Educational Technology as a Video Cases in Teaching Psychology for Future Teachers

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ABSTRACT
Relevance of the article is caused by need to form the teacher's psychological competences on the basis of life and professional situations. This article is directed to detection of the main difficulties, which students have in the course of studying psychology and efficiency of use of video cases at classes of psychology. The leading research method of this problem is the reflexive assessment, allowed to reveal the main difficulties which are experienced by students in the course of studying Psychology and their relation to the use of video cases by the specified criteria. In the course of research three working methods with video cases were approved: group and individual analysis of fragments of feature and animation films; selection of fragments from the literary works and films reflecting psychological features of children of different age; creation of the film about group. In article the content of work with video cases on classes of Psychology is disclosed, the main difficulties which are experienced by students in the course of studying Psychology, criteria for evaluation of work with video cases are revealed, it is proved that video cases allow students to understand and solve professional and life situations better. Using of video cases in the course of studying of psychological disciplines allows students to acquire theoretical material, to visualize and solve professional and life situations better.

Keywords: competences of teachers, teaching psychology, video cases, educational technology
According to national and international requirements new standards and requirements to professional education of the teacher were developed to increase a quality level of pedagogical education in many countries. Professional standards for teachers were developed in Great Britain, in Australia, in the United States of America, in the Netherlands, in the Russian Federation. In standards necessity to form professional, interpersonal, organizational, methodological, reflexive and other competences of the teacher is emphasized (Admiraal et al., 2014; Badjanova, 2013). Competence-based approach is urged for ensuring high quality of the teacher training.

According to the Federal state educational standard of the Russian Federation the psychology and pedagogics belong to all-professional part of the teacher training. Studying of psychology is one of important components in training of the teacher. According to the standard the psychology is directed on formation of professional and common cultural competences of the teacher. In the program of a bachelor degree of pedagogical education studying of psychology happens through the following obligatory disciplines: general psychology, age and pedagogical psychology, social psychology. Due to a training profile elective courses are developed. Traditional teaching psychology assumes familiarization with theoretical material at lectures and discussion of problematic issues on seminars. Thus not enough attention was paid to formation of psychological competences: skills and abilities
which are necessary for the teacher in his professional work. According to modern requirements classes of psychology are urged to form skills of self-control, communicative, organizational skills at students. Future teacher has to master ways of interaction with various subjects of pedagogical process: children, parents, colleagues. In the course of mastering a profession the student has to learn to react and solve adequately pedagogical situations, to resolve the conflicts. The age, social and pedagogical psychology is especially favorable for formation of the specified competences.

**Purpose and Objectives of the Study**

Research objective is to reveal efficiency of use of video cases as practice oriented method of teaching psychology for future teachers.

Research problems:

1. At an experimental phase of research to define difficulties which students – future teachers experience when studying psychology.

2. At the first phase of research to develop and approve three working methods with video cases.

3. By means of a reflexive assessment to reveal efficiency of use of the used working methods with video cases.

**LITERATURE REVIEW**

Very often university pedagogical education is estimated as far from practice, it is considered to be theorized. It is possible to meet such criticism in many articles (Borko et al., 2006; Cochran-Smith & Zeichner, 2005). For overcoming this negative attribute of the higher pedagogical education need of formation of the teacher’s professional, interpersonal, organizational, methodological, reflexive and other competences is emphasized at standards (Admiraal et al., 2014; Badjanova, 2013). Many university teachers try to direct attention of students to use of knowledge gained in the course of training (Ball, 2000; Blomberg et al., 2011; Brouwer, 2010). Also attempts to integrate theoretical knowledge into practice of the teacher meet (Darling-Hammond, 2005; Grossman & McDonald, 2008).

One of essential conditions of full possession of a concept and mastering skill is its systematic application in activity. In relation to psychology it means their use in the analysis of life, professional situations. Material on which application of concepts of this subject domain will be carried out has to be as close as possible to reality. In teaching psychology interactive lectures (Hackathorn et al., 2012), role playing exercises (Lawsona et al., 2010), imitation of conflict situations (Terry, 2010), students’ teaching of more small children (Muir & Linden, 2009), trainings (José Luis Gallego, etc. 2015) other interactive methods of teaching are used.

The method of cases (case-study) is seemed for us to be the most relevant to modern requirements. This method assumes implementation of the analysis of those situations which "most often occur in life and which future expert should face in the course of the professional
activity" (Polyushkevich, 2012). "Use of a case method at a lesson allows: "to plunge" participants of training into the real problem situation which is typical for their future or real professional activity ..." (Filippenko, 2012).

