

## Explanatory note on the topic of research on the structure of the organization (social capital)

The study draws on the work of M. Fullan, D. Hargraves (Professional Capital), D. Hetty (Visible Learning) and many other educational researchers who emphasize the paramount importance of influencing the quality of education in the social capital of an organization. Social capital in this study defined as the existence of sustainable professional relationships within an organization that ensure the exchange of information and experience, facilitate the professional development of educators and prevent professional burnout.

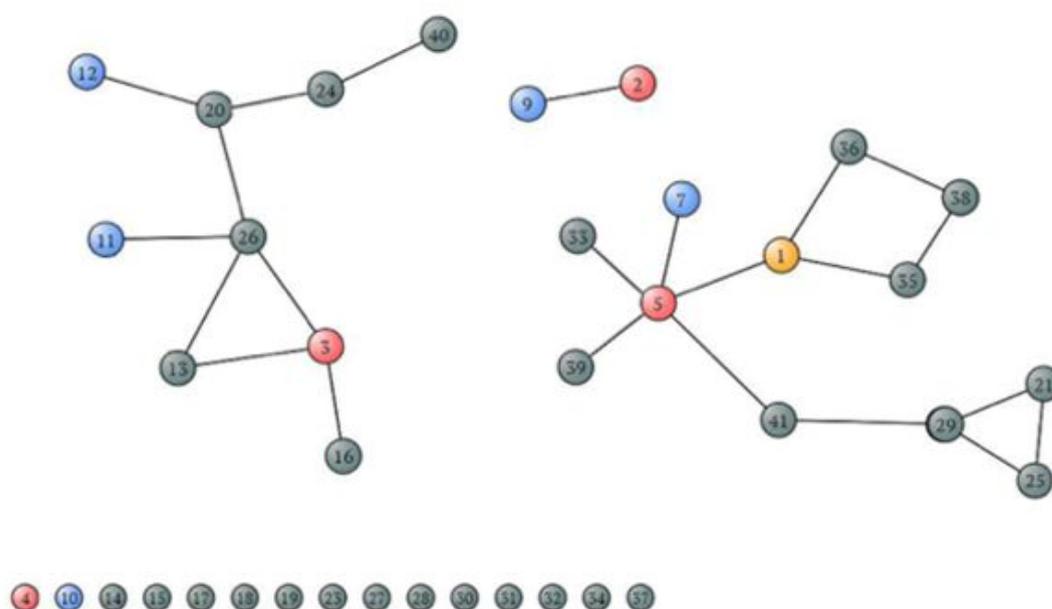
Professional connections arise within the organization regardless of the formal structure and are a consequence of the trust members of the organization place in each other.

The study aims to identify the links, groups, informal professional leaders as well as isolated members of the organization who constitute a risk group (possible care, slowing down professional development).

### The study consists of two parts:

- The first part is a survey with a choice of answers. That makes it possible to assess the peculiarities of the organizational culture of the organization (level of trust and accepted methods of professional interaction of teachers).
- The second part is a network analysis, the result of which are graphs (schemes) reflecting the currently existing (actual) professional connections, potential (possible) professional relationships and personal connections of members of the organization.

Below is an example of the graph of actual professional relations:



The figure demonstrates the scheme of professional interaction of team members (links between elements). The colour highlights aspects of the formal structure of the organization: director - yellow, deputies - red, heads of methodological associations - blue, and teachers - grey.

This graph is drawn up based on the answers to two questions:

1. If you have professional problems, who among colleagues will you consult and whom do you ask for help?
2. Please name the colleagues whose lessons/events you visit at present to learn their experience?

Only mutual connections, i.e. when participants choose each other, are presented in the column. Unilateral relationships (choices, not joint) did not show, so they are unstable and quickly disappear.

Professional (pedagogical) leadership assessed by the number of connections that a particular teacher has (how many colleagues have chosen this teacher).

Linkages may have different configurations:

- Dyads (pairs) or chains formed from them are essential to the organization because of more complex arrangements created from dyads (e.g., 9-2, 12-20-24-40);
- Triads (a mutual choice of three participants, e.g. 3-13-26, 29-21-25) are particularly valuable links for the organization, as they are much more stable than dyads. Triads are usually the basis of any team.
- Stars (when there is one person in the communication centre, e.g. 5-7-1-41-39-33). The person at the centre has the most significant influence on his or her colleagues.

## How is the research carried out?

1. It is necessary to enter into the system a list of all pedagogical staff of the school, indicating the level of the position (deputy director, head of methodological association or structural unit, teacher). The principal of the school may not take part in the survey if he or she is not directly involved in the teaching activity.
2. Participants receive individual passwords to access the online questionnaire.
3. Participants answer the questions asked (confidentiality is guaranteed). It takes about 20 minutes to work with the tool with minimum user qualification.
4. It is desirable to achieve 90-95% participation (from the declared list). That will make the received fields representative (usually it is possible to do it in 10-14 days).
5. After the end of the work, the report provided within 1-2 days.
6. The report contains necessary comments; however, if something is unclear, we are ready for consultations.

## Our experience

At present, 1,769 schools of various types have already undergone such a study and received reports and consultations.

This information enables the management team:

- to develop, if necessary, programs for the development and strengthening of social capital, development (complication) of the organization structure;
- identify isolated people (a risk group) among teachers and develop a targeted programme of action to minimize this risk;
- identify professional leaders who may be worth using in the formal structure of the organization.

## Why is social capital so necessary?

The traditional way to increase the human capital of a school is to improve the skills of third parties, i.e. at the expense of external resources. However, the world experience says that it works well only in very underdeveloped educational systems, with a low level of qualification of staff and weak educational traditions. The more complex the tasks faced by the education system, the less effective are the methods of traditional professional development, and the more effective should be chosen.

### **What interactions should we consider as social capital that influences the professionalism of teachers and the quality of education?**

Usually, it seems that teachers already have much contact with each other: during breaks and events, they gather in groups and vigorously discuss, take part in the work of the Pedagogical Council and Methodical Association once a month, prepare together for holidays. But this is very little and often for the wrong reasons. The lesson remains and will remain for a long time the main form of organizing the educational process at school. It is at the lesson that children receive the central part of education, knowledge, skills and abilities; the lesson affects the results of the final assessment. Look at the extent to which your school's interactions affect the quality of the lesson?

### **Interaction and communication regarding pedagogical activities in the classroom are significant!**

The collaboration will not appear on its own and will not be the result of orders or appeals, because it is hard work and requires time and effort. Collaboration involves confrontations, compromises, presenting one's position.

Collaboration arises when there are common goals, but not as vague as "improving the quality of education," but more specific ones, such as "using more productive issues in class than reproductive ones," or "cutting in half the time taken to establish discipline in class."

However, even if such goals appear in the daily practice of teachers, this is not enough. Each teacher needs a "mirror" - feedback from a colleague who can a) record problems and progress in overcoming them, and b) work together to find solutions. And this is the social capital of the organization: teachers discuss professional issues, observe each other's activities, inevitably change their practices, and learn from each other. But, only, if the interactions are regular (at least once a week).

Cooperation must require people's trust in each other - the confidence that if they "set themselves up", demonstrate insufficient qualifications, admit to difficulties, it will not be used against them, will not drop in the eyes of others, but, on the contrary, will help to become higher professionals.

Intensive professional interactions (or their absence) are certainly reflected in the real structure of the organization. The research tool captures connections and levels of trust and helps make evidence-based decisions.