Learning Standards Must Be Scrupulously Implemented, Not Continually Adjusted

Reflections on *The End of Compulsory Education?* by Oleg Lebedev

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Abstract. Lev Lyubimov regards Oleg Lebedev's article *The End of Compulsory Education?* as a landmark in the field of general education research. For his part, he elaborates and complements the answers given to the questions raised by Lebedev: who should be taught what, how, and what for. The author insists on the importance of training school and preschool teachers on a regular basis. In particular, they should be taught developmental psychology, techniques of

inculcating cognitive competencies and Internet skills in students. Teaching parents is no less important, as they should take seriously the duty of teaching and educating their children. Lyubimov elaborates the notion of activity experience as the backbone of authentic learning, dialogue and group work as the key mechanisms of intellectual development. He also cites the experience of the HSE University-School Cluster, which has been solving the pedagogical tasks stipulated by the learning standards.

Keywords: general education, education quality, educational psychology, activity experience, cognitive skills, civic consciousness, learning competency, HSE University-School Cluster.

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It was a pleasure to read Oleg Lebedev's article *The End of Compulsory Education?*. First of all, it is highly professional. Not in terms of the so-called pedagogical science, which I (like many others) do not fully understand, but in terms of how the author perceives the organization and nature of schooling in the real-life Russian context. The amount of materials analyzed is impressive and indicates full verification of the many judgments and conclusions made in the article. In a word, Lebedev's paper is a landmark in the field of general education research, being completely in line with the importance of the author's professional reputation.

The article has inspired me to enter into a dialogue with Lebedev, not for the sake of criticism but for the sake of discussion and finding possible answers and solutions.

1. On schooling quality

The article begins with an overview of historical school education quality patterns. This is the central problem of the study. But what is school education quality? Lebedev answers this question eventually, describing how he sees it today and tomorrow and emphasizing that quality should not be solely determined by subject-specific outcomes. Why eventually? Because at first he introduces a universal definition of his own: education quality measures the relevance between education outcomes and the cost of their achievement, on the one part, and social demands, on the other. The definition is rather ambiguous and can embrace a number of things, including conflicting speculations, but I won't argue with that.

Yet, the author is undeniably right in stating that schooling quality may change depending on who is taught what, why and for what. I would first stress the dependence on who the teacher is and dare make some additions to Lebedev's answers to these questions a little bit.

1.1. Whom to teach?

The author only includes children in the analysis. Alas, this is absolutely not enough, as problem number one is who teaches. It is teachers who are to be consistently taught. The problem is especially relevant in Russian schools, where the overwhelming majority of teachers have only been trained in pedagogical colleges, which is clearly not enough in the 21st century. (Most school teachers in the West have Master's degrees obtained in classical universities¹.) My personal school interaction experience has revealed virtually a total absence of teacher's knowledge about children, i.e. educational psychology. As a result, such teachers simply do not know "whom to teach" or, rather, "whom they teach". While Lev Vygotsky is revered by Western schools in the same way as Newton is revered in classical mechanics, Russian teachers have never studied his works, although the name usually sounds vaguely familiar to them. It means that Western teachers know what a child is at the age of two, three, five, seven, or ten; how their memory, attention and thinking develop, and what teaching tools can be used to encourage their development, etc. Russian teachers have no idea about these things. This inexcusable qualification gap

¹ G. E. Grant, M. Lipman, D. W. Dean, D. Kuhn, D. F. Halpern, and dozens of other researchers have long arrived at the conclusion that critical (higher-order) thinking, metacognition, problem-solving skills, and analytical thinking can only be taught by teachers who are experts in specific subjects, i. e. mathematicians, chemists, geographers, philosophers, etc.

"between us and them" should start being reduced with a view to being ultimately eliminated.

Besides, Western teaching staff are conversant in the fundamentals of the sociology, philosophy and history of school instructional institutions, and many are well versed in the basics of education economics. Russian teachers are far from this. Western instructors graduating from classical universities are experts in specific subjects, i.e. physicists, biologists, historians, etc. They become teachers as a result of additional teacher training, e.g. postgraduate studies. Western teachers are good at information technology; in Russia, it depends. Russian teachers have too many competency deficiencies that have become obvious to professionals but not to education policy makers, sadly. The latter suggest going back again to the five-year teacher education program combining two specializations (e.g. physics+mathematics, chemistry+biology, etc.) first introduced by Khrushchev in 1956. While the world is moving forward, Russia is retreating "back through the ages".

Teaching parents is as essential as teaching children and teachers. As mass school was introduced, and especially during the Soviet period, the parent "stratum" came to consider kindergarten and school to be "cloakrooms" for their children and to believe those institutions were unquestionably supposed to educate their children as citizens and workers on their own, without any parent participation. This weird belief is only typical of Russian parents in today's society. The rest of the world is aware and confident that child inculturation largely depends on family. In Russia, we involve ourselves actively in the fight around juvenile justice, while the outside world scrupulously observes laws (in the West) and traditions (in the East) entrusting parents with rather strict duties to help educate their children. If the parent stratum fails to perform such duties, efforts made by the kindergarten and school will not yield more than a halved result. It is equally important for the school to make parents realize that a child's behavior at home is largely shaped by imitating parental behaviors. Children read if they see their parents read, copy adults who play online games, etc.

Unfortunately, there is virtually no other institution other than the school to assume the function of convincing parents and teaching them instructional duties. This is part of our culture, and culture is only reproduced and complemented through schooling.

1.2. How to teach?

In answering this question, Lebedev rightly points to the type of learning format, justly criticizes the drawbacks of the subject-class-and-lesson system, and gives recommendations to improve its efficiency. In my view, however, this is not enough either. Oleg Lebedev is an obvious proponent of the reduction of any regulations that inhibit teacher or student creativity. Meanwhile, lesson, class, and subject have invariably been subject to regulations in the Russian tradition. However, the information revolution of the last few decades has led to a crisis

of teacher, student, and lesson as the fundamental schooling system elements. In the Internet age, the teacher has become almost irrelevant as a source and translator of knowledge. Textbooks have suffered the same fate. It is clear that lesson design should also fundamentally change in the future.

