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## How Are We Going to Transform Education?

### A Roundtable

*Changes in the kinds of technology used in modern society are changing the ways in which people think. Russian students, like those elsewhere, are increasingly thinking in terms of short, unconnected forms of knowledge and are losing the ability to see connections, to think holistically. This presents a special challenge to education in Russia.*

Roundtable participants were the following:

Moderators: *Aleksandr Anisimovich Arlamov*, candidate of pedagogical sciences, associate professor, director of the scientific research institute of problems of education at Kuban State University, and head of the department of general and social pedagogy; *Nadezhda Gegamovna Bagdasar'ian*, a professor, doctor of philosophical sciences, head of the department of sociology and humanities at the Dubna International University of Nature, Society, and Man, and a professor in the department of Sociology and Culturology at N.E. Bauman State Technical University; *Aleksandr Iaroslavovich Daniliuk*, a corresponding member of the Russian Academy of Education, a doctor of pedagogical sciences, and editor in chief of the journal *Pedagogika*; *Aleksandr*

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*A.Ia. Daniliuk*: My esteemed colleagues, the topic of our round-table today sounds like an aphorism—“How Are We Going to Transform Education?” Nonetheless, it makes sense to examine the topic in exactly that formulation.

Allow me to discuss what is going on today in general education. First and foremost, new general education standards have been drawn up for primary schools; before the end of this year the standards for middle school and complete secondary school will

have been developed. Starting from 1 September 2011, all general education institutions in the Russian Federation will convert to operating on the basis of these new standards. These are not just the latest document; they represent a completely new ideology. In the past twenty years we have partly converted the general education school into the kind of institution that renders educational services. Without any justification, there has been a shift in the direction of instruction, of relaying systematic scientific information. We have left out one of the most important functions of a general education school, namely that of relaying values and passing on culture from one generation to the next. The resulting deformation will have to be corrected by the new educational standards.

What is fundamentally new about the second-generation Federal State Educational Standards is that the educational process is viewed not solely from the viewpoint of its knowledge component. There can be no question that science has been and will remain a key value, but scientific knowledge has to go hand in hand with a specific system of moral guidelines. The tasks of correlation with values, the creation of the conditions necessary for moral, ethical, and spiritual development, a dialogue about a scientific, artistic, and religious worldview, an understanding of the world in all of its diversity—these tasks determine the format of the new educational standards.

In working on the standards, an interesting document was created: “Conception of the Spiritual and Moral Development and Upbringing of the Citizen of Russia.” Two points are of special importance in the context of our roundtable. The educational process is built on a system, a matrix of values. We call these basic national values: patriotism, social solidarity, civic-mindedness, family, labor and creative endeavor, science, the traditional religions of Russia, the arts, literature, the natural world, and humanity. The educational process has to be value-oriented. Today’s state educational policies are taking on this orientation toward a specific system of basic national values that are inherent to our culture. Creative endeavor is one of the values of contemporary culture. It has always been a very important component of instruction content and technologies in the schools. But creative endeavor or innovation is not significant in and

of itself, only within a particular system of value coordinates. We must have a clear idea of the consequences of particular actions. We must understand the world's complexity and multidimensionality, realizing that any change will cause a wave of transformations in adjacent cultural, social, and economic areas.

The objective of that approach is the development of thinking. In general, we are referring to the ability to see the world in all its diversity, to foresee the consequences of actions, and to understand the factors that bring about particular situations. These could be called systematicity, dialogue, and multidimensionality. In the new educational standards there is a new concept that defines the entire educational space, namely the mode or style of school life. It has to be correlated with the system of basic national values that are clearly expressed, shared, and accepted by educators, the family, the state, and the public at large. There can be no question that among these the highest value is the individual, his spiritual world, our culture, our Fatherland. This, then, is the context of the situation that we all are in today and the context of the cultural, social, and educational situation of our school system as of 1 September 2011.

*N.G. Bagdasar'ian:* When people pose the question as to how something is to be transformed, they proceed on the basis of guidelines that are beginning to appear on the horizon. Future education is exactly the same thing as future society. It is reasonable in this regard to equate them: we understand perfectly well what the system of education means in the life of humanity.

In the world today there are a number of scenarios or models of the future. If we form and formulate certain points of growth in the system of education, we will have to be aware of what this will lead to and how these points of growth will correlate with what is in store for us in society as a whole. I would single out two variants of such a prospect. The first is that humanity is developing in the direction of the posthuman [*postchelovek*], postsociety postcivilization. If we look at the future society as one that is posthuman, our system of education must also be oriented toward a totally new quality. Second, people are fearful when they imagine such a posthuman society, and prefer to think of the future as the result

of a gradual development of what is in place today. We are talking about the evolutionary development of the human being and his various societal forms of existence. Unless a qualitative leap takes place, a number of prognoses are possible in which it is possible to start from the actual situation.

I should like to focus on an obvious distortion in the sphere of education and upbringing, responding to what Aleksandr Iaroslavovich mentioned with when he talked about the morally oriented mode or style of school life. I see this problem a bit differently.