One of the most popular kinds of a case method is the technology of video cases. Video examples of educational practice became popular method in pedagogical education (Goeze et al., 2014; Zottmann et al., 2013; Brophy, 2004; Goldman et al., 2007). There is a number of empirical researches on use of video for training. In the higher education the method of video cases is used mainly in the field of pedagogical education (Rosaen et al., 2009). Within professional development of teachers video topics allow to broaden horizons of teachers in the solution of professional tasks (Borko, et al., 2008). Video reports of students and their subsequent discussion are important not only for evaluation of the student’s work during practice, but also for discussion of future trajectory of the student’s professional development (that is what else abilities he needs to gain) (Admiraal et al., 2014).

Training of teachers prior to professional activity by means of the video focused approaches is one of important ways of practice oriented training (Koc, 2011; Llinares & Valls, 2009; Masingila & Doerr, 2002; Santagata & Angelici, 2010; Schrader, et al., 2003; Wong, et al., 2006). It has been shown that viewing of video situations can help teachers to connect the taught theoretical material with later practice which will occur in a school class. So, the video records help to overcome a gap between the theory and practice (Hana, et al., 2013; Abell & Cennamo, 2004). Use of video in pedagogical education can increase ability of teachers prior to professional activity to apply knowledge (Koc, 2011; Llinares & Valls, 2009; Masingila & Doerr, 2002; Santagata & Angelici, 2010; Schrader, 2003; Wong et al., 2006).

However, it is important to use video in compliance the purposes of a training course. For example, use of video depends on for what it is used: for an explanation of the rule, for giving an example, for training in planning of a lesson, etc. (Blomberg, et al., 2014; Seidel, et al., 2013).

In the Russian scientific literature devoted to educational technologies two types of video cases are defined. Video cases are subdivided into game and documentary. The game video case represents an illustration of quite certain fragments of communicative process (actors play these situations). At perception of a documentary video case students watch professional activity of other person (Kabanov, 2012). Watching of examples in video topics often is followed by group discussion or a theoretical conclusion (Llinares & Valls, 2009). Such watching allows students to gain professional abilities, communicative skills.

Together with considered versions the video cases based on material of feature, animation films can be used. Feature films are used in teaching many humanitarian and natural-science disciplines (Tuncay, 2014; Anderson, 1992). They are also used on psychology classes (Fleming, et al., 1990; Boyatzis, 1994; Conner, 1996). Generally authors suggest students to see full version of the movie to understand a context more fully, then to analyze jointly the social and psychological phenomena reflected in this movie.

Thus, use of video cases in teaching of future teachers allow to overcome a gap between the theory and practice, better to see and understand professional tasks, to gain
professional and communicative skills. However, the systematic analysis of influence of various training video lessons on professional formation of teachers doesn't meet in scientific literature. Video cases can be successfully used at psychology classes for the best understanding of theoretical material. At the same time ways of use of video cases at psychology classes are insufficiently covered.

RESEARCH DESIGN

Experimental research was carried out in 2011. This research allowed to reveal the main difficulties which students had in the course of psychology studying. 50 first-year students who studied in the direction: "Pedagogy and Primary Education Training Methods" took part in experimental research. Since 2012 the research directed on studying of reflexive estimates of students on use of different types of video cases has been carried out. In this research totally 60 students who studied in the direction: "Pedagogy and Primary Education Training Methods" took part. 30 of them were the first year students, 30 were the second year students.

In this research such methods were used: reflexive essay and reflexive assessment of the student. The reflexive essay was directed on detection of the main difficulties which students had in the course of psychology studying. After studying the general psychology first-year students anonymously wrote the essay on the subject "My first experience of familiarization with Psychology". Students were recommended to answer the following questions:

1. What kind of knowledge did you acquire in the course of psychology studying?
2. What kind of practical skills did you get?
3. What difficulties were in studying of this discipline?
4. Where and how can you use the knowledge and skills acquired in this discipline?

By results of experimental research (see the section Results) the decision to approve video cases as a method which allows to immerse students in a vital and professional context was made. After use of the corresponding working methods with video cases at classes of age and social psychology students were asked to give a reflexive assessment to these working methods. Students were asked to estimate a working method with a video case by means of a five-point scale by the following criteria:

1. Availability (clarness of material)
2. Connection with practice (with life)
3. Obviousness
4. Usefulness for professional work
5. Emotional attractiveness (evoking interest).

Five-point estimates were ranged as follows: low (1 point); below an average (2 points); average (3 points); above an average (4 points); high (5 points).