A lesson in the didactic education paradigm (not only in school but in college as well) is a lecture delivered by a teacher/professor. The teacher knows, and the students don't. The teacher speaks, and the students listen. The teacher orders, and the students obey. The teacher evaluates, and the students resign themselves. There is no dialogue in this interaction, and this is true for 95% (or more) of Russian schools. A lesson (or lecture) like this provides temporary input of some information into the memory, and then this information is perceived only partially. But it doesn't provide any knowledge, as knowledge is not something crammed into the memory but something that a student has read, processed individually, and applied in practice under the teacher/professor's guidance. Information perceived and processed by myself and then also applied in some real-life context by myself is the knowledge that will be saved in my memory instead of fading away in two weeks. Why?

Because experience (according to Vygotsky), or activity experience (according to Leontiev), is the unit of measurement for the mind, psyche, and thinking development. This is the only thing that authentic teaching is about; and it is only this type of teaching that is authentic and genuine, as it gives knowledge and does not just attempt to place information into the memory. For many decades already, the English language and the foreign school tradition have largely replaced the conventional term *teaching* with *learning*, i.e. continuous development based on personal experiences, such as recognition, writing, actions, decisions, meetings, deeds, etc. (The correspondence with Vygotsky/Leontiev is hardly a coincidence: their "activity experiences" correlate clearly with "personal experiences", i.e. experiences of actions.)

A lecture does not generate any activity experience. Reading out from a textbook contradicts dialogue as the key mechanism of intellectual development. Plato, the first of the great teachers known to us, used dialogue to teach his disciples and develop their intelligence. By asking ever more elaborative questions as a reflection to a repeatedly incorrect disciple's answers, Plato would gradually prompt the disciple to come independently to the only right answer and find the truth on his own. Dialogue produced knowledge and enhanced intelligence. Thousands of years later, the outstanding instructor, Pavel Blonsky, would say: "Do not give them scientific truth (notion, category, theorem, conclusion etc.) but derivate it from them." (Cit. ex [Leontiev 2016: 33])

Dialogue is impossible in a space with three rows of desks. Over 100 years ago, prominent psychologist John Dewey replaced three

rows of desks with tables to accommodate five or six students each in his Chicago Lab School (the University of Chicago). The outstanding Russian researchers Daniil Elkonin and Vasily Davydov also reorganized the classroom by removing the three rows of desks within the framework of their elementary school system project. Indeed, these three rows make not only dialogue but also team work impossible.

Intergroup dialogue is not only a critical mechanism of intellectual development. It is also a small social community, where academic interactions and dialogues among all the participants contribute to: (i) the development and collaborative learning of future social roles (leader, participant, opponent, performer, etc.); (ii) the development and collaborative learning of intellectual roles (insight provider, solution algorithm developer, "solver", conclusion maker, etc.); (iii) the manifestation of individual activity preferences in specific domains. That is to say, group work is a predictor of social and intellectual roles as well as subject preferences. All of this can and should be applied as early as in elementary school, especially if specific subjects are taught there.

1.3. What to teach?

The answer to this question is inseparably associated with the answer to the question, "How to teach?". Lebedev provides two alternative answers: (i) "teach to achieve required outcomes" (I would say, to get "correct" answers) and (ii) "teach to fulfill the existing educational opportunities". The context of the article makes it clear that the author stands against the first option. However, I would not make a stand for the second one either. Which exact opportunities do exist where, when, and for whom? And what if such opportunities are negligible—should teaching still revolve around them?

The right answer is somewhere else, so let us start searching for it. Could Plato know 1/10 of the then human knowledge? I believe he could. Could Lomonosov know 1/200 of the human knowledge in the mid-18th century? Well, maybe. And could Einstein know 1/2000 of the human knowledge of the first half of the 20th century? I doubt any answer is right. However, I am pretty sure that 100,000 professors in 2017 cannot possess all of today's knowledge. But then, what do we keep thinking up for the content of school education? Today's human knowledge is a universe expanding constantly at a rapid rate. Who can dare select the school education content that will be of use throughout a child's life? Who can find the right fish in this ocean? This is a rhetorical question, although there is no shortage of those coming up with the respective initiatives.

Meanwhile, the right answer to the question "What to teach?" does exist: a child should be given a fishing rod and shown how to fish in the ocean of human knowledge. Because this is what they will have to do in their grown-up life.

The new learning standard calls such skills meta-competencies. In practice, however, nearly all Russian teachers (as well as principals) understand meta-competencies rather as cross-curricular compe-

tencies. Everyone seems to ignore the prefix *meta-*, denoting "above", or "beyond". I once witnessed with my own eyes a seasoned Moscow school principal reporting cheerfully that their school offered "eight meta-subject classes".

The global educational community has long used the more accurate term *cognitive skills*², or cognitive competences. This concept has become a universal indicator that human capital experts use to compare the performance of national education systems. The same experts have coined the term *cognitive capital*, which properly conveys the intellectual nucleus of the term *human capital*. Their research has revealed a significant correlation between economic growth and development of a country, and the level of cognitive skills of its school students.

So, what do they think the cognitive competencies indicator consists of? The answer is simple: it is the results of international assessments TIMSS, PIRLS, and PISA. These studies assess skills in mathematics, science, and reading (hermeneutics): mathematics as a language of cognizing and describing the world around us (view of the world), science as the object of cognition through mathematics and theoretic concepts adopted by consensus (Jürgen Habermas), and reading as the competency of cognizing and interpreting texts (since culture is about texts), hence the surrounding world through texts. Human capital experts believe that school is the main hearth of cognitive skills and thus the key and single-option source of the country's cognitive capital.

