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The Development of Teenagers' Responsible and Creative Attitude to Learning Activity

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ABSTRACT

Social reality in education of present day youth capable to think independently and creatively, to implement their plans, to aware and be responsible for the results of their activity provides the relevance of the paper. The objective of the research is to verify experimentally psychology-pedagogical conditions aimed to develop teenagers' responsible and creative attitude to learning activity. Pedagogical experiment in a parallel variant is applied as the leading method in the research of this problem. 60 teenagers (aged between 12-13 years) studying at comprehensive schools of the Republic of Tatarstan (Russia) took part in the empirical research. The complex of diagnostic techniques to identify cognitive-informative, emotional-motivational and effective-volitional components of teenagers' responsible and creative attitude to learning activity is used in the work. The paper suggests results of experimental work testifying to the efficiency of psychology-pedagogical conditions aimed to develop teenagers' responsible and creative attitude to learning activity. The following conditions are treated as necessary in training and educational process: introduction of a set of programs aimed to form learners' ideas of responsibility and creativity, to develop motives of duty and responsibility within the frames of academic subjects, motives of creative self-expression and their interrelation, formation of an adequate self-assessment, and emotional, volitional and communicative qualities of the personality necessary for implementation of successful creative and social-responsible activity; initiation of school students' creative and responsible attitude through their independent educational creative activity; encouragement of teenagers to use their competences in school educational environment (including extra-curricular time, e.g. work with underachievers, patronage of primary school children, etc.). Statistical processing of empirical research data was carried out by means of standard methods of mathematical statistics (Student t-criterion, methods of correlation data analysis). Materials from the paper are of practical value for teachers and psychologists of educational institutions.

KEYWORDS

Responsibility, creativity, responsible and creative attitude to learning activity, teenagers

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Introduction

Urgency of the problem

The task of modern school is to educate a future citizen possessing creative and responsible attitude to work as well as to any kind of activity. To solve this task it is necessary to make the child execute their children's duties in a responsible and creative way; particularly in the case of learning. It is a key to success in life in general: when the child grows up they will treat labor duties, public affairs and close people in the similar way.

The study of this problem acquires specific significance when it concerns the period of adolescence. At this age teenagers begin to aware and reveal their subjectivity, they actively look for their place in society, in the system of social communications, they try to undertake independent actions and make decision.

Therefore, development of teenagers' creative initiative, ability to build relations with various spheres of reality, independence and responsibility is actual and considered as one of the most important tasks of psychologists and teachers.

Development of teenagers' creative and responsible attitude to activity is a relevant problem of great social importance.

Status of a problem

An increasing body of information has been accumulated in theory and practice so far; it highlights scientific bases and experience of teenagers' responsibility and creativity formation as separate phenomena.

Modern scientific researches of Russian and foreign scientists study: contents, structure and diagnostics of responsibility (Muzdybayev, 1983; Pryadein, 2001; Sakharov, 2003; Grogoleva, 2005; Dementy, 2005); formation and education of responsibility (Zavadskaya & Shevchenko, 1981; Minkina, 1990; Bortsova, 2007; Canfield & Siccone 1992; Fay, 1994; Renouf, 1997; Brinkman, 1998).

Works of many scientists specify responsibility in regard to various spheres of life and activity: in relation to activity (Kochetova, 1991), to learning (Alferov, 1976; Kosolapova, 1990; Nevzorova, 2012; Davis & Murrell, 1994), to education of economic responsibility (Korostelkin, 1992), to ecological responsibility (Zverev, 1983), to social responsibility (Sidorova, 1987; Bayluk, 2015).

Concepts and characteristics of creativity, creative activity were considered in works of such authors as A.N. Luk, 1978; D.B. Bogoyavlenskaya, 1981; A.M. Matyushkina, 2003; H.H. Nikolayenko, 2005; Y.A. Ponomareva, 2007; E.V. Pronina, 2012; E.P. Ilyina, 2012; T.M. Amabile & B.A. Hennessey, 1988; C.W. Taylor, 1988; F. Tardif & R. Sternberg, 1988; E.P. Torrance, 1988; H.J. Walberg, 1988; D.Y. Feldman, M. Csikszentmihalyi & H. Gardner, 1994; M.D. Dinca & M. Albu, 1996.

