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The paper attempts to contribute to the ongoing debate on the impact of executive's behavioral pattern on the speed and effectiveness of the organizational transformation. Authors consider the large-scale reform of school education system launched in the Russian Federation and look at the principals' decision-making behavioral patterns. The use of A.Rowe's Decision Style Inventory (DSI) gives the opportunity to get fast results for a large and representative set of principles and compare these to that of similar study undertaken earlier in Canada. In spite of the fact that the two nations exhibit substantially different cultural characteristics some important conclusions about the principals' behavior and its potential influence do coincide, which makes authors think that these have to do not with the national culture, but rather with some generic features of the school as an organization. Practical implication of the research is seen in providing assessment of the cadre of principals as agents of change at the current stage of reforms of the Russian educational system.

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Introduction

In Russia introduction of a fundamentally new Federal Governmental Educational Standard (FGES) for general education that is oriented toward both subject-specific and personal (capacity for self-development, desire to learn, etc.) results, is deemed to lead to qualitative changes in how the educational process is organized and, consequently, in the whole functioning of educational institutions. The need to successfully implement a “fundamentally new standard” is difficult to overestimate. This is not entirely because Russian educational system, which has not been moving forward in a dynamic way for several years, is gradually becoming outdated (Strategy 2020 by Russian Government, 2011). What is most important is that both the consumers and providers of educational services who have experienced a series of largely unsuccessful reforms are becoming increasingly doubtful that any positive change may result from the Government initiatives.

Policymakers and administrators believe that school graduates can achieve higher educational results not only because of creation of a new educational environment, envisaged by the new FGES, but also by delegating authority and responsibility to the level of the educational institution. In recent years number of reforms were carried out in Russia changing the organizational and financial conditions in which schools operate. This included primarily transforming schools into so-called state-financed or autonomous organizations, introduction of normative budget financing and of a new remuneration system. This means that school principals and their administrative teams have been seen as the agents of change.

Making a school more responsible for academic results naturally raises a question about the principal. Being a government representative at the school he (she) is the key figure who must decide whether to accept and implement the main idea of the new Russian school, thus largely deciding its fate. Over the past 10-20 years, the school principal's role has changed from an independent leader (at the end of the 1980s to the early 1990s) tasked with solving a huge number of resourcing and financial problems, but free to choose the institution's educational strategy, into an conservative-minded oppositionist, tasked with defending the teaching staff from a continual stream of innovations and reforms imposed from outside.

In the mid-1990s (the end of an era of change) the World Bank and Soros Foundation ordered a sociological study in Russia that involved 1,400 school principals from six regions in Russia, and which shed a light on the principals' attitudes toward innovations in education and modernization of the system's management model. This study showed that about 40% of respondents could be classified as independent, focused on the best types of administrative

practices and willing to innovate (read: willing to work under conditions of high degree of uncertainty).

How has the character of Russian school principal changed in the 20 years since this study was conducted? Do principals consider themselves independent today? Can they be the drivers of change in education? This is the central idea of this study in which we attempt to assess their reform potential.

The object of this study is the pool of principals in eight Russian regions and the subject of the study is their decision-making style. The principal's decision-making style is, on the one hand, an important component of the principal's leadership style, and on the other hand, it defines the typical model of school administration that may be aimed at or on the contrary may impede the implementation of the public-government model of education administration.

The objective of this study is thus to determine whether Russian school principals tend to use a decision-making style and administrative models that are appropriate for the implementation the government's education policy.

Theoretical foundations for leadership in education studies

The active study of leadership in education began roughly in the 1960s in the US. Until the 1980s, school principals were considered exclusively in the industrial paradigm in the "hierarchy" of managers, administrators of the hierarchical structure, with a fully defined role and channels of communication (Ogawa & Bossert, 2000; Harris, 2003). Changes in the school structure became a part of a general trend of management in the social sphere, dubbed "new public management", characterized by horizontal management and market regulation mechanisms, and geared toward the client's needs (Shawn, 2009).

