E-learning Strategy of EFL Pedagogy in Talents Management

Zhao Shuo

***Abstract*—This paper's main aim is to identify and discuss the areas of E-learning strategy of EFL(English as Foreign Language) Pedagogy in talents management that are important in describing the state of university teaching and students learning, specifically related to the need for systems and actions for student support system. As a basis for illustrating E-learning strategy of EFL pedagogy in talents management the paper presents different theoretical approaches to distance teaching and learning such as student independence and autonomy, teaching-learning conversation, guided didactic conversation, continuity of concern for students and cooperative learning and constructivism. The paper further discusses the conflict of interest between students who prefer cooperative learning methods and students who both prefer and need a high degree of flexibility to be able to enrol and succeed in E-learning programs. The paper also discusses different models explaining E-learning education of talents management. High quality E-learning education systems have traditionally emphasized student support and continuous concern for management from enrolment to completion. It is the author's view that theory and practices from online education are valid for E-learning and should be implemented into E-learning practice for the sake of talents management. Finally, the author presents a theoretical framework for student support services in online distance education with his own study. The conclusin of this paper is to identify the pedagogical principles underlying the teaching and learning activities that constitute effective E-Learning in talents management. An analysis and synthesis of the principles and ideas by practicing E-learning will also be presented, in the perspective of deploying an effective Learning Management Systems (LMS) as means of EFL pedagogy in talents management .**

***Index Terms*—E-learning, EFL, Pedagogy, Talents management**

I. E-LEARNING AND THE NEW SCIENCE OF LEARNING

It is found that classroom design should focus on active learning, metacognition and a transfer of learning. The new science of learning encouraged classroom to be learner centred and community centred. E-learning reflects these concepts in a variety of ways:

E-learning applications can be personalized, provide feedback, and utilize navigation to individual users to guide their learning path.

E-learning applications involve communication tools that foster cooperation and collaboration between students despite temporal or spatial constraints.

E-learning applications can teach students fundamental concepts with real world treatments. Students can communicate with professional scientists or leaders, observe up to date scientific data and simulations, and participate in projects that expand a knowledge base.

E-learning applications offer unique technical advantages, suggesting new opportunities in how to design a course or learning experience. Reusable components that are scalable allow the ability to easily customize, modify and deploy educational content in EFL talents management.

II. PEDAGOGICAL PRINCIPLES FOR E-LEARNING IN TALENTS MANAGEMENT

Essentially, E-learning is another way of teaching and learning in talents management. In its broadest definition, E-learning in China includes instruction delivered via all electronic media including the Internet,intranets, extranets, satellite broadcasts, audio/video tape, interactive TV, and CD-ROM. All efforts to implement E-learning will eventually move towards total automation of administrating the teaching and learning processes by means of a software known as Learning Management Systems (LMS). E-learning is a fairly recent phenomenon but some pedagogical principles have not been included[1] (Bixler & Spotts, 2000). Most of the pedagogical principles that apply to the traditional classroom delivery method also apply to E-learning. However, these principles need to be extended to accommodate and provide for the rapid changes in technology. Pedagogical principles must form the very basis for inclusion of features in LMS. Better still, these principles should be integrated into the LMS where every feature included is accompanied by explicit guidelines on the best method of their use to effect pedagogically sound instruction in talents management.

A recent search on the Internet for an LMS in talents management that incorporates pedagogy in the design of the software did not yield any fruitful results[3]. Most LMS vendors deliberately distance themselves from pedagogical issues, often adopting an indifferent attitude or sometimes even trying to disguise it as a praiseworthy act of impartiality. This finding is coherent with Firdiyiyek's argument[2] that there is a serious mismatch between the abundance of features in LMS and the lack or total absence of explanation on the pedagogy underlying the inclusion of these tools in talents management. Also lacking are guidelines on how to design, develop, deliver, and manage pedagogically sound E-learning materials. This is a clear indication that most LMS providers perceive themselves as mere providers of technology. Consequently, while every technologically possible feature is included in LMS, there is an absence of overt pedagogical integration. Vendors of LMS often contradict themselves. On the one hand, they claim that they

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can only provide tools for E-learning, but cannot tell educators how to use these tools to teach; while on the other hand, they boast of their ability to provide "complete E-learning solutions."[5] E-learning cannot continue to exist without pedagogical techniques in talents management, nor without incorporation and consideration of the domain in specific knowledge.

