

Nehru-Ton Model Technologies for Blended Learning Between India & Vietnam Teacher Education Programmes

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Abstract - We live in a world that is constantly changing; it can change so quickly that some of the technologies we refer to here may have evolved since the industrialization. The underpinning principles of good curriculum design rarely change, even with the integration of technology in for sustainable development in education and teacher education.

The main aim of this thematic paper has been to present a starter model to blended learning design for Teacher Education (TE) programmes between India and Vietnam and take you through the process of integrating technology into your learning and teaching practice for molding future professional teacher. We have structured this paper around global TE for engaging in a systematic process of planning, designing and developing, implementing and reviewing; good practice for any curriculum design endeavor. In TE each stage in this process, we have attempted to provide guidance, key principles to underpin practice, and highlight the process of designing technology-enhanced learning; Quality learning; course environment, learning objectives, teaching and learning activities, and assessment demands of a course. Effective practice in blended learning tools; technology to promote active and participative learning in both face-to-face and online/mobile contexts; the rationale and benefits need to be clearly communicated to students. Advanced users of technology look to their teacher educators for guidance on how to use technology in learning; so ensure there is appropriate support for students on using the technology for learning. In TE Review and evaluation, drawing on a range of perspectives helps to ensure quality learning experiences for both education administration and academics.

Throughout this paper, we refer you to online/mobile resources, help, the opportunity to explain with Blended Learning environments of comparative teacher education programs between India and Vietnam for Training and Continue training for Teacher (TC&T) for 21st Century. In conclusion, we also encourage you to Get Started with Blended Learning to our colleagues, share your own ideas and experiences and learn from each other; after all, that is what we encourage teacher educators and student teachers in India and Vietnam.

Keywords: *TE, Blended Learning, quality and sustainable education.*

I. INTRODUCTION

“Education is the most powerful weapon you can use to change the world”

- Nelson Mandela.

Education is essential to sustainable development. Citizens of any country need to learn their own way toward sustainability. Present knowledge base does not contain the solutions to contemporary global problems like different environmental, societal and economic issues. Today’s education is crucial to the ability of present and future citizens and governments to create solutions and find new

paths to a better future. For the achieving sustainable development goals of education TE and Training is also very important. So this paper shows the alternative pathway to “Training and Continue training for Teacher (TC&T)” fosters an understanding of the interconnectedness of education, economics, and social equity. It utilizes a multi-disciplinary, learner and learning-centered approach, and an innovative and participative style to sensitize and empower individuals. Especially the student teachers, to think, act and react as responsible professionals and to find sustainable solutions to real life issues, at local, national and international levels.

This paper aims to assess and analyses the following with respect to TE programmes between Indian and Vietnam for Sustainable Development Training and Continue training for Teacher (TC&T).

- 1) The principles constructed on values that underlie sustainable development;
- 2) The four dimensions of sustainability based on – environment, society, culture, and economy;
- 3) To adopt the variety of pedagogical techniques that promotes participatory learning and higher-order thinking skills;
- 4) The Globalization norms - of locally relevant and culturally appropriate;
- 5) To fulfill the local needs, perceptions and conditions has international effects and consequences;
- 6) To Engages and collaborates with formal, non-formal and informal education with interdisciplinary;
- 7) To addresses content, taking into account context, global issues, and local priorities;
- 8) Builds civil capacity for community-based decision-making, and a good quality of life;
- 9) The skills and styles utilized by teachers to promote in their day-to-day teaching.
- 10) The constraints that hinder the adoption of as a regular teaching tool.
- 11) The scope of inclination with their own ideas, suggestions, and plans to promote among other teachers.
- 12) Promotes lifelong learning;
- 13) Cost effective educational models;
- 14) Professionalism in TE and Teacher; and
- 15) Education Entrepreneurship.

The information and insights gained would go a long way in evolving a progressive, creative, dynamic, effective and practical strategy with regard to TC&T in the coming decade, in line with the global requirement. These essential characteristics can be implemented in myriad ways so that TC&T programmes reflect the unique environmental, social, cultural and economic conditions of each locality. Furthermore, education for sustainable development increases civil capacity by enhancing and improving society, through a combination of formal, non-formal and informal education.

BACKGROUND OF TEACHER EDUCATION PROGRAMME IN INDIA AND VIETNAM

TE is one of the most important disciplines in all levels of education (primary, secondary, higher and professional) coordinates and influence on globalized societies for sustainable growth and development. It primarily educates and literacy levels, as well as TE but is also designed to give general qualifications for teaching the subjects. After passing the studies are employed at different levels of

school education as teachers and Teacher Educators at TE institutes or at education centres as Managers or Administrators. TE enrolls students from all discipline graduates, to become a teacher, students must have the degree in the basic school subjects and no need of work experience. The student teachers average age 21-30 years. They are adults, who in addition to their studies on graduation or post-graduation some of them experienced in teaching, but them not fully professional with globalized TE skills.

The TE programme, namely Bachelor of Education (B. Ed) is 2years in India; in Vietnam 4 years / Master of Education (M.Ed) Programme is 2 years in these countries even other TE programmes are to acquaint the student teachers with the basics of a teacher's work. The programme consists of issues concerning the field of action and the duties of a Teacher, learning conceptions and theories, interaction and teaching skills, familiarization with learning and teaching methods, information and communication technology in teaching, as well as, educational and pedagogical planning and evaluation. The conventional way of arranging the TE programme, the majority of the student teachers will try to choose the alternative for practical and practicum also.

These factors take it considering for suitable for development in education and make professional teachers in flexible possible through the Blended Learning (suitable methods of Traditional and Technological mixed) environments.

In this paper, we discuss an alternative model of organizing the TE and training for the future teachers to face the changes in the Globalized, multi-cultural and technologically for sustainable development in between India and Vietnam.

WHY DOES BLENDED LEARNING IN TEACHER EDUCATION

Both the countries TE programmes conducted 60-70 percentages of curriculums on traditional lines only, so we try to improve the present system. Our model of "Sustainable development Training and Continue training for the teacher TC&T" benefits from both on-campus and asynchronous and synchronous online/mobile learning, and various software applications with multi-cultural environment collaborations also. In addition, the planning of the TE programme has been influenced by several methodological bases and the learning situations have been organized to consist of both individual and group studies for Teachers training and training for professional teachers for the 21st Century.