Starting in the 1980s, the focus of this research shifted dramatically toward principals' responsibility for students' academic achievements, giving them the new status as "instructional leader" (Schein, 1992; Edmonds, 1979). This was largely due to the development and implementation of national professional standards and the introduction of a universal final exam. As Leithwood noted (Leithwood, Jantzi & Steinbach, 1999), school administrators were now required to not only effectively manage the school infrastructure, but also focus on the work and behavior of teachers, upon whom students' success directly depends, as well as become experts in school curricula and how they are built. Hallinger and Heck (1998) conducted a meta-analysis of research on the leadership of school principals, which found that 31 out of the 40 articles and dissertations reviewed showed that administrators influence the effectiveness of a school's operations and students' results by creating a defined culture within the school based on a

common vision, mission and goals. The results of an analysis conducted by Witziers, Bosker and Kruger (2003) showed that school administration has a significant positive impact on students' success. Hamilton and Richardson (1995) also found a link between success in implementing school reformations and the principal's leadership qualities.

But in today's rapidly changing and highly competitive world in which the nature of schools' aims are continually shifting, it is no longer enough for the principal to be a leader tasked with providing quality education. In this regard, the paradigm for the position of school principal is undergoing yet another shift, in which this is no longer the sole leader of the school. Instead, the principal must be the leader of a "team of leaders", who recognizes the talent of his or her employees, increases their rights and responsibilities in jointly designing and implementing a single policy, as well as dividing responsibility for the school's effectiveness (Shawn, 2009). Alma Harris (2003) in her study calls this type of leadership "distributed leadership".

The paradigm shift for the role and characteristics of school leaders made it necessary to define and classify leadership styles. It is the principal's leadership style that is considered the most important tool for a school's success, especially as it relates to student's academic achievements and teacher satisfaction. When the transition to "educational leadership" took place, Bernard Bass (1985) developed a classification of school principal leadership styles that defined three base types: transactional, transformational and laissez-faire. The **transactional style** of leadership is sometimes referred to as bartering, whereby services are exchanged for rewards (Bass & Avolio, 2000): employees can reach their goals via an incentive scheme. In this model, teachers are still followers of a dominant principal, so effective cooperation requires a shared vision (Shawn, 2009). This leadership style is oriented more toward tackling especially difficult issues than toward people, though it considers personal interest for motivation purposes. In fact, every time a principal and teacher make a "deal", the final result, and reward, depends on accomplishing certain tasks. The downside of this style is that the principal can only react to the end result once the deal has concluded in order to decide whether to reward or punish, while subordinates are not interested in solving the task for the school's benefit, but for the subsequent rewards that follow. The **transformational style** of leadership is geared toward people, cooperation and trust building within the collective, as well as developing common goals and views. This model corresponds to the new slant of nurturing a team of leaders within the school. Employees are motivated by an appeal to achieve goals via shared ideals and values. They tend to ignore their own interests for the sake of the group. This is beneficial not only for the organization, but also for the employees, as it encourages them to move beyond their own expectations. Commitment to a shared vision and putting it into practice together helps an

organization continually evolve and improve; the school becomes more responsive to changes, while tackling especially complex issues and achieving ambitious goals by stimulating creative problem solving, both individually and in a team (Bass & Avolio, 1996). The **laissez-faire style** of leadership is characterized by a lack of leadership in the organization. Principals that follow this style avoid solving problems and prefer to shy away from making decisions. They are uncertain in their ability to control a situation or their employees. According to Bass and Avolio (1996), principals should avoid this leadership style.

As noted above, there is no doubt that a principal can impact how effectively the institution operates. According to Sergiovanni (2000), the factor that determines a school's success is the leadership style of the administrator who determines its actions. Leithwood Jantzi, & Steinbach (1999) believe that the transformational leadership style is the most effective in a situation of school restructuring, or when working in a state of change. Howell and Avolio (1993) confirm that managers must develop characteristics of the transformational style of leadership in order to positively influence their organizations. Verona and Young (2001) studied the impact of the transformational style on the strong results of the universal final exam at schools in New Jersey, and Scope (2006) analyzed schools in Indiana, finding a link between effective leadership, school culture and the transformational style. Burns and Bass, in comparing the influence of transformational and transactional leadership styles on teachers' satisfaction with their work, came to the conclusion that teachers view principals with a transformational style as more effective and that they have greater potential to lead a group and achieve the desired results (Shawn, 2009).

