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**STRATEGIES OF CONTINUING PSYCHO-PEDAGOGICAL
EDUCATION**

Gabdulkhakov Valerian Faritovich (a), Bashinova Svetlana Nikolaevna (b),
Yashina Olga Vladimirovna (c)*

*Corresponding author

(a) Kazan (Volga region) Federal University, Kremlyovskaya str., 18, 420008, Kazan, Russia,
Pr_Gabdulhakov@mail.ru

(b) Kazan (Volga region) Federal University, Kremlyovskaya str., 18, 420008, Kazan, Russia, Svetlana-
bashinova@mail.ru

(c) Kazan (Volga region) Federal University, Kremlyovskaya str., 18, 420008, Kazan, Russia,
olga.iaschina@yandex.ru, +79046681749.

Abstract

The research demonstrates that both in Russia and foreign countries, higher education professors use traditional (about 35%), distance (about 30%), interactive (15%), none (20%) strategy. When polling professors of several Kazan universities about the strategy used in their academic activity (traditional, distance, interactive, none) we discovered that 43% chose distance strategy, 39% - none, 10% - traditional, 8% - interactive one. Most of the professors chose either distance strategy or teaching without any strategy. These are only the poll results. Teachers' work observation shows that most of them prefer working not distantly, but traditionally and they note that the increasing requirements and reports on digital (computer) education tasks don't let them specify the strategic meaning of their T&E activity.

In the experiment carried out at Kazan federal university in 2014-2016, four levels of educational results were determined according to scoring-and-rating system: the first is high level; the second is middle; the third is low level; the fourth is unacceptable. The experiment verified three strategies: traditional, distance and interactive. These strategies predominate in professors' activity. The undertaken research proved that only interactive strategy has positive effect on educational results. Still curriculum should include real communication between students and teachers, it should propose using information resources in the mode of algorithmic distance tasks, supporting a student by coaching, that is professional (psychological and pedagogical) situations simulation, coordinated problems solving; a student should become a subject of interaction, take an active part in the course of studying, follow his/her individual route.

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1. Introduction

Strategies of continuing psycho-pedagogical education in teacher education were always of interest among scholars. The problem is to search for effective strategies of teaching which should be made as technologies. These technologies should provide steady performance of continuing psycho-pedagogical education for the university students at the undergraduate, and also at postgraduate levels– for the professional development trainees.

However, the assessment of the learning outcomes and strategies of teacher education in the course of continuing education differs in different countries. Some countries (Russia, CIS and some countries of Eastern Europe) assess the academic institution (published papers, professional personnel etc.). Others (Germany, Finland and other) examine the models of pedagogical and secondary education. Some countries (the USA, Great Britain) assess the quality of teacher education (on the basis of Pisa test results, for example). There is no unified conception for teaching strategies and teaching results in the course of continuing psycho-pedagogical education. As a result of this, the quality of teacher education is decreasing in the whole world.

Recent Russian and international practices reveal some risk zone connected with scoring learning outcomes practices, with comparing learning outcomes both at the level of subject areas and at the level of education institutions, and with general assessment of learning outcomes.

The learning outcomes should be both a tool and a methodologic approach which could be used together with other factors of pedagogical education modernization and realised within a specified prolonged period.

Therefore, nowadays, it is important to consider the process of learning outcomes, developing as a technology, when we plan not only the learning outcomes but also the ways of achieving these outcomes, and the assessment methods (including comparative ones).

The **purpose of the research** is to develop an effective strategy of continuing psycho-pedagogical education, which is focused on university students and professional development courses trainees.

1.1. Methodology

The methodological foundation of the research is Menter's concept of interdependence of pedagogical competences and learning outcomes. Ian Menter studies relation and interdependence between competences and educational outcomes, and also emphasises the technological nature of their relation (Menter, 2014). The technological nature suggests taking into account not only influence, but also interaction between the participants of education in various conditions (including multicultural ones).

