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Cases as a Means of Formation of Students' Reflexive and Analytical Experience

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Abstract

Background: Pedagogical press often observes a gap between the theoretical and practical components of the professional education. Theoretical skills of future social work experts finds no back up in the reflective and analytical observational experience, which partly explains their unreadiness for qualified professional reactions. Phenomenological and existential methodology laid in the basis of the educational process stimulates the development of integrated interactive multimedia educational technologies (and in particular, technologies named in contemporary educational theory and practice as 'Case-study'), aimed at forming a professional reflexive and analytical experience of the future professionals of social services and institutions, the development of their subjectivity, creative individuality, adaptive abilities, etc. **Methods:** During the analysis of ways of ensuring internal connection between theory and practice in the reflective and analytical activity of the future social work experts, we used the typology and modelling method ensuring the formation of taxonomic concepts of the studied objects, their characteristics, relationships, attitudes and behavioral patterns. In addition, during the development of interactive multimedia educational technology a system-structural method was used. This method allowed considering the studied phenomena as a dynamic total integrity interacting with other socio-cultural phenomena. **Findings:** The study has revealed the capacity of the case-study interactive educational technology in the context of reflective and analytical experience development and increase in the level of professional preparedness of students, the future social experts, to the professional problems solving; the capacity of interactive educational technology of integrated media education in terms of the reflective and analytical experience development, proficiency improvement and formation of a professional and humanistic attitude of students, the future social experts; the overall structure of the cognitive schemes of social situations and cases as a basis for the formation and development of intentional and dialogical, reflective and analytical experience of students in the educational process. **Applications/Improvements:** Our didactic research support (in the form of interactive technology of integrated education) improves the development of methodological and substantive bases of the educational process in the system of social and socio-pedagogical education.

Keywords: Case, Case Classification, Case Development, Case-Study Technology

1. Introduction

While studying in high school, students receive a deep and comprehensive theoretical education. However, the actualization of theoretical information in the process of study and analysis of professionally significant situations and cases often cause serious difficulties for them.

In general, the experience often means a component of cognitive activity, ensuring the person's appropriate internal and external activity. We will hereafter consider the reflexive and analytical experience as knowledge, skills, figurative notions and cognitive schemes that are fixed in the personality structures and provide adequate perception, analysis, evaluation and authorization of professionally significant (problematic) situations and cases.

Our long-term observations show that one of the very effective tools for formation and development of professionally-oriented reflective and analytical experience can be a technology, called 'case study'. Word

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'*case*' has many meanings and is translated from English as a 'folder', 'suitcase', 'bag', 'container', but also as an 'occasion', 'situation'. In the modern educational theory and practice, the term "case study" is understood in two sense contexts: the first one relates to the technology of distance learning providing students with complete sets (cases) of various teaching and learning materials for self-study; the second one relates to the learning technology based on the implementation of the professional reflective and analytical activity of students regarding the rational solving of a particular professionally significant problem situation or case.

We will focus our attention, first of all, at the second sense context. Despite the fact that the teaching experience of the authors of the article was formed in the process of education of specialists in the field of social work, we are trying to generalize our reasoning and conclusions and it will allow us to interpret them in terms of other fields of education. At the same time, we emphasize that it is the initial social and humanitarian goal setting gives to our didactic recommendations a new perspective, which can be roughly described as 'human dimension'.

The purpose of this article is to analyze means of internal relation of theory and practice in the professionally-oriented reflective-analytical activity of future specialists.

