Formation diagnostics of future managers and leaders of educational process

Inna Kyrychok  
Department of Pedagogics, Primary Education and Education Management  
Nizhyn Mykola Gogol State University  
3 -rd neighborhood 12/46, 16600 Nizhyn  
Ukraine  
e-mail: step_voz@ukr.net

Irina Tonkonoh  
Department of Foreign Philology and Translation  
Kyiv National University of Trade and Economics,  
Kioto 19, 19410 Kyiv  
Ukraine  
e-mail: 197118@ukr.net

Viktoriia Pryma  
Department of Foreign Philology and Translation  
Kyiv National University of Trade and Economics  
Kioto 19, 19410 Kyiv  
Ukraine  
e-mail: victoriyaprima@gmail.com

Abstract  This paper focuses on the anticipative possibility (prognostic competence) of the head of an educational institution as a leader of the educational process. We perceive it as a complex integral formation which indicates the level of anticipatory abilities development, as a special ability of the head to organize a peculiar type of professional and pedagogical activity, aimed at obtaining advanced information about the prospects of institution development with the aim of forming a policy and strategy in the field of education and making advisable decisions in this sphere.

Our paper summarizes the results of the conducted research on the diagnosis of the formation of the anticipatory capacity of future heads of secondary education institutions as leaders of the educational process at the ascertain stage of the experiment. The results of the empirical analysis reveal the anticipation awareness, positive motivation for forecasting in managing activities, the level of development of anticipative abilities, and the level of development of logical thinking of future managers of Nizhyn Mykola Gogol State University and school principals in Chernihiv region. Our results demonstrated that the experience of management activity has formed more awareness in leaders of the importance of anticipation in relation to future education managers. At the same time, the lack of deep knowledge about the anticipation of management activity, its structure and functions does not allow school heads to manage the staff of the institution more consciously and flexibly, to maintain a correlation between the forecasts of its development. Our study empirically confirms and theoretically proves that the criteria and indicators developed on basis of theoretical analysis, the research methods used are informative in relation to the study of anticipative ability.

1 Introduction

Complex processes that are currently taking place in the system of education of Ukraine, as well as their change and transformation, impede the effective functioning of educational institutions, and the ability of heads to anticipate educational risks. This situation, in turn, leads to an increase of the role of the head of a comprehensive educational institution as a leader in educational process. Each innovation in educational sector accompanied by certain risks, it helps to change priorities, change directions of development and identify additional opportunities for improvement. Modern head of an institution must, under the difficult conditions of social challenges, learn to make productive decisions as the main products of managerial work, to promote the development of the educational institution that he leads.

Improving the effectiveness of the activities of the heads of secondary educational establishments can greatly contribute to the development of their ability to predict results and forecasting. Therefore, it is relevant to consider the phenomenon of anticipation as an ability to act and take certain decisions with a certain temporal-
spatial warning regarding expected future events, depending on the tasks and certain criteria (Lomov and Surkov 1980). One can assume that the obstacle to successful implementation of managerial functions of the head of educational institution is the lack of anticipative competence.

In human life span, it is impossible to find such situations in which anticipation would not play an essential role. The versatility of this phenomenon is due to the fact that for the person most typical is not only the reflection of the true, not only the preservation of the past, but also active mastery of the prospect.

Particular relevance and practical significance, the problem of anticipation has become in the function of the system "head of institution - subordinate" within the educational staff of the educational institution. At the heart of the relationship between the "subordinate-leader" there is a paired subordinate contact, the essence of which is that one has a right to issue orders and orders, and the other is obliged to comply with them. The effectiveness of this system is significantly dependent on how this activity is predicted.

