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5th International Forum on Teacher Education**MODEL OF AN INNOVATIVE TEACHER IN THE REPUBLIC OF
SAKHA (YAKUTIA)**

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Abstract

The relevance of the study about the problem of an innovative teacher lies in the need to educate teachers able to teach the new Generation Z living amidst the Fourth Industrial Revolution. In this regard, the current article aims to develop a model of a modern teacher, which comprises a set of professional competencies that will be in demand in future schools. The main method for studying this problem is modeling, which allows considering this problem as a process of purposeful and conscious mastering of professional competencies by students. In addition to modeling, a questionnaire was administered to 100 university students, which allowed identifying the key competencies of a teacher of the future. The most important competencies include informational and communicative competencies, psychological and communicative competencies. It was found out that the most developed competencies among future teachers are teamwork ability, communicative competence, and learning capability. The article emphasizes that in the age of actively developing technologies, teachers' moral qualities continue to be the key prerequisite for the implementation of the advanced principles of teaching and education. The model is aimed at the formation of the innovative teachers who are willing to implement an educational program and educate the Generation Z schoolchildren who are distinguished by creativity, conscientiousness, readiness to learn continuously, multitasking, and pragmatism.

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1. Introduction

Due to an active migration of the population and the fact that humankind is entering the age of the Fourth Industrial Revolution, the system of higher education should adapt to the imperatives of the time and answer the questions: what should a modern teacher be, what competencies should he or she obtain in order to address current challenges and meet expectations. A person who graduates from school and enters a new life will inevitably face a shortage of jobs in the near future due to the “digitalization of products, services, and the corresponding business environment” (Aleksankov, 2017, p. 54). Despite the prevailing situation in the labor market, the teaching profession is still in demand, which is why our research is highly relevant.

Currently, researchers pay great attention to the modeling of the personality of the modern teacher. Kulikova (2018) addresses the problems of adaptation of young teachers, the age structure of teaching staff at school, the assessment of professional competencies, professional development, and staff retention. Makarov (2017) analyzes two main aspects of the problem of modeling an innovative teacher’s personality. First, since Russia is a multinational and multicultural country, it is important for a teacher to find the common thing that is present in every religion, which forms the basis for their carriers to be united in creative social activities. One of the most important tasks in the process of modeling an innovative teacher’s personality is the acquisition of mercy. The second aspect highlighted in the article is the moral problem of using information technology. Another aspect of the development of information technologies is the gradual transformation of the information society into a society of total control. This implies a new actualization of professional ethics. A person should follow its image created in social networks. From the foregoing, it is required to model the personality of the teacher taking into account enthusiasm of the modern youth for information technology as well as with the general course of scientific and technological progress as a whole.

2. Problem Statement

Bicheva, Chelnokova, Yudakova, and Tsareva (2017) elaborate on the importance of self-analysis allowing teachers to see and evaluate themselves through the others’ eyes. It is noted that the professional development of a teacher depends largely on the informed choice of a profession and the finding of personal meaning in their professional activities. It highlights professional qualities that contribute to the formation of a teacher: anticipation (the ability to anticipate, predict the development of situations arising in the process of activities); willingness to change and overcome resistance; ability to search, make alternative choice, and implement innovative ideas; ability to navigate in conditions of uncertainty by assessing the level of risk tolerance.

Kyndt, Gijbels, Grosemans, and Donche (2016) examined 74 studies on the teachers’ informal acquisition of knowledge that improve the quality of their work and their professional qualifications. The article presents the results of a comparison of the aspects of obtaining informal knowledge about the professional development by beginner and more experienced teachers and concludes that the main difference between them is not in the form of their learning activities but rather in their attitude to learning, learning objectives, and how their pedagogical conditions affect them. Zee and Koomen (2016)

integrate 40 years of research experience of authors to assess the performance of teachers. They studied 165 articles on topics of interest. The results showed that teaching performance demonstrates a positive link with academic adjustment of students, models of teacher behavior related to the quality of the learning process, and factors underlying the psychological well-being of teachers, including personal achievements, job satisfaction, and involvement. Negative links were found between teacher efficiency and burnout factors.

