Conditions to Inculcate Tolerance in Students

Tatiana Leonidovna Shaposhnikova, Marina Leonidovna Romanova, Natalia Aleksandrovna Tarasenko

FGBOU VPO "Kuban State Technological University", Moskovskaya Street 2, 350072, Krasnodar, Russia

Abstract: It is well-known that growth of social cooperation, humanization, democratization and economic development of modern Russian society commit educational institutions to inculcate tolerance in students. Having analyzed scientific and methodological literature and best practices of inculcation tolerance in students we have found the following unsolved problems: models of students' tolerance forming process are not sufficiently developed from theoretical and methodological point of view; insufficient level of tolerant interaction between teachers and students; the factors, conditions and mechanisms of infusion students with tolerance are not investigated in full. The purpose of this investigation: to simulate student’s tolerance formation process; find dependencies between external conditions and personal inclinations (factors) of forming tolerance in students.

Keywords: tolerance, student, inculcation, conditions, education

1. Introduction

Significance of tolerance as personal value of an individual is determined by globalization of economy, quick development of communications, interaction of cultures and their integration into single whole social space, large-scale migration of population, urbanization and changes in social structures [1]. Tolerance is a practical “humanism” which means good understanding and acceptance of socio-cultural and individual differences, ability for conflict-free interaction in multi-cultural social environment, establishing business and personal contacts, effective elimination of difficulties in personal interaction [2, 3]. Side by side with morals, ethics, religion, law norms tolerance is one of the most robust foundations on which society rests which provides for its stability and integrity. It is tolerance which will not allow individual and socio-cultural differences to grow into conflicts, it turns diversity into source of inter-enrichment and development of society, that is why tolerance is obligatory condition for human existence and self-development [4].

In the same time having analyzed scientific and methodological literature and best practices of inculcation of tolerance in students we have found the following unsolved problems: models of students' tolerance forming process are not sufficiently developed from theoretical and methodological point of view; insufficient level of tolerant interaction between teachers and students; its informative and didactical base is not systematic, factors, conditions and mechanisms of tolerance formation in students are not sufficiently developed. [5]. Unsolved problems are the result of a number of contradictions: between dominating authoritarian styles of pedagogical management of democratization of Russian society; between necessity of inculcation of tolerance in students and insufficient focus of educational process on realization of this target; between big educational potential that can be used in inculcation of tolerance and its insufficient real use because of poor knowledge of conditions of its formation etc. Taking mentioned above contradictions into account we can define main problem of our investigation as follows: what are main factors and conditions of inculcation of tolerance in students? (The purpose of this research - to find main conditions of inculcation of students with tolerance). The objectives of research: to build model of inculcation of tolerance in students; to find relationship between tolerance formation conditions and personal factors; to develop criteria and diagnostic tools corresponding to realization of conditions of inculcation of tolerance in students.

Extent to which this problem has been studied

Nowadays it is agreed that the target of educational system is forming personal and professional features in students which are not restricted by appropriate skills and knowledge. Tolerance is among the most important personal and professional features which must form thanks to personal-orientated educational process [6]. Phenomenon of tolerance is an object of study of many sciences - polytology, ethnology, philosophy, sociology, psychology, pedagogics etc. [7]. Accordingly to modern models tolerance can be basic or situational feature of a person including operational, motivational-value, emotional-voluntary, activity and reflexion components. Pedagogical aspect of tolerance formation can be viewed at the following angles: forming of student’s attitude towards tolerance as towards socially valuable feature; forming of tolerant mind in students; inculcation of tolerance...
within system of higher education [8]. Big number of scientific works devoted to tolerance formation demonstrates actual character of this problem.

Modern specialists have found both general conditions for forming of personal and professional features and the conditions for forming of tolerance. In opinion of A. Chernykh and T. Shaposhnikova [9] inculation of personal and professional features in students in the system of continuous education is determined by compliance with organizational-methodological and psychological-pedagogical conditions and main principles of this process [10]. In E. Sergeeva's opinion [11] the combination of organizational-pedagogical conditions for inculation of ethnic tolerance in students of a military school includes general, particular and special conditions. Tolerance must be brought up in teachers - it is a leading factor of educational process.

But the conditions for inculation of tolerance are still vague; relationship between them and the models of personal and professional development of students is unclear, their place among other factors which lead to forming of tolerance and personal and professional development in general is also not defined. Single whole system of conditions is also absent.

Conditions for tolerance formation which are developed in educational process must be connected with external, leading, constant and controlled factors. Besides that in order to talk about conditions we must evaluate them in quantity by linear scale. We also have to remember that conditions are the factors which are the same for all students in terms of quantity; there are other factors which will differ in terms of quantity for every student. All mentioned above information determined the choice of subject for our study.

