

# LEADERSHIP SKILLS DEVELOPMENT OF HIGH SCHOOL STUDENTS AT THE LESSONS ON THE SUBJECT OF "FUNDAMENTALS OF INFORMATION TECHNOLOGY IN SPECIAL EDUCATION" USING WEB-QUEST

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## **Introduction**

The article describes the results of a study on the development of leadership skills of high school students through the application of active teaching methods and interactive computer technologies. The author computer program used in the teaching process, the course of the experiment and the obtained results have been described.

**Keywords:** leadership skills, communication skills, a leader, active teaching methods, web-quest.

## **Study areas and Methods**

At present the vocational education faces challenges not only to saturate the labor market with competent professionals, but also to create opportunities for professional growth and personal development, including the development of individuals with strong leadership skills. However, schools are paying more attention to the development of knowledge and skills in specific disciplines, rather than to the professional and personal development of students. The development of leadership skills is an important process in the way of personal development. Being the ordering and not spontaneous process, it makes possible to use comprehensive approach to the issue [2,3].

The opportunity to develop some personal qualities, including leadership skills directly in the classroom with students occurred with the development of modern information technology, the application of active teaching methods in educational process and the possibility of using distance learning technology in educational process.

Pedagogical experiment took place during the 2014-2015 academic year on the basis of "Udmurt State University". The study involved first-year students training in the areas 44.03.03 Special (speech pathology) education in groups of the future speech therapists (hereinafter referred to as the "Logopaedics") and specialized psychologists (hereinafter referred to as the "Special psychology"), who agreed to participate in the experiment [6].

The aim of ascertaining experiment was to determine the initial state of leadership skills formation, communicative and organizational inclinations.

The purpose of the experiment on the formative phase was to test a developed by us model of leadership skills development of the students in the classroom with the use of web-quest. To achieve this goal we developed the curriculum, the diagnostic material, the e-learning course of the web-quest "Information Technology Fundamentals for Special Education". After the students have started directly doing the tasks, they will be able to familiarize with the detailed task text. Using the built-in form of role assignments, they will get roles ("The Leader", "The Performer", "The Observer") for doing the task. Moving in stages, they will change their roles in the group. The list of Internet resources will help them to do the quest [7,8].

## **Results**

The stating experiment revealed that 63% of the respondents in the group of students training in "Special Psychology" had a low level of leadership skills development and only 18% of the respondents had the average level and another 18% of the respondents had a high level of leadership skills development. In the group of students training in "Logopaedics" 82% of the respondents had a low level of leadership skills development and only 18% of the respondents had the average level. Nobody had a high level of leadership skills development. After the experiment there was a shift towards a high level of leadership skills evidence in the group of students specializing in "Logopaedics" - 45% of the respondents showed the average level of leadership skills evidence and 36% of the respondents had a high level. In the group of students specializing in "Special psychology" 27% of the respondents had the average level and 45% of the respondents had a high level.

Before the experiment 36% of the respondents specializing in "Special psychology" had a low level of communication skills evidence, 9% of the respondents had a lower level than the average, 18% of the respondents had the average level, 9% of the respondents had a high level and 27% of the respondents had a very high level. After the experiment 9% of the respondents had a low level, 27% of the respondents had an average level, 27% of the respondents had a high level. The percentage of below the average and very high levels was not changed. In the group of students specializing in "Logopaedics" 81% of the respondents revealed a low level of communication skills evidence, 9% of the respondents showed below the average level and another 9% of the respondents had a high level, the average and very high levels were not identified. After the experiment, there was a shift in the direction to the average level of evidence - 27% of the respondents showed the average level and 45.5% of the respondents had a high level [1].

Before the experiment 45% of the respondents specializing in "Special psychology" had a low level of organizational skills evidence, 18% of the respondents had a lower level than the average, 18% of the respondents had the average level, 9% of the respondents had a high level

and a very high level wasn't identified. After the experiment, there was a shift in the direction to high and very high levels of skills evidence – at 27% each.

For the statistical analysis of the results of experimental work Wilcoxon-T criterion is used to establish directivity and intensity of shifts in the same group of the respondents in two different conditions - before and after the experiment.

The obtained value  $T_{\text{ЭМП}}$  exceeds the corresponding critical value to the level of 1%, hence the differences are significant at the one percent level. Otherwise, changes in the intensity of the typical direction exceed the intensity of changes in atypical direction, that is the hypothesis H1 is accepted.

According to the results of the statistical analysis of indicators, we conclude that the development of leadership skills is held more effectively after the classes conducted in the group of students specializing in the areas of "Logopaedics" and "Special psychology" where we used the technique suggested by us [4,5].

### **Conclusions**

Thus, our pedagogical experiment confirmed our hypothesis that the leadership skills of students can be educated successfully in the classroom if a web-quest is used as one of the active learning methods.

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