Unfortunately, the international studies do not assess skills in English, the lingua franca of international communication, science, politics, and business today—probably because its worldwide spread has reached a level where neither quantitative nor qualitative comparisons make sense. Alas, Russia is still an embarrassing exception to this rule due to the Soviet school policies. Before 1917, school students had studied two or three European languages, in addition to Latin and Greek in gymnasiums. Bi- and trilingualism always imply a higher level of intellectual development. The Soviet school took the route of systemic simplification, actually leaving out the real study of foreign languages in school: two lessons a week—at first in high school only, later in middle school as well—were a senseless use of time and resources. Schools kept producing a society that was "mute" to the rest of the world. Today, foreign languages are still taught extremely insufficiently in school.

Does it follow from what has just been said that only the abovementioned subjects should be taught? Of course, it doesn't. Yet, what must be taught in the first place are the competencies of searching information independently, analyzing it (breaking it up into units of

² See, for instance, [Hanushek, Woessman 2015; Stiglitz, Greenwald 2012].

meaning)3, selecting the necessary bits, synthesizing them with what is already stored in the long-term memory, using associative thinking, etc. These skills are to be taught based on the materials within Internet domains; hence, students must also be taught web navigation skills. Why the Web? Because the Internet will be the main source of knowledge in their adult life, so the basic Internet skills should be taught at school age4. In the adult world, only a drop from the ocean of knowledge will be needed to solve an ad-hoc problem. However, this drop has to be found quickly and processed cognitively within days, while other members of the team created to solve the problem are doing the same thing. Modern economies are organized horizontally as an infinite number of companies, each engaged in innovative projects and creating ad-hoc teams of several experts—each responsible for their own product domain—with advanced cognitive competencies. The fundamentals of such co-existence should be inculcated by school: through dialogue, group work, cognitive capital development, and teaching web navigation skills. This is one part of the answer to the question "What to teach?"

Next, we should add the requirement of paramount importance for school education in the 21st century: school curricula and education content should be open to modification. Russian authorities keep trying to make them rigid, to arm the school with a unified education program, a unified textbook, a single framework curriculum, i. e. in fact, to come back to the infamous Stalinist school and the Stalinist society of unilateral standards (Michurin as the only horticulturist in the country, Williams as the only soil scientist, Stakhanov as the only hard worker, Stalin as the only leader, etc.). If that is to happen, the teacher and the child will have no access to new media—primarily the Internet—and therefore to the 21st century as such. I don't think that children and their parents will put up with this new initiative of the Ministry of Education and Science.

Another part of the answer to the question "What to teach?" has to do with the child's personal development and socialization, the goal that is utterly crucial for Russia.

Civic consciousness, patriotism, a nation's unity, and national identity are of vital importance all over the world today, but even more so in Russia. The Soviet Union could have continued collapsing if it hadn't been for the power vertical erected quickly and smoothly, as well as the discipline of the regions established right away. However, this vertical is not enough to ensure unity as it only provides an ex-

Text (information) analysis is extracting meanings and units of text so that they could be translated into a different form of expression (resume, essay, keywords, abstract, etc.). The ability to express the meaning of a text in a different way indicates that the text has been understood.

⁴ Today, children often outdo teachers in terms of using the Internet (and new media in general) as a source of knowledge.

ogenous tenet. Without any endogenous, fundamental national unity, this power vertical is only transitory. To inculcate the personal qualities mentioned above, Russian authorities have resorted to mass media, rhetoric, public fuss, chaotic events, law amendments, and other "magic spells". I am pretty sure that the result has been zero so far and is not going to get any better.

One must invest oneself into a specific "place"—home, neighborhood, class, school and schoolyard, village, city, or homeland—to love it. The feelings of patriotism and civic responsibility "for everything around" can only develop as a result of activity-based teaching, which makes *me* experience and feel *my* contribution and the moral obligation to protect this contribution into what is *mine*—therefore, into what is *ours*. The school must use student self-government practices to create a menu of activities for children to invest their effort in the "place" to make it their dear home.

It is *my* investment in the "place" that begets *my* love for it, the "spiritual instinct" [Ilyin 2001:396], attachment and care, rejecting the "belligerent chauvinism and blunt national arrogance" [Ibid: 395]. Children's activities aiming at improving what is *mine/ours* or lending help to others to develop their moral values and make them empathic. Morality and empathy, in their turn, will not allow any investment in something or someone to be betrayed.

What to teach for? "For the purpose of either being useful to the state and society or developing personal potential", Lebedev answers. The first option is associated with the ideology of duty, while the second one has to do with the ideology of right. Lebedev prefers option two, but I believe that both answers should be considered viable. The ideology of duty cannot be avoided in a country with such a territory (and all the mechanisms inside).

Education systems can and must change. This point of Lebedev is perfectly true. He sees the root of change in "transformational processes" and cites the famous sociologist Vladimir Yadov a lot in this regard, referring in particular to his belief that transformational changes are predicted by two types of "matrixes of social being: western and eastern". This extensive reference to Yadov in the article is not really clear to me. However, as far as it concerns education in the East/ West paradigm, we should take seriously the essence of the Eastern system, which I see in the focus on inculcating dozens of educational virtues, the maxims of Confucius in the first place, instead of chasing subject-specific outcomes to ensure a high education quality. Such virtues include: "Difficulties are more important than success" and "Learn sincerely and grow every day"; "Don't be afraid of failing, but fear the reluctance to learn": "Learn insatiably and teach others earnestly", and "Learn with love". First come the virtues and the personality that values and lives them, and then everything else.