General competence, knowledge of the fundamental principles and categories of forecasting are the main conditions for the successful decision of the issues facing the head. In addition, such knowledge allows the head to assess correctly the possibilities of activities that are not directly carried out by him, but by his superiors, colleagues, subordinates, which, of course, will increase the validity of his general conclusions and managerial decisions. In our point of view, this integration capacity is the result of the experience of knowledge by the leader of other people and in the performance of the leader of his functions largely determines the correctness of the decisions taken, and, therefore, is a condition for professional growth.

Consequently, the use of anticipation in the preparation of masters – future managers of educational institutions in essence remains an open problem, which determines the relevance of this work.

The psychological content of the concept of "anticipation" defined in the works of Anokhin (1962), Lomov and Surkov (1980), Sergienko (1997), Feigenberg (1963), Sumina and Nichiporenko (2007), and others.

In psychological and pedagogical science and practice, some issues of anticipatory activity of schoolchildren are considered in detail. In the works of Bulygina (1996), Prisazhina (1995), Regush (2003), Mosheysnska (1981), Potapova (2006), Romanova (2015), Somova (2002), Flotska (1995) and other scholars have shown that the successful implementation of educational activities involves the implementation of the regulatory function of anticipation, because it determines the adoption and formulation of students goals of educational activities and tasks, prediction of what is expected as a result of any training action, mastering the internal plan of action, awareness of which provides educational activity, its regulation. Scientists emphasize that depending on the extent to which prediction becomes a necessary and usual component of the educational activity of the individual, to the extent that it develops as the subject of this activity.

Some aspects of the above problem are reflected in Denisov's dissertation "Anticipation of the activities of employees as a condition for the achievement of a professional acme of the leader" (2005), Zhukova "Unity of Anticipation and Reflection as a Psychological Mechanism of Student's Thinking Regulation in Contextual Learning" (2000); Gromova "Interrelation of anticipatory abilities of children and their parents (under conditions of norm and neurotic disorders)" (2004), etc.

Consequently, the objective need to solve the problem of ensuring the training of future managers by means of anticipation in the system of masters training, on the one hand, and the absence of a study where the problem was considered in its entirety, on the other hand, led to the choice of the theme "Diagnosis of the formation of anticipatory capacity of future managers Educational institutions as leaders of the educational process".

2 Anti-capability of the head of an educational institution as an integrative entity

The term anticipation (Latin *anticipatio*, from *anticipare* – foresee) means prediction, forecasting: events, phenomena, pre-created notions about anything; an early occurrence of any phenomenon, event or action (Lomov and Surkov 1980). Sergienko considers the terms "anticipation", "prediction", "forecasting", "forecast", " advance", "interpolation", "extrapolation", "appraisal" synonymous (Sergienko 1997).

We adhere to the point of view of Lomov and Surkov, who convince on the basis of the analysis of the history of development of the concept of "anticipation" and also use the terms "anticipation", "prediction", "forecast", "forecasting" as synonymous (1980). Somova (2002) believes that anticipative ability or prognostic ability is a component of integral individuality that permeates all human activities.

One of the most well-known contemporary views on anticipation is the concept of Mendelevych (Nechyporenko and Mendelevych 2006) who consider the concept of "anticipation" and "anticipatory abilities" synonymous, agreeing with the definition of Lomov and Surkov (1980). However, he identifies a separate term "anticipatory ability (prognostic competence)", which characterizes as an indicator of the level of development of anticipatory abilities and defines as "the ability of a person with a high probability to predict the course of events, to predict the development of situations and their own reactions to them, to act with the temporal spatial warning" (Nechyporenko and Mendelevych 2006).
Mendelevych (see Nechyporenko and Mendelevych 2006) focuses on the following features of the anticipatory ability: 1) this is a property, a stable personality characteristic, demonstrating the level of development of anticipatory abilities; 2) the ability to effectively carry out predictions of objective and subjective phenomena; 3) it includes a well-established system of knowledge and actions that contribute to effective forecasting; 4) This is a "system primarily of internal means of constructing and regulating prognostic activity"; 5) it defines the "state" and describes the system of internal resources of the individual that contribute to the effectiveness of predictive activity (properties of the nervous system, temperament, cognitive processes, intelligence, affective, volitional and behavioural characteristics of the individual) (Nechyporenko and Mendelevych 2006).