Increase of researchers' interest in studying adolescence as a key stage in forming responsibility and responsible attitude to learning activity is observed in recent years.

The following dissertation researches carried out in Russia on this issue are considered perspective.

Karmenates Montekho (1985) proved that inclusion of an evaluative component in educational cognitive activity, actualization of school students' evaluative activity at all stages of assimilation and application of knowledge and its links with abilities and skills are effective educational tools to form responsible attitude to learning. The work presents main directions of responsible attitude formation to learning: activation of school students' cognitive activity, connection of social and personal-significant informative motives of learning, interaction of collective, group and individual forms of work, specific training of school students to conduct introspection and self-assessment of their educational work results.

In the dissertation research by S.L. Sidorkina (2010) on the issues of teenagers' social responsibility formation by means of socially important activity it is shown that the efficiency of the process to form teenagers' social responsibility in activity can be increased due to realization of a complex of specifically developed social initiatives adequate to psychological features of adolescence age, psychology-pedagogical training of teenagers for inclusion in the system of public relations, pedagogically competent position of the adult as a cultural intermediary in interaction of the teenager with the world around, active cooperation of children with various environments of people's activity.

According to M.V. Panasenko (1998), pedagogical conditions of effective formation of responsibility as a personal quality of senior teenagers in the course of studying Humanities are as follows: organization of senior teenagers' responsible behavior experience on the basis of their inclusion in activity; providing freedom to school students as prerequisites of responsibility emergence by means of pedagogics of non-violence; inclusion of the process of responsibility education in the process of senior teenagers' communicative competence formation; encouragement of teenagers' independent educational cognitive activity; consideration of social values in realization of responsibility education in senior teenagers. Within the frames of our research, works of foreign scientists are of special interest for us J. Canfield & F. Siccone (1995) describe approved 101 actions which promote formation of self-respect and responsibility in students. It is important to note that proposed actions are focused both on learners as active subjects of learning activity and teachers to render help in the development of a leader's role and formation of trainer's qualities.

J. Fay (1994) reveals secrets of establishing child-parent relations built on principles of love and logic, directed to form children's responsibility and master tools to solve their own problems.

T.M. Davis & P. Murrell (1993) highlight the need in teachers' systematic encouragement of students' responsible behavior; one of main methods is encouragement of students' achievements.

Analysis of literature and scientific researches shows a big variety of opinions and attempts to explain a phenomenon of creative activity. Much depends on the way the researcher outlines the object of research – what in fact is understood as creativity.

Ponomarev (2007) defines teenager's creative activity as an activity which includes the need to make a choice of directions of teenager's own creativity and achievement of a certain result – a product of creative activity that forms, in turn, responsibility. Formation of learner's personality in the course of activity



when the requirement to create oneself and, as a result, world around is realized, sets the need for creative activity. Implementation of an action in a creative act by a teenager becomes the basis and way of their development.

In educational space of general school it is possible to distinguish some characteristics of teenager's creative activity (Meerovich, 2000):

- 1) "institutionalization" of teenager's creative action;
- 2) variety and "event" nature of teenager's creative action;
- 3) specific emotional atmosphere of creativity in relations in class and emotional involvement of the teenager into task solution process;
- 4) teenager's discovery of something new, both objectively new (e.g., new subject result), and subjectively new (e.g., rediscovery of some knowledge by the teenager, or description of a situation about some difficulty in a school subject in a fantastic form).
- E.V. Pronina (2012) obtained significant results in her work; they reflect the essence of creative attitude to learning activity as an integral characteristic of the personality shown in a rather steady object - subject interrelation, in unity of objective-psychological manifestations of the personality in activity and subjective manifestations - motivations, self-assessments, system of personality qualities arising in activity and realizing it. The nature of consciousness and activity connection is revealed in the creative relation to activity; the content of the personality as a "semantic formation" is realized.