2. Materials and Methods

The case study technology was developed and implemented for the first time in the first quarter of XX century in the educational process of the Harvard Business School. Since the 1950s, this technology was been widely used in the training of managers in Western educational centers. The founder of the case study technology, American educator R. Murry wrote: "I understand the case method as learning by students of the subject by examining a large number of cases in certain combinations. Such training and attempts to manage various administrative situations develop in the student, often unknowingly, the understanding and the ability to think in the language of the main problems faced by the manager in a certain field of activity".[1] Cases are based either on real material, i.e. the situations and cases from the professional practice, or they are invented by authors, totally corresponding to a real life situations. Currently [2]American and Western European business schools assign a considerable time from the classroom and extracurricular work of students for the case work, for example, the Wharton North American Business School: up to 30% and the Harvard: 90%. The trainer shall create a comprehensive 'package' of cases, i.e. the real (or fictional, but as close to reality as possible, 'real-world') cases and situations. At the same time, the information in the case shall not be excessive or distracting, but providing some "space" for the student's "supplementing" imagination. Typically a case package covers a wide range of professionally significant situations and events, social and interpersonal conflicts, occupational incidents, expressive backgrounds of events etc. The efficiency of students' work with cases is determined by the fact that they are dealing with the realities of life, but at the same time they do not have a clear and unambiguous solution. The feature of the case study is the presence of intrigue, conflict, drama, making students not only intellectually but also emotionally involved in the decision-making process. First of all, students are asked to present their understanding of the problem situation or event, to make its reflective and analytical review, and then to make recommendations on the way out of it. Of course, a set of cases must correspond to intellectual capacities, life and professional analytical experience of students.

3. Results and Discussion

Nearly century-old history of technology shows that the case study does open up bright prospects in the formation of the students' reflexive and analytical experience of research of problem situations and cases, in the development of abilities of planning of ways to resolve them and evaluation of available alternatives. A. Dolgorukov[2] emphasizes that the case study technology provides immersion of the subject or group in a problematic situation that can (using his terminology) create "the knowledge multiplication effect", insight, enlightenment, "discovery exchange" and so on. Thus, there are conditions for the 'starting' of the synergistic process of professional self-development of the specialist. [3]Notes that work in terms of case study technology involves the student in the process of knowledge formation, not only in their reproduction. That is why the introduction of case study technology in the practice of modern higher vocational education meets its actual trends related to issues of professional competence, the essence of which cannot be narrowed down to the information 'armament' of the future experts (although, of course, it is included), but ensures the 'composition' of motivational and target

(affective), cognitive (reflexive-analytical) and conative (behavioral) components.

Our experience shows that working with cases, among other things, can put the students in a situation of existential choice, 'turning on' motivational and target determinants of their intellectual activity. In addition, cases create the conditions for the update and activation of various forms of joint activities of students as well as students and teacher, for intentionally meaningful dialogic communication. That is why the introduction of case study technology in the practice of modern higher vocational education meets its actual trends related to issues of professional competence, the essence of which cannot be narrowed down to the information "armament" of the future experts (although, of course, it is included), but ensures the "composition" of motivational and target (affective), cognitive (reflexive-analytical) and conative (behavioral) components[4].

It is evident that cases used during the training process should possess the following traits of integrity and polyphony[1-8] etc:

i. To be grounded on cognitive, reflective and analytical components of cognitive activity, which develop only during activities corresponding to their nature;
ii. To provide a multi-level intentional (motivational and target) interpretation;
iii. Not to "be limited" to a narrow range of tasks, knowledge and skills specific for certain professional activity, but be involved in a broader context of social and cultural achievements of the individual and society;
iv. To disclose their interactive, dialogical nature, as the competence of a specialist is realized, inter alia, through the complex of his interactions and relations with various social and cultural institutions, organizations and subjects (family, profession, economics, politics, ethnicity, culture, and so on);
v. To 'scan the specialist's professional future', as the competent professional must have the ability to capture the positive trends in the development of society, social institutions, professional systems and to promote their implementation in professional practice. However, the specialist should notice the negative trends and promote their smoothing by his professional activity;
vi. To be guided by the positive prognosis for personal and professional development of students, since the sequence of tasks with different level of complexity is focused on the creation of a 'situation of success;
vii. To ensure the development of students' research skills and their ability to process actual information in terms of cases;
viii. To provide the possibility to schematically simulate problematic cases and situations, as well as ways to resolve them (in accordance with the received task), to develop options of approach to solving professional problems, to develop plans of actions (including strategic and tactical planning) focused on optimal results;
ix. To develop the team work skills;
x. To ensure the development of skills of verbal (verbal and written) justification of the chosen position in front of other participants of professional interaction or staff members;
xi. To ensure the development of ability of critical assessment of reasoning and points of view of others on a professional problematic situation or a case of comparative analysis and evaluation of different points of view;
xii. To stimulate the formation of the ability of self-awareness, self-control, self-esteem and self-regulation.

