific literature almost completely unavailable, and creation of foreign connections was left predominantly for the private initiative. But despite all this, a new secondary education curriculum construction began more or less simultaneously in two different institutions - firstly, the place which had traditionally dealt with teacher in-service training and now carried the title Centre for Development of Estonian Education, and secondly, in the facility which had carried various names and had grown out of the former institute of pedagogical research, and now was part of Tallinn Pedagogical University structure. Both these groups were financed by the state.

It should be of wider interest to review the usage of different strategies of curriculum reform by these two groups.

The first, a more practical group of "teachers' teachers" was consciously searching for a **fast** solution and was considerably more successful in creation outside connections. The result was a curriculum variant which was ready already in **1992**, being a mixture of different approaches according to the personal vision of one or another subject plan maker about the necessary changes in that, one's "own" subject. For instance, the subject plan for art was stressing the learner's independent activity in accordance with the modern views, but some other subject plans - for example, physics - simply copied the physics programs of the Soviet Union epoch. The main problem of this fast solution was the fact that not enough time was taken to consider the curriculum as a whole, and that is why this attempt remained contradictory and to a great extent eclectic.

The second group, possessing a research background, chose a different strategy. A joint vision was developed concerning future challenges to education and learning, also a system of concepts to rely on when constructing **the general foundations** of the new curriculum. Compilation of subject plans depended on the preparation of the general foundations and had to take place only when the main principles would have been decided on and clearly formulated. The future vision was that of an **information society** with market economy and democracy - as well as it could be imagined in that time of informational hunger. The basic concept on which to build the curriculum was chosen to be **study realms**, with which the learner had to create an active relationship using a signal system (language) and possessing the necessary technology. The following study realms were distinguished: nature, society (economic, political and administrative spheres, spiritual life), other people, and the learner his/her own Self, including the body. From the future vision were derived **the goals** which traversed all the subjects, such as: the ability to notice and solve problems, make decisions using democratic mechanisms,

foresee the consequences of one's own decisions and take responsibility for them, the ability to find, process, use, translate (from one signal system to another) and spread information, cooperative work skills, etc. Also demands for the learner's thinking qualities were formulated (logical, critical, analyzing and synthesizing). Also did not remain unnoticed the aspiration to shape the learner's awareness of one's own body's welfare and the possibilities to enhance it. From the formulated objectives was derived also the suitable **concept of learning - constructivism**, with the stress on constructing knowledge, relying on reproduction and interpretation of the existing knowledge. This choice also gave an impulse to defining the standard of education connected with the expected learning results **through competencies**. At first the following competencies were meant: communicative, mathematical, socio-reflectory, nature-related, work- and technology-related, art-related and physical training-related competence. As the work progressed, these were divided into three groups: conversational, value-oriented and action-oriented competencies. Such is the simplified account of the team's work during approximately two years. Naturally, there occurred stalemates and reversals. (The reader should not forget what was the starting situation of that work!) This work was summed up in the Tallinn Pedagogical University's **1994** publication entitled "The main foundations of Estonian Republic's main school and gymnasium state curriculum: Project". There was already in more details described the construction of the curriculum, including the definition of the main principles of teaching, mutual proportions of the subjects, the degree of the school's responsibility and freedom. Concerning the latter, a proposal should be underlined, stating that schools should be **obliged** to compile **their own** curricula based on the national curriculum. This idea comes from the curriculum reform in the Finnish Republic and it was adopted here in hope to start the mechanism which would force the school and all the teachers to actively work on curriculum renewal and would exclude the Soviet-time practice which foresaw only the mechanical implementation of instructions "from above". The structure of the curriculum - core curriculum plus a portion for the school to fill (about 30% in the gymnasium) - the same solution that had been implemented in the previous curriculum makes the existence of the school curriculum both possible and necessary. Also there was made a proposal concerning the desired curriculum policy, which meant that proposals made by experts should be discussed by all sides concerned and the achievement of the necessary public **agreement** would be needed before the government **legalizes** the new curriculum.

In the end of 1993 these points were presented to the Ministry of Education, which passed a decision to base on them the compilation of secondary school subject plans. By that time in Estonia a clear understanding had emerged that in addition to scientists expert in that area and university lecturers, subject teachers should by all means also participate in compiling subject plans. During the following two years under the supervision of the corresponding ministerial substructure the work had progressed so, that in **September, 1996**, ER government approved by decree the new primary and secondary education state curriculum. It contains the main clauses, including the description of competencies for the four school stages (I-III, IV-VI, VII-IX and X-XII grades), formulated the demand for

the school to compile its own curriculum, and presented subject plans, also in the four 3-year stages. It should be stressed that in comparison to the initial project, some essential alterations in the **final version** were made **through negotiations**, mainly with teachers. For example, stronger than in the initial project, was stressed by the insistent demand of teachers the belonging to a nation (nationhood) in connection with European values, and love for the motherland.