Despite the fact that these studies show that the transformational style is highly effective, Bass believes that a two-factor leadership model has its place. The transformational and transactional styles are both linked to employees' needs and wishes, and the principal can choose which to use based on the external situation (Bass, 1985). For example, a principal with a transactional style might be more effective when the school is in a stable condition and does not currently need to make any changes, while transformational leaders are more appropriate for times when the institution is in a constant state of flux.

Leadership styles and decision-making styles

Decision-making style of a manager is usually defined as a dominant pattern of manager's behavior in decision-making situations (Scott & Bruce, 1995; Driver, 1979). The notion of leadership style, as described above, definitely includes certain components of this pattern. For example propensity to group decision-making is a feature of collaborative approach

to leadership, whilst preference of individual decision-making is more associated with hierarchical approach. At the same time, dealing with how decisions are made, but not with preferred ways to solve managerial problems, decision-making style, unlike the leadership style, is indifferent to the way subordinates are motivated. On the other hand, disposition to use of information is considered to be an important feature of the person’s decision-making style, whilst it may be combined with different approaches to leadership.

Difference between the characteristics becomes even more evident when we look at the tools used in empirical studies of the two. While the majority of empirical studies of decision-making style rely upon questionnaires, filled-in by the objects of study, studies of leadership style in many cases require questioning not only the object of study, but also the followers (subordinates) (Aarons, Ehrhart & Farahnak, 2014).

Thus the two characteristics of one and the same person – decision-making style and leadership style appear to be linked, but their overlap is less than 100% as they are reflecting different facets of the underlying reality. Identifying one may not be regarded as a reliable way to get to know the other.

Nevertheless, in the normative sense it appears possible to speak about “best fitting” decision-making style for a specific leadership behavior and few authors have attempted to build such relation.

R.B. Williams (2006) in his study of Canadian school principals considers three possible leadership styles: Directive, Collaborative, or Non-Directive and four decision-making styles suggested by Alan J. Rowe – Directive, Analytical, Conceptual and Behavioral. The correspondence used is presented in Table 1.

Tab. 1 Correspondence of leadership and decision-making styles by R.B.Williams

Leadership Style	Corresponding Decision-Making Style
Collaborative	Conceptual
Directive	Directive & Analytical
Non-Directive	Behavioral

Although R.B. Williams is not using the term “transformational leadership”, he clearly connects the success of transformation of the schools in New Brunswick (Canada) with the use of Conceptual decision-making style by school principals. Thus we may label Collaborative leadership style in this model as transformational one, Directive – as Transactional, and Non-Directive – as Laissez-Faire.

Rowe, Reardon and Dennis (1996) come up the grid of four leadership styles based on two criteria: “How adaptive are leaders when dealing with issues?” And “How do leaders

communicate with, persuade, and energize employees?” The corresponding styles are labeled Commanding, Logical, Inspirational, and Supporting. Authors withhold from relating these styles to decision-making styles suggested by A.Rowe, but stated features of Commanding style (short-term goal orientation, ability to learn better by own successes and failures than from others – and consequently preference for individual approach to decision-making) correspond to Directive decision-making style. In a similar way we can conclude that the correspondence in this case may be presented as shown in Table 2.

Tab. 2 Correspondence of leadership and decision-making styles by A.J.Rowe

Leadership Style	Corresponding Decision-Making Style
Commanding	Directive
Logical	Analytical
Inspirational	Conceptual
Supporting	Behavioral

In developing their views the authors do not connect specific leadership styles with transformations, or just transactions (they use the term execution, which in our view is fully equivalent to transaction in this case). Instead, they consider combinations of styles calling these patterns and suggest that different patterns may be useful at different stages of the transformational process.

Generally speaking, we are facing here a kind of a well-known problem of establishing correspondence between different measurements that are personality related. Leonard, Scholl and Kowalski (1999) had undertaken an attempt to establish fit between four measures: the Myers-Briggs Type Indicator, the Group Embedded Figures Test, the Learning Styles Inventory, and the Decision Style Inventory. Comparative theoretical analysis implied that measures appeared to be conceptually linked. Results however indicated that the various measures were not strongly interrelated and appeared to be measuring different aspects of information processing and decision-making.