It is due to these values that China topped the TIMSS, PIRLS and PISA rankings within an unprecedented, record-breaking time-

frame. In my opinion, this breakthrough indicates clearly to whom the future belongs in our world bogged down in uncertainty. Meanwhile, as we persuade ourselves to start teaching children self-learning and self-development skills and transforming the school educational paradigm, i. e. providing "activity-based learning" according to Vygotsky and the new learning standard, the Ministry of Education and Science is planning to restore the Stalinist school with unified textbooks, syllabi, etc. Not a word about virtues "for the personality", only about the duty to the state. The seventy years of personality deprivation in the Soviet Union taught us nothing.

Analyzing the opportunities (quality) of the Soviet school, Lebedev refers to facts that prove convincingly the consistent degradation of this quality in the second half of the 20th century. I agree with the author: nothing of what I learned in school back in the Stalin times has ever come in handy for me. The author's overall conclusion is as follows: "(Soviet) school education was falling behind the social demand more and more, preserving the same drawbacks decade after decade." As for me, the diagnosis is too weak.

Further on, Lebedev dwells on the reasons behind the limited potential of the Soviet school, concluding rightly that this education system solved the problem of accessibility but failed to solve the problem of quality. The retrospective journey into the history of the Soviet school is especially interesting in this regard. Readers will be intrigued to learn about the approach made from the ideas of a new school put forward by Anatoly Lunacharsky, the first Soviet People's Commissar of Education, largely consistent with the assumptions of the present-day federal standard, to the subject-class-and-lesson system—in fact, school authoritarianism and countless school-, teacherand student-related regulations—as early as the 1930s. A successful term "coercive teaching" is coined by the author to refer to that reincarnation.

Next, Lebedev points to the positive transformations in the West and the stagnation trends in Russian school education with disguised disappointment and goes on to speculate on "what an alternative education system could be like". I believe that the new learning standard and the revised Law on Education already contain a regulatory answer to this question—a research-backed answer that hardly requires searching for alternatives.

However, the problem persists. First, schools report implementing the new learning standard without even starting to do so. Second, not only do education policy makers ignore this fact but their declarations and actions are often in direct conflict with the new federal standard requirements.

Subject-specific outcomes are the main concern of politicians, society, and education officials. Meanwhile, the focus of the learning standard is on developing the personality and intellectual/cognitive competencies of children. Moreover, authorities even resort to ma-

nipulations with student test scores more and more often to improve subject-specific outcomes, which are far from perfect. Mathematics is basically the most critical component of international assessments; in this context, how can we consider Russia's performance to be comparable to that of other countries after we have divided the USE (Unified State Exam) test in mathematics into basic and advanced levels?

"...Not so much a body of knowledge as personality development is the overriding concern of an education system." "To make a high school graduate socially demanded under whatever conditions, it is not enough to *teach* them. *Teaching their teachers* is at least as important or even more important." (bold added) [Leontiev 2004:15]

"Student's personal activities should be at the core of the educational process." [Vygotsky 1991:82]

Lev Vygotsky regarded personality as a psychological category that was fundamental for human activities and conscience. A personality regulates her or his cognitive (intellectual) and social development autonomously.

As we can see, the system our school education exists in is a didactic system where personality (subject) is made an object, where children are taught dogmas, algorithms and "correct" answers, and where teachers are authoritarian and non-cooperating. Oleg Lebedev has provided quite convincing arguments in favor of this point.

2. A non-regulatory vision of the alternative

It appears that Lebedev has found the alternative solution but described it in a regulatory style (which is important too). Therefore, I am going to suggest a "non-regulatory vision of the alternative" to develop Lebedev's point. This perspective is now implemented in the University-School Cluster of the National Research University Higher School of Economics (HSE), a voluntary association of schools founded as a common initiative of the HSE and the Department of Education of Moscow. Nearly 60 school complexes (about 140,000 students) solve pedagogical tasks offered by the learning standard with the intellectual support of the HSE.

2.1. Personality development

A child's personality develops on its own, the result being barely predictable if the school is indifferent. That is why schools should provide the necessary conditions. A personality is not shaped by adult rhetoric addressed to a child (persuasion, admonition, advice, scolding, call to action, encouragement, praise, etc.) but develops as a result of the child's interaction with people. Hence, such interaction must be allowed for and maintained; this is accomplished stage by stage in the HSE University-School Cluster.

2.1.1. Preschool

The goal is to develop strong social and behavioral skills in children. The cluster concept stipulates about 20 such skills to be taught through games jointly by families and kindergartens according to an agreed plan. Nearly 60 schools in the cluster have already started implementing such plans. When the preschool stage is over, the level of these skills is tested by schools.

2.1.2. Primary school

The goal is to develop the sense of responsibility for obligations assumed in a micro-community, to provide children with the opportunity to invest their effort into social objects and to fulfill assignments of the student council.

A child is assigned routine obligations by family and school. Through the performance of such obligations, they interact with their family, class, or group. When a child invests their effort and concern into something or someone, they feel attached to the object and want to care about it—this is where patriotism is born. Fulfilling assignments of the student council, a school student identifies his/her place within the group. All of this is also practiced by the cluster schools.

2.1.3. Middle school

Plato would say that a child is a "piece of flesh" that will become a human as soon as it learns to be empathic. Aggression of the present-day world is too evident among teenagers too, indicating the school's educational failure. Meanwhile, empathy development ideas and practices literally grow on trees. For empathy to be born, there should be someone who needs your understanding and participation. Every school is surrounded with residential buildings. Middle-school students and their parents identify all the veterans of the Great Patriotic War and labor, disabled people, and vulnerable families where children are deprived of parental care who live in the school district. A sort of list of those in need of support and emotional warmth is created. Next, students are distributed voluntarily among those people, having submitted a project of their service to neighbors and received instructions from the student council. This type of activity has been a common thing in International Baccalaureate (IB) programs, entitled precisely "community service". It is being inculcated very slowly in the cluster, the Timurite movement coming back to us little by little. Its acceptance by adults is inhibited by the deep atomization of society and the lack of mutual trust. Yet, it only makes this movement even more important, as it builds society's future social capital⁵ out of children who develop themselves as social people.