Kennedy (2016) notes that professional development programs are based on different theories of student learning and different theories of teacher training. Reviewers often classify programs according to design features, such as program duration, intensity, or the use of certain methods, such as coaches or online lessons, but these categories do not highlight the main goal or prerequisites of teacher-training programs. In this review, programs are classified according to their main theories of action, including the main idea that teachers need to learn, and a strategy to help teachers implement this idea within their own existing practices. Shahmohammadi (2015) presented the students' points of view on the characteristics of a competent teacher of a foreign language. In his survey, the author identified five characteristics: knowledge of the subject, sociability, good conduct, management skills, and attractive appearance. According to the results of the survey, students put good conduct and knowledge of the subject in the first places. In other words, students are convinced that the teacher's personality traits dominate the art of audience management. The work of the teacher is efficient if he/she is easy-going, active, friendly, and at the same time, serious and attentive to the students. Profound knowledge of the subject is also more important to students than the ability to control the audience. The remaining three characteristics are also important and efficient in the work of the teacher, but good conduct and knowledge of the subject are paramount.

3. Research Questions

Examination of academic literature allows us to state the insufficient coverage of the topic of our study. No one but the teachers educate the future generation, which will be involved in the most fast-growing sectors of the economy. The new generation of students is called Generation Z and is distinguished by the following features: "creativity, conscientiousness, readiness to learn continuously, audacity and agility of thinking, multitasking, pragmatism, and commitment to a healthy lifestyle. The weakness of the Generation Z representatives is the lack of motivation, inability to concentrate on one subject, animus toward reading (Vorobieva, 2018). The primary task of a modern teacher is to comply with the model of an innovative teacher who has all the competencies required to teach a new "Generation Z". In this case, the teacher should rely on the strengths of the new generation, while eliminating the disadvantages.

In 2020, in Russia, according to estimates, IT specialists (programmers, experts in database or server equipment administration, web designers), engineers, marketing specialists, representatives of social professions (teachers, doctors), interpreters will be in demand. According to the State Employment Committee of Yakutia, in the Republic of Sakha (Yakutia), workers in the areas of mining, health care, construction, public administration, military security, and social security are most in demand.

Aleksankov (2017) writes that

today, the life cycle of technology becomes comparable to the term of apprenticeship, and there is an increasing threat of disappearance of professions chosen for training in. That is, both the student and the educational institution may be in a situation of the need to reconfigure the entire educational process to achieve a different end result in the middle of this process. (p. 57)

Yashina (2017) offers the following option for training the personnel in demand in economics: In present-day conditions, future employees must be “brought up” by their organization, starting from school. Khusnullova & Absalyamova (2016) note that changes in society associated with Industry 4.0 will be explosive in nature when working people have very little time to retrain and re-qualify. Most researchers agree that the Fourth Industrial Revolution “comes laden with a powerful destructive potential to change the personnel market and destroy the existing foundations” (Zaitsev, Zbritskaya, & Zaitseva, 2016, p. 3). Kochetkova & Kozlova (2017) stress that

according to Eurostat, the European Union will need 900,000 IT specialists and experts in Apps technology in 2020. An illustrative trend is the example of the UK, where a child’s acquaintance with programming begins at the age of 5, and 11-years-old schoolchildren learn at least two programming languages. The task of the school is not to make students become professionals in IT-technologies but to make them prepared to “survive” in the era of digital revolutions. (p. 447)

There is another point of view that “new industrial culture will not replace people with machines, on the contrary, it is the competencies and abilities of people that become the key resource determining the competitive advantage of companies” (Kondratyuk, 2018, p. 7).

4. Purpose of the Study

Purpose of the study is to model the personality of an innovative teacher, define competencies that meet current trends in the development of society, science, and the economy.

5. Research Methods

In the process of study, the following methods were used: theoretical (analysis; synthesis; generalization; modeling); diagnostic (questionnaire method; interviewing; method of challenges and tasks); empirical (study of the work experience of educational institutions, regulatory and educational documentation; lesson observation); experimental (summative and formative assessment, control experiment); mathematical statistics methods.

The M.K. Ammosov North-Eastern Federal University represented the experimental base of the study.

The study of the problem was carried out in three stages:

At the first stage, a theoretical analysis of the existing methodological approaches in the academic scientific literature, as well as theories and methods of academic research, was conducted; the problem,

purpose, and research methods were identified; a plan of experimental research was prepared; a survey among students was conducted;

At the second stage, educational activities were arranged, aimed at developing the competencies required for future teachers;

At the third stage, a survey of students was conducted with the aim of ascertaining the development of students' competencies identified as the key ones at the first stage of the experiment.

6. Findings

The introduction of this model involved the following stages of experimental work:

– Determination of the initial level of development of professional competencies among students enrolled in the courses of “Education” and “Philology” at the Faculty of Philology and the Institute of Modern Languages and International Studies at M.K. Ammosov North-Eastern Federal University (Yakutsk) using surveys, lesson observations, statistical processing of research results.