A.A.Al-Omari (2013) has recently provided interesting evidence supporting this point of view. In his paper he analyzed the link between leadership styles derived from Administrative Styles Questionnaire based on Blake&Mouton grid and decision-making styles based on Decision Style Inventory – DSI (A.Rowe). His results revealed that no significant correlation existed between decision-making styles and leadership styles of school principals.

Research methodology

In our research of school principals' behavior we had a choice of frameworks and measuring tools. We could assess either leadership style, or decision-making style. And for each of these constructs we had a number of measuring tools. None of these according to extant literature is by far superior to others and the correlation between the results is loose.

We have decided to assess decision-making style and use DSI as it has been done by R.B.Williams (2006). We realize that this imposes certain limitations on our research, but we base our choice on the following considerations. Assessment of decision-making style appears to be simpler than assessment of leadership style and thus more reliable. We agree that unilateral assessment of the leadership style through questioning only the supervisor (leader) may provide a distorted image and collecting different data from different categories of respondents appears to be much more sophisticated task. There is considerable record of assessing decision-making style of managers in business, including cross-cultural comparisons. This creates opportunity to compare results both cross-national and cross-sectoral, opening the way to put our research not just in the context of educational studies, but in a much broader context of managerial studies.

A.J. Rowe created his DSI based on two criteria: values orientation and tolerable cognitive complexity. The first criterion suggests that differences in a person's behavior depend on his or her focus: tasks or people. The second is the level of ambiguity that a leader can tolerate when making decisions. Cognitive complexity alludes to the amount of information used for making decisions and the number of alternative solutions. These criteria define the four styles of decision-making: directive, behavioral, analytic and conceptual. Two of these (behavioral and conceptual) determine a leader's choice in favor of cooperation in management. The other two (directive and analytic) put the director on the side of the hierarchical structure and organization. Being tolerant of uncertainty (which is characteristic of any period of reformation) corresponds to analytic and conceptual styles

On the basis of how a principal prepares and makes decisions (who is involved in the discussion, who is consulted, based on what data, how quickly a decision is made, etc.), we attempt to characterize the principal and determine his or her reform potential.

Next, by highlighting key reforms that took place in the education system of Russia and studying the decision-making styles of school leaders who actively and successfully participated in these reforms, we determine the reform potential of administrative action. Among such events, we selected the following:

- The emergence of a specific identity of schools, as a result of which they were designated as lyceums or grammar schools;
- Schools obtaining the status of autonomous, state-funded or public institution.

Hypothesis 1: Our hypothesis was that both these transformations, related to educational institutions obtaining the status of lyceum or grammar school, or transforming into an autonomous form of management, have been carried out by principals who were reformers, able to understand and accept the idea of reform and thus possessed special profiles within the DSI framework.

Empirical data for researching the pool of principals was collected in eight pilot regions, of which seven regions represent a federal district (Samara, Novosibirsk, Yaroslavl, Stavropol, Khabarovsk, Krasnoyarsk and Perm regions) and one is a federal city (Saint Petersburg).

In Saint Petersburg, a continuous questionnaire was conducted among principals in two regions – Krasnoselsky and Vasileostrovsky. Directors from 67 educational institutions were invited to take an online survey. We randomly selected 200 schools from the general pool of educational institutions in each of the seven other regions that took part in the study and asked their principals to take the online survey. In light of the unequal number of educational institutions in each of the regions, a sample of 200 schools is optimal, from a sociological standpoint, for ensuring the data is representative for the region and comparable with other regions. The total number of respondents in our study was 1299.

The online survey for all participants was a questionnaire built on the SurveyMonkey web platform, based on Alan Rowe's questionnaire. To supplement the questionnaire we provided a passport that allowed us to identify each school and its principal based on several criteria: gender, age, experience, location (urban/rural), ownership (state, municipal, private), number of classes, type of organization (state-funded, public, autonomous), type of institution (lyceum, grammar school, etc.).

In accordance with Rowe's methodology, respondents were asked to answer 20 questions, each of which had four possible answers. The answers were assigned a value of 1, 2, 4, or 8, where 1 corresponded to the least appropriate response and 8 to the most appropriate.