If we look at future education not as an isolated sphere, if we understand that education is connected to the development of the entire world, then it is not to be ruled out that something will take place in education that is similar to what is going on today in the natural sciences, in particular one of the most fundamental branches of science, nuclear physics. I am referring to a very interesting hypothesis, that there is a mirror world that consists of elementary particles that we are not able to see, that do not interact with any matter known to us and can be detected only by their gravitational pull. This parallel reality has been described with mathematical rigor by Russian Academy of Sciences Academician Lev Borisovich Okun', the eminent physicist. This is a separate and very interesting topic, and is not the focus of today's discussion. It is possible, however, that it contains the solution to a number of new, puzzling phenomena noted by teachers and instructors in both higher education and secondary education, phenomena that are not random but signs of the future. They could be considered the probable elementary particles of a new educational paradigm. I have in mind the appearance of something that I would not go so far as to call a new type of thinking but rather certain new forms of thinking. In particular, "sound bite" and "video clip" thinking. I do not know the extent to which you may have noticed this in the schools, but when I am dealing with college students I come up against the fact that the traditional, time-tested, and formerly very effective forms of interaction with them now "work" only on a very small percentage of them. I lay out a logical chain of a particular system, and yet my students in the classroom do not pick up on it. How can I attract their attention? Something that is vivid,

graphic and unusual is necessary, an example of something that is paradoxical. That works; it gets the students interested. But as soon as generalization comes in, which is exactly what the illustrations were supposed to lead to, their attention wanders.

Whether or not we like this new situation, we have to deal with it. In the published literature that treats problems of education, mention is made of a tendency for the formation of clip thinking, but for the most part it is rated as a kind of surrogate, something that has to be combated. It seems to me that this is totally unproductive. In this case, it makes no sense to fight it or resist: we are not going to win that battle. It represents that parallel world I mentioned.

On the other hand, we cannot simply go along with this new type of thinking. We cannot create a model of education that is based on fragments, on the elements of clip thinking. Very likely we will have to look for a different way by working out fundamentally new forms of the concentration, the organization and systematization of knowledge. In other words, somehow the clip mentality will have to take in or absorb our traditional cognitive values rather than oppose them. Otherwise, the losses may be irreversible.

*N.I. Korikova:* It is very true that you are now addressing an important problem, the clip mentality. I think many schoolteachers are confronting it. It is possible, however, that traditional forms of teaching, oriented toward relaying knowledge to the students who are then supposed to assimilate it reproductively, have caused the students to take the position of consumer. "Here I am, and you are supposed to entertain me and teach me." But why should the teacher have to entice and entertain students? Might it not be that if the vector is changed, if it is the student himself who becomes the lead person in the learning and organizes his activity independently, based on his own inner motives, then the reception will be integrated and whole rather than in clips?

*A.Ia. Daniliuk:* In my opinion, the clip consciousness is quite productive. As you know, I myself recently turned to the use of so-called clip texts. I have tried to lay out the text in the classical pattern, word by word, sentence by sentence, chapter by chapter.

But it is not read, it doesn't work! It has to be broken down into vivid, individual fragments.

*I.M. Pachin:* It seems to me that the problem is a bit different. The instructors and the students are in a different system of concepts. A concept is formed as the result of subjective experience. You have different experience, so that the content—the meaningful, semantic content of the concepts you are operating with—is different in your case. This is why the standards are necessary. They are intended to perform the function of synchronization, they represent the pattern or standard, one might say, of the value correspondence. What we are talking about, in the end, is what values the teacher must be the vehicle of in school, what kind of experience to relay, what experience he does not have enough of to interact effectively with students.

*B.I. Pruzhinin:* And what experience would that be?

*I.M. Pachin:* Interaction with the world, which can vary. The richer the experience, the more meaningful the content is.

*A.O. Karpov:* Yes, very likely, the clip mentality is a product of the fragmentary nature of the conceptual system. Concept contains experience. Even the most general concepts in everyday or scientific use possess an internal associated content that is unique to the individual. It always takes place on the emotional level, but to a certain extent even the meaningful or semantic level also turns out to be individualized in concepts. Do you suggest that the clip mentality has come about as a consequence of experience that is not sufficiently connected? In other words, that the mentality is the consequence of a destructive situation with concept, a situation that is characteristic of today's schools?

*I.M. Pachin:* I have never encountered that mentality as a scientifically formulated phenomenon.

*A.O. Karpov:* The question remains an open one. Is it a devi-

ant situation? A case of inadequate teachability? Or a new type of thinking? The way I see it, the “clip character” of the perception of a situation, speech, or thinking is not something new. The Silver Age of Russian Literature, for example, provided its own examples of the phenomenon. In their writings, the authors offered “strings” of story plots, they broke up their sentences and split their ideas into parts. I have found that kind of style in Blok, Belyi, Khlebnikov, Kuzmin, Gumilev, Kol’tsov, and others. I have found the apotheosis of the phenomenon in the poet who, in my opinion, is the best poet of the twentieth century, Rainer Maria Rilke; consider his *Book of Hours* [Das Stunden-Buch] or his *Book of Images* [Buch der Bilder]. There is a huge layer of literature, so to speak, in the field of the “clip phenomenon.” Are we seeing some kind of deviant blip that has simply never become integrated into the culture? And are we going to be surprised every time we encounter it?