**Organization of this study**

Theoretical stage of research was performed in the Departments of engineering institute - FGBOU VPO Kuban State Technological University, experimental stage - on the base of the Departments of the Faculty of computer technologies and automated systems.

The methods of research: analysis and generalization of scientific and methodological literature and best practices of organization of educational process in higher education institutes, questionnaires, simulation, pedagogical observation (monitoring), methods of mathematical probabilities and statistics, methods of theory of sets and ratios, pedagogical experiment. Methodological grounds of research: competence, person-orientated and system approaches; theoretical grounds: works devoted to tolerance and the problem of inculation of tolerance in students. Pedagogical experiments were made on students of 2007-2009 intake in accordance with conclusive classical scheme ROXO where R is randomization (forming) of reference and experimental groups, O is control in the process of experiment, X-experimental incentive (realization of the most important conditions of tolerance formation in students).

**Main part.**

In accordance with person-orientated approach, the task of educational institutions is to create conditions for development of personal and professional features in students (including tolerance) and to monitor their personal and professional development. It is determined by activity of a student as developing system, priority of self-development and personal and professional self-organization. Tolerance formation is connected with learning moral and spiritual values by person, self-improvement and use of potential of social institutes for personal and professional growth. That is why identification of conditions for tolerance formation in students in educational institutions must be done on the base of this process [12]. As tolerance includes 5 relatively independent but interrelated functional components its structural-functional model of formation can be divided into 5 elements. Proposed by authors model of infusion students with tolerance suggests stage-by-stage realization of combination of in-process elements which must be included into educational technologies intended for upbringing of spiritual and moral features in students - first of all, tolerance as practical humanism. It can be seen from this model that 3rd stage is intended for formation of educational level; 4th - to form creativity; highest levels reflect active tolerance (active tolerance means searches for points of meeting "the unknown", ways of interaction with it, in opposition to passive tolerance (passive perception of the unknown, “as it is”); active tolerance is a factor of personal and professional growth by means of self-realization, optimization of social contacts and social interaction, use of the potential of multi-cultural social environment.

It is well-known that development of personal and professional features and their components is not possible without appropriate activity. Tolerance components are formed simultaneously with accumulation of tolerant behaviour experience. To make trans-disciplinary process more orientated for infusion students with tolerance we designed a model of forming of experience of students’ tolerant behaviour using innovative methods of learning. It is based on case studies when a student finds himself in situations which require tolerant reactions, skills for overcoming inter-personal barrier to interact together etc.
Education is a social institution, whose main purpose is to create conditions for personal and professional development of a student, infuse him with social culture. Development of modern education is characterized by a number inter-related trends: modernization, humanization, informatization, valeologization, technologization, integration of science, practice and modern technologies. Analysis of trends of education's development, models of personal and professional development in general and tolerance formation models in particular enabled us to define necessary conditions for effectiveness of the latter process: humanization of education (condition 1); multi-cultural environment of educational institution (condition 2); realization of measures of state regulation in educational institutions intended to form tolerance in students' society (condition 3); monitoring of infusion of students with tolerance and its relationship with monitoring of their personal and professional development and the quality of educational process (condition 4); orientation of educational process towards inculcation of tolerance in students (condition 5); providing sustainable relationship between tolerance components (condition 6); providing sustainable relationship between development of tolerance and other significant personal and professional features - informative competence, law culture of person, communicative competence etc (condition 7); availability of informative-educational environment helping in communication between students and in obtaining by them skills and knowledge connected with tolerance (condition 8).

