



RESEARCH ON GRADUATE MICROBLOGGING VIRTUAL TEAM IN PROJECTS LEARNING

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ABSTRACT

With the rapid expansion of graduate students, higher demand of using information technology in graduate education arises. Based on the analysis of the problem existing in the traditional graduate educational programs, we propose the microblogging virtual learning team for graduate education. We also explore the advantages and characteristics of microblogging virtual learning in project learning.

Keywords: *Microblogging Virtual Team, Project Learning, Graduate Education*

1. INTRODUCTION

Training of graduate students has their own uniqueness. The main guiding should be Self-learning and scientific research, which is different from undergraduate training. Tutor trains graduate students mostly relying on their research work, and the assessment of graduate students often combines with their research performance. However, along with the expanding of postgraduate enrollment year after year, the number of tutor doesn't keep up with the number of students. Tutor must guides more and more students, student-teacher ratio and the degree of alienation between them increasing, so that they have little opportunity to meet except for class time, which cannot create a good academic atmosphere between instructors and students, or exchange ideas and discussion among students and students. To change this situation, we set up a microblogging virtual team to gather different directions student of one tutor or students of different tutors for communication and cooperation, regardless of space, time, tutor and so on. Team members study and work jointly, to develop research personnel of cross-disciplinary and multi-field complex type, to train their team spirit and communication and collaboration capabilities, which is essential for the personal development of graduate students in the future.

2. THE MEANINGS OF MICROBLOGGING VIRTUAL TEAMS AND PROJECTS LEARNING

2.1 Micro-blogging Virtual Teams.

As a hot topic of modern management, virtual team is an executive and efficient organization which gathers those people with different knowledge and specialty from different regions through information technology of the network to achieve a common target [1]. It is a decentralized group which breaks through boundaries in space, time and organization. Virtual Learning Team is one form of learning organization. Through Internet and other means of communication, Learners learn together constantly and break their own limits of ability, create truly wanted results so as to cultivate wholly new, forwarding-looking and open way of thinking to realize their common ambition. Generally, Virtual Learning Team has the following three characteristics: firstly, there is a spatial distance between members and they communicate through Internet. Secondly, members have the common vision of studying and work hard for this common vision. Thirdly, members should be equal, trust each other and focus on the importance of communication. Graduates microblogging virtual team is a virtual learning team composed by postgraduates and tutors by using a microblogging platform. Such a team will break through limitation in distance and space, truly realize a prompt information updating and sharing. Moreover, it can gather students of different field from different schools together to cooperate to complete the research project. Postgraduates virtual team construction will promote a better



communication between students and specialists as well as that between students and students. Students will get the latest research information through discussion among team members, understand professional knowledge deeper, widen their vision and develop better logical thinking ability accordingly. The process of establishing goals and culture can develop students' sense of teamwork, as well as coordination skills under different cultural background. Through teamwork and knowledge sharing, students will learn not only explicit knowledge but also tacit knowledge such as work experience, research view and ways of thinking etc. through close interaction with teachers and scholars.

2.2 Projects Learning.

Project learning is a subject of learning during which the learner selects and uses optimal resources fully to get a more complete and specific knowledge after practical experience, absorption and exploration innovation, and finally form specialized skills and realize development in a specific research project. During the learning process, the project is no more than a carrier; the true essence is to study [2]. On comparing with traditional acceptance learning form, project learning pays more attention on students' problem consciousness, critical thinking, independent learning ability and quality of teamwork. Therefore, project learning is not only a teaching model, but also an organic carrier to train students to undertake scientific research. It is an effective way to help postgraduates study with research and innovate with research.

1. Characteristics and contents of project learning. Projects make effective use of resources to achieve a specific goal basing on a series of unique tasks which are relative with each other. Project learning is a project-centered study and research model, which carries out scientific research with a variety of resources and solves kinds of problems encountered during the project process in a certain period. For graduate students, the subject of their teacher is the project. Content, activity, situation and result are four elements of Project learning [3]. Content is an accumulation of complex, non-predictive, multi-disciplinary knowledge required for the project; Activity is various acts learners applied to settle relative problems in use of research methods and technical tools; Situation is the physical environment and virtual platform supported by IT where learners do their researches; Result is knowledge or skill learners obtained through the exploration activities during or after the

learning process. As a new learning concept, project learning is different from the traditional teaching method. Core of the method is to complete the project which lay stress on teamwork and combination of research and learning. Generally speaking, project learning should have all the following characteristics: first of all, it should focus on the steps and methods proposed by the project; secondly, it should embody multi-disciplinary knowledge and cross-integration; thirdly, there should be a variety of cognitive tools and information resources be applied in the process; fourthly, division of labor and finally, it should be ended by fully completion of the project.