*I.M. Pachin:* It is now a reality of the culture.

*A.O. Karpov:* The beginning of the twentieth century took place in this “clip reality.” But after that, it went away. So what is happening now? Are we going back to the old way or can it be simply a cultural zigzag? And if that is the case, are we not entering a zone of constant zigzags? That is an issue too! Look at how often they have started to happen. And, consequently, what we are dealing with is not simply a case of “clip mentality” but rather a different functioning in the world.

*B.I. Pruzhinin:* I might ask the culturologist [Bagdasar’ian]: Have you not attempted to correlate these “clip phenomena” with the traditional conception of myth and mythological consciousness?

*N.G. Bagdasar’ian:* I submit that there can be no question that here the mythologemic and the clip kind of thinking are closely conjoined. It is just that the “mythologemicity” is taking on contemporary forms that are imposed virtually, by the computer civilization, among others. This is of a somewhat different kind than the traditional mythological picture of the world.

*I.M. Pachin:* The clip phenomenon represents a reduced, truncated perception of reality.

*N.G. Bagdasar'ian:* And at the same time a fragmentary perception.

*A.O. Karpov:* Might it not be that, in fact, we are the ones who are taking it that way, and not our children? If it is subjective perception, how do they perceive us? Also fragmentarily, perhaps? It may be that we are not capable of entering that place, this “clip phenomenon.” Might it be that we are the ones who have the problem? Might it be that we are talking about different genres of thinking?

*N.I. Korikova:* That is most probably the case. There are times when there is no single thing that unites the world and the people in this world.

*A.O. Karpov:* Pursuing your own thought, what we get is something very interesting: when we talk about the value approach to education, we are entering a paradoxical situation, in which there is no basic value system; we are imposing it on the world. Is it then worthwhile to stand on this shaky foundation and use it to build the edifice of education?

*A.Ia. Daniliuk:* I am going to stand up in defense of the sound bite and video clip form of thinking, because in my view it is not a deviation and does not represent marginality; instead, it represents an attempt to encompass a complex phenomenon all at once, to see it and interpret it in its entirety, which is a great deal more difficult to do in a linear system.

*A.O. Karpov:* But just how are you going to build an integrated system on this “clip perception” of the world?

*A.A. Arlamov:* In general, thinking is a phenomenon that is integrated and unified. There may be various ways of thinking. One way is the sound bite and video clip form of thinking.

*A.O. Karpov:* In that case I should like to make the question more explicit. A system of standards is being put together. We can take different attitudes toward it. There is another method of organizing instruction that is widely practiced and very prevalent. It is the syllabus. It is very flexible from the standpoint of making up-to-date changes. At the same time, it is sufficient for the pedagogical department to make a decision, and there is no need for such a complicated and time-consuming procedure as making changes to the law. In the dynamic situation we now have, this is a substantial advantage.

The system of standards affords plenty of freedom of instruction on the level of the schools. However, when the attempt now is made to combine the standards with values, it needs to be kept in mind that the system of values has a very rigid normative structure. In that case, the freedoms of the schools, as stipulated by the “nonburdening” standards, have a destructive impact on what is by definition a very rigid system of values of society, and by that I mean any society. Let us add to this the cultural phenomenon we are discussing here, “sound bite” and “video clip” thinking. By itself it absolutely destroys any normative frameworks. That is because such thinking is more than just hypertext. It represents an attitude toward the world. And if this attitude is structurally fragmented (and by that I mean on the part of thinking as well as potentially on the part of the kind of normativity that is stipulated by the standards), how are we supposed to be able to construct a system of education that is supposed somehow to serve that world?

*A.Ia. Daniliuk:* A very good question. I am happy about the direction our discussion is taking. In the first place, Aleksandr Olegovich [Karpov], the standards do not incorporate values. Values lie in experience. They are present in life. They are present in relations between people. A remarkable parallel was drawn here to the effect that a sound bite or video clip is a kind of modern form of mythological thinking. After all, the Gospels represent a clip text. The Gospels are a classical clip text that is two thousand years old. Myth and the clip phenomenon are, in some ways, essentially conjoined. At the same time, myth always involves values.

Knowledge is not as important; logic is not important. There are values and priorities, there is immersion in the realm of myth. A myth is never an objective text separate from the personality of the individual who appropriates it. Everything that we do by way of the value system, by way of standards, means we are, in part, mythologizing present-day education; we create the mode, the space in which we have to live. It is not something that can simply be taken and assimilated on a rational level. It does not exist unless we are immersed in it, unless we are living by it. It is a personal appropriation, or life in space, that is possible only through a system of values and emotional relations, a system of meaningful personal aims, and there is no other way.

*A.O. Karpov:* Does this mean there is a set of standards with legal force, while the value structure can be variegated and fragmented?

*A.Ia. Daniliuk:* No it does not. I will even say what myth we are starting from. We began from the rather simple myth that we are a united people. We even find ourselves in the first variant of the conception of the use of the term “the people of Russia,” “the united people of Russia.” Is it a myth? Without question. It is the myth that we are all different—and we are absolutely different, especially right now—but we do have something that unites us, namely our supreme value, which, essentially, is what makes us a united people. We are the united people of Russia. This myth of the unity of the people of Russia was present at the very beginning.