The current situation poses a serious challenge to any organization embarking on implementing E-learning. Often many features and tools of LMS are left unused. This is a terrible waste of resources since these tools account for the cost of implementing E-learning. In a worse case scenario, the tools may end up being used in a manner entirely opposed to pedagogical principles, and in turn, will hamper learning. In either case, the impact inevitably will be reflected in the return on the E-learning investment. Pedagogical principles are theories that govern the good practice of teaching. As far as E-learning is concerned, the good practice of teaching or instruction is well represented in an eclectic linking science known as Instructional Technology. It is a growing science because various elements of the good practice of teaching are still in the process of being discovered by means of trial and error. Luckily, some of these trials have become subjects of funded research, the results of which have been documented and made available on the Internet. One such research project was conducted by the Institute for Higher Education Policy. The research draws upon the experiences of pioneers in E-learning comprising of six institutions of higher education in talents management. The deliverable from this extensive study is a set of quality benchmarks distributed along seven parameters. The seven parameters are:

- Institutional support
- Course development
- Teaching and learning
- Course structure
- Student support
- Faculty support
- Evaluation and assessment

The desirable attributes that should characterize an E-learning environment will be discussed in this paper, drawing upon the above pedagogical principles through reflecting on personal experiences where it is possible in talents management.

III. E-learning Pedagogical Issues and Talents Management

A. Teaching and Learning Philosophy and Theories of Teaching and Learning

It is our firm belief that our perception of teaching and learning has important implications for how we will look at organization models, administration and student support systems for online education. Keegan[6] categorizes distance education theories into three groupings:

- Theories of autonomy and independence
- Theory of industrialization
- Theories of interaction and communication

It should be noted that until the 90's the theories of interaction and communication mainly treated communication between the tutor/helping organisation and the individual student, while recently theories involving collaborative learning, group interaction and social constructivism emphasising learning as a process and result of a collective experience of the learning group have received much attention.

B. Independence and Autonomy

Moore is specifically known for his development and refinement of the theory of distance education as independent learning. His work was clearly based in a tradition of autonomy and independence of adult learners advocated by scholars such as R. Manfred Delling in Thübingen, Germany and Charles A. Wedemeyer in Wisconsin, USA. Moore's theory was developed over more than 10 years. The main dimensions are 'transactional distance' and 'learner autonomy'. It is clear that in his earlier writings Moore put more emphasis on autonomy – as distance teaching programmes by their nature require more autonomous behaviour by the learner. To succeed in such programmes, the learner must be able to act independently and autonomously. (In this connection it can be questioned whether this should be seen to be a necessary condition for enrolment, or that the institution must take responsibility for preparing their students and train them to become autonomous learners, which again would be one important aspect of student support services in e-learning.)

According to Moore[9] "It is the physical separation that leads to a psychological and communication gap, a space of potential misunderstanding between the inputs of instructor and those of the learner and this is transactional distance."

Transactional distance is not the same as physical distance but built up of the two qualitative and continuous variables labelled 'dialogue' and 'structure'. The dialogue describes the transactions between teacher and learner, but is not used synonymously with interactions, as dialogue is described as interactions having positive qualities. The structure of a programme is determined by the nature of the media being applied and by the teaching philosophies of designers and constraints imposed by the educational institutions. Structure describes to which degree the programme is able to be responsive to individual student's needs. According to Moore the transactional distance of a programme increases when level and quality of dialoguedecrease and structure increases. Program with low transactional distance have high dialogue and low structure.