Each possible answer corresponded to one of the four decision-making styles – directive, analytic, conceptual and behavioral – but this was not explicitly indicated to the people taking the survey.

After answering all of the questions, the values that correspond to the decision-making styles were tallied. In this way, each respondent was scored on each of the four decision-making styles.

The next step under this methodology consists of determining which of the styles are the dominant ones for each respondent, which ones are back-up, and which does the respondent avoid (the plural is used here for a reason, as Rowe claimed that a person can have several dominant, back-up or least preferred styles).

To classify each style based on the level to which a respondent uses it, we calculate the average value for this style among the general population (A) and the standard deviation (σ). In the range of $[A - \frac{\sigma}{2}; A + \frac{\sigma}{2}]$ are the values that correspond to a reserve style of decision making. Values to the right of this indicate a dominant style, and values to the left signify an avoided style.

For example, for the total studied population, the average value for the directive style is 75.2, and the standard deviation is 13.4. Principals who scored over 81.8 on the directive style actively use this when making decisions. Those respondents whose level of directive style is within a range of 68.5-81.8, have this style as a back-up. Finally, respondents who scored under 68.5 tend to avoid the directive decision-making style.

Key findings, conclusions

We start with an assessment of the potential of principals by highlighting the share of various sub-groups of school leaders for whom conceptual style is either dominant or least preferred. This gives us a kind of portrait of the “conceptual” style of principal and his or her opposite.

The data presented in table 3 show that around one third of principals of both genders prefer to use the conceptual style in their managerial practices, and around the same sure avoid this style. This is slightly different from the results of R.B.Williams who reported about 23% of New Brunswick principals having dominant conceptual style. Theory and previous empirical research prompt higher acceptance of conceptual style by female respondents, which is not the case in our research, but this may be just random fluctuation.

Tab. 3 Portrait of a principal by gender

With a dominant conceptual style				With least preferred conceptual style			
	Total	Conceptual	%		Total	Conceptual	%
Gender				Gender			
Male	230	68	30%	Male	230	64	28%
Female	1069	300	28%	Female	1069	362	34%

The results presented in table 4 show that age and practical experience play different roles with the respect to principal’s propensity to conceptual decision-making. It becomes evident from the table 5, which demonstrates the age and experience structure both conceptual-dominating and conceptual avoiding groups of principals.

Tab. 4 Portrait of a principal by age and work experience

With a dominant conceptual style				With least preferred conceptual style			
Age	Total	Concept	%	Age	Total	Concept	%
Under 25	2	0	0%	Under 25	2	1	50%
25-35	35	6	17%	25-35	35	12	34%
35 or older	931	266	29%	35 or older	931	315	34%
Retirement age	331	96	29%	Retirement age	331	98	30%
Experience				Experience			
Less than 2 years	161	47	29%	Less than 2 years	161	54	34%
2-5 years	275	71	26%	2-5 years	275	99	36%
5-10 years	299	78	26%	5-10 years	299	99	33%
10-20 years	362	106	29%	10-20 years	362	123	34%
Over 20 years	202	66	33%	Over 20 years	202	51	25%

Tab. 5 Age and experience structure both conceptual-dominating and conceptual avoiding groups of principals

With a dominant conceptual style		With least preferred conceptual style	
Age	%	Age	%
Under 25	0%	Under 25	0%
25-35	2%	25-35	3%
35 or older	72%	35 or older	74%
Retirement age	26%	Retirement age	23%
Experience		Experience	
Less than 2 years	13%	Less than 2 years	13%
2-5 years	19%	2-5 years	23%
5-10 years	21%	5-10 years	23%
10-20 years	29%	10-20 years	29%
Over 20 years	18%	Over 20 years	12%

As we can see the age structure of both groups is pretty the same, whilst the experience structure is different with a shift in the group with dominating conceptual style towards greater experience. Note in Table 4, that the subgroup with more than 20 years experience is the only subgroup in which number of principals with dominating conceptual style is higher than the number of principals avoiding this style.

It means that if the authorities need to look for agents of reform, it would make sense to do so among principals with managerial experience of over 20 years. If we add to this the fact that principals who have 20 years of experience began their work before 1994, meaning in an era of change, then we can assert that they have reform potential.