*B.I. Pruzhinin:* Then what name would you give this people?

*A.Ia. Daniliuk:* In the Constitution we are the multinational people of the Russian Federation.

*A.A. Arlamov:* What has prompted you to bring up this myth, the myth of the unity of the people of Russia? What was the reason for it? Why have you selected this myth in particular?

*A.O. Karpov:* Of course this is a myth on the political plane, the plane of the state. Right now it is construed in the educational

standards in the form of a specific set of values. But how do these ideologized values correlate with what you stated at the beginning when you were discussing “culture” and “human being”?

*A.Ia. Daniliuk:* When the decision was made in the summer of last year to introduce the course in “The Principles of Religious Culture and Secular Ethics,” a number of other myths emerged within the myth, because each of the six modules provide a special identification, a child’s identification with some ethnic tradition.

*A.O. Karpov:* But what about the rest of the subject area? We are introducing such an important culturological element in education. We are introducing something that used to be in place at weekly political information sessions [in the Soviet era], on the level of the Pioneer camp assemblies, on the level of everything that united people in the Soviet manner. Right now we are introducing a different form that is supposedly more humane, more watered down. But what about the rest? We have the subject area of the present school system. But we cannot go on indefinitely pouring various new subject fields into it. Cultural principles, including the plane of religion, are, I agree, an integrating area. But, after all, there are a lot of other integrating areas! It was announced not long ago that normatives would regulate only 30 percent of educational activity, while the schools would decide everything else on their own. And so, these very “free” standards will regulate only 30 percent of all schoolwork. By making 70 percent of the schools’ activity free, we are introducing an additional clip element. And what are we going to do with this element? How are we going to cope with it? We are introducing a very freely standardizing component to the video clip “hodgepodge” that exists in the schools today—a component that does not integrate everything else.

*I.M. Pachin:* If we cast out of this process a chief participant, the schoolteacher, we will have what you are talking about. In that case, a student comes to the biology class and gets one little picture, then he goes to mathematics and gets another little morsel, then he goes to religious studies class and gets another element. That is

how everything goes if there is no educator there, no teacher who is able to integrate all these things by passing them through his own system of values as enriched by his experience of interaction.

*A.O. Karpov:* Nonetheless, I want to return to whether the standards constitute the form of regulation that will deliver us from the “clip mentality” with respect to both the school and thinking.

*I.M. Pachin:* Everyone knows very well how the process by which ice melts, for example, is explained in a physics course. The ice becomes warmer, then it melts at a constant temperature, and after that the water heats up, and then it evaporates. Does the process really take place this way in actuality? No, of course not. What we are explaining in this way is nothing more than a model that makes it possible for us to deal with this process in our minds. In exactly the same way, the standards that are supposed to impose order on the system of values are nothing more than a model that makes it possible for any participant in the educational process to synchronize himself with it.

*A.A. Arlamov:* The standards set forth the values, they impose order on the content of education and serve as a resource support for the educational process. They set the requirements on the planning, organization, and administration of the educational process. But deviations from them are inevitable.

*M.L. Moskalenko:* I should like to express my own opinion on what has been said here. I have my own experience of interacting with children who have exactly the kind of sound bite and video clip thinking that we are discussing here. And at first, when I had just started teaching school, I was a bit frightened by this situation. Why? Because there is no depth behind that kind of thinking. In today’s world a person does not have enough time to stop and think about things. I believe that that type of thinking represents the reverse side of the achievements of scientific and technical thought, achievements that have simplified so many things in our lives, but which have speeded up the pace of life and have deprived

us of the ability to have a feeling for its depth. On the other hand, clip thinking is linked to the huge flood of information. In order to take it in, to process and absorb it, we have to somehow give structure to it. Since a youngster does not have enough time, we ourselves (we adults, teachers, and parents) offer them ready-made forms, what might be called “slices” of information or clips. And of course there is no depth behind these things. If a person himself processes information, if he himself gives structure to it, that is his way of perceiving the world. But we are offering a ready-made product to the youngster. And as a result we are depriving him of the opportunity to think, contemplate, and analyze.

*A.A. Arlamov:* Here it is necessary to draw a distinction between the formulation of the content of the education and the form of the instruction. Should ready-made knowledge be provided in class, or should a pedagogical situation be created so that the students themselves can discover new knowledge on their own? The first form hampers the development of creative thinking, while the second form, on the contrary, fosters it.

*M.L. Moskalenko:* I should like to add, in regard to this, that the teacher makes use of new and interesting forms of conveying the material in class in order to get the youngster interested. There are different ways to present the information in class, such as interactive panels, projectors, computers, all kinds of other apparatuses, the Internet, and so on. A youngster is not prepared to take in information in the standard variant that was used from one year to the next; it is no longer sufficient to demonstrate some video story, to play a game in class, to give interesting assignments. But it is also possible to lose the real content, the depth behind new and interesting forms of presenting the material and organizing the class lesson.

*B.I. Pruzhinin:* Could it be that the youngsters' preference for spending all their time in class playing is linked to the fact that they have no interest in knowledge as such?