Despite a vast number of works studying phenomena of responsibility and creativity, the issue of specificity of manifestation and formation of responsible and creative teenagers' attitude to learning activity still remains insufficiently solved.

Purpose of the research

The objective of this research is to verify experimentally psychologypedagogical conditions of formation of responsible and creative teenagers' attitude to learning activity.

Methodological Framework

Methods of research

A number of complementary methods were used to conduct the research: 1) theoretical methods: study and analysis of psychology-pedagogical literature on the research topic, synthesis, comparison, classification, systematization; 2) empirical methods: observation of school students' behavior at lessons and during extracurricular activities, conversations with school students and teachers, pedagogical experiment, testing, questioning; 3) data processing methods (quantitative and qualitative analyses).

Research Base

Experimental work on formation of responsible and creative teenagers' attitude to learning activity was conducted on the basis of a comprehensive school of Kazan, the Republic of Tatarstan. 60 six-form school students aged between 12-13 years, 46% of boys and 54% of girls, made the sample.

Arrangement of research

Research was conducted in natural conditions in three stages:

During the first (search-theoretical) stage the analysis of psychology-pedagogical literature on the research topic was carried out; scholarly apparatus and base of research were defined; techniques of experimental research were selected

During the second (pilot-experimental) stage, approbation of psychology-pedagogical conditions to form responsible and creative attitude of teenagers to learning activity throughout an academic year was carried out.

During the third (generalizing) stage, systematization and processing of research results were carried out, experimental conclusions were formed.

Evaluation criteria

The following criteria (components of responsible and creative attitude to activity) were applied to evaluate the level of efficiency to which responsible attitude to activity (RAA) and creative attitude to activity (CAA) were developed:

- cognitive-informative component: awareness of need to perform an action (RAA), understanding the possibility to perform a creative action (CAA), knowledge of what RAA and CAA include, about their interrelation and ideas of the ways of their implementation;
- *emotional-motivational component*: motives of a commitment and responsibility (RAA), motives of creative self-expression (CAA), interest in performance of action and worrying about it;
- *Effective-volitional component*: performance of action precisely and correctly (RAA), entering of novelty into activity (CAA), assertiveness and persistence to achieve the goal.

Each of these criteria can have a set of specific manifestations which will testify to the high, average or low level of relation formation.

Diagnostic tools

Within the conducted research the following techniques were used:

1) the questionnaire to identify awareness and level of concepts "creativity" and "responsibility" formation; 2) the questionnaire to study motives of responsible and creative attitude to learning activity; 3) a modified technique "Scale-Thermometer" to identify an emotional background of responsible and creative attitude to learning activity; 4) the technique "A ladder of responsibility and creativity" to study self-assessment of these qualities; 5) the technique to diagnose responsibility directions (attributes of responsibility); 6) technique "A task from Friday for Monday" to define real manifestation of responsibility in teenagers in learning activity; 7) the technique "A storyline of difficulties on a lesson" studying actual manifestation of creativity in learning activity.

Course and description of the experiment

Within the frames of this work the pedagogical experiment in a parallel variant to form responsible and creative attitude of teenagers to learning activity was arranged. Two forms of a comprehensive school took part in the



experiment (there were 30 school students in the experimental group (EG), and 30 school students in the control group (CG).

The character of the research determined the following types of experiments that make the basis of a pedagogical experiment:

- 1) Stating experiment: initial values of studied indicators of responsible and creative attitude to learning activities for the chosen techniques were defined in testees of the experimental and control groups; their similarities or differences were revealed.
- 2) Forming experiment: psychology-pedagogical conditions aimed to form responsible and creative attitude to learning activity were introduced in education and training process in the experimental group.
- 3) Control experiment is a final research stage; its goal is to confirm the efficiency of tested psychology-pedagogical conditions aimed to form responsible and creative attitude of teenagers to learning activity. For this purpose, values of studied indicators were determined in testees of the experimental and control groups according to the same selected techniques that were applied during the stating stage.

