– знакомство с тренажером. Обучаемый детально изучает особенности управленческого объекта, его характеристик. Могут применяться сценарии знакомства в виде заданной последовательности действий. Знакомство может быть представлено как в виде ознакомительного ролика, так и в виде коротких заданий для выполнения. В этом случае появляется интерактивность – взаимодействие обучаемого с тренажером. В данном режиме не производится интерпретация и оценка действий обучаемого при взаимодействии с тренажером;

– полнофункциональный режим. Обучаемому предлагается воспроизвести ранее изученную последовательность действий на виртуальном управленческом объекте, при этом каждое действие обучаемого интерпретируется, оценивается и в соответствии с оценкой осуществляется реакция тренажера на произведенную последовательность действий. Ошибки могут комментироваться как в момент совершения, так и по завершении определенного этапа взаимодействия с тренажером.

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VIRTUAL SIMULATORS: CLASSIFICATION AND THEIR ROLE IN MANAGEMENT OF HIGH SCHOOL STUDYING PROCESS

Nowadays the e-learning technologies are of a great interest of institutes of higher education, as they allow to create studying models, which enable to learn theoretical knowledge and to master personal competences through the necessity of permanent work with the different types of information. Officials' personal competences besides education, erudition and abilities to analyse information and to solve numerical problems, certainly requires special skills and ability to act efficiently under different conditions.

Therefore in this context the models that allow students to master special skills are of a particular interest. Students' management skills acquisition is a very difficult task in order to teach students on management

specialties. Such skills as managing decisions making, HR managing and others can't be mastered by the traditional means of teaching within a university. These skills can be mastered only under the conditions of practical activity. The use of real management situations in a real enterprise is often unacceptable for universities as the consequences of a mistaken managing decision may turn out to be irreparable for the enterprise and can even force the enterprise to go out of business, or the consequences liquidation costs may turn out to be too much high. Thus, it seems like the most acceptable means of personal competences acquisition is a package of computer virtual simulators, able to imitate practical situations that involve student into practical activity and do not reduce to fatal consequences in case of mistake.

Today, there is a range of virtual simulators samples, which were successfully designed and applied in such fields of activity like medicine; engineering procedures imitations; plane flying, driving and navigation; construction and design; virtual museums and libraries and many others. Also there are samples of simulators in the field of managerial training (like strategic management business simulation Global Management Challenge).

All this creates the necessary prerequisites for the virtual simulators design of all kinds of destination, assigned for use within different management disciplines taking into account branch features of management specialties in universities of different specializations.

In accordance with functionality virtual simulators can be divided into 3 relative groups:

1. Knowledge teaching simulators. Can be presented in following forms:

– E-books. Teaching efficiency can be increased by application of wide range of multimedia means (like images, diagrams, animation sounds etc.);

– Virtual lectures and seminars;

– Virtual objects, museums, libraries, managing experiments. As an example, a virtual model of Ford's assembly line or a virtual model of a factory before and after Taylor's perfection of engineering processes can be designed.

2. Controlling simulators - testing programs that are assigned for students' examination on studying topics. Can be applied for self-examination or for admission to work with skills teaching simulators on

the base of theoretical knowledge. Controlling simulators can include questions, which allow detecting a student's degree of preparedness for sensible work with skills teaching simulators.

3. Skills teaching simulators - animation multimedia imitators, assigned for managed object condition changes imitation (like changing of situations, enterprise conditions or economy as a whole). These simulators react to a student's actions. Conformably to teaching of managers these are all kinds of business simulations, managing and economical situations, management games and studying cases. It's expedient to create two modes of simulators work:

– Simulator Familiarization Mode. A student studies the features of managed object and its properties in details. Familiarization Scenario in the form of preset sequence of operations can be applied. Familiarization also can be realized in the form of presentational filmloop as well as in the form of short tasks to be accomplished. In this case the interaction between the student and the simulator is supported. Within this mode interpretation and marking of the student's actions during interaction with the simulator is not provided;

– Full-scale Mode. A student is suggested to repeat a sequence of operations, which have been studied before within a virtual managed object. During this process every action of the student is interpreted and marked and in correspondence with the marking the reaction of the simulator on the sequence of operations that have been made is accomplished. Mistakes can be commented immediately after they have been made or after completing a certain phase of interaction between the student and the simulator.

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ОСНОВНЫЕ СРЕДСТВА И СПЕЦИФИКА СОЗДАНИЯ СРЕДЫ ВИРТУАЛЬНЫХ ТРЕНАЖЕРОВ РАЗЛИЧНОГО НАЗНАЧЕНИЯ

Для обеспечения возможности реализации всех перечисленных типов виртуальных тренажеров и объединения их в единую обучаю-