NEHRU-TAN: BLENDED LEARNING CYCLIC DESIGN FOR TEACHER EDUCATION

This proposed model (TC&T) for TE programmes between India and Vietnam has an alternative way of the blended learning model. In addition to on-campus learning, off-

campus learning experiences (school Internship) and working experience in different Blended Learning geographical environments also. We planning a long-term blended learning for TE programme is the significance of planning the whole entity is emphasized. The aim of the thematic model planning for TE programme which is presented to make various content specific, methodological and technical solutions visible, collaborations and highlight their importance in the educational whole by making this model contain 5 steps 1.Design 2,Implimentation3.Reviewing 4.Improving,5. Re-planning is observable.

Nehru-Tan- Blended Learning Cyclic Design Model

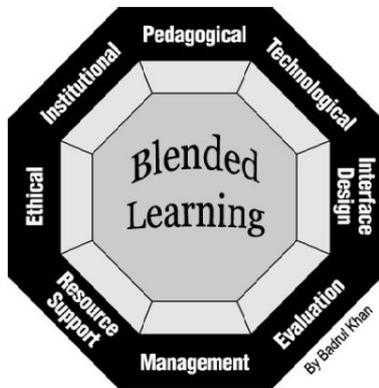
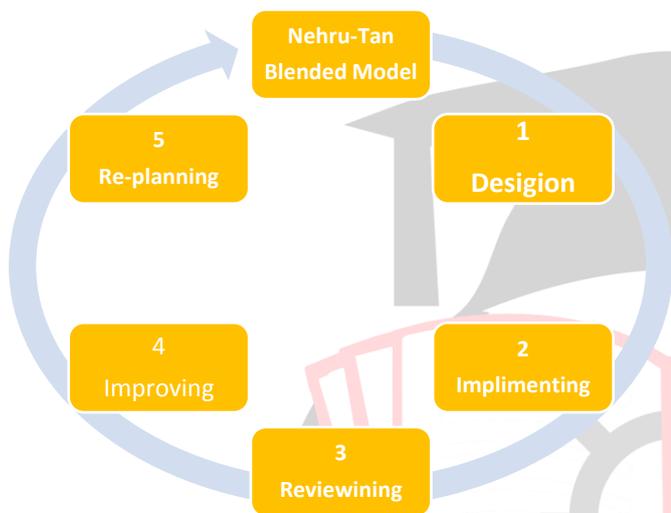
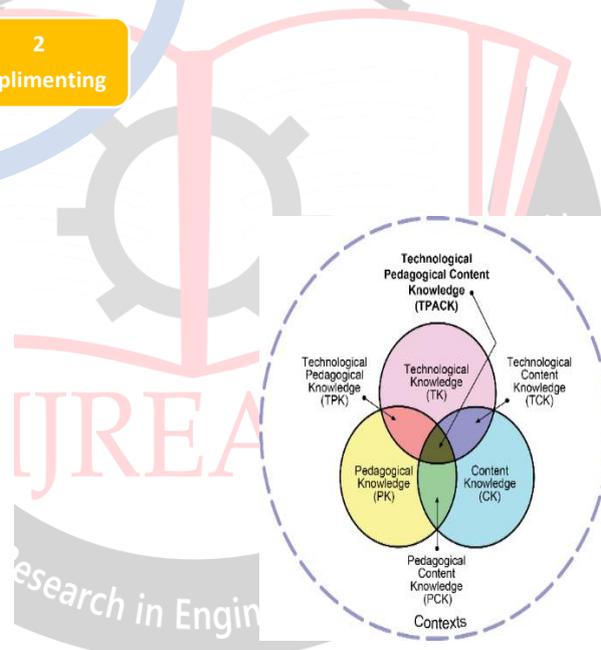


Figure – Khan's Octagonal Framework.

Nehru-Tan MODEL OF TC&T BLENDED LEARNING DESIGN

This model mainly based on the principles of TE programme consists of different subject Pedagogy (Literature, Science, Social Science etc.) are examined and evaluated within the programmes conducted by India and Vietnam. Nehru-Tan, the aim has been to design a model which will help develop flexible learning environments and meaningful Blended Learning Experiences. The model has also been called an octagonal framework of Blended Learning according to Khan (2005), the eight dimensions are 1. Pedagogical; 2. Technological; 3. Interface design, as well as 4. Evaluation; 5. Management; 6. Resource support;7. Ethical and 8. Institutional dimensions. According to Khan, the dimension are interrelated and interdependent with TPACK design (2011), extends Shulman’s idea of Pedagogical Content Knowledge.

Badrul Khan’s octagonal of blended learning (Khan2005) with TPACK design



Technological Pedagogical Content Knowledge (TPACK) framework model

WHAT IS BEING BLENDED (BL)?

Being blended (BL) is a comprehensive way of responses to this question most of the definitions are just variations of a common themes.

The three common definitions by Graham, Allen, and Ure (2003), are:

1. Combining instructional modalities (or delivery media)
2. Combining instructional methods
3. Combining online and face-to-face instruction



The above two are reflect on the influences of media versus method on learning. Both of the define BL. So broadly they encompass virtually all learning systems to find any

learning system that did not involve multiple instructional methods and multiple delivery media.

PAST, PRESENT, AND FUTURE

In the past - learning environments have remained separate because they have used different media and method combinations and have addressed the needs of different learners. The traditional (face-to-face) learning typically occurred in a teacher directed environment with person-to-person interaction in a live synchronous, high-fidelity learning environment.