This finding perfectly fits the results obtained by A. Rowe for a group of 80 CEOs of American companies. Considered as a group they demonstrated substantial trend towards conceptual style as compared with the general population of white collars in the USA. One of the possible explanations for this phenomenon may be that conceptual style is a pattern, which may be learned over time and the environment at the top of the managerial pyramid, is favorable for this learning.

There is a rather clear trend that the share of school principals who demonstrate the conceptual style of decision-making rises as the number of students in the school increases, and vice versa (Table 6). It seems as though small schools are generally managed by some other, “non-managerial” but more family-style laws.

Tab. 6 Portrait of a principal by school size

With a dominant conceptual style				Who avoids the conceptual style			
School size	Total	Concept	%	School size	Total	Concept	%
Up to 5 classes	65	12	18%	Up to 5 classes	65	31	48%
6-11 classes	524	119	23%	6-11 classes	524	186	35%
12-18 classes	212	56	26%	12-18 classes	212	75	35%
19-25 classes	185	63	34%	19-25 classes	185	54	29%
Over 25 classes	313	118	38%	Over 25 classes	313	80	26%

This factor of size seems to play a very important role. R.B.Williams reports that 45% of the partial elementary school (K-1 or K-3) principals exhibited a dominant behavioral style, while the dominant styles of principals of full elementary schools (K-5 or K-6) were more likely to be either analytical (27%) or conceptual (24%). He doesn't mention the size factor explicitly, but educational statistics tells that K-1 and K-3 schools are usually smaller than K-5 or K-6.

It is curious and to some degree surprising to see the results presented in Table 7. Nearly half of lyceum and grammar school principals demonstrate the conceptual decision-making style, and only 10-15% of them avoid it. If these data are compared with the conclusions regarding experience, then one can assume that a significant proportion of principals of lyceums and grammar schools, which, as a rule, were created from schools with in-depth study of various subjects, in the very act of changing their school's status, displayed their reform potential. Those

principals who do not possess this potential left the status of their institutions unchanged as a secondary school with in-depth study of various subjects.

Tab. 7 Portrait of a principal by school status

With a dominant conceptual style				Who avoids the conceptual style			
School status	Total	Concept	%	School status	Total	Concept	%
Grammar school	43	21	49%	Grammar school	43	6	14%
Lyceum	37	17	46%	Lyceum	37	4	11%
Secondary school with in-depth study of specific subjects	66	21	32%	Secondary school with in-depth study of specific subjects	66	25	38%
Other (specify)	1153	309	27%	Other (specify)	1153	391	34%

Conclusion 1

Considering a principal who scores high on the conceptual style of decision-making as an agent of reform, we see that the highest probability to find such a person is among the group of male principals with more than 30 years of experience, working in a large (19 classes or more) lyceum or grammar school. However, this group is rather small.

The idea to look not at only at the dominant decision-making style, but rather to consider pairs: dominant style – back-up style, appears to be very attractive, and has been used in a certain form by several researchers. As education reform requires principals that are able to work for long periods of uncertainty and successfully solve tasks in cooperation with teachers and students, the best suited for this are those who are transitional (transformational) style leaders who have a conceptual style of decision-making. Based on Bass’ two-factor leadership model, the transformational or transactional style could be effective depending on the school’s situation. They can also substitute each other if the need arises or if required to do so by external forces. When it comes to a principal’s potential to reform the school, there are two types of leader that could be most effective:

- Principals who have a dominant conceptual style and a back-up analytic style – these people are already prepared to make changes and are likely already implementing them;
- Principals who have a dominant analytic style and a back-up conceptual style – these people are potentially prepared to adapt under changing conditions or if required to change by external influences.

It is interesting to note, that R.B.Williams (2006) has found the preferred patterns for different types of schools as presented in Table 8.

Tab. 8 Preferred decision-making patterns for different types of schools

School Type by Grade Level	Dominant Style	Preferred Backup Style
Partial Elementary	Behavioral	Directive
Elementary	Analytical	Conceptual
Elem./Middle	Directive	Behavioral
Middle	Directive	Analytical
Senior	Conceptual	Analytical

We see, that suggested pattern Conceptual-Analytical is preferred at the senior school level, where organizations, managed by principals, are larger and more sophisticated. As for Analytical-Conceptual combination it is found at the elementary school level where the size and complexity of the object of management are lower. It is interesting that in the middle we found transition from Behavioral-Directive pattern towards Directive-Behavioral one and then eventually to Directive-Analytic pattern.