In the course of research three working methods with video cases were approved. Also criteria to evaluate the work of the student and group of students were developed.

1. Group and individual analysis of fragments of feature and animation films

   Description. The analysis of film fragments can be carried out both on lecture, and on practical lesson. For the analysis fragments from feature and animation films were selected because it took less time at lessons. The allocated fragments contained situations which
illustrate the psychological phenomena and regularities studied within a subject. For example, the approximate basis of educational activity is reflected in the animation film "Special Agent Oso". Fragments from films "Valka’s sails" (Russia), "Triumph" (USA), by "Mary Poppins" (Russia), "Experiment" (Germany), "Smeshariki" (Russia), "Special Agent Oso" (USA), etc. were used. After watching the fragment there is a discussion with students. During discussion the teacher asked questions to direct students’ attention to definition of the problem on theme of the lesson and ways of its solution.

As examination students can be given fragments from other films for individual analysis. The teacher should raise questions which the student has to answer during the analysis of a fragment. For the individual analysis it is better to use problematic professional, conflict situations (Table 1).

<table>
<thead>
<tr>
<th>Table 1. Approximate criteria by which it is possible to estimate this task</th>
</tr>
</thead>
<tbody>
<tr>
<td>criteria</td>
</tr>
<tr>
<td>- the student correctly answered questions</td>
</tr>
<tr>
<td>- the student correctly uses scientific terms</td>
</tr>
<tr>
<td>- the student offered pedagogically expedient way of an exit from this situation</td>
</tr>
</tbody>
</table>

2. Selection of fragments from literary works and films reflecting psychological features of different age children.

Description: Students are offered to select fragments from literary works and films reflecting psychological features of different age children. On practical classes students show others these fragments. The group can estimate the suitability of the selected fragment. This task can be used on classes of the child, age psychology (Table 2).

<table>
<thead>
<tr>
<th>Table 2. Approximate criteria by which the selected fragment will be estimated</th>
</tr>
</thead>
<tbody>
<tr>
<td>criteria</td>
</tr>
<tr>
<td>- the fragment reflects psychological features of children of this age</td>
</tr>
<tr>
<td>- the student can prove a fragment choice</td>
</tr>
<tr>
<td>- the source (the name of the film, a work of literature) is specified</td>
</tr>
</tbody>
</table>

3. Creation of the film about group

Description: Students are offered to create the non-fiction film about the group. Work on discussion about a plan of cast begins on a practical class. Shooting and editing happens in out-of-class time. Demonstration of the film and its discussion takes place during final lesson of discipline "Social psychology". During discussion the teacher asks to explain film creators what parameters of group and group processes they reflected in this film. In group several films can be shot. The academic heads of group are also invited to this event (Table 3).
Table 3. Approximate criteria of an estimation of the film about group

<table>
<thead>
<tr>
<th>Scientific character</th>
<th>Representation of all group</th>
<th>Creativity</th>
<th>Logicality</th>
<th>Work of all group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific terms are not used / use of scientific terminology</td>
<td>The film gives an idea only about a part of the group</td>
<td>The Scenario isn’t thought over / creative representation / separate approach to the scenario</td>
<td>Separate shots / presence of the scenario (plot)</td>
<td>Only a few people worked / all members of the working group worked</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Results of the reflexive essay were qualitatively and quantitatively evaluated. Essays of students were attentively read, their self-assessments at this course were allocated. The most often found difficulties among students in the course of psychology studying were analyzed and revealed. Collected data on a reflexive assessment were written down in excel sheets for the statistical analysis. The estimates given by students to each working method with video cases were statistically analyzed: 1 point; 2 points; 3 points; 4 points; 5 points. For statistical data processing the SPSS 17 program was used.

RESULTS

At first results of experimental research will be presented. In the analysis of answers to a question: "What kind of knowledge did you acquire in the course of psychology studying?" students list subjects (100%) which they studied, some students listed the basic concepts of the general psychology (32%). Many students (60%) already found it difficult to give the answer to the second question: "What kind of practical skills did you get?" Other students give very generalized answers: "to see into myself", "to better understand myself", "I learned to think", etc. Concrete skills were mentioned by anybody. 34% of examinees designated difficulties in mastering of this discipline. As difficulties they allocated such: "there are a lot of difficult terms", "examples from life aren't given in textbooks", "it is difficult to imagine in life concepts which we study", "I don't know how it is possible to use knowledge at work", etc. Other respondents didn't answer the question. To the question: "Where and how can you use the knowledge and skills acquired in this discipline?" most of students (90%) answered that in "life and at work", without calling a concrete scope. Other students didn't answer this question.