2. Advantages of project learning. Project learning takes the period how long the project takes as a cycle. It makes postgraduates research training be normalized and process-oriented, and helps students promote their research quality and comprehensive capacity to a large extent. First of all, here we should mention the cultivation of graduate students' awareness of innovation. Postgraduates will do extensive collection basing on previous experience, and then enrich their own knowledge with unique personal experience. In the implementation process, they always find the gap between their understanding and knowledge application, which will stimulate them to review the literature in order to enhance the understanding of knowledge. Secondly, cooperation and emotional ability. Nowadays, matters students facing with become more and more complex. The ability how they cooperate with each other becomes essential to them. Emotion plays a very important role in project implementation. Finally, self-learning ability. Along with the constant updating of knowledge updating and problems rising, we must obtain a range of skills to avoid being eliminated by the age. The project learning gives graduates basic scientific research ability such as innovation and critical thinking, and the opportunity to study closely. Once they go to work after graduation, students will adapt quickly, which must contribute to their employments.

3. LEARNING CHARACTERISTICS OF POST -GRADUATES

Cultivation of innovation, independence and autonomy should be particularly strengthened in postgraduates' cultivation. As an important stage of talents cultivation, much important academic achievements are all generated during the period. Graduate study is characterized mainly as follows:



1. Teaching and learning can be separated with each other; network technology enables their activities occur in different classrooms; multimedia and network technology play a prominent role in teaching activities.

2. Research teaching is a student-centered model that requires specialized learning. Tutors should enhance students' practical learning and discovery ability in the process. One important characteristic of postgraduate's cultivating mode is that they have a relatively large active space. The main purpose is to protect and encourage postgraduates' research interest and making the research based on the individual initiative. Generally, it doesn't impose specific research method on every student. Otherwise, it encourages students to ascertain their research orientation according to their own interest, ability and actual condition in the range of the disciple concerned. In many universities, instructors are chosen by the postgraduates themselves, so in this way, postgraduates can find out their instructors according to their own research orientations instead of being assigned by the departments or colleges. More often than not, members of Steering Committee also are nominated by the postgraduates or determined by the discussion with the instructors. Postgraduates also have a large degree of autonomy in term of course selecting, and they determine the compulsory courses and selective courses they will take, and then discuss them with instructors so that they can receive a lot of advice and adjusting suggestions.

3. Discussing, communicating and self-learning are dominated in this method while the target of traditional lecture-style teaching is to support student in their learning.

4. Another major characteristic of postgraduate education is that it mainly focuses on the scientific research competence cultivation, which highlights the scientific research that runs through the whole cultivation. One major way out for quite a few well-known universities is to put equal emphasis on cultivation and scientific research. The intended quantity and orientation of postgraduates' recruitment are often connected with teachers' scientific subject requirement that concerned. Scientific Research Center mainly is located in the universities, and universities are the major institutions that grant the research funding. More often than not, the scale of postgraduate recruitment of one subject is in proportion to the scale of funding they will be granted, which guarantees the consistence between the postgraduate education and scientific research from the point of funding. Many

postgraduates joined the scientific research task of their instructors directly after admission, becoming members of research group and combining organically the subject studying and research. As being members of research group, some postgraduates have the chance to come to the frontier of the world scientific technology research. Such mechanism as majoring around scientific research in one way creates a platform for the postgraduates to learn academic knowledge, and in other way, let them be part of scientific research in-person, get familiar with the standards and procedure of scientific research, as a result, they can greatly practice their scientific research ability of postgraduates.

4. PROBLEMS IN TRADITIONAL PROJECTS LEARNING

1. The performance is not good. In order to save human and material resources for survey again, some project learning often adopt literature survey and use all existing data directly. Their conclusions cannot keep up with the time or act as guidance. Some project study conduct field survey, but are mostly limited in sample surveys. In that case, samples are lack in quantity, which lead to errors in conclusions.

2. Members of project are lack in a sense of belonging. The past project learning usually organizes a brief meet for clearing the processes and contents at the beginning, and next the members act independently. As a result in loneliness virtually, they will feel helpless when they encounter problems. It appears to be a team, but not in fact.