3 Structure of the anti-capability of managers in the field of education

The theoretical analysis of the problem allows us to state that this concept is a complex integral system that is subject to structuring. Therefore, let’s consider the components of the anticipatory capacity of future managers in the field of education. Taking into account the accepted psychological and pedagogical terminology it is possible to determine the structure of the defined definition, respectively, distinguishing the following components: motivational; cognitive; procedural-activity.

The content load of the motivational component of the development of the anticipatory capacity of future managers of educational institutions accumulates a positive-active attitude towards prediction, a positive motivation to predict its own behaviour and development strategies of the institution.

The questionnaire entitled "My Attitude to Anticipation in Management Activity" serves as the diagnostic tool for revealing the indicators of this criterion. The cognitive component reflects the level of education, awareness of future education managers about the specificity of anticipation, anticipatory capacity, presupposes the presence of masters of a certain level of awareness with the concepts of "forecasting", "anticipation in making managerial decisions", "anticipatory capacity".

Given the content of the cognitive component, the legitimate criterion of its expression called information and cognitive, and the indicators to distinguish the following: awareness of future managers regarding the concepts of "forecasting", "anticipation when making managerial decisions", "anticipatory capacity".

The questionnaire "My understanding of the concepts of" forecasting "and" anticipatory capacity of the head of an educational institution "was determined by the diagnostic tools for revealing the indicators of the specified criterion. The content load of the procedural-activity component of the development of the anticipatory ability of masters reflects the level of development of anticipatory abilities, the level of development of logical thinking. Taking into account the content of the procedural-activity component, it is legitimate to call the criterion of its expression operational-behavioural.

The selected components can be diagnosed according to the complex use of such techniques: the level of development of anticipatory abilities is checked using the method "Probability for prediction" Regush (2003); the level of logical thinking – with the help of the methodology of studying the logical thinking Sleptsov (2006).

Subjective-oriented criterion characterizes the aspiration of the future head of the institution to prove himself as a person with an interest in anti-pecuniary types of managerial tasks. The information-cognitive criterion makes it possible to identify knowledge, presentation of education managers about anticipation, anticipatory capacity of the education manager. Operational-behavioural criterion reveals the level of development of anticipatory abilities of future managers of education, developed logical thinking.

In order to test the conceptual ideas on which the research is based, we conducted a staging experiment, which was organized on the basis of Nizhyn Mykola Gogol State University. The sample comprised 56 masters of the specialty 073 "Management", 17 directors of the schools in Nizhyn, and 39 school principals in Chernihiv.

The purpose of the reconnaissance experiment: to determine the criteria and levels of anticipatory capacity of future managers and directors of educational institutions; determine the initial level of development of the anticipatory capacity of future managers and directors of general education institutions.

In order to obtain reliable and versatile information about the initial level of development of the anticipatory capacity of future managers and school directors, a criterion-diagnostic toolkit was developed that served to detail the manifestation of indicators of development of anticipatory capacity. The manifestation of the formation of the motivational, cognitive and procedural-activity components of the development of the anticipatory capacity of education managers was carried out with the help of certain research methods, which were marked by the degree of representativeness, reliability, validity.

We tested the positive motivation for anticipation of future managers of educational institutions for the subject-oriented criterion of the motivational component at the stage of the experiment using the developed questionnaire "My Attitude to Anticipation in Management Activity".

The questionnaire contained 5 questions. To the proposed basic and functional competencies of the head of Tarasova (2006) (general cultural, civic, informational and communicative, socio-psychological, administrative, regulatory, research, entrepreneurial and presentation), it was necessary to add those special ones.
which missing Future managers have identified the following competencies: "conflictual" (35%), "strategic" (21% of respondents), "prognostic" (19% masters), "innovative" (25%).