At the middle school stage, a child wants to play a grown-up role—this is the next level of their social development. The school is supposed to use student councils and other mechanisms to find this role for the child, help them master it and assess it regularly. We pay too

⁵ The concept of trust is paramount for the notion of social capital.

much attention to governing boards, i.e. people who have already failed as active citizens (I have never seen a governing board teeming with activity in my life), and do not fulfill our pedagogical duty of developing civic consciousness in school students. Meanwhile, civic consciousness can only develop in action, through deeds for the sake of society, a neighbor, a peer, a friend, or just someone else. We organize children instead of entrusting them with the freedom of action within their own student organisms.

2.1.4. High school

This new level of social development manifests itself in the student's desire to understand the social world model and come to grips with their own view of the world. Socialization at this stage means first of all being serious about social sciences: economics, law, sociology, political science, and gnoseology. The school must motivate students towards mastering this knowledge all the time by creating the conditions for them to plunge into social life and take an active part in it, trying different roles.

The new learning standard ranks socialization, education, and personality development as the paramount goals of school education. China owes its rapid rise to the top of international school education quality assessments almost exclusively to its educational culture (still Confucian), reproduced by inculcating a great number of educational virtues in school students. This culture determines the intellectual development of Chinese children too. How about Russia?⁶

2.2. Intellectual development

It is only in our country which "reads the most books" that teaching staff could mistake the second most important (after personality development) goal of the school, according to the new learning standard—"development of meta-competencies"—for "cross-curricular associations". It proves again the extreme relevance of this second goal. We will refer to those competencies as cognitive skills, as it has been accepted by the global school community.

I was glad to find no in-depth homage to the Soviet school in Lebedev's article. As far as I can remember from my own experience, academic achievement was determined much more by student characteristics (family, genetics, social environment) than school ones back in the Soviet era. The school kept applying the same molds to everything—zero individual approach, zero freedom of choice, and everything averaged for a mediocre student. Inevitably, this affected the dynamics of the average national IQ, which declined progressive-

⁶ I would like to provide an example from the life of the cluster. The cluster includes schools of Nekrasovka settlement, which used to be one of the most crime-prone areas. Character education activities in which these schools engaged in 2012 reduced the juvenile delinquency rate in the settlement by more than 60% in 2015, bringing it to zero in 2016.

ly. Today, the new learning standard puts the development of cognitive skills, or intellect, on a par with the personality development goal.

Taking my cue from Lebedev, I will try to provide a description as telegraphic as possible of how the HSE cluster has been tackling this problem (again, stage by stage)⁷.

2.2.1. Kindergarten

Preschool education faces a few serious challenges to the development of higher psychic functions in children. Challenge number one (equally important for socialization) is the mass-scale non-involvement of parents in the sustainable and adequate development of their kids. This is what draws a sharp line between Russia and the East or the West, which I have already mentioned. Parental non-involvement degrades the outcomes of a child's intellectual development manifold, evidenced first of all on the progress of speech development.

The vocabulary of today's seven-year-olds is far less extensive than 25 years ago. Visualized life and the gadget boom have deprived children of their main source of speech development—the "verbal environment", i.e. everything they hear during the day. This deficiency is largely compensated for in the West and in the East by family practices: first, reading children's books aloud every day; second, talking to children as much as possible; third, watching at least one voiced cartoon a day; and, finally, playing audiobooks continuously while the child is home and awake. All of this shapes the "verbal environment" from which the child's vocabulary is built. Parental responsibility for this investment into their child's development must be at least as high as that of the kindergarten.

A bank of literary works, audiobooks and visual tools has long been developed by the schools in the cluster to be shared with parents and used for such intrafamily practices. Many schools coordinate their efforts with kindergarten activities. There has been ample evidence that such joint efforts of family and kindergarten boost the intellectual development of children. Thinking and speech are inextricably connected with each other.

The degree of sensory environment saturation has a tremendous effect on child development. Sensory analyzers accumulate meaningful concepts; the more actively they are accumulated, the higher the pace of cognitive development. Drawing, music, handicrafts, cooking, etc.—a child should be engaged in these activities as much as possible both within the family and in the kindergarten.

Many of the cluster schools have introduced preschool bilingual education. It is far from universal coverage yet (not all parents understand the importance of such development), but the initiative has been

While complementing Lebedev's answers to the questions, who should be taught what, how, etc., I also elaborate on my own ideas for the intellectual development of children in school (dialogue, group work, new media, the role of texts, etc.).

launched and is evolving almost everywhere, pushing children's language boundaries and thus the boundaries of the world they cognize.

Importantly, the staff of preschool institutions in the cluster have started learning the fundamentals of developmental psychology under the auspices of school psychologists, using the sources supplied by HSE employees on a regular basis.

Preschool cognitive development offered by the cluster implies a vocabulary of 5000–6000 words, a well-developed sensory system (monitored through assessing children's artifacts), basic bilingual skills, special game techniques (e. g. "Archicard", a game invented by Alexander Lobok that allows children to learn arithmetic operations in a visual way). Results are monitored by primary schools. The preschool staff even knows how to promote conceptual thinking in children, from the first syncretic perception at the age of about three to the gradual transition from one complex to another, with a view to allow for the early development of pseudo-thinking skills (the fifth complex) in primary school.

2.2.2. Primary school

Cognitive development at this stage is provided by inculcating reading, writing, speaking, and bilingual skills.