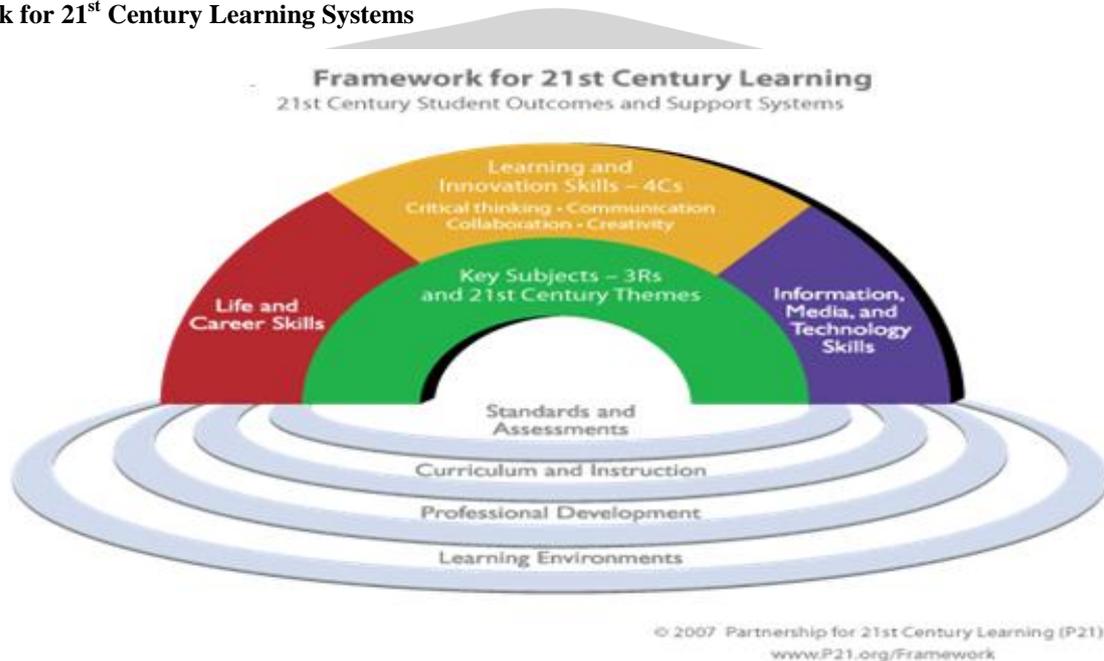
Present learning - systems emphasized self-paced learning and learning materials interactions that typically occurred in an asynchronous, low-fidelity (text only) environment.

Future - Blended Learning environments is part of the ongoing convergence of two classic learning environments. The traditional face-to-face learning environment that has been around for centuries, on the other hand, have distributed learning environments that have begun to grow and expand in experimental ways as new technologies have expanded the possibilities for distributed communication and interaction in 21st Century learning skills.

CURRENT TRENDS AND ISSUES ON LEARNING SKILLS

Below the figure explain about the Frame Work for 21st Century learning skills in teaching and learning environments.

Framework for 21st Century Learning Systems



21st Century Skills

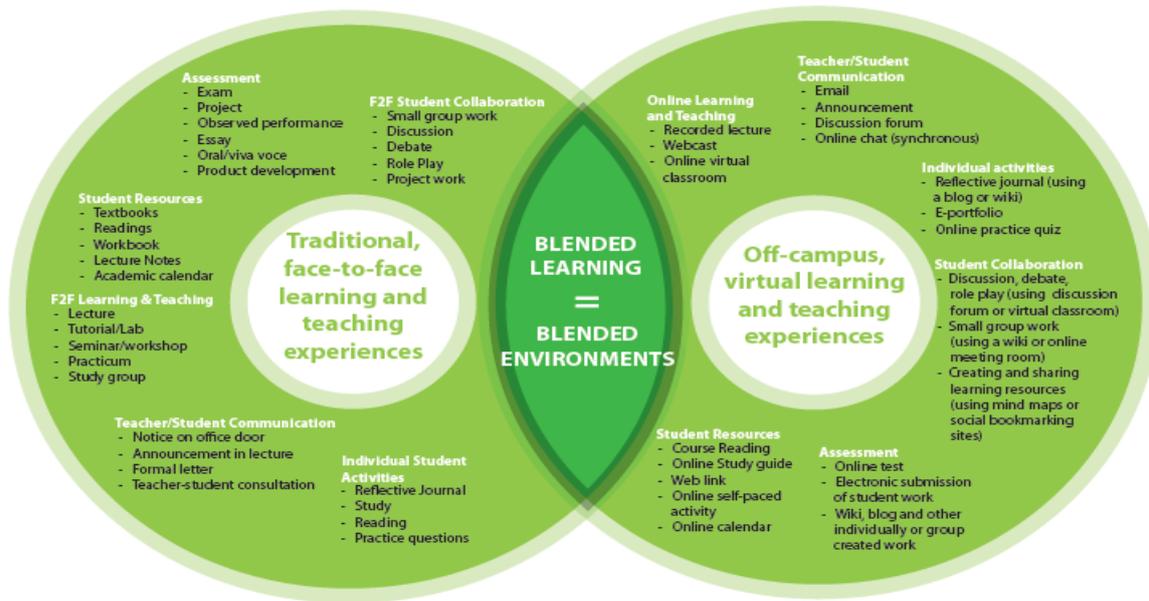
Definition of 21st century skills



Based on Partnership for 21st Century Skills (P21) Framework



Possibilities of Blended learning environments



Possibilities for blended learning

WHY BLEND?

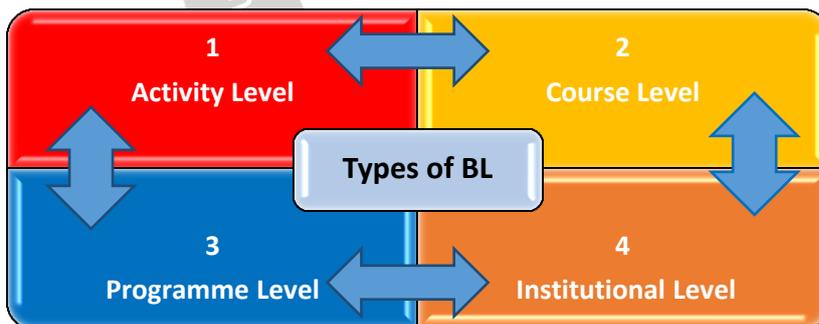
In the BL the most common that combines the best of both worlds. Although there is some truth to this, it is rarely acknowledged that a blended learning environment can also mix the least effective elements of both worlds if it is not designed well.