C. Guided Didactic Conversation – Teaching-Learning Pedagogy in Talents Management

Long before the term distance education had been established and the terms for this concept were correspondence education, home study and independent learning, Börje Holmberg(1980)[3] argued in favour of a conversational approach to course development, and later followed this up by attempts to formulate what can be called a theory of distance education in which empathy between the learner and the teaching organisation was assumed to favour learning. In his earlier writings, Holmberg used to denote his theory of distance education as 'guided didactic conversation'. Now he prefers the term 'teaching-learning conversation'.

In recent writings Holmberg(2001)[4] summarises his basic theory concerning learning, teaching and organisation/ administration, as follows:

Distance learning is guided and supported by non-contiguous means, primarily pre-produced course materials and mediated communication between students and a supporting organisation (university, school etc.) responsible for course development, instructional student-tutor interaction, counselling and administration of the teaching/learning process inclusive of arrangements for student-student interaction. Distance education is open to behaviourist, cognitive, constructivist and other modes of learning.

Feelings of empathy and belonging promote students' motivation to learn and influence the learning favourably. Such feelings are conveyed by lucid, problem-oriented, conversation-like presentations of learning matter expounding and supplementing course literature, by friendly mediated interaction between students, tutors, counsellors and other staff in the supporting organisation as well as by liberal organizational-administrative structures and processes. These include short turn-round times for assignments and other communications between students and the supporting organization, suitable frequency of assignment submissions and the constant availability of tutors and advisers.

When analyzing the teacher-learner conversation, Holmberg stresses that the conversation includes both non-contiguous conversation between the live teacher and student and also learning activities, such as thinking, processing information and other cognitive processes taking place when the student interacts with the pre-prepared learning materials including its 'built-in tutor'. He specifically refers to the educational institution as the supporting organisation.

Holmberg agrees with Keegan that modern developments, including online learning, have not changed the content of the theory, although he clearly values that the use of new computer technology that provides the basis for great improvements of teaching-learning effectiveness. Communication on the net with its great possibilities for spontaneous interaction underlines the importance of the empathy approach and the conversational style. Holmberg (2001) finds that the relevance of the theory is now greater than when it was first developed.

D. Cooperative Learning and Constructivism

McConnell (2000)[8] gives an introduction to computer-supported cooperative learning. Cooperation in learning is not new. Students have formally and informally cooperated in learning processes, however, as a way of thinking about and conducting learning processes, 'cooperative learning' is a fairly new concept. Planning and conducting cooperative learning means formalising what happens informally in many settings. According to Muller[10] there are three possible reasons for cooperating:

- For external rewards – in education, e. g. achieve better grades, diplomas and degrees
- To share activities
- To form and further relationships

Fig.1.Components in Cooperative Learning and Constructivism of Talents Management.

Bearing the increasing state of super-complexity in mind, it is important to realize that students in addition to learning and understanding existing knowledge, they should also produce new knowledge in order to be a part of the "knowledge society". In order to respond to these demands, new forms of teaching and learning are required that build upon the possible interconnected nature of goals, tasks, resources, roles, pacing and social structure in talents management. Often the educational system can bee seen as one that encourages competition and not cooperation. Usually students are required to do the same work, and results are compared and also a limited number of high grades are granted. The students compete on a zero-sum basis. Whatever one person wins, others lose.

In cooperative learning the theory is that everyone wins and no one loses. The learning process is not seen as an individual pursuit concerned with accumulating knowledge, but as part of a social process where students help each other to develop understanding in an enjoyable and stimulating context. The learning is process driven and learners must be involved in the social process and pay attention to this process to achieve their desired goals. The outcomes are not only academic, but involve increased competence in working with others, self-understanding and self-confidence. The learning activities may end up in group products, which would not be achievable if learners worked individually, or the process may consist of learners helping and supporting each other in achieving individual learning goals.