Reading is about developing a consistent communication pattern of extracting meaning from texts. The goal is to make children addicted to reading and inculcate a habit of reading every day, as culture is contained in literature. The cluster schools make a reading list for children, pass it on to parents, and monitor reading activity. The school continues to encourage families to participate actively in child development and monitors parental behavior as well: families are supposed to read together with their children, discussing what has been read. Discussion, dialogue, and discourse with parents build the zone of proximal development. The school is expected to explain this mechanism to parents. Home reading activities are important first of all because the child is given the right of choice. Reading behavior is a crucial characteristic of a human being: "People can be recognized and identified via their reading preferences, for everyone is WHAT they read and HOW they do it." [Ilyin 2006:581] Mastering reading skills in early childhood is a vital stepping stone to cognitive development. However, the texts should not be restricted to literary works alone; essays from Alfred Brehm's encyclopedia, for example, are a good read for preschoolers.

Writing is about developing a consistent pattern of cognitive behavior and communication as well as the representation of one's ideas, thoughts, feelings, impressions, etc. From an educational perspective, the process as such matters the most, providing one of the essential prerequisites for independent development of conceptual abstract thinking (concepts are not communicated but must be shaped by children themselves). For this reason, Professor Lobok recommends using a sort of "standard rate" of 1500 pages of self-penned

texts (literally "not a day without a page") to assess children's writing activities over the four years of primary education. Combined with everyday verbal communication with adults at both preschool and primary school stages, this type of activity guarantees successful independent development of conceptual abstract thinking skills by the end of primary school.

Speaking is another competency that must be inculcated at the primary school stage. Oral presentation of another topic by the teacher is a waste of time and resources for everyone—it has long been recognized all over the world. Attempts to "put" content into students' memories are actually demotivating, as they deprive children of the right to choose, read, analyze, etc. on their own, i. e. of the possibility to "live" this content. The IB program, one of the best school programs, recommends that teachers should keep silent in the classroom for the most part, encouraging students to engage in discussion and continuous verbal self-expression. Homer considered debating to be the second most important skill for a man after fighting. Teaching students to communicate is one of the school's paramount objectives, which maybe even deserves a USE test of its own.

I have already touched upon the importance of replacing the three rows of classroom desks with big tables to sit around. Rows of desks are also abolished in the famous elementary school scaffolding technology developed by Vasily Davydov and Daniil Elkonin, allowing for an ongoing dialogue of everyone with everyone.

Bilingual skills. Bilingual education, started in kindergarten, should be picked up by the primary school without interruption—with five hours per week instead of only two and textbooks from the target language country. Primary school leavers must be able to read, listen to, and speak the target language as well as communicate with native speakers easily.

Reading, writing, speaking, bilingualism, intergroup dialogue, group work, open curriculum, and learning content accessed via the Internet (new media) are powerful drivers of intellectual growth and cognitive skills development. Active development of speech at the preschool stage is remarkably intensified in primary school. As a result, fresh fifth-graders possess a well-formed competency of learning, i. e. "changing oneself as a result of an activity experience" [Leontiev 2016: 131]. They enter the fifth grade with the ability to represent information and knowledge through categories and dynamic scenarios. The psychic function of memory, which prevailed in preschool education, is now dominated by conceptual abstract thinking, which is of a higher level. Now that the middle school content has become a reduced model of university knowledge, a child will choose subjects consciously, guided by their own aptitudes, yet keeping an eye on the rest of the curriculum. Conceptual abstract thinking will save them the agony of rote learning, unavoidable by many fifth-graders with the dominant psychic function of memorizing instead of thinking.

2.2.3. Middle and high school

I surveyed a dozen school principals and teachers, asking them the same question: "Is there any knowledge you were taught in school that you have carried and applied throughout your life?" With the exception of "side" answers like "some social skills", nearly all replied, "No, nothing". There is nothing flamboyant about it: it is essential, indeed, to understand what the school must teach.

So, what is the core value of modern school education? Is it subject-oriented knowledge, which hundreds of thousands of professors are not able to give, or is it something else? In fact, I have already answered this question above, and here is the concise version of my answer:

- 1. School must create all the conditions necessary for personality development.
- School must switch smoothly from the instructive learning of the early stages to activity-based learning, encouraging for the development of cognitive skills and intellectual abilities.
- 3. School must ensure the acquisition of subject-specific knowledge as the "representation of the multidimensional outside world, the world as it is." [Leontiev 1983: 255]

As we can see, subject-specific knowledge is ranked third. A positive practice of pre-university studies has developed as part of activity-based learning, where subject-specific aptitudes can manifest themselves rather early in the course of group work activities. We refer to such pre-university studies as subject-oriented instruction. This is the knowledge that a school graduate will take to the next stage in their life, the knowledge that will provide them with a starting background to enter the realm of professional education. However, all of their future life will require speaking a foreign language, English predominantly. It is only the endemic weakness of our school that can explain the fact that the introduction of a compulsory USE test in a foreign language is constantly postponed.

Meanwhile, the choice of mathematics and foreign language as compulsory subjects made at the very dawn of the USE was perfectly right. These are the two disciplines "oriented towards not so much the objective world itself as the construction of our knowledge about this world as well as the tools to learn it." (bold added) [Leontiev 2016: 140]. Mathematics, Russian, and foreign language as a means of world perception constitute a sufficient set of compulsory USE disciplines.

The Ministry's recent suggestions to introduce compulsory USE tests in geography and history appear to be not only redundant and likely to augment a homework overload for school students but are also simply irrelevant. All the school geography knowledge that will ever come in useful can be easily found within ten minutes using mobile Internet. The same is true for history. However, this discipline is

an object of ardent interest and reverence by our patriots in the State Duma and the Ministry of Education and Science, anxious to educate our school students "correctly".

I would like to remind those patriots that "education is a controlled system of *interactions* between society and personality, ensuring self-development and self-fulfillment of such personality, on the one part, and compliance of this self-development to society's interests, on the other part." (bold added) [lbid: 150] While researchers are talking about interactions (actions, participation, etc.), authorities keep hammering the "subject". Where are the science and politics that are supposed to be implemented into research findings?