To the question of the questionnaire on determining the key competencies of the head of the educational institution, the masters selected the following: "Allocate personal qualities that promote the development of an educational institution" (16%); "Monitor the effectiveness of a new management style" (14%); "Determine the goals of the educational institution in terms of real conditions" (13%); "To determine the optimal management style, acceptable for the educational staff of the educational institution" (12%); "To highlight the quality that prevents effective management" (11%); "Provide the results of the development of an educational institution" (10%); "See alternative ways of institution development" (7%); "Perception of new educational technologies (5%); "Effective use of new knowledge" (6%); "To compare own experience with colleagues' experience (2%); "To see their advantages in professional activity" (3%); "Using ICT in Management and Educational Process" (1%). As we see from the answers, the most important competencies of future managers identified socio-psychological and entrepreneurial.

On the 3 questions of the questionnaire, "Do you agree with the statement that the education manager should predict the results of management decisions and to encourage those subordinates?" 95% of the students answered affirmatively, justifying their answer as follows: "The manager must be responsible for his actions and predict the actions of his subordinates ". The leader should predict how they will be able to comply with his instructions and how it will affect the development of the institution "; and the rest - 5% said that "This is not necessary ".

Respondents responded to the question "Problems that help to resolve the use of anti-smoking in the activities of the head of the educational institution"; "With the help of anticipation, the leader induces subordinates to joint planning of the institution's activities" (21%); "Anticipation helps the leader to predict the consequences of his actions and deeds of subordinates, motivates his own development" (43%); "It allows for providing incorrect questions, preventing conflicts" (36%).

The answers of the future managers to the last question of the questionnaire "What should be the modern head of a comprehensive educational institution?" Were as follows: "He is able to choose a serious management team, does not suffer from conflictophobia and is able to express his opinion, supports the development of the institution" (13%); "A good manager who is betting on common sense and will, consistent and has a flexible practice in implementing success-oriented administrative tasks, attaches great importance to interpersonal relationships in the team" (21%); "Has a sufficient arsenal of resources and energy that makes its adaptive policy truly creative and active; is guided by the definition of the goals and objectives of education of students to the level of world civilization; predicts the strategy and methodology of the institution's management taking into account its actual needs ") (10%); "A creative person who has inner personal attractiveness, understands social needs well, is able to recommend his school and the results of her work; ensures the quality of knowledge, skills and abilities of pupils on the basis of introduction of new, improvement of existing learning technologies, creates conditions for maintaining the socioeconomic status of school teachers, school pupils, parents ") (40%); "A person who constantly works for himself, over his professional and personal qualities; a strategist, sees the prospect of developing his institution for several years in advance, based on existing social conditions and resources ") (9%); "The carrier of organizational change, which produces new approaches to solving problems that promotes new values among employees, obsessed with the idea, is ready to overcome the long-term difficulties in order to implement it) (4%); "The leader, trying not to order, but listen to colleagues, psychologically minded to approve proposals, supports enthusiasts" (3%). Thus, according to the results of the survey, only 19% of future managers of education had significant qualities of the manager had the ability to forecast.

The positive motivation for predicting the directors of educational institutions for the subject-oriented criterion of the motivational component at the stage of the experiment was checked by the same questionnaire. Note that only 2% of the surveyed school principals had special management education at the time of the experiment.

Educational managers have added competencies to the proposed ones: "managerial and functional" (18%), "conflictual" (16%), "personal" (21% of respondents), "prognostic" (22%), "innovative" (23% persons) Consequently, the anti-catalytic capacity in the eyes of the heads of institutions is not significant, since only 22% (compared with 19% of masters) consider it to be significant.