The developments of online learning have spurred interest for computer-supported cooperative learning. Computer-supported cooperative learning is based in socially oriented learning theories, such as 'constructivism' or 'social constructivism'. Emerging from the work of Piaget and followers, the role of peer interaction in cognitive development has been influential for our concept of learning. Learning is seen as a construction of meaning in interaction with others (teacher and fellow students). Knowledge is constructed in social groups.

A meta-study by Johnson & Johnson (as cited in McConnell, 2000) [8] concludes that cooperative methods lead to higher achievement than competitive or individualistic methods:

- Students in cooperative learning environments perform better
- Students in cooperative groups solve problems faster
- Students in cooperative work use elaboration techniques and meta-cognitive strategies more often than those working in competitive and individualistic situations

- Higher level reasoning is promoted by cooperative learning
- Students in cooperative groups discover and use more higher-level strategy methods
- New ideas and solutions are generated in cooperative learning groups that are not generated when people are working on their own
- When individuals have worked in cooperative groups, their learning is transferred to situations where they have to work on their own.

E. Flexibility

In online education, there is a conflict of interest between many students who prefer individual flexibility and educators who promote collaborative learning. Many students choose to study online because they want or need individual flexibility. They have full-time jobs and family responsibilities, and many are reluctant to participate if it means relinquishing high quality family life and job achievements. They need flexible education: education that allows them to combine job, family, and education in a manageable way.

Figure 1 illustrates six dimensions of flexibility that many individual students want. Many institutions (among them NKI) have put major emphasis on designing online courses to be flexible concerning time and schedules. It is a great challenge to develop online learning environments that support this individual freedom as well as collaborative learning. This challenge is discussed in the theory of cooperative freedom (Paulsen, 1993, 2003) [11]. There is no doubt that design and administration of student services is related to how the teaching learning model emphasizes individual freedom in learning relative to collaborative learning.

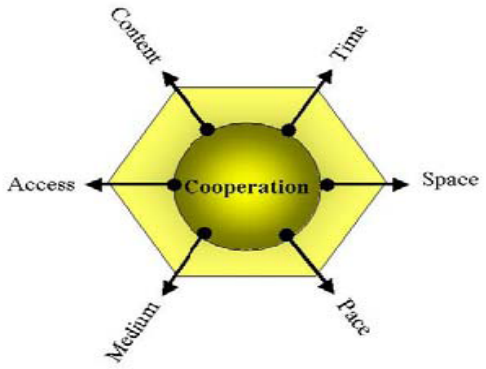

Fig. 2.The Hexagon of Cooperative Freedom.

IV. LMS System in Talents Management

To make a good learning or study environment, the course developers must bear in mind something called "constructive alignment", this process denotes the aim of removing inconsistencies between the curriculum, teaching methods, assessment procedures, educational environment and learning objectives. Clearly defined learning objectives are crucial. Instructional design must articulate educational purposes and construct tasks and learning activites appropriate to those purposes.

When the goals and the study environment have been established, the students must be given access to resources to work with in order to achieve the goals. The course developer thus has to map the learning-enhancing resources for each section and then give access to or produce these resources. In order to support the student in finding her/his way in a "sea of information", it would be advantageous to give the student more resources than s/he can use. The crux is that s/he must learn to get an overview of the mass of information and then critically pick and choose. Learning resources can be the Internet, textbooks, articles, summaries, graphics/photos, animations, on-line lectures (video), on-line lectures with power point slides, video clippings, quizzes, on-line auto-correcting self-assessment tests etc. The learning goals focus somewhat less on knowledge acquisition by individuals, and more on knowledge-generation with others.

An effective learner is versatile and can actively utilize different strategies and approaches for different contexts and purposes, for example gaining understanding from texts, creating knowledge with others through a project, actively listening to an exposition, building dialogue with people of different stances and so on. Effective learning advances effective learning processes: distinctions between process and outcome decrease.