6.1. Ascertaining stage

100 students of the North-Eastern Federal University participated in the questionnaire survey and polls. After processing the questionnaires, we came to the following conclusions. A modern teacher is a person who is able to adapt to the challenges of a changing world and retain self-control in any situation. To become a good teacher, one must be honest, decent, and mobile, have a flexible mind, a broad outlook, and be able to think outside the box, be a good speaker, be master of information and communication technologies and implement them actively in the educational process. In addition to excellent knowledge of the subject, they need to have empathy abilities, love for the subject and the students, to possess extensive knowledge of works of art and cultural patterns. A modern teacher must be a good psychologist, adviser, and a sensitive friend for students. Teachers must be in a continuous process of self-actualization, learn from their students, and possess excellent organizational skills. Since the teacher is an example to follow, they should help the student to come of age. The teacher must possess such qualities as kindness, purposefulness, perseverance, industriousness, observation skills, artistry. Teachers are supposed to be tolerant and creative, to understand and support the students, to develop their potential and abilities. Due to active migration processes, the teacher should be able to involve competently the new students in the established team. In addition to personal qualities, the modern teacher shall possess professional qualities, for example, willingness to accept constructive criticism from colleagues.

The teacher must not only be an excellent professional, first of all but the teacher must be a good person. In addition, a modern teacher is one who is able to address effectively the professional challenges arising in teaching activities in specific real-world settings. The teacher should be able to conduct classes in the mode of dialogue and discussion creating an atmosphere where students would like to express their opinions, discussing not only among themselves but also with the teacher; use various forms of organization of students' activities, taking into account their individual characteristics; look fashionable and attractive.

As part of the survey, students answered the following questions: “What is the model of a modern teacher?”, “What competencies should a modern teacher possess?” Based on the students’ answers, we identified the competencies required for an innovative teacher (the results of the questionnaires are given in brackets):

- Digital literacy (ICT competence) (98%);
- Psychological competence (emotional intelligence) (75%);
- Communicative competence (mastering oratory, ability to communicate with children with disabilities (due to the introduction of inclusive education)) (72%);
- Learning capability (68%);
- Ability to plan rationally (54%);
- Teamwork ability (52%);
- Creativity (thinking outside the box) (42%);
- Mobility (33%);
- Cultural competence (28%).
- Adaptability (19%);
- Leadership (15%).

6.2. Formative stage

Development of professional competencies of future teachers in an institution of higher education is a complex and multifaceted process, which is based on the unity of interests, the combined efforts of teachers and students, traditional approaches, innovative technologies, and the organization of various types of activities. At the same time, teachers, as the leading actors of this process, and students are required to have a positive motivation, high culture, mutual responsibility, and readiness for constructive cooperation. In the course of the formative experiment, we organized educational activities aimed at improving the universal and general professional competencies of future teachers.

Let us consider educational work through the example of the Faculty of Philology and the Institute of Modern Languages and International Studies of the M.K. Ammosov North-Eastern Federal University. Educational work is a part of the educational process of the university, aimed at the implementation of the tasks of developing a personal culture of highly qualified teachers. The main tasks of educational work include shaping students’ attitudes towards learning as a professional work; all-round development of future graduates’ professional and human qualities; encouraging creative activities feasible for students. The dean (director), deputy dean (director) for educational work, and mentors of student groups perform the educational work at the faculty and at the institute. The trade unions of students, the Career Center, the NEFU Center for Practical Psychology provide significant assistance to the dean’s office. The main goal of the work is to enhance the students’ activity in the academic, scientific, and social life of the faculty and institute, as well as to create conditions for inclusive development of students. This goal is achieved most effectively in study-free time, the main purpose of which is to develop professional, artistic, sports, and other abilities of students, to expand opportunities for cultural advance and self-enrichment.

In accordance with the components of a comprehensively developed teacher, it is possible to present the forms and results of work with students in a tabular form (Table 1).