*N.G. Bagdasar'ian:* There are games and then there are games. For example, there is the Bead Game in Hermann Hesse's brilliant

novel [*The Bead Game* (*Glasperlenspiel*)]. It is a totally different kind of game, and without that kind of game playing our education is in principle not possible at all. I am firmly convinced of this. It is the kind of intellectual play that enables the youngster to become involved in the intellectual continuum. It is play between the past and the future, the conjoining of different cultures. It is play in the most lofty sense.

*A.O. Karpov:* Hesse's novel is, of course, a wonderful work. But it also creates a myth, since it is definitely a utopia.

*N.G. Bagdasar'ian:* Of course. But utopias also represent models of the world, which permit us to understand the world better.

*A.O. Karpov:* Here again, a very important aspect! We are saying that a young student comes to school from a situation of playing games and continues to demand the same situation, since he is not able to relate cognitively to the world outside of play. We are supposed to get him in the mood for something that is more serious, while he wants to keep on playing. Why is that? One reason is that the world—the culture—is very likely starting to take on a character that is more and more of a game. The school cannot put up resistance to this, it needs a lot of help from the rest of the society. Everything is coming to be of the nature of play. And the school is somehow supposed to respond to that. So it responds, for example, with “interactive” panels that may not be wanted or are not always necessary. These days the theater is testing and fine-tuning this cultural situation in its own way, and it is doing so on “empty” stages devoid of scenery, where the imagination has to do all the work. A problem arises in the case of a situation of play: the “empty” stage stimulates the imagination, but real life and school instruction demand a certain amount of real substance. On the other hand, when play is happening on a stage that is densely filled with props, in the same way that the world is densely filled with standardized things, and the school absorbs these things into its subjects, then the imagination will perish. When the theater submerges the stage in scenery, in the spirit of the old Moscow Academic Art Theater, that is not good either. There used to be plenty of room for imagination,

but nowadays the world offers up ready-made recipes. And these recipes play among themselves; everything has become visualized, everything is in standardized images. And then the imagination no longer functions. It is no wonder that more and more people who feel there is not enough imagination in the world are flocking into the little theaters in the cellars.

Unfortunately, many people no longer care about going there; they are unable to fill the empty stage with their imagination. This is the result of “sound bite and video clip” thinking that is able to absorb ready-made images but not to come up with new ones. We are seeing a play situation that rejects and destroys creativity.

Concerning the schoolteacher’s integrating function, let me point out that the standards do not have any relation to this. Today’s student is living in a world that has been torn apart. In school he has limited interaction with the teacher; outside school he has separate interaction with teachers of “supplementary” education. How is it possible to speak of any integrating function, when education today consists of nothing more than “clips”? It is remaining that way regardless of whether standards are adopted. Given this kind of school, who or what will be able to unite values and knowledge? What can anyone synchronize them with, with 30 percent standardized subject material? I do not think we are in a position to answer this question. The life-integrating function, of course, is higher than the standards. The standards will ensure that we have that function. It is an absolutely technical and auxiliary entity.

In today’s “sound bite and video clip” cultural situation we are coming to the point where different kinds of schools are necessary, culturally different schools. They will have to be oriented toward the cognitive type of individual who not only processes information but is able to think about it in his own way.

*N.I. Korikova:* We do agree that there has to be a unified standard, and that how to work with this standard is something that each school will have to decide.

*A.Ia. Daniliuk:* The chief figure in our education, the one who has to ensure its quality, is the schoolteacher. The standards really

do not decide anything in and of themselves. But they do offer some direction for development. It will not do to overestimate or underestimate their importance. The new standards of education raise the problem of how to train the kind of teacher who is characterized by a totally new type of thinking, of activity. It represents a whole complex of issues. The teacher has to be different. How do we perceive teachers today? They are literally at the bottom in terms of their social, economic, and even moral status. The most crucial task is how to raise teachers' status, to turn them into the kind of individual who is socially significant and respected in society. But that is not sufficient either.

There is a lot of talk about changing the entire system of pedagogical education, about a fundamental restructuring of the system, because, sad to say, our higher pedagogical educational institutions are not teaching the teacher how to work with children. They are managing to provide him with a system of knowledge, but not with professional training or help in developing communication skills, a sense of responsibility for his work, and other qualities that are essential to a teacher's work. Unless we change teachers' status, unless we change the system under which they are trained and unless the conditions in which they work, we will in fact not change anything.

*A.O. Karpov:* Yes, this is the pedagogical prayer [*molitva*] as always. Indeed, it may be that we will create the ideal teacher. What if the teacher and the student are educated to appreciate the most beautiful things that are spelled out in the standards? Still, no one knows what is necessary to fit in successfully with today's cultural situation. We do not have a scientific formulation of today's situation from the pedagogical point of view. Can it be that the teacher has to be trained for the kind of school portrayed in the TV series *Shkola* [School]?

*A.A. Arlamov:* Do the standards reflect the resource support necessary for the instruction and upbringing of the individual in today's world? Do they reflect the requirements on the creation of the psychological and economic conditions that are essential for

teachers' life and activity, their competence? Is the complexity of the tasks spelled in the standards in keeping with their resource support? And when it comes to the question of how to transform education, I would like to emphasize one more aspect in regard to the formulation of the standards. Is it possible from the standpoint of the new standards to assess the extent to which present-day pedagogical science is prepared to accommodate the content support necessary to implement them? According to the laws, fourteen-year-old adolescents have the right to obtain a certificate of entrepreneurial activity. However, to develop such activity, innovative thinking is essential. In both theory and in pedagogical practice, the normative approach that is firmly in place fosters the formation of reproductive thinking.