Increasingly, transferable generic skills – which it is expected will be required for future employment – are being specified as learning objectives. For instance, adaptability, creativity, communication and social skills, problem solving, organization, time management, being able to work independently, meta-cognition and the use of information technology are being identified as important as are personal competencies which develop citizenship. What matters is no longer to massively store facts, but to sort them, integrate them and reveal their relationships. Facts are now instantaneously accessible, they are no longer the first and foremost object of learning. Handling them is what matters.

It seems the more time the student can spend collaborating in problem-solving with peers, the better talents management works well. Co-operative cultures and group investigation methods give better academic results. Learners develop interpersonal and management skills, and improved communication skills and positive multiethnic relations. The effective learner is described as active and strategic, skilled in cooperation, dialogue and creating knowledge with others, is able to develop goals and plans and monitors his/her own learning, reflection on the process of learning is believed to be an essential ingredient in the development of expert learners.

Experience indicates that tutor follow-up is crucial. When individual assignments and group assignments, including "Tutor Marked Assignments" (TMAs) [7] are given, the tutor must call or contact students who have not contributed within the deadline. These types of collaborative studies entail that the pure "individual constructivist" approach cannot be followed. Studies anytime or anywhere are not quite compatible with social constructivist collaborative studies. That means group members depend on each other's contributions at correct timing in talents management.

When an on-line course has been planned, with academic content, generic skills to learn and practice, and a meta-learning environment with study guide, an archive of

resources is available and all parts have gone through a process of constructive alignment, the management can be constructed in a "Content Management System" (CMS). The CMS version can then be incorporated in a "Learning Management System" (LMS) to facilitate communication, collaboration and administration. The students and the study groups will also be able to publish their findings, articles, reports, tests and websites in individual student folders and in group folders using the LMS.

V. E-learning Strategy of EFL Pedagogy in Talents Management

As stated earlier, in order for any E-learning implementation exercise to be successful, it must be rooted in strong pedagogical foundations. In talents management, pedagogical attributes will be discussed along five parameters: Integrating pedagogical principles into LMS, User profiles, developing content, storing and managing content, packaging content, student support, and assessment.

A. Integrating pedagogical principles into LMS

An important step that must be taken prior to implementing e-Learning is selecting a suitable LMS. Often LMS are compared and evaluated on the basis of feature richness. The more the features of an LMS, the more likely it is to be chosen. This form of uninformed decision-making on the part of LMS customers positively reinforces vendors' inclusion of every technologically possible feature in an LMS. It is time for consumers in the LMS market to make demands on the vendors for products to have fully integrated pedagogy. This change has begun to take place but it is still at its early stage of being affected. In the next sections, the author synthesizes some forms of pedagogical integration in LMS that are prerequisites for successful implementation of e-Learning.

B. User profiles

Most LMS, despite being heavily laden with features, address only three groups of user profiles. These three groups of users are administrators, learners, and instructors. Features related to content development are consolidated under the tools for instructors, hence, implying that the tools provided and consequently the tasks pertaining to content development are the responsibility of the instructors. This implication can make implementation difficult because it does not depict the gradual stages of expanding the instructors' responsibility. Furthermore, this may lead the organization to believe that content development is the most natural thing that every instructor should be able to do without any form of training. Ideally, the tools should be grouped and packaged under different categories of user profiles so that the actual number of people involved in performing content development work is well represented. LMS should group the tools into various suites of user profiles like content experts, instructional designers, developers, etc.

C. Content development

Interfaces used for development and uploading of content must clearly communicate the necessity to develop content adhering to the instructional development models. The interfaces should also communicate the need to develop content at smaller levels of granularity to promote share-ability and reusability.