Table 01. Forms and results of work with students

Item No.	Activities	Competencies to be developed (UC – universal competence. GPC – general professional competence)	Result
1.	Interactive lectures with the use of materials from the personal files of the teacher on the topic studied in the “History of Foreign Literature” subject. For example, photos from literary museums of different countries, photos of monuments to writers, programs of attended performances based on works of the authors studied.	<p>UC-5 is able to perceive the intercultural diversity of society in the sociohistorical, ethical, and philosophical contexts.</p> <p>GPC-4 is able to ensure the moral education of students based on basic national values</p> <p>GPC-8 is able to carry out teaching activities based on special scientific knowledge</p>	An expansion in their general outlook, the development of tolerance to cultural and mental differences of representatives of different countries can be observed in students. During the teaching internship, students actively used the obtained information in test and scoring classes.
2.	Visiting the museums of the city of Yakutsk: the National Art Museum, the M.F. Gabyshev Gallery of Foreign Art, the Museum “Russia – My History,” the E.M. Yaroslavsky local history museum. Visiting theaters: the A.S. Pushkin State Academic Russian Drama Theater, the D.K. Sivtsev – Suorun Omoloon Opera and Ballet Theater, the P.A. Oiunsky Sakha Academic Theater.	<p>UC-5 is able to perceive the intercultural diversity of society in the sociohistorical, ethical, and philosophical contexts.</p> <p>GPC-3 is able to organize joint and individual learning and educational activities of students, including those with special educational needs, in accordance with the requirements of federal state educational standards.</p>	<p>Expansion of the content of additional esthetic education of students, aimed at the development of their esthetic culture and emotional intelligence.</p> <p>Improved quality of students’ knowledge in local history and history of the country and region.</p>
3.	Meetings with foreign teachers.	<p>UC-4 is able to carry out business communication in oral and written forms using state language of the Russian Federation and foreign language(s)</p> <p>GPC-6 is able to use psychological and pedagogical methods in professional activities, necessary for the individualization of training, development, education, including students with special educational needs</p>	<p>Development of specific knowledge and skills in the field of methods of teaching foreign languages and educational science.</p> <p>Development of moral value systems in terms of interethnic concord.</p> <p>Development of communication skills, increasing motivation to learn the profession of a teacher.</p>
4.	Organization of extracurricular activities. For example, a visit	UC-3 is able to carry out social interaction and implement its	Development of the ability to interact successfully in a

	to the Botanical Garden of the Institute of Biological Problems of the Cryolithozone of the SB RAS, trips to the historical places of the suburbs of Yakutsk to study the history of the region.	role in the team. GPC-7 is able to interact with the participants of educational relations within the framework of the implementation of educational programs	team, the development of leadership qualities. Improving the quality of students' knowledge in local history and the history of the country and region. Development of the ability to think within the scope of environmental safety.
5.	Meetings with Russian-speaking Yakut writers A. Ambrosiev, D. Mikhailov, as well as well-known Russian writers A. Gelasimov, D. Glukhovskiy, M. Kucherskaya, and others.	UC-1 is capable of searching, critical analysis, and synthesis of information, applying a systematic approach to complete the tasks set.	Improving the skills of critical analysis and synthesis of the information received. Broadening horizons. Creating a system of moral values. Development of emotional sensibility of beauty.
6.	Organization of student stage performances based on famous works of Russian and foreign classics with the subsequent upload of videos to the university YouTube channel.	UC-2 is able to determine the range of tasks within the framework of the goal set and choose the best ways to achieve them, based on the existing legal regulations, available resources, and restrictions UC-3 is able to carry out social interaction and implement its role in the team.	Involving students in individual, group, and collective project activities. Development of students' ability to apply information and communication technology in solving educational and professional tasks. Formation of esthetic sense, development of imagination and thinking.
7.	Organization of the "Cookery Book" cooking contest for students to get acquainted with the national dishes of the countries of the studied language.	UC-5 is able to perceive the intercultural diversity of society in the sociohistorical, ethical, and philosophical contexts.	Development of creative language activities of students, the ability to analyze independently the country-specific literature and express their own judgments.
8.	Every year on the school takeover day, bachelors and undergraduates of the Faculty of Philology hold lectures with first-year students from different faculties and institutes of NEFU, aiming to encourage them to think about the benefits of reading, getting acquainted with the "100 books" list. In 2018, Institute	UC-6 is able to manage its time, build and implement a self-development trajectory based on the principles of lifelong education. GPC-4 is able to ensure the moral education of students on the basis of fundamental national values GPC-8 is able to carry out teaching activities based on	Development of skills of independent work, initiative. Adaptation to the future profession. Establishing contact with students which leads to the improvement of communicative competence. The ability to ensure the