All school textbooks on Russia's history present the history of the Russian state. Of course, this is important for young people preparing to live in a country whose survival depends exclusively on the powerful and dominant state, given its size and a number of other factors. Yet, the textbooks ignore the history of Russian society, which is the source of knowledge about the culture, social thought, science, education, and moral values of the Russian people, hence its national and historical self-consciousness. Patriotism and civic consciousness should be inculcated through social interactions and participation in the life of society in the first place. This participation is supposed to develop parallel to the acquisition of knowledge about the state, society, and their historical evolution. As for virtues, values, and the traditional Russian panhumanism, they are to be inculcated through student's actions (i. e. their social activities, again), their insight into social history, and their acquaintance with Russian literature and its specific features.

These two interrelated parallels fuel each other and suffice to ensure successful character development by the school both in the field of verbal communication and through student activities. However, foisting additional USE tests is a form of coerced learning and excessive pressure on the school.

Experts in all branches of educational psychology agree on the ultimate synergy between personality development and development of intellectual/cognitive competencies. These two phenomena evolve each other and have been made the top priority of school education both in the West and in the East. In Russia, they are "casual", except for the cohort of lyceums and gymnasiums (by no means all of them).

3. What has remained untold?

Of course, Oleg Lebedev's article, aside from being a very good one, is highly relevant. However, he chose not to focus on what was feasible and real. The HSE University-School Cluster has allowed its participants to revise their self-conception, probably for the first time, and to engage in metacognition⁸. The cluster has seen at least 40%

⁸ Metacognition is a key concept in educational psychology, denoting "thinking about thinking", interiorizing oneself in one's own conscience, possessing

of preschool and school teachers quit their jobs in the member institutions over the 30 months of its existence. Operating within the cluster framework, schools kind of fitness tested the professional potential of their staff to the real ideas of the cluster (stipulated by the learning standard). The fitness test identified three categories of staff in nearly every institution (the proportions varying heavily from school to school). Category one includes those who either engage in successful self-development or are always ready for new ideas, making up the driving force of the school. Teachers of category two are able to change but need to be highly motivated, sometimes even pressed upon. The staff in category three does not want to and is unable to change, so they do not belong to the school as such. Most such teachers have already resigned from the cluster schools.

However, neither category one nor category two teachers are conversant with educational psychology as the critical science for successful school education. Predominant preschool teacher activities are still restricted to care and supervision (not in the cluster schools), diluted with ad-hoc game practices, which may accidentally fit in with speech and sensory system development objectives, purposeful socialization, etc. All the more, no one is concerned about the literally historic goal of involving parents in the educational and learning process. Involving not through organized events but through a plan of everyday home practices designed jointly with the teacher to boost the development of speech, sensory system, etc. (see above). The cluster schools have already involved the bulk of the parents into regular school-approved activities for children.

Not awareness-raising but rather training activities must be provided for kindergarten staff to teach them the fundamentals of developmental psychology—this is a critical task to be performed if we expect kindergartens to implement their learning standard instead of imitating it. The same is true for primary school teachers, who do not understand the essence of learning activities involving reading, writing, speaking, group work, and dialogue skills as well as their role in the development of thinking. However, this conclusion leads to another one: developmental psychology is totally disregarded in teacher training colleges.

Middle and high school teachers still prefer the presentation-and-question-based teaching style. However, this technique is demotivating children more and more, as we can see from the cluster experience. Therefore, the cluster schools are gradually giving this up. Students who resort to tutoring services—they are not few—have the opportunity to compare group work activities (tutors work with small groups most often) to the presentation teaching style, with their assessments of the latter growing ever more negative.

self-improvement, self-evaluation, self-monitoring, self-control, and planning skills.

The official teacher professional growth policy has turned Russian teachers into collectors of certificates in various types of advanced training. They take refresher courses in numerous pedagogical and non-pedagogical colleges offering even more numerous training programs, the quality of which is not controlled by anyone. Neither does anyone evaluate the results of such "advancements".

Here is a small example illustrating the critical question of whether or not teachers engage in self-development. A survey of the cluster school principals conducted within the first few months after the cluster was launched revealed an almost unanimous opinion that most preschool and school teachers never actually engaged in self-development. They knew nothing but kept collecting certificates zealously.

Meanwhile, the continuous professional growth of teachers is the primary prerequisite for the constant enhancement of education quality. Certification failed as a solution long ago. The chaotic "market" of teacher certification services has been criticized by most principals and teachers, behind the scenes though (administrators are vigilant). This format has long become inflated and has to be replaced by an alternative system. The most effective solution could be building the culture of self-development inside the school in the form of reading recent subject-specific and pedagogical monographs and journal articles by all teachers, monitored by subject-specific groups, with further panel discussions, cross-lesson observations, etc. A school library must include a section for school and preschool teachers. The cluster schools have begun to create such libraries and fill them with necessary materials regularly. A lot of joint discussions on the most pressing issues of a modern school are conducted by the cluster schools. As a result, an intracluster pedagogic discourse has developed, which is important for the synergy of school management teams.

3.1. Imitation as the lifestyle of mass school What is imitated? Implementation of all the well-intentioned initiatives of the education policy. The new learning standard had hardly come into effect before a huge number of schools reported working and having always worked in compliance with it. No sooner had the preschool learning standard been adopted than many kindergartens allegedly implemented it to the full. Kindergartens, schools, municipal and regional authorities need this imitation. Let's be honest: our morbid society needs it. Hence, the imitation will thrive. Why do we need it? Because it provides stability for the chiefs (principals and higher education administrators) and for the reputation of institutions and the system as a whole. Because imitation is wired into our DNA. It was practiced in the Russian Empire, when everything was fine because of "Orthodoxy, autocracy, and nationalism". It flourished under the Bolshevik rule because of "Glory to the CPSU!"—hence, everything could not be anything but fine. It has moved on into the Russian Federation and keeps prospering, for no one dares encroach upon it: you cannot irritate or disappoint the electorate.