For the 2 questions of the questionnaire on determining the key competencies of the head of the educational institution, school principals identified the following: "To determine the goals of the educational institution in terms of real conditions" (29%); "Provide the results of the development of an educational institution" (20%); "Monitor the effectiveness of a new management style" (11%); "Determine the optimal management style, acceptable for the educational staff of the educational institution" (10%); "See alternative ways of institution development" (9%); "Using ICT in management and educational process (7%); "Effective use of new knowledge" (5%); "To highlight the quality that prevents effective management" (5%); "To compare own experience with colleagues' experience (2%); "To see their advantages in professional activity" (1%);
"Perception of new educational technologies (1%). As we see from the answers, the most important competencies of the education managers identified entrepreneurial and administrative-managerial.

The biggest difficulty was the question questionnaire "Do you agree with the statement that the manager should predict the results of management decisions and encourage those subordinates?", Which 75% of school principals answered affirmatively, without reasoning their answer, while the rest - 25% refused to answer that We explain the formation of leaders of autocracy in relation to subordinates.

The palette of answers to the question "The problems that help solve the use of anti-cataclysm in the activities of the head of the educational institution" from the education managers was much narrower than the future managers: "With the help of anticipation, the head assumes the results of the institution's activities" (36%). "Anticipation helps the head to predict the consequences their actions "(27%)," allows to predict the consequences of making managerial decisions "(37%).

The responses of school principals to the last question of the questionnaire "What should be the modern head of a comprehensive educational institution?" Were as follows: "A good manager, consistent, who has a flexible practice in implementing success-oriented administrative tasks" (18%); "He is able to choose a management team and is able to stand his opinion, he supports the development of the institution" (12%), "The leader, capable of leading subordinates, using his authority, high professionalism" (24%); "Has a sufficient arsenal of creativity, predicts the strategy and methodology of management of the institution, taking into account its actual needs" (20%); "A creative person who can create an image of his institution that provides the quality of knowledge, skills and abilities of students on the basis of the introduction of new, improvement of existing learning technologies" (9%); "A Strategist who sees the prospect of developing his institution based on social conditions and resources" (8%); "A reformer developing new approaches to problem solving (6%); "A leader who can analyse the legal situation from the legal point of view and predict the legal consequences of the decisions taken" (3%). Consequently, the responses of education managers found that anti-capability in the portrait of the head of the institution occupy a prominent position in the sense of 28% of the respondents compared with the magistrates, which was 19%.

We have established: high level of positive motivation of future managers and directors of institutions for forecasting was found in 15% of masters and 24% of managers; the average level of positive motivation for anticipation was stated in 52% of the interviewed future managers and 53% of managers; a low level - in 33% of students and 23% of education managers. In addition, it was found that educational managers are more motivated than future managers on anticipation in management, are aware of its significance, which is explained by the experience and peculiarities of their professional activity, which constantly induces them to predict taking into account psychological knowledge and correct assessment. Summarized results obtained by this indicator are given in Table 1.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Levels, in %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>Future administrator</td>
</tr>
<tr>
<td>Aim level of future administrators and school directors considering anticipation in managerial activity</td>
<td>15</td>
</tr>
</tbody>
</table>

Source: Own results

As the data in Table 1 shows, the motivation of future managers of education and the heads of educational institutions about the process of forecasting for the subject-oriented criterion of the motivational component at the stage of the experiment was mostly on the medium and low levels, with future managers with a low and average level of anticipation motivation was on 9% more than school directors.

In order to ascertain the awareness of future managers about the concepts of "forecast", "forecasting", "anticipatory capacity of the head", we have developed a questionnaire "My understanding of the concepts of" forecasting "and" anticipatory capacity of the head of an educational institution. "

Only 9% of future managers and 10% of managers were able to give a complete and substantiated answer to the question "What is a forecast?" 60% of masters and 61% of education managers on the second question of the question "What is anticipation?" Answered as follows: "Guessing, foreseeing something"; 16% of surveyed masters and 15% of managers - "Forecasting something, premature action"; 8% of future managers and 10% of managers - "Prejudice in advance"; 7% of masters and 6% of managers - "Theoretical prediction of events,
events based on previous experience”; 3% of masters and 4% of managers - “Prediction of the future”; 3% of future managers and 2% of managers - "Premature attack of something”; 3% of masters and 2% of managers - did not answer the question. Consequently, a large part of the masters has a superficial idea of anticipation and prognosis.