3. Because of little communication, the relationship among members is loose. Graduate students have their own research for their business. There is few chance for them to exchange with each other, so they are unable to get feedback and evaluation in time.

5. THE PROBLEMS SHOULD BE PAID ATTENTION TO IN SETTING UP THE MICROBLOGGING VIRTUAL TEAM

The establishment of postgraduates' virtual Learning Team is to better adapt to the universities' requirement of scientific research and the talent cultivation, which is the fundamental goal of the establishment. We oppose to the idea of setting up the virtual Team purely because they want to set up the virtual Team. In actual application,



postgraduates' virtual Learning Team needs to pay special attention to the following problems.

5.1. Selecting Of Team Members And Studying Subject

When establishing a virtual team, one must plan reasonably and choose scientifically as well as apply the team flexibly according to the nature and characteristic of scientific research projects. A virtual team with different subjects and different universities is more suited to some relatively weak subjects so that to win various kinds of resources and broaden the vision for these postgraduates of these subjects. The proceeding of different subjects and different scientific research requires different attitudes. For example, the basic scientific research can adopt the form of virtual team to a large scale because students in science and engineering often have an international applicable means of expression so they can form a unified academic standard and language in the area of academic communication, but humanistic and social science with a strong cultural and national property when taken into application, needs specially care as it hardly has a recognized standard form in the field of academy.

5.2. Establishing The Learning-Oriented Team

The postgraduates' virtual team should be a learning-oriented team that represents the theory's spirit of learning organizations. The members of postgraduates' virtual team often communicate their current running states and they require each other to modify the deviation from the common vision by themselves, coordinate the conflict between the personal goal and organizational goal and impel its members to share the trying process and achieve its happiness. The team needs to develop a learning atmosphere, create groups' educational environment. Besides, the team is responsible to impel the postgraduates in the team to exchange ideas in order to make the knowledge known to all, even activating the group's wisdom mechanism formation. It is necessary to foster the sense of trust among the postgraduates so as to reduce the sense of loneliness when operating the scientific project by himself or herself. This can enforce their cooperating spirit and form a unified strength.

6. CONSTRUCTION OF THE MICROBLOGGING VIRTUAL STUDYING TEAM OF POSTGRADUATES

6.1 Establishing Team Goal and Task

The constitution of the microblogging virtual team of Postgraduates calls for a specific scientific

research goal. Virtual team by itself builds up around the project so the members in the virtual team must understand clearly the goal they intend to achieve and tasks they are going to take, a mutual understanding between goal and tasks. Targeting and specific goal can be motivating in term of task achievement itself, which will support the follow-up cooperation and study greatly. A team's goal is accomplished by the effort of the whole group members. Therefore, when setting up a goal, a group's capacity should be fully concerned together with the actual condition, plus with the recognition from the whole group members. It's better for the members to take part in the goal setting process consciously rather than being imposed by the manager. Besides, the individual goal should be link to the team's overall object because goal's connectivity can stimulate the motivation of accomplishing the goal among the members.

6.2 Selecting The Team Members And Communicating Platform

Universities and instructors can decide to recruit different members according to different scientific research task in order to bring the postgraduates from different backgrounds into full play. Of course, in recruiting members, the idea of recruiting members from different subjects can be especially concerned, because this kind of members' combination is conducive to the creative ideas generation. When developing the postgraduates' virtual team, the knowledge backgrounds, study orientation, subjects and so on should be taken into consideration. And also the team should be equipped with necessary techniques and abilities together with tacit tendency for the cooperation to end up with outstanding results. The members in the team should develop a sense of group identification, regarding themselves as an important factor in self-realization. In term to the goal of the team, they also fully devoted to the goal and are willing to mobilize their energy and show their talents in carrying out the goal. One obvious characteristic in microblogging virtual team of postgraduates is that it must take the computer as a medium and take the advantage of microblogging to realize the remote communication and coordination.

6.3 Selecting Team Study Mode

The highest level in the studying mode of Virtual team is that, with the help of technique means, such as electronic media and computer studying support system, all the members in the team can share the knowledge and experience of members from different time and different space and also can realize the team's dynamic regulation so that it can



continuous better the organization .The microblogging virtual team of postgraduates mainly adopts the information platform of microblogging in order to have a real time communication towards project proceeding and project procedure.