Further results of studying of reflexive estimate which students gave to working methods with video cases will be presented: 1. Group and individual analysis of fragments of feature and animation films. 2. Selection of fragments from the literary works and films reflecting psychological features of children of different age. 3. Creation of the film about group. Estimates of students are ranged on a five-point scale and presented by five criteria: availability (clearness of material); connection with practice (with life); obviousness; usefulness for professional work; emotional attractiveness (evoking interest). Results are presented in Table 4, 5, 6.
Table 4. Reflexive estimates of students on the first working method (in %)

<table>
<thead>
<tr>
<th></th>
<th>Valid Percent</th>
<th>Mean</th>
<th>1 point</th>
<th>2 points</th>
<th>3 points</th>
<th>4 points</th>
<th>5 points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability</td>
<td></td>
<td>3,833</td>
<td>0</td>
<td>8,3</td>
<td>25,0</td>
<td>41,7</td>
<td>25,0</td>
</tr>
<tr>
<td>Connection practice</td>
<td>with</td>
<td>3,750</td>
<td>0</td>
<td>8,3</td>
<td>16,7</td>
<td>33,3</td>
<td>33,3</td>
</tr>
<tr>
<td>Obviousness</td>
<td></td>
<td>3,867</td>
<td>6,7</td>
<td>6,7</td>
<td>13,3</td>
<td>40,0</td>
<td>33,3</td>
</tr>
<tr>
<td>Usefulness for professional work</td>
<td>for</td>
<td>2,02</td>
<td>40,0</td>
<td>35,0</td>
<td>13,3</td>
<td>6,7</td>
<td>5,0</td>
</tr>
<tr>
<td>Emotional attractiveness</td>
<td></td>
<td>2,050</td>
<td>25,0</td>
<td>21,7</td>
<td>20,0</td>
<td>30,0</td>
<td>3,3</td>
</tr>
</tbody>
</table>

N=60

Students estimated the first working method with video cases (the group and individual analysis of fragments of feature and animation films) as available, obvious, connected with practice. To a lesser extent in the reflexive estimates students designated this method as "emotionally attractive" and "useful for professional work".

Table 5. Reflexive estimates of students on the second working method (in %)

<table>
<thead>
<tr>
<th></th>
<th>Valid Percent</th>
<th>Mean</th>
<th>1 point</th>
<th>2 points</th>
<th>3 points</th>
<th>4 points</th>
<th>5 points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability</td>
<td></td>
<td>2,33</td>
<td>22,17</td>
<td>37,3</td>
<td>23,0</td>
<td>2,5</td>
<td>15,0</td>
</tr>
<tr>
<td>Connection practice</td>
<td>with</td>
<td>3,886</td>
<td>2,4</td>
<td>1</td>
<td>16,7</td>
<td>38,53</td>
<td>41,3</td>
</tr>
<tr>
<td>Obviousness</td>
<td></td>
<td>3,67</td>
<td>6,57</td>
<td>0,8</td>
<td>15,3</td>
<td>43,0</td>
<td>34,3</td>
</tr>
<tr>
<td>Usefulness for professional work</td>
<td>for</td>
<td>3,913</td>
<td>4,50</td>
<td>5,0</td>
<td>11,23</td>
<td>44,27</td>
<td>35,0</td>
</tr>
<tr>
<td>Emotional attractiveness</td>
<td></td>
<td>3,45</td>
<td>5,0</td>
<td>13,7</td>
<td>35,0</td>
<td>14,0</td>
<td>32,3</td>
</tr>
</tbody>
</table>

N=60

Students estimated the second working method with video cases (selection of fragments from the literary works and films reflecting psychological features of children of different age) as obvious, connected with practice, useful to professional work, emotionally attractive. Less students emphasized availability of this working method.
Table 6. Reflexive estimates of students on the third working method (in %)

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>1 point</th>
<th>2 points</th>
<th>3 points</th>
<th>4 points</th>
<th>5 points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability</td>
<td>3,4</td>
<td>6,43</td>
<td>35,26</td>
<td>24,1</td>
<td>30,09</td>
<td></td>
</tr>
<tr>
<td>Connection with practice</td>
<td>3,5</td>
<td>9,13</td>
<td>26,7</td>
<td>43,93</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Obviousness</td>
<td>1,7</td>
<td>16,37</td>
<td>31,67</td>
<td>28,17</td>
<td>17,06</td>
<td>6,73</td>
</tr>
<tr>
<td>Usefulness for professional work</td>
<td>4,02</td>
<td>0,73</td>
<td>15,0</td>
<td>21,53</td>
<td>24,7</td>
<td>38,04</td>
</tr>
<tr>
<td>Emotional attractiveness</td>
<td>3,486</td>
<td>2,9</td>
<td>24,657</td>
<td>17,05</td>
<td>32,1</td>
<td>23,3</td>
</tr>
</tbody>
</table>

N=60

Students estimated the third working method with video cases (creation of the film about group) as emotionally attractive, useful to professional work, connected with practice, available. Students designated this method as "obvious" in the reflexive estimates in a lesser extent.