Conclusions on the efficiency of used conditions were made as a result of qualitative and quantitative analysis with mathematical statistics methods application. Statistics package SPSS version 15.0 was used to process obtained results.

Results

Results of the stating experiment stage

During the first stage of the stating experiment initial values of a cognitive component of the studied indicator were estimated in testees.

When school students answered questions In our experiment they named about 25 features of a responsible attitude and about 20 features of creative attitude to action. Among features of responsible attitude teenagers named such manifestations of it as high-quality performance of work, diligence, consciousness, conscientiousness, meeting of deadlines, etc.; school students refer esthetics of performance, quality of performance, personal and public significance, imagination, novelty and other signs to features of creative attitude to activity.

Table 1 presents examples of formulations which school students use to define the concepts "creative" and "responsible" attitude to activity.

Table 1. Correlation of school students' formulations to some features of creative and responsible attitude to activity

Distinguished feature	Typical formulations of school students
Social significance of activity	"activity useful for all"; "to make people happy"; "to please everybody, to interest"
High-quality performance of activity	"to do it very well"; "to do it correctly, as it is necessary"; "to do as best as possible"
Novelty	"to come up with something peculiar", "to do something special or unusual"

On the basis of obtained results, it is possible to draw a conclusion that teenagers experience some difficulties at defining concepts "responsible attitude" and, in particular, "creative relation to activity".

Quantitative correlations of revealed levels of concepts "responsibility" and "creativity" formation in children of EG and CG were determined as follows: 46,6% in CG and 43,3% in EG have the level of RAA concepts formation that is below an average, and 30% have a low level. The level of CAA concepts formation is below an average in 53,3% in CG and 50% in EG, low in 30% in CG and 33,3% in EG.

The fact that RAA and CAA level is above an average only for 3,3% in CG and EG is of great concern; no one from two grades revealed a high level. It causes difficulties to perform tasks correctly, creatively and responsibly.

Comparative analysis of results on levels of emotional- motivational sphere identifies that school students in CG and EG have, in general, a high level of emotional-volitional sphere of RAA (46,6% and 50%, respectively). Average (43,3% in CG, 56,6% in EG) and high levels (43,3% and 30%, respectively) were revealed as prevailing in regard to manifestation of emotional-volitional sphere of CAA.

Correlations of levels of real responsibility and creativity manifestation in testees are distributed as follows: a high level of manifestation of RAA (63,3% and 59,9%) and an average level (23,3 % in each group) is characteristic for CG and EG, a low level makes 13,3% and 16,6% respectively.

As for CAA the situation is a bit different than for RAA. The dominating position is taken by the average level in CG (46,6%) and high level in EG (56,6%). 13,3% of teenagers of CG and 6,6% in EG have a low level.

Verification of teenagers' qualities self-assessment (RAA and CAA) and its adequacy was carried out to study responsible and creative attitude to learning activity more thoroughly. So, most sixth-graders in CG define their level of responsibility as average (56,6%), above average (23,3%), below average (13,3%), high (3,3%), low (3,3%). The fact that 23,3% of school students in CG have an inadequate self-assessment causes concern.

Most teenagers in EG have an average level of self-assessment (36,6%), below average-26,6%, above average - 20%, high - 6,6%, and low 10%. It is necessary to note that about 40% in EG display an inadequate self-assessment of RAA.

The situation with CAA is similar to RAA. 33,3% of school students in EG and 23,3% in CG have inadequate self-assessment.

As for personal orientation of teenagers' responsibility it was revealed that 63,3% of school students in CG and 66,6% in EG attribute the reasons of tasks non-performance appropriately and in time to external circumstances. And only 36,6% of teenagers in CG and 33,3% in EG look for the reason in themselves.

Statistical comparison of means according to Student t-criterion was carried out to confirm the lack of differences in RAA and CAA indicators of school students in EG and CG. It is proved that statistical distinctions in two studied groups are not revealed at $p \le 0.01$ on three components of RAA and CAA.