6.4 Setting Up The Evaluation Index System

In the process of setting up the performance evaluation index, one should evaluate whether the goal has been achieved or not and behavior effect of the undertaking tasks as well as other invisible factors, such as studying level 、 continuous cooperation inclination and degree of satisfaction and so on. It evaluates not only what the members have learned ,but also other factors as team cooperation, planning control responsibility consciousness as well as the process of team cooperation. The latter one is the factor required by many organizations. This evaluation mechanism will perfect and improve other techniques besides academic achievements, which will help their work a lot and accomplish their evaluation index and feedbacks. After setting up the evaluation index, the team can have a comprehensive evaluation towards their performance. In the process of evaluation, the team needs to pay attention to the behavior effect and synergistic effect between interpersonal relationships. After evaluation, one should present the result to the organization in order to better manage the newly founded virtual team.

7. ADVANTAGES OF GRADUATE MICROBLOGGING VIRTUAL TEAM IN THE PROJECT STUDY

7.1 Improving The Performance Of Project Learning

Microblogging Virtual team gets help from microblogging information platform to exchange process and knowledge of the project timely, which greatly reduce human and material resources of project learning. In this learning team, a large part of the microblogging information is given by teachers, relevant experts and scholars. Such reliable, state-of-the-art and useful information has a great help for the team to improve its learning performance. Tutor can teach students explicit knowledge by means of information dissemination and learning ways, for example, how to analyze problems, how to reason logically. In additions, teachers are able to shield useless or wrong information to prevent students from interference. As a follower, students obtain the information provided by teachers and do effective feedbacks, making some good suggestions to the teacher or even supplementing teach content by proposing a

different method to solve the problem. It will expand the breadth and depth of students' knowledge, and promote teachers to improve their knowledge structure and teaching experience. Finally, the virtual team can steady the knowledge created in the process and update existing knowledge with dynamic knowledge management platform for the future learning, and avoid the waste of resources.

7.2 Enhancing Feeling Of Ownership And Decreasing Loneliness

With modern information technology, microblogging virtual team has opened up a variety of formal and informal communication channels. All kinds of synchronous and asynchronous communication tools make it possible to contact with each other among the team members at any time anywhere, which will meet students' flexible and sovereign needs formally. At the same time, this way also creates an open, relaxed psychological atmosphere, making members feel their concerns and then improve their awareness of a member of the team to have strong sense of belonging. Team members are not familiar to each other in previous virtual learning teams, so it is difficult to develop mutual trust. Many members of graduate microblogging virtual team have the same teacher, and they are more familiar with each other. The follow function of microblog strengthens comprehension and touch between followers and information editors. The equal status helps graduates communicate and interact better to get the most needed information for both sides. In this process, instructors have more opportunity to pay attention to each student's different reactions to obtain a deeper understanding of students, which will benefits their personalized training to improve the quality of postgraduate education.

7.3 Enhancing Communication Among Project Members.

With information technology, high-performance virtual team build the "field" of knowledge creation, which can maintain trust between members and loyalty to the team, based on this, the frequent formal and informal sympathetic promote the emergence, share and integration of knowledge, especially for tacit knowledge, and accelerate the knowledge innovation. microblogging platform collect the advantages of many information tools like website, mobile phone and chat tools, so can greatly reduce the restrict of use, users can study through website, mobile phone or chat tools in anytime, anywhere, without any limit; users can follow anyone, or do not want followed by



someone, the scope of information release and the source of receive information can also be effectively controlled by users[4], the discussion can be started in any range, which ensures effective communication and strong interaction between users; The simple and short design of microblogging making its content updated very quickly, communication are more convenient.

7.4 Improving The Quality Of Postgraduate Education.

The quality of postgraduate education is reflected in the breadth and depth of knowledge, the ability of analysis and problem-solving, and the ability of self-learning acquired by them. Graduate education receives social recognition by providing the talents, so meet the social needs is the measure of the quality of graduate education. Introduce the virtual team to graduate project study with microblogging, improving the efficient and effective of team work, which can promote the breadth and depth of knowledge, ability of problem-solving, information literacy and self-learning ability of learners, thus improve the quality of graduate education and social reputation.

8. SUMMARY

It is significant to improve the quality of graduate education, as well as to achieve innovation. With advanced information tools, we should form graduate microblogging virtual learning teams to improve the quality and performance of graduate education, thus to break the space, time limitations, and other constraints. Moreover, it can gather the cross-disciplinary, multi-field compound research talents, and train teams' awareness, communication and collaboration. Therefore, they can come over practical work to develop a truly useful high-level talent.

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