Application of this framework to our data yields the results, presented in Table 9. Only 12% of the general population constitute principals with a conceptual style who have the analytic style as a back up. These are the ones that can be classified as transformational leaders. And only 11% are likely to effectively implement change in the future under the influence of certain reform actions, or transactional leaders with a predisposition to change leadership style in favor of transformational. This is the ready available reform potential among current principals.

Tab. 9 Transactional and transformational leadership styles of principals identifying by decision-making style

	Dominant analytic and reserve conceptual	Dominant conceptual and reserve analytic
Total schools	1299	1299
Those who fit the description	139	155
Share	11%	12%

We now turn to our hypothesis, that truly reformist actions of the federal authorities (the appearance of variability and changes in the legal form of an institution), must “ride the wave of change” of reformers among school leaders. In other words, as a consequence of reform, “field

commanders” who are not afraid of change must lead new types of institutions and organizations that obtain financial independence.

We identified groups of principals from grammar schools and lyceums who have transformed their schools to this new status. This change involved the need to develop the curriculum, provide a higher level of quality, etc. We also highlighted groups that predominantly practice the conceptual style (or avoid it), as well as those that as a back up (Table 10). And, in parallel and along the same lines, we identified groups of leaders who have assumed a certain amount of financial freedom and responsibility – autonomous educational institutions (Table 11). Recall that the status of autonomous institution gives principals greater managerial capabilities.

Tab. 10 Use of the conceptual style in schools based on status

	Grammar schools and lyceums	Secondary schools with in-depth study of particular subjects	Other
Dominant	48%	32%	27%
Back-up	40%	30%	39%
Least preferred	13%	38%	34%

Tab.11 Use of the conceptual style in schools in various types of educational institutions

	Autonomous	State-funded	Public
Dominant	33%	29%	26%
Back-up	41%	38%	40%
Least preferred	26%	33%	34%

Table 10 clearly shows that nearly 90% of grammar school and lyceum principals have a conceptual decision-making style as either dominant or back-up. However, the distribution in Table 11 does not point to a clearly expressed conceptual style among the leaders of autonomous schools. Moreover, a detailed look at the sample of principals of autonomous institutions leads to the conclusion that schools led by principals with completely different styles of decision-making made the switch to this new status without a clearly predominant one (table 12).

Tab. 12 Use of the different styles in autonomous educational institutions

	Directive	Analytic	Conceptual	Behavioral
Dominant	29%	29%	33%	26%
Reserve	32%	41%	41%	35%
Avoided	39%	29%	26%	39%

Conclusion 2

In comparing the effects of two reform actions – introducing variability and providing financial freedom to schools – we find that they have different consequences. Substantive reform (variability) attracted the attention of reformers (it is here that they were in demand), while financial reform took place not because school principals were willing to take on a new level of responsibility in exchange for new opportunities, but due to the requirement to execute the government’s policy. “... Thus, autonomy for the principal in decision-making for the school does not make him a reformer...” (Source OECD, 2009).

Economic reforms of the past 10-15 years that placed the emphasis in the Russian education system on improving the reform potential of the principal pool have not worked. However, the introduction of the new Federal Government Education Standard and teacher standards, the modernization of educational programs to prepare teachers should be classified as substantive reforms that make us cautiously optimistic.

In considering the prospects of this research, we think that studying the influence of managerial decision-making styles in the education system might have a broader focus. Are students’ academic results linked to how the principal makes decisions? Is the conceptual decision-making style needed in rural schools? Is the context in which a school operates related in principle to the effective managerial decision-making style, and if so, how can we build a system for raising the qualifications of school principals?