I am far from opposing activity that is in accordance with a model to the kind of activity that creates a model. My position is different: when attempting to accomplish any task in a situation of uncertainty, the thing to do is to create a model and achieve a result based on that model, regardless of whether it is a research task or a practical task. Creative activity is not subject to norming. All pedagogical situations are unique. They are always in a state of uncertainty. Nonetheless, standards are essential both in the aspect of content and in the aspect of social justice, as well as the aspect of resource support.

*A.O. Karpov:* Standards represent the nonportable portion, while the portable portion is how things are taught.

*A.A. Arlamov:* The eternal problem of didactics is to single out the portable portion of experience in the tasks "What is to be taught?" and "How is it to be taught?" Under the conditions of level-based education and the accelerated pace of science and culture development, the dominant of instruction content is coming to be the way students master the culture of self-instruction, self-education, and self-checking. The risks connected to the question of "How is it to be taught?" depend on the competence of the practicing teachers. The formation of that competence remains an urgent and topical task of pedagogical education. The problem of standards consists

of just how to set the most general framework whose purpose is to develop people's abilities in the creation of a healthy society and a competitive state. In this sense it is portable as a guideline when it comes to accomplishing social and pedagogical tasks.

*A.O. Karpov:* At the same time, the loss of pedagogical traditions and a particular type of innovation in the presentation of the material may make very problematic the instruction of, for example, a boy from Khanty-Mansiisk in a Moscow school or institution of higher learning. The standards include Ohm's law and Viète's theorem, but when each school is able to teach in different ways, a youngster who has been taught by one teacher is not going to understand anything in a class taught by a different teacher! This is the kind of situation that can result from an education based solely on the standards and only on a 30 percent-unified component.

This problem relates directly to the subsequent stage of instruction as well. Textbooks and instruction in higher education, when it comes to presentation of material, methods by which to draw conclusions, and system of illustrations, are geared toward the patterns of thinking whose inculcation was inherent to the pedagogical tradition in this country. "What is to be taught" in the schools turns out to be the same, but "how it is to be taught" is a question that may render the teacher helpless when it comes to subsequent serious material.

*M.L. Moskalenko:* It seems to me that there is one other very important problem. Sociological surveys provide evidence that today's youngsters do not have much trust in their teachers. Are the students going to trust the values that we teachers are presenting to them?

*E.M. Aref'eva:* I do encounter disrespect for the teacher virtually every day. And, strange as it may seem, this comes from the family. It also comes from television, because the big "gift" to the Year of the Schoolteacher was the premiere of the TV series *Shkola*. Why are such things not censored? Why are they broadcasting series like these on Channel 1 at 6:30 in the evening? It is a state-run channel, after all!

*M.L. Moskalenko:* Unfortunately, most parents and students view us as service personnel.

*N.I. Korikova:* There are many who are not happy with the phrase “educational service.” But what is wrong with that, if we are able to cause our students to feel a need for educational services and be able to choose them intelligently?

*A.A. Arlamov:* The work of the teacher is not a [consumer] service, it is service to humanity as the supreme value, service to the Fatherland. Treating pedagogical activity as an educational consumer service gives rise to corruption in the sphere of education. That is my position.

*N.G. Bagdasar'ian:* I have serious apprehensions regarding the dynamics of the instructor corps in higher education. A substantial percentage of capable individuals have gone into business. Of course, people have different motives, but teaching is a special profession that requires a high level of competence. If people think they will be able to teach in their spare time away from their main occupation that provides a good income, there is a real chance that professional models will be lost.

*A.A. Arlamov:* When someone comes to me in the classroom, I am not teaching mathematics, I am interacting with a human being. This is what fosters a unity of values. When heart goes together with expertise, when intelligence and soul go together, that is when the teacher is born. If this unity disappears, the teacher is no longer there either.

*B.I. Pruzhinin:* I am quite removed from pedagogical practice. Nonetheless, I think I can add to this discussion as a professional philosopher. I should like to say a few words about the overall cultural situation in which the new pedagogical standards are being drawn up, and the appropriate answers that they are specifically supposed to provide. The problems that the new standards are supposed to solve are old ones. They have been in existence

for the entire history of European culture and, accordingly, the history of the schools. Meanwhile, these days there is more and more loud talk about the crisis phenomena in European culture. In general, the word “crisis” is not a frightening one; it simply means a transition from one state to a different state. But the question is: what state?