Table 1. Students’ tolerance stimulation model

<table>
<thead>
<tr>
<th>Stages</th>
<th>Basic methods and factors</th>
<th>Teachers’ tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forming of axiological sphere, motivation of tolerant behaviour by use of model of &quot;perfect person&quot;</td>
<td>Persuasion; methods of forming tolerant consciousness of person; self-persuasion</td>
<td>Make conditions for forming of tolerant moral-orientated person; organization of cultural and educational environment; inclusion of subjectively significant leaders, heros etc.</td>
</tr>
<tr>
<td>Acceptance by person moral norms, interiorization of social duties; accumulation of spiritual and moral experience, first of all experience of tolerant behaviour</td>
<td>Demanding from a person obedience to social and cultural norms; methods of inculcation of socially-approved activity; exercise</td>
<td>Creation of learning situation which demand tolerance; skills to overcome difficulties in interpersonal interaction etc; infusing students with values, traditions, spiritual heritage of multicultural world</td>
</tr>
<tr>
<td>Moral self-regulation, self-control, self-evaluation of person based on reflexive capabilities and skills</td>
<td>Case studies which demand tolerance; methods of inculcation of socially approved behaviour; motivation</td>
<td>Finding and development of spiritual and moral resources in person of a student (will, conscience, kindness, responsibility etc); inculcation of positive moral self-evaluation based on accepted notions of Good and Evil, values, ideals, cultural norms</td>
</tr>
<tr>
<td>Personal and professional self-determination, self-development, elevation of the level of tolerance</td>
<td>Stimulation of activity&amp;behaviour; methods of inculcation of tolerant personal orientation; reflexion</td>
<td>Facilitate to self-development of person; realize creative potential in socially-orientated activity, self-improvement and self-realization by showing positive personal features and social communication; finding and development of spiritual-moral targets of behaviour (patience, discipline, altruism etc)</td>
</tr>
</tbody>
</table>

The result of all this - is formation of tolerant consciousness and behavior model, high level of tolerance
Humanization is orientation of education towards development of personality of a student and realization of his needs; creation of conditions for his comprehensive (all-round) development by means of educational process, real realization of self-preciousness of personalities of teacher and student, practical realization of ideas of natural-like training. Humanization of education means not only development and use of humanitarian educational technologies but such re-organization of educational process which is not possible without creation and realization of productive models for training and upbringing, without respectful attitude towards the personality of a student. Table 2 demonstrates factors of humanization of educational process which are found on the base of analysis of aspects of anthropic educational technologies.

**Table 2. Factors which lead to humanization of professional education**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Its characteristic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-cultural environment of institute</td>
<td>Student must develop in spiritually (mentally) saturated atmosphere of inter-personal contacts, determining mind's horizon, style of thinking and behaviour of students included in it</td>
</tr>
<tr>
<td>Tolerance of teacher</td>
<td>Without tolerance a teacher will not be able to establish conflict-free dialogue-like relations with students which differ from him greatly in many parameters</td>
</tr>
<tr>
<td>Tolerance of students</td>
<td>Success of pedagogical activity depends on perfect readiness of students for conflict-free interaction in multi-cultural educational environment</td>
</tr>
<tr>
<td>Availability of pedagogical practice (experience) and high level of professional competence of a teacher</td>
<td>Anthropic technologies are easier to implement by a teacher who has big experience of pedagogical activity and possesses the whole set of tools, methods and means of training and education. Humanization of educational process (organization of tolerant educational environment) demands from teacher special psychological and methodical efforts. Forming of productive dialogue-like relations with students is not possible without a number of personal and professional characteristics and in general - professional training of a teacher.</td>
</tr>
<tr>
<td>Use of innovative and educational technologies</td>
<td>Young and inexperienced teachers which would like to establish productive relations with students and reach success in their professional activity are not always able to use modern didactical technologies, innovative methods and means of education, upbringing and control; experienced teachers which in principle are able to use innovative technologies effectively do not use them because of ignorance (sometimes because of emotional exhaustion).</td>
</tr>
<tr>
<td>Availability of broad range of tools for pedagogical activity</td>
<td>Humanization of educational process is closely connected with its variation, with providing individualization and differentiation. It is not possible without a set of tools, methods and techniques of pedagogical activity and variation in their use. In conditions of informatization of education means of pedagogical activity are supplemented by computers.</td>
</tr>
</tbody>
</table>
Table 3. The results of pedagogical experiments on realization of authors' model of infusion students with tolerance