There are many reasons that a student teacher/ trainer, or learner might pick blended learning over other learning options. We identified ten reasons that one might choose to design or use a blended learning system. They are 1)

Improved pedagogy; 2) Pedagogical richness; 3) Access to knowledge; 4) Social interaction; 5) Personal agency; 6) Increased access and flexibility; 7) Ease of revision; 8) Cost-effectiveness; 9) Collaborations, and 10) Education Entrepreneurship.

DIFFERENT LEVELS OF BLENDED LEARNING

The BL occur at one of the following four levels ...they are 1) Activity level; 2) Course level; 3) Program level, and 4) Institutional level.



Above all four levels, the nature of the blends is determined by the learner or the teacher educator or instructor/teacher. Blending at the institutional and program levels is often left to the discretion of the learner, while designers and instructors are more likely to take a role in prescribing the blend at the course and activity levels.

1. Activity-Level Blending: Blending at the activity level occurs when a learning activity contains both face-to-face and course management elements. For example, Wisner outlines large-scale military training events that incorporate both face-to-face and virtual elements.

2. Course-Level Blending: Course-level blending is one of the most common ways to blend. It entails a combination of distinct face-to-face and course management activities used as part of a course.

3. Program-Level Blending: Blends in TE are often occurring at the degree program level. Blending at a program level often involves the model in which the participants choose a mix between face-to-face courses and online courses or one in which the combination between the two is prescribed by the program. The TE program is conducted typically in Blended Learning mode 30 percent of the learning time in a face-to-face setting, 50 percent

from practicum and 20 percent from different activities. TE programs that blend face-to-face and course management experiences at the program level. They are 1) Focus on enhancing blends in traditional settings, 2) Enhancing blends, 3) Transforming blends 4) Addressing issues of access and convenience. For this blends that are anticipated to provide additional flexibility to the learners to blends that attempt to provide the same prospects or learning experience but through a different modality. Allow changes to pedagogy, but do not completely change the way teaching and learning occur.

4. Institutional level Blending: TE programme generally 60 percent of curriculum theory and 40 percent is practice, internship, and practicum within the same geographical area but this blended model gives and gets exposure of multi-cultural and multi-national.

WHAT ISSUES OR CHALLENGES ARE FACED WHEN BLENDING

Six key issues are significant in designing blended learning systems. They are 1) The live interaction 2) The learner choice 3) The support and training, 4) The innovation and production, 5) The Cultural adaptation, and 6) The digital divide.

1. The Live Interaction: The human interaction is an important to the learning process and to learner satisfaction with the process observed an inclination among many learners for the live or face-to-face components of a blended experience. The Course Management and face-to-face elements were combined; learners frequently placed a greater value or emphasis on the face-to-face features of the experience. Juxtaposed to this, face-to-face components are unnecessary and primarily used for socialization reasons. The position that the live, completely online, and blended options to its courses are “equivalent” experiences to be selected based on learner preference.

2. The Learner Choice: Learners making choices about the kinds of blends that they participate in blended learning make it seem that learners are primarily selected based on convenience and access. Online learning components require a large extent of self-discipline on the part of the learners (Collis, Bruijstens, & Van der Veen, 2003). The challenge that the students have in regulating their own learning without the close guidance of an instructor.

3. The Support and Training: Many issues related to supporting and training in blended environments, including 1) To Increased demand on instructor time, 2) To providing learners with technological skills to succeed in both face-to-face and Coerce Management environments (Morgan, 2002), and 3) To changing organizational culture to accept blended approaches (Hartman et al., 1999).

4. The Innovation and Production: In design, there is a constant between innovation and production. On the one hand, there is a need to look into the possibilities that new technological innovations provide, and there is a need to be able to produce cost-effective solutions. The constantly changing nature of technology, finding an appropriate balance between innovation and production will be a constant challenge for those designing blended learning systems.

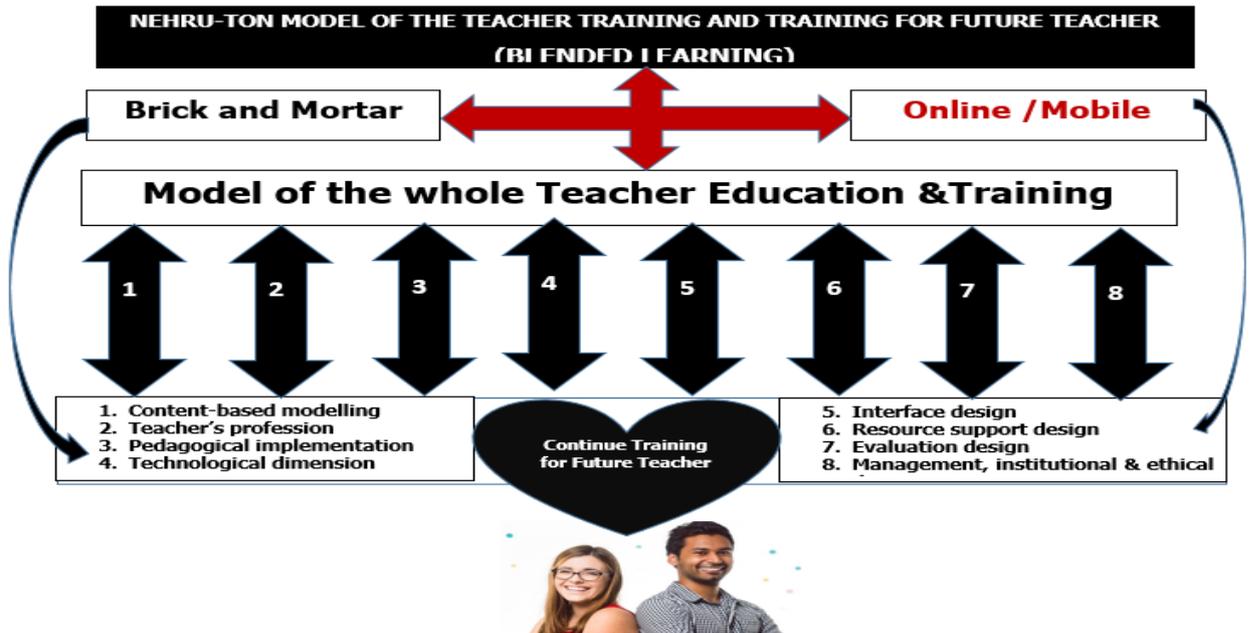
5. The Cultural Adaptation: must blended approaches play in adapting materials to the strength of e-learning is the ability to distribute uniform learning materials rapidly. There is a need for modifying the materials to the local students to make them culturally relevant to both and find the balance between global and local interests. That a face-to-face instructor plays an important role in helping to make globally distributed materials culturally relevant and meaningful.