References

1. Aarons, G.A., Ehrhart, M.G., & Farahnak, L.R. 2014. The Implementation Leadership Scale (ILS): Development of a Brief Measure of Unit Level Implementation Leadership. *Implementation Science*, 9(1) 45: [Electronic resource] // Access URL <http://www.implementationscience.com/content/9/1/45>
2. Al-Omari A.A. 2013. The Relationship between Decision Making Styles and Leadership Styles among Public Schools Principals. *International Education Studies*, Vol. 6 (7): 100-110
3. Bass, B. M. & Avolio, B. J. 1996. Manual for the administration of the multifactor leadership questionnaire. Technical report. *Redwood City, CA: Mind Garden*.
4. Bass, B. M. & Avolio, B. J. 2000. MLQ multifactor leadership questionnaire sampler set (2nd ed.). Technical report. *Redwood City, CA: Mind Garden*.
5. Bass, B. M. 1985. *Leadership and performance beyond expectations*. New York: Free Press.
6. Burns, J. M. 1978. *Leadership*. NY: Harper & Row.
7. Driver, M. J. 1979. Individual decision-making and creativity. In S. Kerr (Ed.), *Organizational behavior*. Columbus, OH: Grid Publishing: 59-91
8. Edmonds, R. 1979. Effective schools for the urban poor. *Educational Leadership*, 37: 15–24.
9. Hallinger, P., & Heck, R. H. 1998. Exploring the principal's contribution to school effectiveness: 1980-1995. *School Effectiveness and School Improvement*, 9(2): 157-191.
10. Hamilton, M. L., & Richardson, V. 1995. Effects of the culture in two schools on the process and outcomes of staff development. *The Elementary School Journal*, 95(4): 367-385.
11. Harris, A. (2003). Teacher leadership as distributed leadership: Heresy, fantasy or possibility. *School Leadership and Management*, 23(3): 313-324
12. Howell, J. M., & Avolio, B. J. 1993. Transformational leadership, transactional leadership, locus of control, and support for innovation: Key predictors of consolidated business-unit performance. *Journal of Applied Psychology*, 78: 891–902
13. Leithwood, K., Jantzi, D., & Steinbach, R. 1999. *Changing leadership for changing times*. Philadelphia: Open University Press.;
14. Leonard N.H, Scholl R.W. & Kowalski K.B. 1999. *Journal of Organizational Behavior*, Vol. 20, No. 3: 407-420

15. Ogawa, R. T., & Bossert, S. T. 2000. Leadership as an organizational quality. *Jossey-Bass reader on educational leadership*. San Francisco: Jossey- Bass: 33-58
16. Reardon K., Reardon J., & Rowe A. 1996. Leadership Styles for the Five Stages of Radical Change. *Acquisition Review Quarterly*: 129-146.
17. Schein, E. H. 1992. *Organizational culture and leadership (2nd ed.)*. San Francisco: Jossey-Bass
18. Scope, P. S. 2006. *Relationship between leadership styles of middle school principals and school culture*. Doctoral Dissertation, Purdue University
19. Scott, S. G., & Bruce, R. A. 1995. Decision-making style: The development and assessment of a new measure. *Educational and Psychological Measurement*, 55(5): 818-831
20. Sergiovanni, T. J. 2000. The lifeworld of leadership. *San Francisco: Jossey-Bass*.
21. Shawn M.T. 2009. *Relationship between the Leadership Styles of Principals and School Culture*. Electronic Theses & Dissertations. Paper 269
22. *Source OECD Education & Skills*. 2009. Leading to Learn: School Leadership and Management Styles Source. 15: 177-206
23. *Strategy 2020. New growth model – new social policy*. Final presentation on the results of expert analysis of relevant issues in Russia's socio-economic strategy through 2020. [Electronic resource] // Access URL <http://2020strategy.ru/data/2012/03/14/1214585998/1itog.pdf>
24. Verona, G. S., & Young, J. W. 2001. *The influence of principal transformational leadership style on high school proficiency test results in New Jersey comprehensive and vocational-technical high schools*. Paper presented at the annual meeting of the American Educational Research Association, Seattle, WA.
25. Williams R.B. 2006. Leadership for School Reform: Do Principal Decision-Making Styles Reflect a collaborative Approach? *Canadian Journal of Educational Administration and Policy*, Issue 53
26. Witziers, B., Bosker, R. J., & Kruger, M. L. 2003. *Educational Administration Quarterly*, 39(3): 398-425.

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