Let me get back to the problem of myth. Myth is a cultural formation that is totally different from what knowledge is, and the reason the school came into being was to accomplish the tasks of relaying knowledge. The mythological person did not have any need of value-oriented consciousness. When Achilles was preparing to fight Hector, it was predicted that by winning he would doom himself to death. Achilles did engage in the battle, but it was not a heroic choice the way we understand it; it was not a moral choice—he simply did not see any other way. His family connection had sent him there to do this, so he had no other option; hence, it was not a matter of freedom. Values had nothing to do with it either, and in this regard the relaying of the relevant types of behavior was accomplished in a different way. Well, if during the class lesson you all stand in a circle, start to sing, and sway back and forth shoulder to shoulder, the moment of play will turn into one of ritual, a uniting ritual, and that is the point at which you will start coming closer to this type of relaying. Those who do not sway back and forth in the same rhythm are not one of us; they wear different “war paint” on their face. Myth is a tribal consciousness. There is nothing you can do about it. It is possible to bring back certain forms of myth today, but I cannot predict its appropriateness and what it may lead to in the long run. And so is this the kind of sound bite and video clip mentality that we are talking about here? It is simply a splintered, fragmented consciousness. Science cannot be relayed that way. It is not possible to teach mathematics that way.

What I mean is, it is possible to do so, but in that case what is it that we are passing on? Science requires a rational, coherent consciousness that is deployed sequentially. There is nothing that you can do about this either. When we say “clip” what we have in mind are blocks of information that are not connected among themselves. Let’s say you’re watching TV: first they show you a commercial

for shampoo, followed by a brief video clip about the advantages of democracy. At the end of these clips, the viewer begins to surf, to jump around from one channel to the next. He is no longer able to watch an entire movie to the end.

People watch action films and “fantasies” that have been based on the video clip principle. In general, does a person who has a remote control even care about a movie that calls for the sequential presentation of content, or does he need a hundred channels, since he is not able to concentrate on one channel? This, again, is the sound bite and video clip mentality. Of course, the schools are not to blame for this. It is just the way the culture is today. It is a different matter that the school itself is a very powerful component of culture, capable of opposing destructive tendencies. In any case, life will go on even without science; it will simply be a different kind. Let me explain. The Bible is a wonderful work with enormous moral potential, but it cannot be relayed in the same way that knowledge is relayed. It cannot be taught in the schools the way physics is taught. It is possible to talk about it, to tell its stories, but it cannot be taught as an academic subject. If you want to ensure that it carries a moral charge, it must be read with someone. That is a different kind of perception! An element of this is necessary in the schools. We must not substitute logic for interaction, the only place where the personality is formed. But neither can we substitute interaction for knowledge about the world. The reason the standards are necessary, in my opinion, is for the sake of a sensible balance. It is possible—probably necessary—to criticize the standards, but the criticism must be based on the realities of the world we now live in. I submit that at the same time we have to try to do away with any negative consequences of the standardization, with a more or less clear understanding of the kind of world we are living in today.

*T.Iu. Shalashova:* If we are talking about standards today, there can be no question that we must have them. But do there have to be standards in everything? If we are talking about textbooks, I should like to see a little more definiteness in this regard. Just one textbook on a subject is not the best option. But might it be more successful for everyone to work for three hours with one textbook and then spend

one hour as the teacher sees fit? In that case, the teacher could select material that would add a little spice to his activity and develop the students' creative abilities. Standards in education, after all, hamper the development of giftedness. Giftedness always involves breaking out of the limits, going beyond the standards.

*O.I. Lomonosova:* As I was listening carefully to the discussion about the work and study loads of teachers and students, I had this thought: in our region, class hours were added to the syllabus for the teaching of the Orthodox culture and physical education; the study load was increased, but practical applied subjects such as drafting and technology have been removed from the educational process. The subject "Technology" is an experimental creative facility that provides acceptable conditions for planning and research activity on the part of the students, helps them develop work skills and habits, and detects and develops any talents for certain kinds of activity. This must be kept in mind, because otherwise we might lose the resource of teaching students to value work.

*A.A. Arlamov:* In the course of this roundtable I have created a clip of my own of people's remarks, replies, and questions from the position of my own experience. Allow me to share what has occurred to me. In regard to the necessity of a single textbook, for example: When I was teaching school, I always thought there should be a single textbook. But once I found a mistake in one of these textbooks, regarding substantiation of the methods of solving linear equations with two unknowns. When I told the students about this and explained it in a different way, everything worked, and they did a good job on their assignment. Nevertheless, during the pedagogical council meeting I was told: "Aleksandr Anisimovich, you are undermining the authority of the Soviet textbook. You told your students there are mistakes in the book!" It was only later, when I was teaching in college, that this came back to me, but from a different perspective. Now I tell my college students to analyze the same topic on the basis of different textbooks; I ask them to find contradictory statements and ideas, to pinpoint the problem and work out their own position. Would this be permissible in school?

It is a hard question. But I think that for the purpose of developing thinking and creative abilities, it would not be a bad idea. Here is another interesting example, from a woodworking class in a German school. I spotted a young Russian girl and asked her, "What do you think of the teaching here?" She answered: "You know, they teach us better than they do in Russia, but there is no one I can talk to." And her face had a look of depression and sadness. It seems to me that this is something that makes Russia a bit different, that students are not as isolated. Attitudes toward the individual in terms of value are also different, evidently. But this is the usual situation! Let's say a youngster has gone to school in Europe and then moves to the East. What happens? Discussion and debate about universal human values, which began long ago, once more arise with new force. Clearly, it is necessary to look for common values on the world level. It seems to me that two basic things remain, but it is not possible to include them in the standards. I am referring to the experience of reflection and active creative involvement, the assimilation of an attitude of value toward the individual and toward tolerant social interaction. Experience in accomplishing these pedagogical tasks is already being accumulated. First-grade students are learning how to keep journals. Also interesting is an experiment designed to accomplish pedagogical tasks for the development of the creativity of young enthusiasts at Bauman University in collaboration with schools and other universities in Russia, and also including foreign experiences.