	<p>of Natural Sciences, Institute of Medicine, Institute of Languages and Culture of the Peoples of the North-East of the Russian Federation, Institute of Foreign Philology and Regional Studies were visited. Coverage: 172 students. Lecture topics: N.S. Leskov: biography, the image of a nihilist in Russian literature; F.M. Dostoevsky: biography, the novel “Idiot.” Contemporary literature (the film adaptation of works of art). The influence of the lyrics by G.G. Byron on the work of A.S. Pushkin. “The Captain’s Daughter” by A.S. Pushkin and the novel “Ivanhoe” by W. Scott (a genre of a historical novel). The life and work of A.P. Chekhov, interesting facts, analysis of the short story “Misery.” Psychologism in literature through the works of F.M. Dostoevsky, facts from the life and work of the writer.</p>	<p>special scientific knowledge</p>	<p>moral education of students based on the best examples of classical literature.</p>
9.	<p>The “Joint Internet” project with students from different countries (Norway, USA), aimed at developing the skills of foreign language writing and intercultural communication. Relevant topics for communication are highlighted: sights of your city, free time, favorite movies, and musical compositions, happy and sad moments of your life.</p>	<p>UC-3 is able to carry out social interaction and implement its role in the team.</p> <p>UC-4 is able to carry out business communication in oral and written forms using state language of the Russian Federation and foreign language(s)</p>	<p>Increased number of students engaged in research and projects.</p> <p>Development of students’ ability to apply information and communication technology in solving educational and professional tasks.</p> <p>Development of skills of foreign language writing and intercultural communication.</p>
10.	<p>The mentors organize meetings with psychologists at the Center for Practical Psychology at NEFU on the topics: “Team building,” “Time Management,” “How to cope with stress before exams,” “Team building.”</p>	<p>UC-3 is able to carry out social interaction and implement its role in the team</p> <p>GPC-6 is able to use psychological and pedagogical methods in professional activities, necessary for the individualization of training, development, education, including students with special educational needs</p>	<p>Development of rational planning skills.</p> <p>Developing the ability to work in a team.</p> <p>Best adaptation of the individual to the surrounding community, the optimal organization of activities in a team.</p>

6.3. Control stage

At this stage of the experiment, in order to determine the level and identify the dynamics of the development of students' competencies in the course of the experimental work, assessment of school students was performed using the same methods as at the ascertaining stage of the experiment. According to the analysis of the assessment, the modern teacher should not only be a good subject teacher but should also have a number of competencies required for the activities of the teacher today. The knowledge and skills that an innovative teacher provides shall comply with the Federal State Educational Standard. In addition, teachers must be interested in their profession. Students believe that excellent knowledge of their subject is insufficient. The main qualities of the teacher are a passion for their work, a creative approach to the course of study, high motivation and the desire for self-development. A modern teacher should identify the best qualities inherent to each child, encourage children to receive joy from acquired knowledge so that, after graduating from school, graduates are clearly aware of their place in society and are willing to participate in addressing current and future challenges. The motivation of the students depends on how much the teacher is interested in life, because the school is alive while the teacher is of interest for the child, and the teacher may only achieve this with the desire for knowledge.

Students are aware of the difficulties of the future profession and diagnose the lack of some competencies that we have identified in the ascertaining stage of the experiment. During the teaching internship, the students came to the following conclusions. First, a new generation of schoolchildren is significantly different from their own generation; despite the slight difference in age, modern schoolchildren have a different outlook and self-perception, they perceive the world through the eyes of other people: film directors, bloggers, Viners, coaches. Second, it is not enough just to be modern, interesting, and active. You need to be able to present your information so that it is interesting even to students with low academic performance and insufficient motivation. In addition, a good teacher educates his students so that they respect those older than them.

We are encouraged by the fact that 100% of students intend to engage in teaching activities after graduation. They are highly motivated to master their future profession, strive to gain new knowledge, and actively improve their teaching skills. According to the students, today they do not correspond to the model of an ideal modern teacher, which was described at the ascertaining stage. They are in the process of forming and developing professional competencies. Unlike the results of the ascertaining stage, where students identified digital literacy (ICT competence), psychological competence (emotional intelligence), communicative competence (possession of oratory, communication with children with disabilities through the introduction of inclusive education) as key competencies, at the control stage, the results have undergone some changes. Students believe that the following competencies are most developed: teamwork ability (70% developed), communicative competence (95% developed), and learning capability (80% developed).

7. Conclusion

In this paper, the authors described a model of a modern teacher based on an analysis of relevant literature on the topic of study, questionnaires, surveys, conversations with students enrolled in

“Pedagogical Education,” “Philology” courses at the Faculty of Philology and the Institute of Modern Languages and International Studies of the M.K. Ammosov North-Eastern Federal University (Yakutsk).

Following the work performed, we concluded that a modern teacher should possess digital literacy, emotional intelligence, communicative competence, strong learning capability, should be punctual and able to plan their activities rationally. They should possess teamwork ability, creative thinking, mobility, cultural competence, adaptability, initiative. At the same time, teachers are persons with high standards of integrity, able to be a role model and only secondarily – a professional in their field.

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