

A Survey on Impact of Interactive Teaching on Teaching-Learning Process

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ABSTRACT

Today, we should talk about the use of interactive methods of training, which encourage interest in the profession; promote the efficient acquisition of training material; form patterns of conduct; provide high motivation, strength, knowledge, team spirit and freedom of expression; and most importantly, contribute to the complex competences of future specialists. The learner passively sitting in a lecture, with no stake or interest in the information, does not reach the level of stimulation required to promote effort. Moving around a room, participating in a contest, or simply talking to other students can raise the level of activity to a point where a student is more alert and attentive to the activities of the class. Active learning techniques divide the lecture so that less material falls prey to the serial position effect—dips in learning of material in the middle of a lecture. Using activities and games in class encourages active learning, as well as collaboration, and interactivity. Currently there are many choices and these keep expanding as newer methodologies are being developed. Even a cursory search by the interested teacher using the search term "based learning" in Google, would yield over 7 million items! In fact, many different formats have been named and described ranging from problem-based learning, project-based learning, peer led team learning, process oriented guided inquiry learning, inquiry-based learning, case-based learning, team-based learning, student-centered learning, active learning, cooperative learning to peer instruction, scientific teaching, and so on. There is an already recognized fact that the need for educational experiences is rapidly growing. Previously there was a sense of audience as a market segment. However one major impact of the Internet is that neatly packaged target markets do not present themselves. Passions for and uses of learning grow in a way that has little to do with demographics. Therefore the flexibility provided by the educators becomes especially important and the new meaning of access to education is quite individual enabling individuals in making their own decisions regarding their private and public lives.

Keywords: Teaching method, Interactive method, Active learning techniques

I. INTRODUCTION

The operational infrastructure of creating a more effective, efficient and accessible learning environment is critical to Web-based learning/teaching success. Yet all too often this element is overlooked or seen as incidental to the design and quality of the learning materials themselves. These are the key success factors in teaching/learning which is orientated towards the students, who will become autonomous self-learners using the media and the support services. The high quality of the Internet education process means the molding of abilities to learn. The advantages of online learning must outweigh the disadvantages for both the learner and the teacher to make the conversion process cost effective. However, there is no doubt that we have already entered the global information society. And there is no way back. Nowadays, content on the Web seems to be inexpensive. But knowledge is nearly never inexpensive. The importance of content will increase to become a critical issue for the Web-based teaching/learning.

Content is the hidden asset in online degree providers by many universities. In order to grow and continue to be profitable, these universities will need to tap this asset in an environment where they can test the effectiveness of content to decide on what content is working and what content is not. However, often the measurement tools for how students respond to content are crude and the decision process is not structured partly because managing contents is a dynamic process.

We must find ways to discover how students respond to the content. For example:

- ✓ Making sure you have accurate, consistent contents.
- ✓ Focus on action points during each week homework assignment. How many students are failing to submit their homework on time? How many revisions students did during the semester?
- ✓ The best web-teachers make it part of their weekly routine to interact with students. There is no greater skill you can develop than to have a deep understanding of how your students think. There is only one-way to develop this: by consistent interaction with your individual students.
- ✓ Usability test once a week. Monitor how each student try and complete a task on that particular week.

The traditional methods of the university educational process (lecture, explanation, exercise, etc.) are certainly important for professional development. However, their limitations are felt even more acutely at present when a complex phenomenon such as competence is formed. Therefore, we believe that modern education should focus on the student's independent activity, the organization of selflearning environments and experimental and practical training, where students have a choice of actions and can use initiative—as well as flexible training programs where students can work in a comfortable rhythm. Today, we should talk about the use of interactive methods of training, which encourage interest in the profession; promote the efficient acquisition of training materials; form patterns of conduct; provide high motivation, strength, knowledge, team spirit and freedom of expression; and most importantly, contribute to the complex competences of future specialists.

Interactive teaching methods: description and role

Training: Training refers to the teaching and learning activities carried on for the primary purpose of helping members of an organization acquire and apply the knowledge, skills, abilities, and attitudes needed by a particular job and organization. The stability and progress of the organization always depends on the training imparted to the employees. Training becomes mandatory under each and every step of expansion and diversification. Only training can improve the quality and reduce the wastages to the minimum. Training and development is also very essential to adapt according to changing environment.

Discover: This step is a necessary procedure for the first class of any training. It activates the group for engaging in interaction and developing communication skills. It should be done even if the students know each other already. Through games such as "interview", "Know Me" and "exchange of business cards", participants can see a new side of and feel concern for each other.

Participants Expectations: The act of participants behaving according to what they think is required of them by the experiment or researchers. Participant tries harder and works better when observed by an experimenter. Fatigue - participant gets bored of doing the same actions again and again and therefore

has decreased performance. Practice - participant's performance increases due to them being able to practice the same actions.

Determination of the order of the training: To enable the trainer to first comprehend his / her role, it would be helpful if training as a concept is briefly delved into. It is recognized that the right mix of knowledge, skills and attitudes/behaviors, helps a job holder to perform tasks successfully. Organizations try to achieve this by: Proper selection of personnel, i.e., choosing the right person for the right job; and Human resources development - through training intervention - helping them to learn in order to bridge the performance gap, if any, and make them more proficient. The component of development may also be added to this process.