*A.O. Karpov:* I should like to say a few words in conclusion. We have come up with some interesting questions. The discussion that Aleksandr Iaroslavovich [Daniliuk] launched about the standards was provocative. Proceeding from that, we turned to a number of urgent unresolved problems regarding just what the school ought to be. These are not just problems of theory; that would be too academic. They are problems first and foremost of interpretation. Of course, in this regard the standards will not help us in any way. They exist in their own space, and today we have been discussing them on a totally different plane, thinking about the new kind of school and about how to create it.

*N.G. Bagdasar'ian:* What we have been talking about today, essentially, is the desired model of education. Russia is still a special country. All of us who are involved to some extent with the history and culture of Russia understand this well. We understand that many of the things that we hold as a value today, including the system of education, came into Russia from far away. But somehow, in an amazing way, these became transformed into the life of Russia today. Knowledge and understanding of different cultures, and the development of youngsters' readiness to understand them, constitute one of the most essential tasks of our schools.

In spite of all the variety of education models, there are two opposite poles, the Western and the Eastern. The Western progressivist model is seen in concentrated form in the system of education in the United States. Barack Obama has founded the Institute for the Future. As director, he has appointed Ray Kurzweil, an incredible person, an Edison for our times, a genius who became a millionaire. He came out with the book *The Age of Intelligent Machines*, in which he predicted that the age of thinking machines will come in 2045, when the Earth has turned into a gigantic computer. He uses the key term "technological singularity." This is a phenomenon of very rapid scientific and technical progress based on a powerful artificial intelligence and the cyborgization of human beings. I do not wish to frighten either you or myself, but I realize that this is the reality toward which we are rapidly moving, especially if we take on the emasculated Western model of education. Naturally, all our national narratives are in opposition to this. Whether we are aware of it or not, the elements of the patriarchal system in our culture have not disappeared. Along with that, we are becoming a part of the Bologna system with its tests, credits, and so on. As always, we are a catch-up civilization running behind the West. But we are not the same! Especially considering that in the West as well, not everything is unequivocally progressivist: there are plenty of signs that today's Western schools, very good and intelligent schools, are looking attentively to the East and adding to their arsenal a great many aspects from the Eastern system of values and education.

Let us return to our problems, to the standards and the school of the future. It seems to me that the key focus of the competencies

being talked about today in connection with the new generation of standards should be the cultivation of citizens who possess the appropriate set of knowledge, abilities, values, and so on. By “citizen” I mean a person who possesses personal worth. Let us hope that our youngsters frequently engage in protest because that kind of personality has not been formed in them. They are trying to compensate for the lack of a sense of self as a citizen by showing disrespect for their teachers. Of course you are right, a thousand times over: the school is not “communism in a single place.” For this reason it is not only the authorities but all of society that are responsible for this country’s education. We ourselves, of course, will have to cope with the tendencies taking shape on a global scale, with the fact that our system of education continues to manifest crisis (also true in many other countries). It is becoming clear that the future of education lies in compensation for the weakened mechanisms of wholeness. A search is ongoing in the world for basic values on which to build modern education, education of the future. In a society that is changing so rapidly, such a foundation cannot be found definitively, but in any search it is the individual that is prompted to action. I am convinced that the kind of individual who has a sense of his own worth in his own Fatherland, in his own culture, represents the chief national value and the most important national idea.

*A.Ia. Daniliuk:* We have been dealing with the topic “How Are We Going to Transform Education?” But in our discussion we have also addressed another very important topic, the cultural dimension of present-day education. The things we have been debating today have opened up the problem of the cultural dimensions in which the standards exist. We have touched on many issues, including the characteristics of today’s culture, its sound bite and video clip form. We can view it as representing a marginality or a decline in present-day thinking. We can look at it from the standpoint of its positive and important constructive elements. One thing, however, is not subject to doubt! There is no doubt that we are now living in a different cultural dimension. Even though that American professor [Kurzweil] has no doubt that in forty years we are going to

live in a kind of technogenic information space, as cyborgs, a place where even poetry will be written by machines, nonetheless all of us here today still have a niche. We have something that belongs to the purely human dimension, namely our values. Any society that loses its values will fall apart sooner or later. A person who loses his values turns into a machine that may be able to generate excellent innovations and come up with many technical solutions, but that is no longer human activity. The most important cultural dimension is the human dimension. The decisive role when it comes to solving this problem as it applies to the general education school belongs to the schoolteacher. If the teacher does not encompass the human dimension in school, no projects or standards will help us. The teacher has to be the kind of individual who respects himself and who is respected by others, a person who has an excellent education, who has been professionally trained to engage in his activity and is motivated to do so. Attitudes toward the teacher constitute one of the most important cultural dimensions in society. And I am very hopeful that these attitudes will undergo positive changes in the near future.