Correlation analysis was performed to define the extent of RAA and CAA indicators connection, in particular, the nature of this link, force and directions



of the link. Two statistical sets were formed – the set of values of RAA indicator and CAA indicator on three components obtained on the sample of the experimental group since two groups of testees can be integrated and referred to one general set according to measured features.

Relations on an effective-volitional component (interrelation of levels of RAA and CAA manifestations) - r_{xy} = 0,56 (p≤0,01), interrelations of CAA indicators between cognitive-informative and effective-volitional components $r_{xy} = 0.46$ (p ≤ 0.05), interrelation of RAA indicators between cognitive-informative and emotional-motivational components - $r_{xy} = 0.43$ (p \le 0,05) were revealed during this stage of the experiment.

Results of the control experiment stage

The same operations were performed during the control stage as during the stating stage, though numerical ranks were changed after the forming experiment stage.

Proceeding from data obtained in EG, it is possible to claim that the number of school students with low and below an average levels of RAA concepts formation decreased by 20%, namely, the level below an average after the forming program makes 23,3%, low-10%. The average level prevails over all other and makes 33,4%. It is most remarkable that the number of testees with a level above an average increased from 3,3% up to 23,3%, and with a high level from 0% up to 10%.

The situation with level distribution of CAA concepts formation in EG significantly reminds the situation with RAA. The low level and level below an average make 13.3% and 26.6%, the average level increased up to 30%, the level above an average corresponds to 23,3%, and high level -6,6%.

Analysis of obtained results testify that the number of teenagers in EG having a high level of emotional and motivational RAA and CAA component, considerably increased and makes 70% and 50% respectively due to redistribution of testees with the average level of RAA from 36,3% to 20%, CAA - from 56,6% to 43,3%. As for the low level of emotional-motivational component of RAA and CAA, we can also note changes of results which make 10% and 6,7% respectively.

Essential changes took place in the dynamics of levels distribution of an effective-volitional component manifestation of RAA and CAA in the experimental group. About 76,7% of school students have a high level of manifestation of CAA and 83,4% of RAA. 23,3% of school students have an average level of manifestation of CAA and 13,3% of RAA. It is very important to note that a low level in CAA is completely absent, and in RAA it makes only 3.3%.

It is peculiar that committing acts before the experiment 66,6% of school students in EG referred to external reasons (an external locus) of tasks nonperformance, but not on internal (an internal locus). After the experiment this number decreased by 46,6% of testees.

So, teenagers in EG while committing some acts and actions began to consider many circumstances more fully, to be guided by internal factors not external ones, therefore, children came to a deeper understanding of the concepts "responsibility" and "creativity", they perceived the basis of their actions.

Also it should be noted that adequacy of RAA and CAA self-assessment increased by 10%.

Essential changes on the studied indicators in the control group did not occur over the studied period.

Obtained conclusions were statistically proved by Student t-criterion for dependent samples at the level $p \le 0.05$.

Corresponding structures of studied indicators correlational links were specified during the control stage in EG to obtain a broader picture of features of teenagers' responsible and creative attitude to learning activity. Significant and highly significant correlation links of average and strong density on three studied components of RAA and CAA were found; that confirms the interrelation between formation of teenagers' responsible and creative attitude to learning activity and, in particular:

- indicators of RAA and CAA concepts formation;
- indicators of RAA and CAA emotional-motivational sphere;
- indicators of RAA and CAA manifestation;
- indicators of concepts formation and emotional-motivational sphere of RAA (CAA);
- indicators of concepts and levels of manifestation formation of RAA (CAA);
- indicators of emotional-motivational sphere and levels of RAA (CAA) manifestation.