Imitation is provided by procedures, and procedures are ensured through organized events. The school is ordered to educate patriots, so it holds five public events and has its reports approved—reports on events, not on the result of patriotism development. The introduction of the USE brought about ubiquitous frauds: imitation of high education quality could not provide any positive outcomes in the context of independent evaluation, so the outcomes had to be forged. Fraudulent practices were stopped at a heavy cost (thanks to safety measures), which was immediately followed by a large-scale imitation of the educational process as such. The school became focused on drilling children for the USE (and other national tests and independent assessments), putting education as a system on the back burner.

For the cluster schools as well, imitation used to be a genetically encoded lifestyle. It stayed in the back of the mind, and still remains there for many educators. On being prescribed to develop an activity-based learning system, educational institutions plunge into inventing events, which they truly believe to be the outcomes, or tasks completed. It is only through continuous, repetitive and tedious interpretation of the cluster conception, first to the management team and then to the rest of the school staff, that "plants" the minds step by step, freezing out the subconscious attitudes typical of event organizers.

The conclusion is as follows: it is not the new learning standard requirements but answers to the questions on how this learning standard could be implemented (and why exactly this or that way) and what will be accepted as outcomes that the education authorities should communicate to schools persistently. Until then, our education policy can be described as purely declarative, inducing schools to imitate solutions, and ad hoc policies, based on accidental ideas that come to administrators' minds in the morning. The University-School Cluster has made some progress only because the cluster ideas have been digested enough to begin to change the leaders and their professional mindset little by little, and then the leaders have begun to change the mindset of teachers. Meanwhile, a continuous dialogue between the cluster schools has promoted changes in each of them.

However, even some cluster schools (they are few) imitate the implementation of the cluster ideas. Realizing that imitation is not detected and that they earned their reputation in the Soviet-style (class-lesson-interrogatory) paradigm, the principals of such schools see refusal from imitation as an obvious risk. Taking time is safer.

Having observed the life of a number of schools in different regions, I can state for certain that this life implements the education policy with no strategy at all. Standard policy documents do exist but have no more to do with real life than Stalin's Soviet constitution, the most democratic one in human history. The actual policy is built around the art of reporting and presenting concocted achievements. If something does not add up, authorities, which judge life by reports, simply change the numerators/denominators in the metrics

or the threshold values of reference intervals. In a nutshell, they tune thoughts (reports) to fit the rhymes (what is supposed to be done).

The ad-hoc policy agenda does not include the most vital issues, such as: parental obligations in teaching and educating their children; professional growth of school staff (including the paramount importance of the need to eliminate the lack of knowledge of child development); changes to the academic performance assessment system (breaking the monopoly on final assessments); evaluation of a child's personality development, including the inculcation of civic consciousness and patriotism; the focus on developing cognitive (non-academic) meta-competencies and, hence, paying special attention to mathematics, speech development, and proficiency in foreign languages; teaching metacognition (self-cognition); the gradual transition from lectures to teaching self-development and web navigation skills; the importance of dialogue and group work, etc.

Even when the newly-appointed Minister of Education and Science touches upon the abovementioned issues in her abundant statements, she does it in the traditional conjuration style. All the cramming with "new" ideas reveals the blatant desire to find as many supporters as possible, not so much for the sake of education as for the looming election campaign: rectors (by entitling them to independent college-based tests), geography and history teachers (by granting them compulsory USE tests), music teachers (by allowing them to teach choral singing to everyone), and a huge number of other teachers (by luring them into the restoration of the Soviet school, "the best in the world"). In other words, this is all about winning support for the 2018 elections. But does it have anything to do with the true objectives of school education? Education policies should consist of implementing the learning standards, not in adjusting them to please those in love with the schooling system of the past century.

4. Conclusion

Lebedev's article is about what our school should be like today. While going along with him on nearly every point, I have added some arguments of mine as well. Nevertheless, there can be a huge gap between what needs to be done and what can actually be done in a specific social environment. What needs to be done is often described by researchers, but few or none raise the question of how it should be achieved in a specific environment to provide a successful and integral continuum of four cohesive education stages. A continuum such as this has been promoted by the HSE University-School Cluster conception, which explains the learning standard assumptions to schools effectively. The conception has been gradually and consistently translated into reality by most schools in the cluster. This is a very difficult process of changing everyone who is involved in school life: principals, school and preschool teachers, parents, children, and local communities. Still, the conception is being realized because it offers not dec-

larations or prescriptions but answers that motivate towards its implementation. Answers to the questions, "What to do?", "Why this way?", "How to achieve the desired outcomes?"—all of them satisfy the cluster participants and motivate them into action⁹. I hope these answers will satisfy the fastidious taste of Oleg Lebedev too.

There is one more important aspect. What has been set forth by Oleg Lebedev and elaborated by me is only known to a small number of people in the "metaschool" educational community, outside of the school. First, all of this is delivered to schools as a dissembled jigsaw puzzle. The whole picture is unknown and, consequently, incomprehensible to schools. Second, the authorities discover this information in the same disassembled fragments from educational events, the ideas of which they tend to forget quickly. So, they cannot assemble the puzzle either. They do see the overall picture but in the form of regulatory documents compiled by a group of experts, which are then translated into officialese, and then to another "foreign" language in the Ministry of Justice. These texts are unreadable. However, they have a superimportant characteristic—they are dead. Their content is never implemented by schools or enforced by authorities. This results in three phenomena divorced from each other: isolated regulatory texts; isolated reports on fabricated achievements; and isolated schools with three rows of obsolete desks in the 21st century, yet with personal computers and even interactive whiteboards.

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⁹ The University-School Cluster conception is described in detail in *Obrazovatelnaya politika*, no 3, 2016 (Lyubimov L. *Obrazovanie kak izmenenie samogo sebya* [Education as Self-Improvement].