<table>
<thead>
<tr>
<th>№</th>
<th>Indicator</th>
<th>Experiment № 1</th>
<th>Experiment № 2</th>
<th>Experiment № 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>RG</td>
<td>EG</td>
<td>RG</td>
</tr>
<tr>
<td>Initial stage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Tolerance as basic feature, %</td>
<td>12</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>2.</td>
<td>Tolerance as situational feature, %</td>
<td>20</td>
<td>23</td>
<td>18</td>
</tr>
<tr>
<td>3.</td>
<td>Intolerance as situational feature, %</td>
<td>46</td>
<td>43</td>
<td>41</td>
</tr>
<tr>
<td>4.</td>
<td>Intolerance as basic feature, %</td>
<td>22</td>
<td>24</td>
<td>26</td>
</tr>
<tr>
<td>Final stage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Tolerance as basic feature, %</td>
<td>19</td>
<td>32</td>
<td>23</td>
</tr>
<tr>
<td>6.</td>
<td>Tolerance as situational feature, %</td>
<td>24</td>
<td>35</td>
<td>22</td>
</tr>
<tr>
<td>7.</td>
<td>Intolerance as situational feature, %</td>
<td>40</td>
<td>27</td>
<td>35</td>
</tr>
<tr>
<td>8.</td>
<td>Intolerance as basic feature, %</td>
<td>17</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td>Realization of the most important conditions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Condition-1, logit</td>
<td>0.27</td>
<td>1.78</td>
<td>0.38</td>
<td>1.96</td>
</tr>
<tr>
<td>Condition-2, logit</td>
<td>3.26</td>
<td>3.26</td>
<td>3.63</td>
<td>3.63</td>
</tr>
<tr>
<td>Condition-3, logit</td>
<td>0.73</td>
<td>0.73</td>
<td>0.96</td>
<td>0.96</td>
</tr>
<tr>
<td>Condition-4, logit</td>
<td>0.37</td>
<td>1.08</td>
<td>0.49</td>
<td>1.26</td>
</tr>
<tr>
<td>Condition-5, logit</td>
<td>0.18</td>
<td>1.03</td>
<td>0.32</td>
<td>1.16</td>
</tr>
<tr>
<td>Condition-6, logit</td>
<td>0.43</td>
<td>1.24</td>
<td>0.33</td>
<td>1.39</td>
</tr>
<tr>
<td>Condition-7, logit</td>
<td>0.21</td>
<td>1.12</td>
<td>0.28</td>
<td>1.24</td>
</tr>
<tr>
<td>Condition-8, logit</td>
<td>0.62</td>
<td>0.62</td>
<td>0.88</td>
<td>0.88</td>
</tr>
</tbody>
</table>

Humanization of education is the main factor of infusion of students with tolerance. It is determined by the fact that an individual is an adaptive system. Side by side with adaptivity a student is characterised by multi-parameter feature, dynamics, openness. Humanization of education places students in conditions where he must find conflict-free ways of interaction with social environment to reach productive personal development, it demands from him to follow benchmark models of productive social behaviour and use of multi-cultural environment for optimization of individual development.

In conditions of informatization of education key factor of personal and professional development is use of modern informative technologies. But this factor will become the key condition of forming personal and professional features only when informatization of educational process will be systematic; besides that, tools of informative-educational technologies must be integral and therefore serve as artificial socio-cultural informative environment - it must be virtual projection of multi-cultural society. The role of these tools can be fulfilled only by informative-educational environment - telecommunication learning and methodical complex (it is usually realized in the form of educational sites) which integrates pedagogical program products and electronic educational resources. Content of this environment must be always re-filled by activity of teachers, students as well as by joint activity of teachers and students. Model and methods of quality-metric diagnostics of electronic educational resources is described in earlier works of the authors. These methods can be easily adopted for development of criteria for evaluation of electronic educational resources intended directly for infusion students with tolerance. Mentioned above informative system must enable to perform teleconferences and web-seminars.

Model of inculcation of tolerance in students has been tested experimentally (table 3). Table 3 demonstrates (in %) the proportion of students with tolerance or intolerance as basic or situational feature of their personality (indications: RG-reference group and EG-experimental group).

**Conclusion**

In all pedagogical experiments at initial stages there were no distinct differences between reference and experimental groups in regard to proportion of tolerant/intolerant students (being judged as basic personal feature); but at final stages in experimental groups the proportion of intolerant...
students was distinctly less (intolerance as basic personal feature) and proportion of tolerant students (tolerance as basic or situational personal feature) was bigger. The results of experiments give evidences for high effectiveness of proposed model, demonstrate significance of emphasized conditions for infusion students with tolerance (in table 3 realization is evaluated in common scale for measuring latent variables - logits; there were no differences in the limits of one intake year only on second, third and eighth conditions - multi-cultural environment of higher-education institute, realization of measures of state regulation for infusion students with tolerance; and informative-educational environment for development of tolerance.

Inference
The results of research prove that emphasized conditions for tolerance formation with students must be obligatory component of organizational-pedagogical model of this process. Proposed models of inculcation of tolerance in students can become the foundation for developing innovative educational technologies. Possible extension of this work - study of interaction between conditions and factors of infusion students with tolerance.

Acknowledgements:
This work was performed in the framework of state order of the Ministry of Education of RF #10.70.79.2013 "Study of motivation and development of system of incentives for infusion studying youth with tolerance".

Corresponding Author:
Dr. Shaposhnikova,
FGBOU VPO "Kuban State Technological University", Moskovskaya Street 2, 350072, Krasnodar, Russia
mobileaia2013@yandex.ru

References