The responses of future administrators and managers to the questionnaire "How do you understand the anticipatory ability of the head of the institution?" were as follows: "This is the ability of the manager, which is manifested in the prediction of the results of forecasting the development of the institution" (47% of masters and 46% of managers); "This is a system of knowledge and actions that contribute to the effective prediction of the development of the institution, the activities of the leader and the team" (21% of future managers and 22% of managers); "Level of development of anticipatory abilities" (2% of future managers and 2% of managers); "The ability to quickly predict events" (5% of future managers and 3% of managers); "Possibility of predicting the results of managerial decision" (5% of masters and 3% of managers); "Possibility to foresee something, to predict" (16% of masters and 19% of managers); “Ability to look into the future” (4% of future managers and 5% of managers of institutions).

The answer to the questionnaire "Can the anticipation and anticipatory ability of synonymous concepts be considered?" the answers of the masters and school leaders were as follows: 2% of future managers and 3% of managers did not answer this question, 94% of masters and 93% of managers consider these concepts to be synonymous, the rest -4% of managers and students - “only to a certain extent.”

The analysis of the answers to the questionnaire convinced that 59% of the interviewed future managers and school heads have a superficial idea of anticipatory ability, forecast, forecasting. Leaders and masters essentially understand the essence of the phenomenon of the anticipatory ability of the head, although their representations are not always lacking in integrity. Summarized results obtained by this indicator are shown in Table 2.

Table 2. Level of awareness of future managers and directors of educational institutions

<table>
<thead>
<tr>
<th>criteria</th>
<th>Levels %</th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future administrator</td>
<td>School directors</td>
<td>Future administrator</td>
<td>School directors</td>
<td>Future administrator</td>
</tr>
<tr>
<td>Informative level of future administrators and directors as for “forecast”, “prediction”, “anticipation ability”</td>
<td>9</td>
<td>10</td>
<td>32</td>
<td>31</td>
</tr>
</tbody>
</table>

Source: Own results

As shown in Table 2, the awareness of future managers and directors of educational institutions regarding the concepts of "forecast", "forecasting", "anticipatory capacity of the leader" for the cognitive component of the information-cognitive criterion at the stage of the experiment was mostly on the medium and low levels, with quantitative indicators the distribution of executives and future managers was approximately the same: 9% of future managers and 10% of executives polled high; 32% of future managers and 31% of managers have an average level, 59% of masters and 59% of managers have a low level.

As the organization of classes increases the role of students in the educational process due to the systematic use of regulatory components of anticipation, which, in turn, are based on the active work of logical thinking, we have chosen methods aimed at experimental verification of logical thinking by the procedural-activity component.

In order to determine the level of logical thinking of future heads and directors of schools, we used the methodology of studying the logical thinking of Sleptsov (2006).

The methodology allowed establishing the peculiarities of conceptual thinking, the formation of the most important logical operations. Evaluated universal teaching actions of masters and managers - cognitive logic (ability to analyse objects with the allocation of significant and non-essential features, the ability to compare, classification according to certain criteria, the formation of the logical effect of "reasoning", the ability to establish analogies, the formation of the ability to generalize, to generalize and the derivation of a community for a number or class of single objects on the basis of the allocation of essential connections, and hence the ability to put forward hypotheses).