6. The Digital Divide: The splitting between the information and communication technologies available to student teachers and teacher communities at different ends of the socioeconomic spectrum can be great. The issue that e-learning is often perceived as being an approach that favours the advantaged. The e-learning is a strategy that might be considered for educating the masses because of its low cost and ability to be distributed widely. Blended learning models can be developed that are affordable and still address the needs of different populations with different socio-economic conditions around the world.

NEHRU-TAN BLENEDE LEARNING (TC&C) MODEL

This model has eight dimensions, 1) Pedagogical, 2) technological, 3) interface design, 4) evaluation, 5) management, 6) Resource support, 7) Ethical and 8) Institutional dimensions (Khan-2005), of the processes and the TPACK design (2011), extends Shulman's idea of Pedagogical Content Knowledge and outcomes of the TE programme are also taken it in to considered. In this Blended Learning as a core concept in the model has used other concepts in different contexts such as web-based training, m learning and flexible learning while the basic arrangement of octagonal dimensions has been preserved unchanged.

The Nehru - Ton model was applied as a planning tool for developing the TE programme. This paper will describe the pedagogical and technological solutions as well as evaluate and reflect on the significance of pedagogical modeling in planning a blended learning for TE programmes (ST&CT) between India and Vietnam.



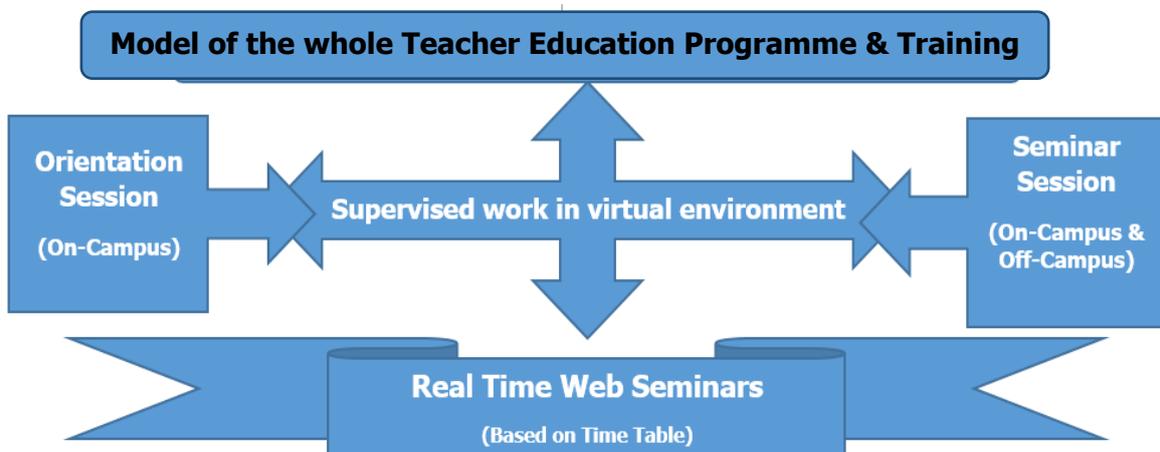
1. PEDAGOGICAL DIMENSION – Model of Nehru-Tan Model

“The pedagogical dimension of Blended Learning refers to teaching and learning. This dimension addresses issues concerning content analysis, audience analysis, goal analysis, media analysis, design approach, organization, and learning strategies.” (Khan 2005)

In the pedagogical design, was given to model of learning entity, recognizing the core contents and planning the methods of learning and teaching. Especially where long-term learning is concerned, the design is hypothetical to be capable of planning comprehensive entities and action models connected to them well in advance. In online/mobile design it means that such practices which in on-campus learning are considered self-evident must be made visible. We have been taken to make transparent different solutions connected to contents, teaching methods

and technical problems by the model for TE programme and Training.

The pedagogical model is started with planning the division between on-campus and online/mobile (off-campus) learning in relation to organizing learning experiences and with anticipating the relationship of studying on the Blended Learning and real-time and web-seminars during the programme. At the same time decisions concerning the time-table were made. In the beginning three on-campus days were reserved. The on-campus days, time should be given to guided work in a virtual environment. Online/mobile studying can be characterized by working in different asynchronous virtual environments, but on the other hand, it is marked by four joint real-time web-seminars by the group to promote learning by the implementation of the all TE programme in India & Vietnam.