In one of the articles[9], offer a classification of cases interesting from the point of view of the subject of our research. This classification is also used in a number of foreign educational systems:

- Highly structured cases contain the minimum necessary amount of information, which greatly facilitates the work of the student whose task is to use the given scheme or algorithm of solution of a specific situation;
- Short vignettes are based on 'key concepts' and information studied by the students, but are directly designed for actualization in the course of resolving the situation, for the intellectual potential of the individual and his life experience;
- Long unstructured *cases* are the most difficult type of situational tasks, as they contain a detailed information, much of which is not directly related to the resolution of problem; and vice versa, a part of the necessary information may be absent in the case; students must take into account in their decision the essential details and ignore insignificant ones, logically "fill" the gaps in the information and justify the decision taken;
- Ground breaking cases, in which the problem can be solved not only through actualization of already studied theoretical base and professionally significant

skills, but also requires the implementation of creative potential of the person, inviting the students to perform a chain of research activities, providing an increase of knowledge (at least in terms of an individual).

The authors emphasize the creative nature of the process of preparation of the case, which can be based on given academic models, but also may not correspond, to any of them. Describing the case forms[9], pay attention to the potential of the case presentation in modern multimedia, opening bright prospects for development in the technology, but at the same time complaining on the fact that the prospects remain unnoticed by the general teaching public.

Sharing this point of view, we note that the audio-visual media presentation of the case really opens up bright prospects for the development of professional competence of experts of social services and institutions, especially when there is a storyline, intrigue, conflict that provide intentional involvement of students' consciousness, emotional reaction related to the putting of oneself in the other person's shoes, the appearance of empathy, sympathy, compassion, and others. The genre elaboration of the case serves as an additional factor of activation of students' motivational and target field. On this basis, a specific 'multi-channel' dialogic environment is created. In addition, the cases, though in a specific form, but at the same time, very clearly, in a close-to-reality form allows students to grasp the causal connections and relationships, to reconstruct a situation or event in the continuous past-present-future chain.

The case subjects, the behavior of which is analyzed, evaluated and prognosticated, can be the following:

- Specific individuals: professionals, and the objects of their activity. Some characters stimulate the psychological mechanisms of social identification;
- Organizational and institutional structures: organizations, enterprises, their departments, social groups, community, etc.;

There may be multi-subject cases involving several characters of the first, second and third plans.

Given the socio-humanitarian specifics of our educational experience, the case subjects whose behavior and reactions are analyzed, evaluated, reconstructed and predicted by the students, are often 'characters' with a specific set of psychological characteristics. Some of them are designed to stimulate the formation of mechanisms of students' professional identification.

The case study technology was developed in several stages. In particular, first of all we formulated didactic purposes for the achievement of which a case was made up. Then, we determined a problem issue to be resolved by means of the case. After that, the case software maps were developed, where the pursued goals were formulated in the form of brief abstracts. Since our attention was focused on the problem situations and cases from the social work practice, the abstracts were instantiated in the conditions against background of which the case "characters" interacted, in behavioral patterns of these 'characters'. On this basis, the case genre was selected. If the case was created in the multimedia genre (and in our work we preferred this very genre), the available database of media texts was scanned (e.g., fragments of feature motion pictures and documentary films, TV shows, etc.). In some cases, a didactic processing of the original audio-visual material was necessary: e.g., fragmentation, montage of various episodes, use of the zoom technology (approximation), freeze frame shot, etc. In addition, an audio-visual text was supplemented by a didactic material (questions, comments, specifications, etc.). Before the case was used in general practice, it was tested in the pilot experiment and corrected, if necessary.