In connection with the new curriculum, a two-directional and somewhat contrasting movement could be observed. On the one hand, especially energetic and active schools, realizing the increase of their freedom and rejoicing over it, began compiling school curricula on the basis of the new curriculum ideas **even before** it was legalized. It was greatly assisted by Soros' Open Estonia Foundation: a whole school movement appeared, entitled "The school with a face of its own". On the other hand, the new curriculum faced severe criticism, with the main arguments running along the following lines: a) subject plans are not harmonized with the main part and are overburdened, and that is why there is not enough time to solve problems, to cooperate, etc., in a nutshell – the goals traversing the curriculum cannot be implemented in the framework of this curriculum; b) there is no justification in demanding that schools should compile their own curricula, as the state curriculum itself is contradictory and also there are little materials to aid schools/teachers in this task. In addition to this, from **1997** onward a system of state examinations was introduced at the end of the 12-grade school, which naturally serves as a unifier of demands for schools and decreases the motivation for compiling a school curriculum. It is also complained that the state examinations' questions are more oriented towards the reproductory model of learning and do not favour orientation towards solving problems and making decisions, etc., as the new curriculum sets in its goals.

To sum it up, during the second phase of the curriculum reform a noticeable **professionalisation** of the work took place. It became clear that the more utilitarian and better accepted by politicians strategy of curriculum compiling is oriented towards distant future and relies on describing new socio-cultural challenges, and not correcting the existing subject plans without a concrete and mutually agreed by the compilers concept. But even this approach does not guarantee that during the following stages of curriculum compiling, when subject specialists and renowned teachers become involved in the work, the planned principles and construction will not be altered again. One of the reasons for this is surely the fact that the stereotypes that are present in the deeply rooted views of the subject specialists and teachers, about what is the correct knowledge and learning, are hard to fight. Moreover because they are not clearly worded and remain behind the conscious threshold. But still, the essential decision was to include in the curriculum policy the issue of how and to what extent is possible the control of the concerned social groups over the curriculum reform. This enabled to preserve the legitimacy of the curriculum even in cases of strong criticism, and is hopefully the foundation for future corrections and development of the curriculum, taking into account the criticism.

In 1996 in Estonia began to function the mechanism of **higher education** assessment, which relies to the great extent on the examples of Britain and Scotland. The workgroup lead by Professor H. Sillamaa developed separate standards for university institutional and curriculum assessment. The stress is on **self-analysis** and self-evaluation. The actual process of assessment began with the assessment of **curricula** with the participation of international experts. This set in motion new processes in higher education: if up till then the main stress in academic circles had been on knowing one's subject and lecturers' self-determination also relied on one's subject (me as a physicist, chemist, philologist, etc.), and the problems of how to teach the given subject seemed mostly self-solvable (even the word *curriculum* was almost not used at all in these circles), then now the need appeared to think about the problems of **teaching** one's specialty. It can be assumed with some certainty, that discussions about correcting and developing curricula became quite frequent at universities – especially concerning the specialties that were to be assessed. The assessment with the assistance of international experts revealed the typical mistakes of our universities' lecturers, if we take for foundation the current Western models. Namely, the Ministry of Education made a summary of the higher education curriculum assessment results. The following deficiencies are listed there: the theoretical basis of curricula is weak, the modern science is inadequately represented in them, the connections between curricula of different levels are weak; the choices open to students are limited, curricula are too stressful, the teaching methods used cause students to assume the position of passive listeners, independent student research work is hindered by inadequate libraries, etc. In any case, this assessment gave a strong impulse for curriculum development in universities. Another factor that naturally brought along the diversification of university curricula was the emergence of private universities from the beginning of the 90-ies. Although nobody has yet officially declared a university curriculum reform, it can still be said for certain that essential changes are taking place here. Obviously, the time has come for a detailed analysis of these changes, which has not yet been done by anyone.

Second level **vocational education deliberate curriculum reform** has been the most problematic. But here (at the same time with several EU or separate member countries' Estonian projects) several **self-regulative** processes have taken place. Namely, in the Soviet vocational education dominated industrial and agricultural specialties, where pupils were sent often involuntarily after they dropped out of school. Structural changes in economy after the regaining of independence meant the swift growth of the service sector and a decrease in demand for agricultural and industrial labour force. Now there was no more compulsory distribution and as many of the vocational schools did not change the structure of the taught specialties, a situation occurred when there were few young people eager to enter such schools. This forced the vocational schools to do something. The result of this was the change of the structure of specialties in favour of the service sector, which meant also substantial changes in the vocational education curricula; a decision was made to take as the basis of the new vocational educational curriculum construction a system of modules which are easy to switch between and thus

enable flexible alterations in the curriculum. The ties with employers have been substantially improved, as a result of which their needs can also influence the curriculum. Slowly but steadily has improved the technical equipment of vocational schools. But still even now this branch of education is the one experiencing the strongest feeling of insecurity. The fact that reform was not begun when it should have, and also because the vocational education research had been neglected already in the Soviet days, causes us to suffer the consequences even today. Especially problematic is the lack of intellectual resources in vocational education.