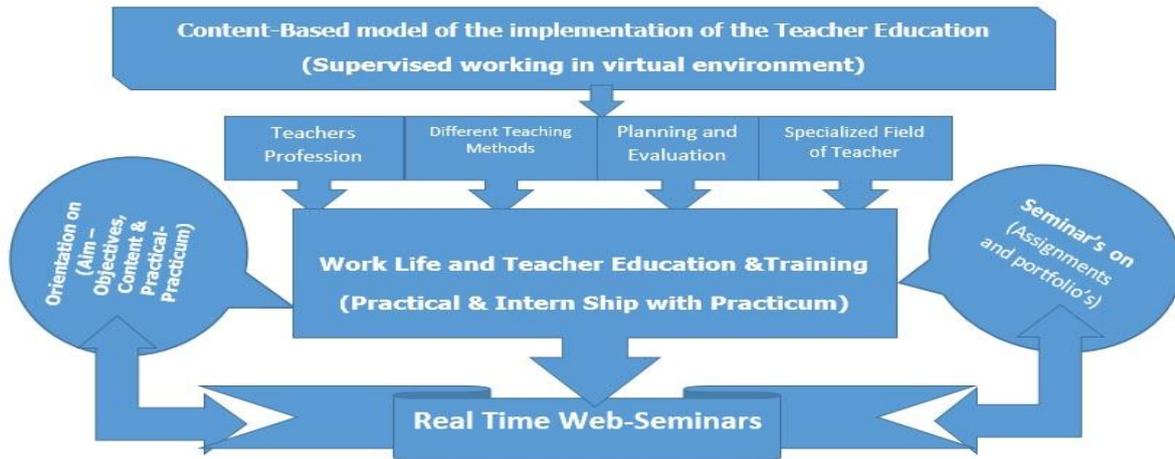
The next phase was planning the contents of the TE programme. This meant recognizing and synchronizing the core contents with the aims. Since the studies of the

students and student groups were organized according to these core contents, their definition was centrally important. The programme was designed with four main areas of

contents: 1) Teacher Educator’s profession in the TE; 2) Different teaching methodologies; 3) Planning and evaluating teaching, and 4) Special fields of a TE and teacher’s profession.

The main objective was to organize the small groups to work online/mobile on the assignments connected to these main areas. The students were to work in small groups, each with appropriate tasks in the content areas. The tasks mentioned, the students had to produce assignments on the

Content-based model of the implementation of the TE



The design of the pedagogical choices as well as teaching and learning methods for the TE programme. Instead of teacher-centred methods and activates the aim was to choose the online/mobile studies and reflection of 4 to 5 persons small groups. The methodological choice was that of problem-based learning (PBL) in which the learning process could be based on working life oriented, relevant, authentic problems. The students should try to solve the problems through the methods of collaborative problem solving, reflection on their experiences and engaging in self-directed inquiry. The teacher Educator could also participate in directing the learning process, and usually several different text-based resources were available during the phases of the process. Essential in the PBL was thus to foster students’ collaboration with each other, sharing information, seeking solutions and exploring alternatives (Merrill 2007).

During the programme students had to work on tasks based on their assignments connected. The planning for program, it is important to regard the tasks as thematic areas within which the student groups make collaborative inquiry, and try to solve the problems connected to the tasks. The working of the student groups was supervised by Educators/mentors (either India or Vietnam), and the students were also provided with stimulating questions and various supportive resources.

Another effective method in the TE programmer was co-operative learning, the so-called jigsaw method. It was developed by Professor Elliot Aronson and his college

relationship between TE and work life. This task would be under examination throughout the studies. In addition to the group tasks, the students had to produce an individual learning portfolio in the same way as in the conventional programme design. For individual supervision and collective reflection in the blended learning, provisions were given. So, when the core contents of the programme had been recognized, by this model of the content-based implementation within the TE programme.

students in the beginning of the 1970’s. According to it the participants work first at home or in jigsaw groups in which they decide about sharing the task. During the process the participants proceed in seeking for more knowledge in the so called expert groups.

Teacher’s Profession in the Teacher Education

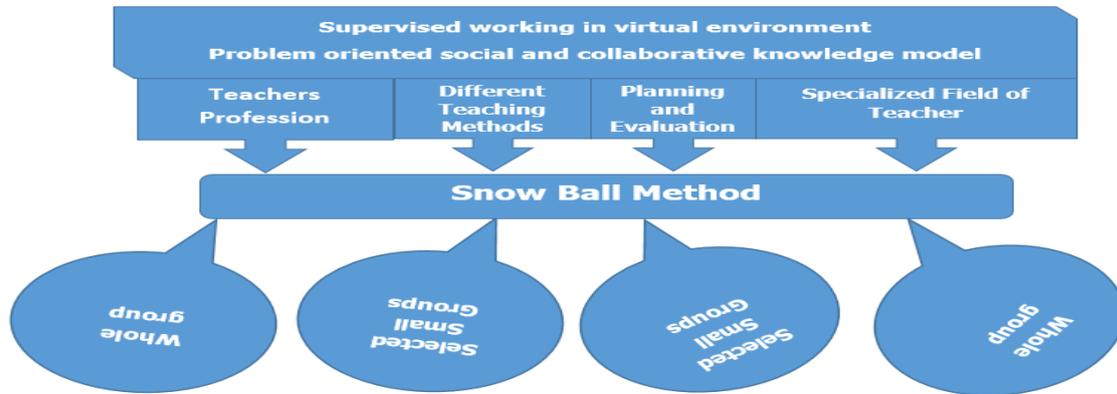
The real-time web seminars work life and TE return to their home/ jigsaw groups in which they share their expertise with each other. The single group represents thus different expertise areas (Aronson, 2008). Traditionally the jigsaw method has been applied in practice teaching. For that reason benefiting from it in a virtual environment presupposed careful planning. It was necessary to design the jigsaw implementation, especially with synchronous and asynchronous Blended Learning software. The work of the expert groups was planned to be carried out in four groups, each of them having their own thematic areas to be acquainted with in two weeks. The work was to be designated by individual work and expert group online/mobile meetings aided by Team Speak or Skype software. During this period the groups were also to work on the materials connected to their own thematic areas on the WebCT learning platform. The work of home/ jigsaw groups, again, was planned to take place in real time web seminars.

Three separate seminar rooms were introduced to for the working of jigsaw groups so that the plan supposed three simultaneous jigsaw web seminar sessions. As to other teaching methods, conventional group work was also

included in the plans of learning different themes, as well as, the so-called snowball method in connection with the assignments concerning the relationship between working lives. The pedagogical theories behind the decisions

concerning the choice of teaching and learning methods were made transparent by modelling the pedagogical implementations of the TE programme during the online/mobile process.