The national purpose of the Great Britain is that freedom of creativity of the participants of education is provided by the variety of cultures. Great attention is paid to the variety of means of future teachers' training; there are different ways to becoming a teacher along with bachelor's and post-bachelor's degree.

The governmental authorities of the United Kingdom support transfer to teaching from different professions. These teachers, according to British specialists in education, are more interesting for school students (CIES conference, 2009). The authorities also support teachers' inflows from other countries to enrich the Great Britain's education by educational achievements from other countries. Consequently,

modern methodology of educational competences tends to subjectivity, multiculturalism, and freedom in choosing educational paths.

1.2. Experimental resources

The experiment was carried out in 2014-2016 in the Centre of Pedagogical Master's School of the Institute of Psychology and Education at Kazan Federal University. Pedagogical Master's School is a unique multidisciplinary laboratory for top-qualification teachers training. The Laboratory of Pedagogical Master's School is a department of the Institute of Psychology and Education at Kazan Federal University, which coordinates teachers training with all the university's institutes and faculties.

The ideology of the laboratory is that it creates a teacher of a new type – a teacher of XXI century, a teacher of the future, who is not only independent, flexible, but also can notices changes in the society, education, children, and who can work in constantly changing informative, scientificandeducational space. In addition, this teacher is also a scholar, a researcher in mathematics, physics or chemistry, a scholar who knows, not only the world science, but also traditions of Kazan mathematics school, Kazan physics school, Kazan chemistry school, Kazan Linguistics school, Kazan psychology school, Kazan pedagogics school etc. These are school of sciences known all over the world.

The development strategy of this unique laboratory of Masters teachers training is based on diagnosing actual situation in education, predicting staff needs in the coming years, modelling foresight for future teacher's competences, that is determining the competences needed in 2020, 2025, 2030 etc.

Teachers' training is based on Bachelor's programme. So a school graduate first enters a Bachelor's programme in mathematics (Institute of Mathematics), physics (Institute of Physics), chemistry (Institute of Chemistry) etc., acquires fundamental knowledge in the science and basic pedagogical competences, necessary for teaching.

While studying in Bachelor's programme, a student can choose his own path in pedagogical education (a teacher of mathematics, a teacher of physics, a teacher of chemistry etc.).

There is a path of consecutive training, when a Bachelor graduate enters the pedagogical Master's school and becomes a top-qualified teacher.

There is also a path of simultaneous training, when a Bachelor student studies both his programme and a retraining course in the laboratory, after graduating he gets two diplomas, for example, the diploma in mathematics and the diploma of mathematics teacher, or maybe the diploma of mathematics teacher and the diploma of physics teacher etc.

The organization he wants to work for, school, gymnasium, lyceum, college or university depends on the subjects and the path the student selects.

The laboratory administers students' teaching practice, housed by leading educational institutions of the republic, which it cooperates with in monitoring, distance, scientific-methods and creative issues. So, the students are able to watch and analyse the academic activity both from a lecture hall and the educational institution.

Other participants of the experiment were students and professors of institutes (faculties) of Kazan Federal University, Kazan juridical institute of RF MIA, trainees of the Centre for professional advancement and professional retraining at Kazan national research technological university.

1.3. The results of the research

The research demonstrates that both in Russia and foreign countries, higher education professors use traditional (about 35%), distance (about 30%), interactive (15%), none (20%) strategies.

When polling professors of several Kazan universities about the strategy used in their academic activity (traditional, distance, interactive, none), we discovered that 43% chose distance strategy, 39% - none, 10% - traditional, 8% - interactive one.

As we can see, most of the professors chose either distance strategy or teaching without any strategy. These are only the poll results. Observation of teachers' work (176 teachers of different institutes) shows that most of them prefer working not remotely but traditionally, and they note that the increasing requirements and reports on digital education tasks don't let them specify the strategic meaning of their T&E activity.