New challenges to education in connection with changes in the contingent of learners. The birth of the 3d sector in Estonian education.

The need to re-think the basic structures of the curriculum – **concepts of knowledge and learning** – becomes evermore pressing in connection with the increase of the contingent of formal education learners on the higher levels of education and their shifts on the middle level. **Firstly:** substantially decreased is the proportion of those who, after the compulsory 9-year education, continue their education in vocational schools. If at the beginning of the educational reform in the spring of **1987** 56% of those finishing main school continued their education in the secondary school, then in 1995 it was already 75%, while the proportion of those continuing their education after finishing main school remained more or less stable – 95%. The situation where more and more main school finishers choose to continue their education in secondary schools instead of vocational schools has been a lasting trend since the middle of the 80-ies. According to some research results, even many of those who enter vocational schools, view it as a temporary emergency solution. This puts gymnasium curricula under pressure. Although from time to time there are voices in defence of the so-called “classical” gymnasium in Estonia, which is sometimes expressed in demands to decrease the number of gymnasium students and implement mechanisms which would see more pupils leaving for vocational schools, the general tendency, which has emerged as a result of self-regulation, is still different. From the curriculum viewpoint the question arises of integrating academic and vocational education on the second level of education. **Secondly:** the proportion of those, who after finishing school proceed to higher education, has steadily increased: if, for example, in 1966 of the spring school finishers went on to universities 7.4%, in 1986 – 11%, then in 1995 – already 45%, and this percentage is steadily growing. If we count as the third stage of education also the so-called “technicums” (polytechnics), which are based on secondary education and have the average study time of 3 years, then in 1996 among secondary school finishers over 60% went over to the third level. Thus, the third level education, including university education, is becoming in Estonia, as well as in the rest of the world, **mass education**. This cannot leave the curriculum untouched. Some academic traditions definitely need looking into, such as the domination of lecture-type classes. **Thirdly:** with the development of lifelong learning, Estonian higher educational establishments, including universities, are increasingly becoming also the centres for in-service training. This moves curricula towards a greater degree of practicality, working

approach, and raises the question of the proportion of scientific education in in-service training. **Fourthly:** in connection with the transition to market economy in Estonia has suddenly increased educational differentiation. The most worrying tendency is the large dropout rate for the compulsory 9-year education. According to some estimates, the number of these dropouts in Estonia could be as big as 10,000 children, who neither work nor have hopes of finding a lasting job. This calls for curricula that would be adjusted for school dropouts.

The need for curriculum changes, conditioned by changes in education itself, is just being realized and is far from having a satisfactory solution. We can assume that the same problems are now faced by many schools all over the world and that Estonia is by no means an exception in this respect, except for maybe the dropout rate of compulsory education, which in the majority of cases is not a problem for developed countries (and which only appeared in Estonia in the 90-ies). To sum it up: **Estonia is getting over the historical problems caused by the Soviet occupation and the current problems are beginning to increasingly acquire the traits characteristic of Western culture.**

More and more has been felt during the curriculum reform the scarcity of **competence in this field**, moreso because the whole curriculum reform needs **everincreasing** intellectual resources. Educational research in independent Estonia is inadequate, and universities are more interested in the development of “their own” specialties than in general educational analysis and planning. Although the interest of Estonian politicians in education is on the rise and all major political parties have declared that they consider education to be one of the most important priorities of Estonia, but not being professionals, they cannot perceive the decisive role of the curriculum reform in educational innovation; they pay more attention to the issues of managing and financing education. Again Estonia is in a situation where there is a need **to mobilize** public representation for an educational (curriculum) reform. Recognizing this need, in 1995 an initially small group organized the so-called “3d sector organization in the field of education” – at first under the name of an educational conference. The idea was to create a representative body of persons connected with education, who would discuss issues of educational policy. It was believed that it should include also some representatives of learners, including university students and adult learners; also teachers, educational administration, schoolchildren’s parents, politicians, employers, local self-governments, as well as 3d sector organizations connected with education. By today this body – now entitled Estonian Educational Forum – has already gathered five times, and in the coming November there will take place the next gathering. And although this body, consisting of about 300 people, cannot discuss concrete issues connected with the curriculum, it is still possible to develop principal points concerning the curriculum, such as study language, language policy, school structure, compulsiveness of education, availability of education from viewpoints of different groups of learners, etc. There has even been a successful discussion concerning learning concepts, and has been developed an orientation towards problem-centred learning instead of just memorizing facts. The forum and its committee’s meetings have

acted as a sort of a learning environment and have noticeably lifted the level of educational competence of Estonian society. Now politicians have accepted the forum, too. The proof of its recognition can be the fact that all the forum meetings have begun with the opening speech of the Minister of Education, in which the minister presents an overview of the educational situation in Estonia. At the forum in late autumn, 1998 (Estonian Educational Forum'99), the decision was passed about **learning society** being **the desired future** for Estonian society.