The technique itself consisted of 18 logical tasks, in which the letters were in numerous interconnections. Relying on logical operations, it was necessary to decide in which ratios are letters under the ridge. Summarized results obtained by this indicator are given in Table 3 (See Table 3).
Table 3. The level of formation of logical thinking of future managers and directors of educational institutions

<table>
<thead>
<tr>
<th>criteria</th>
<th>Levels, in %</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Future</td>
<td>School</td>
<td>Future</td>
<td>School</td>
<td>Future</td>
<td>School</td>
</tr>
<tr>
<td></td>
<td>administrator</td>
<td>directors</td>
<td>administrator</td>
<td>directors</td>
<td>administrator</td>
<td>directors</td>
</tr>
<tr>
<td>Level of logical thinking</td>
<td>23</td>
<td>23</td>
<td>50</td>
<td>56</td>
<td>27</td>
<td>21</td>
</tr>
</tbody>
</table>

Source: Own results

Table 3 shows that as a result of the implementation of the methodology by future managers of education and school directors, we have identified the following quantitative data: 23% of the prospective managers and 23% of the directors stated that the level of development of the logical thinking indicator was high; 50% of respondents - future managers and 56% of directors have demonstrated the average level of development of the indicator of logical thinking; 27% of masters and 21% of school principals have a low level of logical thinking.

Table 4. Level of development of anticipatory abilities of future managers and educational managers

<table>
<thead>
<tr>
<th>criteria</th>
<th>Levels, in %</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Future</td>
<td>School</td>
<td>Future</td>
<td>School</td>
<td>Future</td>
<td>School</td>
</tr>
<tr>
<td></td>
<td>administrator</td>
<td>directors</td>
<td>administrator</td>
<td>directors</td>
<td>administrator</td>
<td>directors</td>
</tr>
<tr>
<td>Level of the development of anticipation skills</td>
<td>8</td>
<td>10</td>
<td>44</td>
<td>46</td>
<td>48</td>
<td>44</td>
</tr>
</tbody>
</table>

Source: Own results

Since scientists have found that in studying the anticipatory ability (prognostic competence) one should use the Questionnaire for estimating the ability to predict Regush (2003), then in order to determine the level of development of anticipatory abilities, we used the method “ability to predict” (Regush 2003). The test consisted of 20 pairs of opposing statements. According to the results of the questionnaire, we divided heads and masters into three groups: those surveyed with low indicators, characterized by the ability to anticipate the development of events, taking into account simple reconciliation of the past with the present; respondents with average indicators demonstrated the ability to make assumptions about the future based on past experience and observation of the present; The respondents with high indicators confirmed the ability to create a creative way of a new image, which had not previously met in their experience.

Table 5. Level of development of anticipatory capacity of future managers and education managers

<table>
<thead>
<tr>
<th>criteria</th>
<th>Levels, in %</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Future</td>
<td>School</td>
<td>Future</td>
<td>School</td>
<td>Future</td>
<td>School</td>
</tr>
<tr>
<td></td>
<td>administrator</td>
<td>directors</td>
<td>administrator</td>
<td>directors</td>
<td>administrator</td>
<td>directors</td>
</tr>
<tr>
<td>Level of development of logical thinking</td>
<td>23</td>
<td>23</td>
<td>50</td>
<td>56</td>
<td>27</td>
<td>21</td>
</tr>
<tr>
<td>Level of the development of anticipation skills</td>
<td>8</td>
<td>10</td>
<td>44</td>
<td>46</td>
<td>48</td>
<td>44</td>
</tr>
<tr>
<td>Total</td>
<td>15, 5</td>
<td>16,5</td>
<td>47</td>
<td>51</td>
<td>37,5</td>
<td>32,5</td>
</tr>
</tbody>
</table>

Source: Own results

According to this methodology, the level of development of anti-capability abilities during the management of situations was determined by such qualities of thinking as analyticity, depth, awareness, flexibility, prospects, and evidence. As a result of the methodology it was established that quantitative data from future managers and managers in the field of education differed and varied within 4%; besides, 8% of masters and 10% of managers have noted the high level of development of anticipatory abilities; 44% of the interviewed
future managers and 46% of directors level of the level of development of anticipatory abilities is recorded as average; 48% of respondents - future managers and 44% of directors - are low. The results obtained using the "Forecasting ability" method (Regush 2003) represented in Table 4 above.