In the survey of students (327 people) of correspondence departments at different universities with distance educational system, we saw an interesting situation. Most off-campus students (78%) have adjusted to this system and they like it, because there is no need to spend time for study, but they worked out malpractice: A group of students asks a student (usually an excellent full-time student) to perform all the tasks for them. As a result they all have good marks.

In the sample group of 447 tested students (studied in 2014, 2015, 2016), we could prove the correlation between the strategies and the education outcomes (see Table 01).

Table 01. The results of used (non-used) education strategies

Levels of education outcomes (%)	Zero	Low	Middle	High
Traditional strategy	10	18	37	35
Distance strategy	38	24	33	5
Interactive strategy	5	12	31	52
No strategies	36	21	36	7

As the Figure 01 shows, interactive strategy is the most effective (high result of 52%); it combines with features of live communication between a teacher and a student, and different forms of distance interaction: 52% of students confirm their high results in learning. The second best is traditional strategy: High results are confirmed by 35% of students, though within this strategy teachers avoid distance interaction and prefer to work in an old manner (using lectures and practice along with seminars).

Distance form (in its pure form) proved to be not very effective: Independent testing showed that 5% of students have high results, and 38% have zero-point results. The group of teachers who don't use any strategy don't differ much in results (7% and 36% respectively).

Therefore, non-strategic and distance interaction between a teacher and a student is rather risky for the educational process aimed at results (Figure 01).

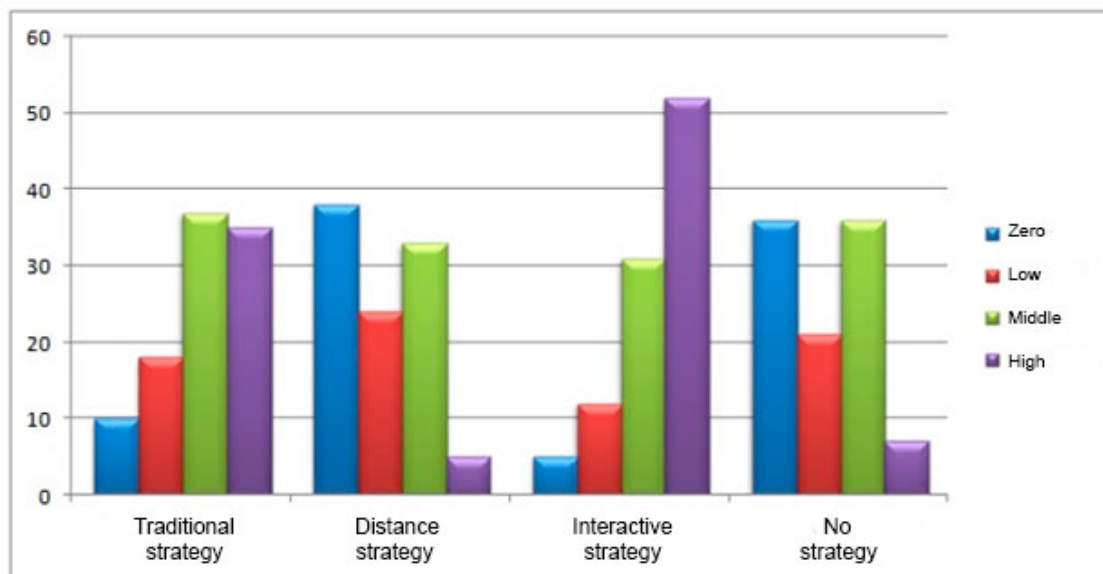


Figure 01. Students' educational outcomes

2. Problem Statement

In the context of foreign professionals' research and recent discussions, there is a logical question, which strategy (technology) provides higher educational outcomes? (Bolotov, 2013), (Vorovschikov, 2007), (Galperin, 2006), (Inkov, 2009), (Competency building approach, 2012), (Kolomiyets, 2011), (Concept, 2008), (Krayevskiy, 2008), (Livshits, Nechayev, 1988), (V Russia research-to-practice conference proceedings, 2013), (Education and development in changing world, 2016), (Fancourt et al., 2015) and others. This way, we could give new terms to everything in teaching techniques, to create some new formation, but the learning outcomes will still be questionable. There is some result, but what is it?