During the work with a case, the students performed the following types of analysis:

i. Analysis of the problem related to the 'conversion' of the situation or the case in verbal form; doing this, the students determined the type, specifics of the problem, its main system characteristics; the causal connections of the problems with professionally significant conditions and circumstances of the subject's life in specific spatial and temporal terms; the main vectors of the problem solving, etc.;
ii. Cause-effect analysis revealed the connection between the phenomena; it was implemented by the following algorithm:

- The object and the subject of the case analysis were formulated;
- The general characteristics and vectors of causal relations were identified; the cause of the problem situation was established, the possible scenarios of further developments of events were determined;
- The ways of correction of the problem situation were justified;

iii. Pragmatic analysis was aimed at the comprehension of the utilitarian value of events and circumstances described in the case; at the same time, the situation and phenomena were analyzed from the perspectives of the following main concepts: 'efficiency' (i.e., the achievement of high results while minimizing costs and resources); 'effectiveness' (i.e., the ability to achieve the goal); 'assessment' (i.e., the determination of the importance of the situation, subject, phenomena in terms of actor and cognizor); there were also several common algorithms identified in the pragmatic analysis:

- Systems (situations, subjects and processes) were considered from the point of view of their functionality;
- Structures of the studied systems were examined;
- Criteria for evaluation of effectiveness of the systems as a whole (situations, subjects, processes) and their particular elements in certain conditions were determined;
- Functions, inefficiency of which violated the proper operation of systems, were identified and the causes of inefficiency were determined;
- Potentials for improvement of the effectiveness of systems and existing reserves were studied;
- Proposals aimed at improvement of the system efficiency were formulated;

iv. Axiological analysis was focused at the study of the value bases of objects, processes, events and conditions in their hierarchy. Since the value base of activity of various communities and individuals belonging to these communities differ significantly, it was inevitable that the most important issue of the analysis was the problem of reconciliation of these values. It was on this very basis that the joint life and activities of people became possible. The value is manifested in the assessment, which is a dynamically changing phenomenon; it is hardly possible to imagine any abstract assessment, since it always expresses the position, the opinion of a subject (including the opinion of a social community) embedded in a specific socio-historical and socio-cultural context;

v. Situational analysis was based on the understanding of the fundamental volatility of the situation; every situation is a consequence of the previous situation and is causally linked to the subsequent one; thus, the fundamentally procedural nature of any situation becomes revealed. Analyzing the situation in the past-present-future context, the students noticed the uniqueness and generality, discovered the essence of a case or a problem, they found intrigue, the study of which gave to the analysis a special motivation and target tone;

vi. Prognostic analysis was aimed at understanding the trends that in specific sociocultural circumstances and conditions can lead to a 'supposed (expected) future';

vii. Recommendation analysis was aimed at development of guidance regarding the behavior of some individuals in a given situation. The core problem of this type of analysis was the problem of reconciliation of intentional field of interacting "characters" of the case.

4. Conclusions

Thinking about our experience and the potential of case study technology, we emphasize that working with cases is not only a catalyst for reflection-analytic immersion of students into professionally significant problems (and this provides the "composition" of the theory and practice in the educational process), but also a catalyst for the formation and development of motivational and conceptual system of students in relation to the profession. Immersion into the situation allows students putting themselves in the other person's shoes, identifying themselves as specialists that are solving professional tasks. At the same time, the cases (provided that they are accessible through the university servers) can become an important material for the self-reflexive and analytical activity in the conditions of domestic work. That is why we can consider the development of a large-scale case database as currently important direction of methodical work of the teaching staff.

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