Model of the pedagogical implementation of the TE programme



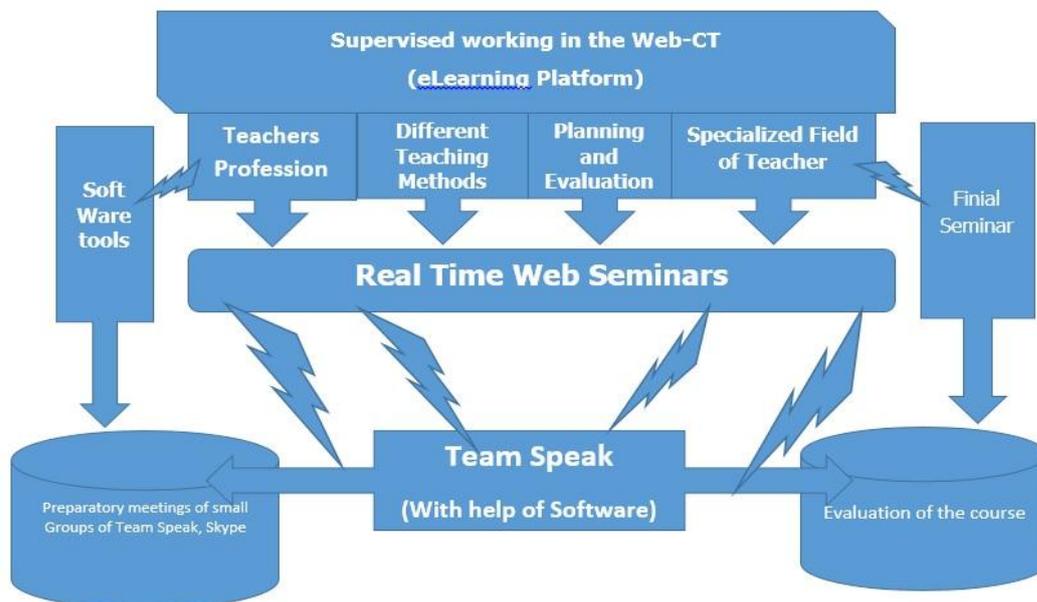
2. TECHNOLOGICAL DIMENTION OF THE COURSE DESIGN

“The technological dimension of Blended Learning examines issues of technology infrastructure in Blended learning environments. This includes infrastructure planning, hardware, and software.” (Khan 2005)

The TE programme design was to get acquainted with different technical ways of implementing. Out of various technical tools only WebCT Blended Learning platform, now called Blackboard, was familiar beforehand. And also adopt to consider needing such a software tools which would make it possible for the participants to create various real time learning situations during the TE programme. The contents and pedagogy of the different technical methods of implementation were practiced to make them familiar, viz. audio conferencing solutions like TeamSpeak and Skype –

software as well as videoconferencing solutions. The evaluation software (Like ZEF) was also made accessible. It was planned to be used in the context of the TE programme. While connecting the exercises with the software, the participants were made familiar with the qualities of the software and tools. The characteristics of the tools / software, of the team work, of sharing documents and so on. At the same time, efforts were made to arrive at the conception of the applicability of different software and tools in teaching and learning. When the contents and pedagogical measures of the programme were defined more precisely, the use and applications of different software in different phases were planned. The pedagogical solutions for actually defined the most meaningful usage of the software in running the TE programme.

Modelling the technical implementation of the TE programme



The students were given instructions beforehand concerning the technical properties of the student computers as well as instructions concerning the software. They were also given preliminary tasks connected to the technical preparation such as adjusting the headset microphones and installing the Skype and TeamSpeak-client software. During the orientation period the students were made acquainted with the TE programme software and tools like, TeamSpeak, Marratech, WebCT, ZEF at their disposal. The online/mobile seminars the students were given the chance to test different audio and video conferencing software through their own home computers/mobile. The aim of all these technical instructions and software tests was to create a learning environment which could have its focus on actual learning during the TE programme.

3. INTERFACE DESIGN of Nehru-TAN Model

“The interface design refers to the overall look and feel of Blended Learning programs. The interface design dimension encompasses page and site design, content design, navigation, accessibility, and usability testing.” (Khan 2005)

Interface design dimension was the central attraction of in the TE programme. The importance of the WebCT e-learning platform is essential, since it is the “home” of the TE programme, showing the whole of the implementation, basic information, instructions in different phases of studies and for the usage of different software, as well as the evaluation criteria of the TE programme. The overall look of the TE programme was introduced to the students in the WebCT environment with the help of the models. The purpose was to help the students to visualize the total continuum of the TE programme through this model. The basic ideas in designing the Blended Learning platform were to make the structures in the WebCT environment to follow the progress of student work. The home page of the WebCT environment was structured according to the core contents and student assignments. To assignment on the Teacher’s profession in TE field; Teaching methods and other core skills of teaching; Task-based learning platforms were designed for small groups to include all assignments in the WebCT learning environment.

The task-based learning platforms included, concerning every assignment, the following items

- 1) Information on the task for the small group,
- 2) Stimulating questions connected to the task,
- 3) Sources of information connected to the theme,
- 4) Each small group offering it a chance to prepare the presentations and brainstorming, and
- 5) A public forum shared by all the groups and meant for the delivery of prepared presentations before the web seminar.

This aimed at creating a WebCT environment constructed according to the pedagogy of implementation. In its

construction it was supposed that structuring the environment, according to the proceeding logics of the assignments and tasks would enhance the usability.

4. RESOURCE SUPPORT DESIGN OF THE TEACHER EDUCATION PROGRAMME

“The resource support dimension of Blended Learning examines the online/mobile support and resources required to foster meaningful learning.” (Khan 2005)

The measures in supervision and support, the target of planning the TE programme was to offer supervision of both an “automated” and personal tutor. The planning was influenced by the idea developed by Albert & Thomas (2000) of an automated tutor. Its basic principle is “the automated tutor directs the student through a set of resources that aids her or him in completing a specific assignment”. The TE programme had as its working principle to offer the students opportunities to easily find help for carrying out assignments by providing resources for them in the learning environment.