Unfortunately, experience has shown that high educational outcome obtained distantly, is sometimes next to nothing and graduates are not able to work the way their employer wants them to work. Why aren't distance learning outcomes always confirmed at entrance testing at work?

As known since ancient Greece times, all the education strategies have been divided into several groups: memory, cognitive, compensational, metacognitive, affective, social, which are connected respectively with memory, thinking, compensation of learning difficulties, self analysis, self control, and communication.

Now the strategies concept has changed and every education strategy includes all the above mentioned. Their grading and differentiating mainly depend on results only.

In the experiment carried out at Kazan federal university in 2014-2016, four levels of educational results were determined:

- 1st level - high (when a student scores 80-100);
- 2nd level - medium (60-80 scores);
- 3rd level - low (40-60 scores);
- 4th level - unacceptable (0-40 scores).

When learning some subjects in Master's programme, one group of students took traditional strategy, the second group learned with distance strategy, and the third group - with interactive strategy.

The subjects were “Methodology and methods of scientific research”, “Theory and practice of multicultural education”, “Educational rhetoric”, and “Family study”.

It is known that learning strategy is a complex of models (technologies) that clearly define learning outcomes and aim at achieving them by means of specially designed programs. Usually, strategy clearly defines the aim and content of learning, the technology (or algorithm) of interaction between a teacher and a student. Observations show that despite the growth of requirements for university teachers, the necessity for them to have programs for education, teaching materials, and electronic educational resources, the strategic approach to teaching is lowering now.

3. Research Questions

Here we will clarify the substantial content of the strategies (or the technologies for purposive interaction).

- traditional strategy is prevailing in not only universities of Russia, but also in foreign ones (in spite of all the novelties of digital pedagogy) – lectures and tutorials, with the seminars and business games to add novelties;

- distance strategy, performance provides achievement of some definite results;

- interactive strategy, which combines the elements of the first (live contact with a tutor) and the second one (information resources for algorithmic distance tasks are used), however this strategy also suggests modelling professional situations with live dialogue with a teacher, cooperative tasks solving; it excludes imperiousness of any participant where electronic educational resource is the main conversion aids for attached didactic materials (course books, textbook of methodologies and others), the novelty here is gamification for these materials and staged task of academic activity (including the teacher) or of any idea (including the teacher’s idea); in this situation a student becomes the subject of interaction, he/she takes an active part in the learning process, follows his/her own route, meets his/her own academic needs.

4. Purpose of the Study

The purpose of the research is to develop an effective strategy of continuing psycho-pedagogical education, which is focused on students and professional development courses trainees.

5. Research Methods

Scientific literature analysis, educational experiment.

6. Findings

The results of the research helped not only to specify the content of interactive strategy, but also to define the effective curriculum for this strategy. The curriculum includes:

1) using the material based on diagnosing actual situation in education, predicting staff needs in the coming years, modelling foresight for future teacher's competences, that is, determining the competences needed in 2020, 2025, 2030 etc.

2) arranging study and scientific-methods assistance in the form of using samples, handbooks and schemes;

3) coaching-based support, when the teacher trains to solve professional tasks; working with a coach suggests achievement of an objective, new positively formulated outcomes in learning, in independent psychology-educational work;

4) tutoring support – consulting students (trainees) in their independent projects and research work.

In practical work, this curriculum is very dynamic and is changed according to the results of grading, learning, personal and professional growth of students. This should be taken into account when projecting (and realization) of the teaching content.

7. Conclusion

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