Discussions

If we compare obtained data with an ideal or basic model of a creative and responsible attitude to activity during the stating experiment stage, then it is possible to isolate qualities that teenagers do not "correspond" to most of all (in form in general and certain children). On the basis of obtained results it is necessary to develop the program to form a creative and responsible attitude to activity; it should include various forms and methods of pedagogical interaction with teenagers, for example, conversation, discussions about responsibility and creative attitude to activity, in particular, to learning to increase school students' awareness and understanding of studied categories, etc.

In general, due to results of two groups at the stating stage of the experiment it is possible to draw a conclusion that the development of responsible and creative attitude to learning activity is rather stable with average and low level of its development manifestation.

Generalizing the analysis above, it is possible to state that situation on creativity and responsibility formation on all components is not critical, but there are reserves to improve RAA and CAA.

Statistically reliable quantitative and high-quality changes on all indicators of RAA and CAA in the experimental group took place as a result of introducing



into education and training process of psychology-pedagogical conditions aimed to form teenagers' responsible and creative attitude to learning.

General approaches were determined to form teenagers' responsible and creative attitude to learning activity:

- 1) the teacher should take into consideration that it is impossible to form a responsible attitude to activity without affecting creativity, and creative attitude without responsibility. RAA and CAA are interdependent and complementary qualities;
- 2) to form responsible and creative attitude does not mean to equip the child with ready motives and goals; on the contrary, they should find themselves in such conditions and situations where they can display and consolidate responsible and creative attitude to learning activity.

As a matter of fact, projecting of RAA and CAA formation can become an important component of educational working plans which are sometimes limited only to a formal list of educational events.

The general way to form attitudes to learning activity implies that teenagers should learn to treat learning activity both responsibly and creatively through formation of knowledge about creativity and responsibility, interrelations of cognitive and social motives, emotional reinforcement.

The key directions were defined within the frames of forming work with teenagers in EG:

- 1) formation of school students' ideas about responsibility and creativity during conversations and discussions;
- 2) formation of motives of commitment and responsibility, motives of creative self-expression and their interrelation, and also emotional, strongvolitional, communicative qualities of the personality in the context of forming programs realization including various forms and methods of pedagogical interaction both during educational process (within humanitarian disciplines), and in extra-curricular time.
- 3) exercises, training, initiation to manifest responsibility and creative attitude to learning activity in conditions of education and training process.

On the last lessons practical skills acquired in game were transferred in learning activity: at first by means of various forms of socially useful activity organization, for example, assistance to a sponsored class, then through the system of errands which are directly connected with learning (help to underachievers in class, etc.). For example, pupils of an experimental class were appointed "trustees" or "chiefs" of second graders. Teenagers had to organize leisure activity of primary school students - to help to prepare for events and to organize their game activity during breaks.

Besides, much attention was paid to the formation of personality adequate self-assessment. An individual scale of growth "I am myself" was introduced. School students fixed their responsible acts and creative manifestations, noted advance in their personal development on it. Thus, even insignificant advances in development of responsibility and creativity of each school student were revealed by comparison with their own achievements but not with results of



other school students; it motivated children to treat learning activity responsibly and creatively.

Conclusion

Thus, it was experimentally proved that revealed and approved psychology-pedagogical conditions aimed to form responsible and creative attitude of teenagers to learning activity are rather effective; all this provides the ground to consider the performed experimental work successful.

The following conditions are treated as necessary in training and educational process: introduction of a set of programs aimed to form learners' ideas of responsibility and creativity, to develop motives of duty and responsibility within the frames of academic subjects, motives of creative self-expression and their interrelation, formation of an adequate self-assessment, and emotional, volitional and communicative qualities of the personality necessary for implementation of successful creative and social-responsible activity; initiation of school students' creative and responsible attitude through their independent educational creative activity; encouragement of teenagers to use their competences in school educational environment (including extracurricular time, e.g. work with underachievers, patronage of primary school children, etc.).

Recommendations

Results of this research testify to work prospects in the designated direction and a possibility of widespread introduction of psychology-pedagogical conditions aimed to form responsible and creative attitude of school students to learning activity at comprehensive schools.

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No potential conflict of interest was reported by the authors.

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