The support resources designed for the WebCT environment, the automated tutor of the TE programme can in their part offer students help in preparing for the assignments. The finding answers to all stimulating questions or getting acquainted with all the resources in the environment, student groups should define their viewpoints in approaching the task and the sources of information. They were recommended to benefit from their own experiences of teaching and work life in working on their tasks or to interview experts on the theme. The supervision of small groups by the tutors was taken for granted. The role of the two tutors was to supervise the work of the small groups both when preparing the tasks and in web seminars. During the preparation phase, they were to supervise the work of the groups in the discussion forum of the WebCT and to participate in the planning sessions of the groups when necessary in TeamSpeak or Skype environments. The mentor’s task has also been to give pre-advice for action in real time web seminars. The emphasis in actual web seminar work was intended to be in the dialogue and interaction of the students. The role of the tutor was to be one of the participants in the discussion.

The technical supervision and support, the TE programme can be regarded to have had both automated technical support and personal technical support. As stated in connection to the technical dimensions, several instructions were composed in the learning environment and links created to guide to be used in different software. They were supposed to help students in introducing the software and with possible technical problems. The TE programme participants were also advised to contact the technical support staff if needed.

5. EVALUATION DESIGN OF THE TE PROGRAMME

“The evaluation of Blended Learning includes both the assessment of learners and the evaluation of the instruction and learning environment.” (Khan 2005a; Khan 2005b, 15.)

The trainee teacher assessment had proper content-based evaluation criteria which had been developed specially for the TE programme which were accessible by the students in the Traditional and WebCT platform (India and Vietnam). When the evaluation criteria are transparent, they can possibly direct and guide students during the programme time to student teachers and even in-service teachers also.

The assessment and practicum, etc., evaluation of the implementation forms were designed in which the student teachers were asked about their conceptions of the contents and methods of the programme, of the technical realization and the chosen different software with online evaluation tools. With this, the students were asked to evaluate the work of different groups during the process. Evaluation of the process was planned to be collected several times during the studies. This might make it possible to develop the studies further on. The first feedback was planned to be collected in connection with the orientation period, when the students could also get acquainted with the like ZEF evaluation software. The feedback was planned to be collected after the web seminars and, to sum up all the study process, in the TE programme.

6. MANAGEMENT DESIGN of Nehru-Tan Model

“The management of Blended Learning refers to the maintenance of the learning environment and distribution of information.” (Khan 2005)

The institutional dimension in Khan's report (2005) refers to the influence of institutions behind the holistic design of online/mobile learning. This kind of holistic strategy of thinking was not of concern in the TE programme, the implementation was based on the developmental work of teachers. The TE Programme had access to various student support services, as well as to the WebCT learning base support services offered by the University departments, colleges of education, so that in this respect the institutional measures supported the realization of the TE programme. Too many responsibilities connected to the management dimension were taken for granted in the planning phase. On the other hand, the main responsibility of the management in practical implementation was clearly the teachers' duty.

1. ETHICAL DESIGN of Nehru-Tan Model

“The ethical considerations of Blended Learning relate to social and political influence, cultural diversity, bias, geographical diversity, learner diversity, the digital divide, etiquette, and legal issues.” (Khan 2005)

The ethical dimension consciously included in planning the TE programme. On the other hand, the equity of student accessibility to studies, regardless of which corner of the country they come, was one of the basic ideas. In this respect the TE programme design gives attention to the geographical diversity of the students, which Khan (2005b) mentions as one of the significant issues in the ethical dimension. Also the jigsaw technique used in the TE programme of studies contains features which the developer of the technique, developing the mutual equity of the students, when they share the learning processes in heterogeneous groups. In TE Programme, heterogeneous groups were formed according to the backgrounds of the students so that each subject methodology group should contain expertise from different fields. The principle in forming the groups was not, however, ethical. Diversity was the main strategy, since it was considered to benefit learning, when the group members inquired and solved problems from different viewpoints.

2. INSTITUTIONAL DESIGN of Nehru-Tan Model

“The institutional dimension is concerned with issues of administrative affairs, academic affairs, and student services related to Blended Learning” (Khan 2005)

The Institutional dimension consciously included in planning of administrative and academic affairs co-ordinate with student services in a (Democratic) way of the Blended Learning model. On the other the equity of student accessibility to studies which corner of the country they come, was one of the basic ideas. In the TE programme design gives attention to the geographical diversity of the students, which Khan (2005b) mentions as one of the significant issues in the ethical dimension. Also the jigsaw technique used in the TE programme of studies contains features which the developer of the technique, developing the mutual co-operation of the students and faculty's, when they share the learning processes in heterogeneous groups. Diversity was the main strategy, since it was considered to benefit learning, when the group members inquired and solved problems from different viewpoints.

ST&CT SKILLS FOR 21ST CENTURY TEACHER

After successful implication of Nehru-Tan Blended Learning Model, teacher trainees and future teachers acquire the 21st Century skills for students and as well as for teachers also shown in below picture....



ADVANTAGES OF BLENDED LEARNING

After adopting and implementing the model, advantages of relevant to designing blended learning in TE Programme

- (1) Teacher Education and training on par with global level,
- (2) The role of learner choice and self-regulation,
- (3) Models for support and professional training,
- (4) New innovation and production in education system,
- (5) Multi-Cultural and multinational collaborations,
- (6) Dealing with the new technologies,
- (7) Produce global professional teachers,
- (8) Global opportunities in teaching profession ,
- (9) New innovations in Educational Entrepreneurship, and
- (10) Sustainable development in national development.

CONCLUSION

In this thematic paper Nehru-Tan blended learning model for continue training for the teacher development (TC&T) between India and Vietnam. The dimensions of the model are interrelated and interdependent to planning the TE and future teacher of the especially emphasize the professional dimension. It was a core dimension of planning, its solutions influenced those of the technological dimension, interface design dimension and resource support dimension between India and Vietnam as collaborative manner.

It presents that choosing different pedagogical solutions and using different teaching and learning methods are possible through Blended Learning. In this models preceded by good planning and implementation of the sustainable TE

programmes and 21st Century Teachers of the both the societies. This model pedagogical implementation of the technical implementation, steps for tasks and planning support, supervision and mobility of the student teacher educators and teachers. This model not only for India and Vietnam, this model can apply to global level for sustainable development.

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