In order to achieve its overall goal of performance must lead improvement, training to the enhancement of professional knowledge and skills both at individual and collective levels. It should also equip personnel to respond appropriately to emerging challenges. Training should also bring about appropriate changes in attitudes and should that strive for unique synthesis between improvement of the individual's competencies and promotion of organizational objectives.

Adoption of the rules of the group: For the participants to feel responsible for their training from the very beginning it is recommended that they accept the rules of the training or make an "agreement". Every student is responsible for the execution of the "agreement". Cooperation is necessary for the emergence of complex, hierarchical systems. Why is cooperation maintained, when there is a conflict between self-interest and the common good? A set of answers emphasized agent similarity, in terms of kin- or group-selection and compace network communities, which is helped by learning of successful strategies. On the other hand, agene diversity in terms of noise, variation of behavior and innovation, as well as the changing environment of

the agent-community all promoted cooperation in different settings.

Assessment of group information level is one of the tasks for the teacher: A questionnaire or checklist with the questions on the training theme is usually used for this purpose. Polling results show the level of students' readiness and help the teacher correct the content and balance of the topics, adapt the training and make the exercises easy to understand. A questionnaire repeated after the training is over is very effective. Comparing the results, the teacher will be able to assess how students increased their readiness, which is an important measure of training efficiency.

Education: Whereas students often lose interest during lecture-style teaching, interactive teaching styles promote an atmosphere of attention and participation. Make it interesting. Make it exciting. Make it fun. Great teachers are observant, and responsive, always keeping an open mind about how to best engage their students and get them excited about learning—and that means considering trying out different interactive teaching styles in the classroom. Interactive teaching styles are designed around a simple principle: without practical application, students often fail to comprehend the depths of the study material. Interactive teaching is also beneficial for you as the teacher in a number of ways, including:

Measurable student accomplishments: Teachers making use of interactive teaching styles are better equipped to assess how well students master a given subject material.

Flexibility in teaching: Applying training methods that involve two-way communications will enable you to make quick adjustments in processes and approaches.

Practice makes perfect: Interactive instruction enhances the learning process.

Student motivation: Two-way teaching dispels student passivity, and when more students are engaged, you'll have much more fun too. Now is the time to start bringing life into your teaching styles. Here are some of the most effective ways to engage students.

1. Brainstorming — various techniques

Interactive brainstorming is typically performed in group sessions. The process is useful for generating creative thoughts and ideas. Brainstorming helps students learn to pull together. Types of interactive brainstorming include:

- ✓ Structured and unstructured
- ✓ Reverse or negative thinking
- ✓ Nominal group relationships
- ✓ Online interaction such as chat, forums and email
- ✓ Team-idea mapping
- ✓ Group passing
- ✓ Individual brainstorming

2. Think, pair, and share

Establish a problem or a question, and then pair your students. Give each pair sufficient time to form a conclusion, and permit each participant to define the conclusion in his or her personal voice. You can also request that one student explain a concept while the other student evaluates what is being learned. Apply different variations of the process—your students will be engaged, communicating, and retaining more information before your eyes.

3. Buzz session

Participants come together in session groups that focus on a single topic. Within each group, every student contributes thoughts and ideas. Encourage discussion and collaboration among the students within each group; everyone should learn from one another's input and experiences.

4. Incident process

This teaching style involves a case study format, but the process is not as rigid as a full case study training session. The focus is on learning how to solve real problems that involve real people—preparing your students for life beyond your classroom. Provide small groups of students with details from actual incidents and then ask them to develop a workable solution.

Summing up

On the heels of every topic introduction, but prior to formal lecturing, ask your students to jot down questions pertaining to the subject matter on 3×5 index cards. After you collect the cards, mix them up and read and answer the student-generated questions.

Typically, this procedure is designed to ensure that the participants share their impressions and feelings and express their wishes. Summing up can involve filling the "sheet of revelation," letters, questionnaires or surveys. An important component of training is the documentation of the student's progress, e.g., via photography. While summing up, these photos can be viewed to remind how the work was proceeding. Thus, training efficiently forms competence students' professional through establishing confident and comfortable а environment and the possibility of practically drilling the steps that are essential for future professional activities in general.

Case study method

The case study method is training by solving specific cases. The essence of this method is a collective analysis of a situation, finding a solution and a public defence of said solution. In the process of reviewing the cases, students gain the skills of teamwork, independent modelling of the solution, independent reasoning and defending their opinion. The method was first applied at Harvard Law School University in 1870.This method involves ambiguity in the solution of the presented problem, which creates a challenge for discussing the reasoning of proposed solutions and choosing the most appropriate one. Therefore, the result is not only knowledge but also professional skills and a well-formed personality and set of values.

The case which is viewed by the students is usually taken from a real professional area and is supported by visual materials, statistical data, charts and graphs, descriptions of how it is viewed by different people, reports, data from the media, Internet resources, etc.—i.e., the information that allows us to understand what is described in the case. When future teachers are trained a case may be, for instance, a conflict between a teacher and parent based on a student's progress recorded in the class register; the decisions of teacher's councils and boards recorded in the minutes; the student's character as described by classmates, teachers and a school psychologist; and other documents, including school statutes.