DISCUSSIONS

Video topics and feature films are used in the field of pedagogical education, in teaching many humanitarian and science disciplines (Tuncay, 2014; Anderson, 1992; Fleming, Piedmont & Michael, 1990; Boyatzis, 1994; Conner, 1996; Bauer et al., 2011; Rosaen et al., 2009; Borko et al., 2008; Admiraal, et al., 2014; Bower et al., 2011). Analyzing scientific sources, it is possible to allocate the main used areas of work with video cases on classes related to Psychology. Firstly, video cases allow to show better what a teacher at a lecture tells about. Secondly, it is possible to analyze the pedagogical, social and psychological phenomena reflected in this movie with students. Also through the submitted video reports it is possible to estimate work of the student in practice. One more method of application of video cases is observation of other people’s professional activity. At the same time in scientific and methodical literature different options of use of video cases at classes of psychology are insufficiently presented. There aren't enough descriptions of experience and application methods of video cases at classes in scientific literature. Also the relation of students to application of this method isn't revealed.

This research reveals efficiency of use of video cases on the basis of feature and animation films and creation of the movies. Different working methods with video cases are approved.

In the course of research a number of contradictions appeared. In the conducted research the evaluation of efficiency was based on a reflection of trainees. At the first phase students in a free form described difficulties which they had when studying psychological disciplines in the essays. At the second discovery phase criteria have been developed by the teacher on the basis of those data which were obtained at the first discovery phase. Students estimated the applied methods of work with video cases by the already set criteria:
availability, connection with practice, obviousness, usefulness for professional work, emotional attractiveness. Reflexive estimation is one of widespread methods of research in psychology and pedagogics, but its objectivity raises doubts. It should be noted that any assessment, especially the self-assessment always has subjective character. At the same time, it is very difficult to avoid value judgment in psychological and pedagogical researches. Possibly, the most successful way is to combine value judgment and objective methods of research, for example, tasks, tests, etc. Therefore, a research method is planned to be improved in further research. The necessity to develop and apply more objective methods of studying of future teachers' psychological competences occurred.

CONCLUSION AND RECOMMENDATION

Results of experimental research showed that students quite easily can actualize knowledge, but find it difficult to designate practical skills which they got in the course of studying psychology. It shows that it is necessary to change accents in the process of a course planning. In the course of development of syllabus to designate and work on concrete skills, psychological competences necessary for future teacher. As difficulties students called complexity of visualization of psychological regularities and concepts, necessity to give examples from life and professional work. In studying psychological disciplines to use methods of training which will allow students to see the necessity and the importance of knowledge and psychological competences in professional work. It is necessary to immerse students in a vital and professional context in the course of studying of psychology.

As the method satisfying the specified requirements the method of video cases was chosen. In the course of studying of social, age and pedagogical psychology three working methods with video cases were used. Students estimated the group and individual analysis of fragments of feature and animation films as available, obvious and connected with practice. Creation of the film about group seems to students as emotionally attractive, useful to professional work, connected with practice, available. Students specified selection of fragments from the literary works and films reflecting psychological features of children of different age as obvious, connected with practice, useful to professional work.

During the work with video cases it is necessary to consider the next moments:

1. To select carefully movies according to the contents, considering a professional orientation of students.

2. For saving time students can be given a task to see the feature film completely at home. To use a fragment of film on the lesson. In this case the context will be clearer for the student.

3. To consider interests of students when choosing the film. The task on selection of fragments of feature films allows the teacher to understand the interests of students.
4. To use interactive forms of work with films, without turning the student only into the passive viewer. For this purpose it is necessary to think over tasks which allow students to show independence, creativity during the lesson and in process of preparation for it.

5. To think over ways of control and estimation of work of students. Especially it is actual for the third working method with video cases as it is difficult for teacher to check out-of-class work of students.

Work with video cases is one of actual, effective ways of preparing the student to future professional work. Video cases allow to immerse better the student in a professional context. Use of different working methods with video cases showed that they allow students to imagine and solve better professional and life situations, allow to understand better theoretical material.

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