Learning society: a new challenge for curriculum reforming

In 1998 a 5-member collective of authors (K. Loogma, R. Ruubel, V. Ruus, E.-S. Sarv and R. Vilu) constructed four visions of the possible future for Estonian education, entitled "Estonian Educational Scenarios 2015". As a result of discussions during the compilation of the scenarios, the following starting points were agreed on: a) education as an institutionalized study system cannot be viewed separately from a society type, that is why their possible future is also inseparably connected and their future should be described accordingly; b) in order to construct future visions, we need as few as possible mutually independent key factors – the best solution would be to have just two – i.e. only these key factors which influence society's (and thus education's) future the most. For such key factors we chose: a) connectedness, integration of society (does it function uniting or separating people, including them or rejecting) and b) society's capability for renewal, the level of innovativeness and aspirations (whether the orientation is towards invention and implementation of new ideas and technologies, trying to actively shape the desired future, or almost all energy is spent on adjusting the already existing to new circumstances, reacting to a problem only when it threatens to become huge). Combining these two factors between themselves, we produced four visions of Estonia's possible future (including education):

low capability for renewal/connected, integrated society: nation-centred society and **traditional school;**

low capability for renewal/divided, separating society: corporate society and **constantly launched educational reforms** in connection with power struggle and power shifts in the societal superstructure;

high capability for renewal/divided, separating society: polarized society and **"market education" with elite and poor schools;**

high capability for renewal/connected, integrated society: **Learning Estonia** and interactive society.

The 1998 educational reform chose as the suitable future for Estonia the Learning Estonia scenario, with its inherent interactivity, and rejected the other three choices, albeit more achievable or even already functioning. Thus, we are faced with the task of describing in more detail this desired future and developing both strategy and tactics for starting the movement in that direction.

Again among the mechanisms that will allow us to move in the chosen direction we find **development of the a new generation of curricula** together with defining the curriculum policy (who and using what methods creates the curriculum) and the addressee (for whom is the new curriculum meant) and developing all the necessary support systems for curriculum implementation (teachers, rooms, money, leadership, etc.).

Estonian experience clearly confirms the fact that curriculum compilation and implementation is a serious task, demanding great intellectual effort and competence, and it needs educated people, information, time, money and other resources. Estonia lacks all this. The vision of Learning Estonia can provide some new vistas of compiling the curricula suitable for that type of society.

Firstly: it is possible that it would be reasonable to widen the concept and scope of usage of curriculum. As a rule, curriculum is now still understood as one planned, legalized and implemented for formal education; even shadow curricula can be treated in the context of formal education's official curricula. After all, learning is taking place also outside the institutionalized sphere of education. It is possible that for learning society it would be reasonable to more exactly plan also some non-traditional ways of learning – that is, to compile here as well some sort of program of learning or curriculum (which understandably does not have to repeat the structure of the formal education curricula). For example, for what purpose, what and how should learn workers of the public sector in order to create and maintain ties with the private and 3d sectors, or the same objective as viewed by the private or 3d sector organizations. Also on the organizational level the same question arises: as one of the characteristics of a learning organization could be the existence of articulated curricula (probably this already takes place to some extent). Both on the societal and on the organizational level the criterion used for evaluating curricula and also its goal would have to be the emergence of an organization or society, which is capable of renewal, innovative, looking to the future and shaping it consciously, including possibly all people in social unity. **Secondly:** the basis for everything is after all the capability of the individual to learn, and to learn in a way that suits the present. The central objective for curricula in the context of learning society would obviously have to be creation of conditions for the emergence of such individuals, who would, on the one hand, would assume upon themselves the responsibility for their own, open, and changeable in case of need identity in the context of the present, relying on all the spiritual inheritance of the educated man of yesterday and re-thinking it, and, on the other hand, for creating such individuals who would take other people's freedom as the limit of their own freedom and would be in solidarity with those, who suffer from injustice and oppression. Thus, here too the criteria could be, on the one hand, creativity, capability for renewal, innovativeness, and on the other, capability for empathy, solidarity and feeling of justice for others – all these relying on the individual's learnedness.

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