D. Collaboration and co-authoring

Standard communication formats must be included to supplement the communication tools that are currently included in almost all LMS. These formats can take the form of structured instruments where users need only to key-in words or phrases. All the information categories must be specified and elaborated by the instruments so that the users do not have to waste a lot of time and effort in information logistics.

E. Content publishing workflow

The publishing workflow must communicate the necessity for a proper evaluation–deploy–review–revise cycle. The system should include structured instruments to help administrators generate text-based communications with other users of the E-learning network with regard to the shelf life of content. It would be better still if this notification process is automated. This is very important for organizations dealing with very timesensitive domain areas.

F. Assessment

Most LMS include test builder tools that automate the process of authoring questions. Most of these tools offer easy-to-use templates for authoring automatically scored questions like MCQ, TFQ, SAQ, and other forms of SAQ and MQ. These tools do not mention other types of questions that can be used to assess learners like essay questions, projects, structured subjective questions, and case studies. The developers of current LMS were probably driven by technology in choosing the question builders to be included in the system. Creating quiz questions, possible answer options, assigning weights to the answers, automatically scoring the answers, and programming appropriate feedback for different answers provided by learners require a working knowledge of HTML, Java Script, and other programming languages. This is definitely too much to expect of instructors, therefore, the developers of the LMS probably felt it was necessary to provide instructors with these tools. On the other hand, in order to assess students by means of projects, case studies, assignments, and other artifacts of learning, all an instructor needs to do is to post the message on the bulletin board. Students then complete their assignments and submit their work to the instructor via e-mail or upload it as a web page for the instructor to assess manually. Instructors with basic computer knowledge will be able to do this. Assuming this is the underlying consideration that led to the inclusion of the quiz builder templates, the developers' good intent deserves appreciation but their choice of tools in putting their good intent to practice could be improved.

This decision may have some negative implications pedagogically. The prominence and convenience of the builder tools may imply that the use of only MCQ, TFQ, MQ, and SAQ are valid and reliable means of assessing learning. Similarly, the total omission of essay questions, projects, assignments, and case studies may imply that these forms of assessment are not needed to effectively assess learning. In some cases, instructors who are fully aware of the strength of the other assessment types having found their way into the test builder tool may not know how to go about creating and

administering these assessment elements.

G. Resource management tools

Can any organization implement E-learning completely? The answer is a definite 'no' because not all types of content lend themselves well to the electronic delivery mode. Some knowledge types need to be complemented with practical training. Some knowledge is acquired best in a face-to-face session with the instructor using paper-and-pencil exercises.

Just because e-Learning is available, the old practices cannot be totally discarded. The old and new have to be mixed and blended in the right proportions to provide a rich and fulfilling learning experience for the learners. Hence, the need for the resource management tools to manage the scheduled use of training rooms, laboratories, computers, equipment, or even trainers.

VI. Discussion and Conclusion

E-learning offers great promise as a powerful tool that can be integrated into EFL pedagogy and instruction to enhance talents management in university education. Yet a careful consideration of its promises and a thorough review of the literature suggest that persuasive usage on Internet technology does not guarantee positive gains in instructional objectives, rather the heart of learning lies in effective instructional strategies that manage diverse educational provisions to optimize student learning. This would suggest a move to a more constructivist rather than instructivist E-learning pedagogy. This is because knowledge is socially and individually constructed on the basis of experience.

This attempt to provide a pedagogical foundation as a prerequisite for successful E-learning implementation has clearly changed the emphasis from merely managing the logistics of electronically delivering E-learning content, to managing E-learning content. Some of the demands expressed in talents management have already been fulfilled in a new generation of E-learning solutions known as Learning Management Systems (LMS). It is an LMS built not only on a strong pedagogical foundation, but also with the purpose of helping educators manage this wave of change called E-learning strategy. If more educators come forth to express their expectations of E-learning solutions, their voices would collectively become loud enough to be heard by the E-learning solution providers. The subsequent change will appear in EFL pedagogoy of talents management.

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