The structure of the case has three parts: two for the student and one for the teacher. The subject section describes the situation and allows the students to characterize all of its circumstances; the information section reflects the details of the support upon which a final decision is made; and the methodical section, designed for teachers, determines the location of the case in the structure of the course, tasks for students and pedagogical support for solving the situation.

The solution of the situations offered to the students involves a variety of analytical methods: problembased, cause and effect, praxeological, axiological, situational, prognostic and other types of predictive analysis.

The actions of students as part of the method are productive in the following succession: 1) familiarity with the situation, its content and features, 2) the allocation of the main problems, the factors and personalities that can really act, 3) offering solution concepts, 4) analyzing the consequences of the decision and 5) selecting the optimal variant, predicting consequences, an indication of the potential problems, mechanisms, prevention and solutions.

The activity of a teacher using this method includes two phases. The first includes creating the case, formulating the questions for analysis and developing methodological software support materials for the students and their independent work. The second phase includes the classroom activities of the teacher in discussing the case, where he/she makes introductory and closing remarks, organizes discussion or presentation, supports a business atmosphere in the audience and acknowledges the contribution of students in the analysis of the situation.

The method of peer feedback

The method of peer feedback is where one student provides another student ongoing feedback about his/her actions deeds and decisions. A look at their actions and reactions from the outside allows the future specialist to better understand his/her strengths and weaknesses and develop adequate selfesteem. The method of peer feedback is based on information (objective and honest feedback) when performing tasks associated with the development of new skills and performing current professional duties. The participants (the one who acts and those who analyze and give feedback) absolutely are equal.Feedback can be provided after discussions, educational tasks, etc. Practical performances, students training, which directly solve in professional problems, has extraordinary value and opportunities for the implementation of this method. For example, such feedback for future teachers can be given after the lecture or additional training and educational activities, etc. The students, of course, need to be trained to give objective feedback to make informed judgements and become competent to provide information before using this method. Thus, the method of peer feedback provides more efficient development of the competences of future professionals through continuous monitoring of activities and opportunities to provide timely assistance and correction of deficiencies.

The method of action learning

Action learning is a style of learning in which individuals control their own learning experience, unlike traditional education methods that rely on the development of content by training organizations and delivery by teachers/instructors.Action learning (also known as personal learning) is rapidly gaining popularity among individuals regardless of their stakeholder status such as employees, customers, associates and students. And, with good reason.

People now have the ability to assert control over their own learning experiences, and they are doing so in ever greater numbers. That is why action learning is generally regarded by training organizations as more than a mere trend; it is considered a profound and permanent sea change in learning. The stimulus, clearly, is the development of Internet-based technologies like the search engine. For millions of people, exploring the Internet has become the principal fact-finding method for resolving informational challenges large and This capability, combined with equally small. convenient social media tools, has made the Internet the first option for individuals who seek greater responsibility for their own learning experience. Within the workplace, individuals are similarly reaching for the Internet to supplement formal training, often with the support and encouragement of training departments. Accommodating the technology-based learning priorities, social or other informal learning style - is increasingly viewed.

II. CONCLUSION

To conclude the review, we note that active learning methods modify the role of the teacher from the translator of information to the organizer and coordinator of the educational process and make it possible to form complex competences in future professional specialties via student activities that manifest as closely as possible the content of professional work. This natural talent of modern students must be exploited constructively by engaging them in technology based learning environment. Irrespective of the response and performance of the students in any subject, teachers must take the moral responsibility to engage them actively through any means, so as to increase the percentage of students who find the classroom teaching interesting. Endeavour of a teacher must be to reach out to all the students in a class to know the temperament of individual students, so that he can apply any suitable interactive technique to teach them effectively

III. REFERENCES

- A.M. DerkachCase-method in teachingSpetsialist, 4 (2010), pp. 22-23
- [2]. R. Korsiny, A. AuerbakhPsychological Encyclopedia, Piter, Saint Petersburg (2003)
- [3]. A.P. PanfilovBasics of Management. Complete Guide in Case-Technologies Piter, Saint Petersburg (2004)
- [4]. W. Swap Creating Value with Knowledge: Insights from the IBM Institute for Business Value, Alpina Business Books, Moscow (2006)
- [5]. I.V. VachkovBasic Technologies of Group Training Izd-vo "Os-89", Moscow (1999) Peer review under responsibility of Far Eastern Federal University, Kangnam University, Dalian University of Technology, Kokushikan University.
- [6]. G. Zilgalve and I. Sennikova, "The impact of interactive teaching methods on development of student's creativity", 2012.
- [7]. M. Sprenger, "How to teach so that students remember for lifetime", Association for Supervision and Curriculum Development (ASCD), 2005.Misra and Kate N. Nagaraj, "Security in Wireless Ad Hoc Networks", in Book The Handbook of Ad-Hoc Wireless Networks (Chapter 30), CRC Press LLC, 2003.