Moreover, the summarized results obtained by the operational-behavioral criterion of the procedural-activity component are provided in Table 5 that follows. Table 5 shows, that quantitative data from interviewed future managers and managers in the field of education differed and varied within 1-6%; the vast majority of managers have a low and average level of development of anticipatory capacity for the operational-behavioral criterion of the procedural-activity component - 77% of masters and 77% of directors. The level of development of the anticipatory capacity of future managers and school principals at the stage of the experiment is presented in Table 6.

Table 6. Level of development of anticipatory capacity of future managers and school directors at the stage of the experiment

<table>
<thead>
<tr>
<th>criteria</th>
<th>Levels</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>Future administrator</td>
<td>School directors</td>
</tr>
<tr>
<td>Motivation component</td>
<td>15</td>
<td>24</td>
</tr>
<tr>
<td>Cognitive component</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Processed and activity component</td>
<td>15,5</td>
<td>16,5</td>
</tr>
<tr>
<td>Total results</td>
<td>13,2</td>
<td>16,8</td>
</tr>
</tbody>
</table>

Source: Own results

Consequently, from Table 6 it appears: quantitative data from masters and managers of educational institutions differ little and fluctuate within 3%; the most motivated component of the development of anticipatory capacity is among the respondents, since the smallest number of managers with a low level of development of anticipatory capacity at the stage of the experiment is 33% of masters and 23% of managers respectively; the least developed is the cognitive component, the lowest of which is the high level of development of anticipatory capacity, respectively 9% of future managers and 10% of managers.

The study of the components of the anticipatory capacity development of future managers and school principals at the stage of the experiment made it possible to find out that the managers of education have an average level of development of anticipatory capacity, namely, 43, 6% of masters and 45% of directors. 13.2% of future managers and 16.8% of managers in the field of education have a high level; a low level was found in 43.1% of students and 38, 1% of managers.

4 Conclusions

Overall, we consider the anticipatory ability (competence) of the head of an educational institution as a complex integral education, which is an indicator of the level of development of anticipatory abilities, as the special ability of the head to organize a special type of vocational and pedagogical activities, aimed at obtaining forward-looking information about the prospects of the institution to formulate policies and strategies in the field of education and making advisable decisions in this area.

The criteria and indicators developed on the basis of theoretical analysis the research methods used are informative in relation to the study of the anticipatory capacity of future managers of educational institutions. Having analysed the results of the diagnostics, we came to the following conclusions:

- the most important condition for the development of the anticipatory capacity of future leaders of educational institutions is the formation of anticipative abilities, which must be formed by solving administrative tasks under the direction of a teacher of a higher educational establishment;
- it is necessary to carry out systematic work on the analysis of peculiarities of the development of anticipatory capacity of future managers during the study in the magistracy;
- systematic tasks for the use of forecasting during the study of various subjects in the magistracy form an anticipatory capacity;
- the way in which the master is able to substantiate the role of anticipation, anti-catalytic ability in management, knows its essence, structure, functions, is able to predict the ways of development of the institution, the anticipatory effects of subordinates' actions, it is possible to determine the level of development of its anticipatory capacity;
it is necessary to develop a pedagogical complex of measures aimed at developing the anticipatory capacity of future managers, which will be the next stage of our work.

References


Feigenberg IM (1963) Probabilistic forecasting in activities THEM. Questions of psychology 2:59-67


Lomov BF, Surkov YeN, Anticipation in the structure of activity, 1st edn. (Science: Moscow, Russia, 1980), 280 p.


Sleptsov AS, How to hire a "specialist"? Tests for recruitment and IQ level, 1st edn. (Literary "Knizhkin Dom": Moscow, 2006), 82 p.

