Teaching and Learning in the Intercultural Context

Case Study of Erasmus Mundus Program

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Abstract

The focus of this study is to reflect how students experienced the Erasmus Mundus program. Taking two specific EM course as case study aims to understand how EM course was organized, how teaching and learning was taking placed, how student life and learning experience reflected within this program. The study found that students learning experience were not always positive and rewarding, especially for non-European students. From academic perspective, the uniformity of teaching method, curriculum, material and assessment for diversified student body is lacking effectiveness; the inadequate of teacher-student interaction and insufficient learning support seriously affect the quality of education. From the social life perspective, culture differences, language competence and personality differences are the main factors affect student life and learning experience. With regard to the mobility scheme, the challenges are the difficulty in adjusting new academic environment and integrating into local community. To meet these challenges, it is important to improving teacher-student relationship, providing effective learning support, strengthen peer relationship, and improving student service.

Key words: Erasmus Mundus, Student, Intercultural, Teaching and Learning.

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Abbreviations

EC	European Commission
EU	European Union
EM	Erasmus Mundus
ERA	European Research Area
EUA	European University Association
EHEA	European Higher Education Area
EADS	European Aeronautic Defence and Space Company
ECTS	European Credit Transfer and Accumulation System
EQF	European quality framework
HEI	Higher Education Institution
HEEM	Higher Education Erasmus Mundus

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1. INTRODUCTION

1.1. Background

Erasmus Mundus is a co-operation and mobility program in the field of higher education intended to promote the European Union as a center of excellence in learning around the world. It initially began in 2004 and aims to support the development of top-quality European Masters Courses and enhance the visibility and attractiveness of European higher education in non-European countries. The specific aims of the program are: to promote quality and excellence in European higher education; encourage the incoming mobility of non-European graduate students and scholars; foster structured co-operation with non-European higher education institutions; and improve the profile, visibility, and accessibility of European higher education around the world.

The Erasmus Mundus program, as a window of European higher education, has been running for six years with the purpose of becoming the education center of excellence around the world. As the first round of the EM program (2004-2008) has gradually drawn down its curtain, it's time to look back at its performance record over the past five years and look forward to a new phase and the second round (2009-20013) implementation of the EM program. This thesis aims to investigate EM students' experiences in the program and, in particular, the process of teaching and learning in the program.

1.2. Research Aims and Questions

The EM program, as a part of Bologna process strategy, has attracted worldwide attention in the past five years because of its distinctive characteristics, which represent the tendency of European higher education development to include a diversified academic staff and diversified student body. The most significant feature of the EM program is the mobility scheme that the EM master course offers through a consortium of higher education institutions and requires its students to study in, at least, three different partner institutions within the consortium. With the first phase of the EM program (2004-2009) gradually coming to an end, it is worthwhile to have an overall evaluation of the program by interviewing students about their learning experiences to reflect on how well the EM program has been implemented. The research results will not only provide a good example to learn from for the implementation of the second phase of EM program (2009-2013), but

also benefit partner administrators and faculty as to help them design a more effective learning environment.

The purpose of this thesis is to explore the teaching and learning process in the intercultural context of educational programs. Using teaching and learning theory to analyze the gap between theory and practice, I will shed light on existing problems and difficulties, and try to find effective methods for improvement in order to enhance the implementation of the second around of the EM program. Therefore, the main research question is – how well is EM program performing with respect to the teaching and learning practice?

In order to understand how teaching and learning activities are actually happening in the EM program, several sub-questions will be developed to show how EM courses are administered and analyze students' experiences within the program. These questions are:

- How have students experienced the teaching and learning activities within the EM program?
- How have students' lives been affected by the learning experience and by the mobility scheme?
- What factors affect students learning in the context of intercultural education program?
- What are students' expectations from institutions, teachers, and peer students?

2. Literature Review and Analytical Framework

2.1. Overview of the theory of learning

Ference Marton and Shirley Booth in their article "what does it take to learn" (1997) proposed that instructional research in the west was initially from the ancient Greece by a famous formulation of the question "**How do we gain knowledge about the world**?" to understand teaching and learning, it is necessary to know what the knowledge is. And this ancient anecdote will bring us a thought-thinking with respect to learning and teaching. Ference draw out an interesting story in one of Plato's early dialogues, written in 403 or 402 BC. The dialogue was between Socrates and Meno, a young Thessalonian visiting Athens, and started with Meno posing the question: "Can one be taught virtue?" Socrates replied that he did not even know what virtue is, and he argued that neither did Meno. Socrates suggested that they embark upon a search for an answer together, but Meno puts forward an objection that has become known as Meno's paradox: "How can you search for something when you do not know what it is? You do not know what to look for, and if you were to come across it you would not recognize it as what you are looking for." Socrates agreed with this objection, and elaborated:

> *It is impossible for a person to search either for what he knows or what he doesn't…He couldn't search for what he knows, for he knows it and no one in that conditions needs to search; on the other hand he couldn't search for what he doesn't know, for he won't even know what to search for. (Day, 1994, p.47)*

The surprising answer to the question "How do we gain knowledge about the world" is that we *cannot* gain knowledge about the world. Learning is impossible. The paradox lies in the observation that we certainly do learn!

In order to solve the paradox, Plato created his *theory of recollection*, which has claimed that the human soul is immortal even if the human body is not. The soul is re-embodied again and again, going repeatedly from one life to the next. All knowledge is laid down in the soul prior to the series of lives. It is then forgotten by its current vessel but is there to be recollected. *Learning is such a recollection*. Knowledge thus does not originate from the world or, from the outside, but from the immortal soul or, from within. (Ference,1997)

Socrates, in the course of his dialogue with Meno, wished to demonstrate that knowledge is innate and called in a young slave boy who way able to count but was ignorant of geometry. Socrates gave him a geometrical problem: to find the length of a side of a square, the area of with is twice the area of a given square. The boy's first answer was wrong, but Socrates managed to act as midwife and draw forth the answer by putting questions that repeatedly showed the inherent contradictions in the boy's way of reasoning. Socrates' method amounts to breading the problem down into component parts and prompting answers to each part separately, an instance of his famous *midwifing*, or maieutic, pedagogical method resembling the teaching strategy that in modern educational research has been called *piloting* (Johansson, 1975; Lundgren, 1977).

Although Socrates did claim that knowledge comes from within by using one's powers of reason. This does not imply, however, that Socrates presented strong support for the theory of recollection and that he had solved Meno's paradox. Thus Plato did not solve the paradox he had formulated. Nor did anyone else(for some fairely recent and less than convincing attempts from the field of education see Bereiter, 1985; Hallden, 1994; Petrie, 1981,1991) (Quote from Ference Marton and Shirley Booth,1997). Some 23 centuries after Plato formulated the paradox of learning—Meno's paradox—learning became an object of research in psychology which formulate the Behaviorism learning theory.

2.1.1. Behaviorism Learning

Behaviorism as a learning theory can be traced back to Aristotle, whose essay "Memory" focused on association being made between events such as lightning and thunder. Other philosophers that followed Aristotle's thoughts are Hobbs (1650), Hume (1740), Brown (1820), Bain (1855) and Ebbinghause (1885) (Black, 1995). Pavlov, Watson, Thorndike and Skinner later developed the theory in more detail. Watson is the theorist credited with coining the term "behaviorism". Behaviorist theory maintains a focus on the change in observable behaviors as the manifestation of learning. The theory emphasizes changes in behaviors due to the influence and control of the external environment rather than the internal thought process of the subject (Merriam & Caffarella, 1999).

Behaviorism has seen learning as a straightforward process of response to stimuli. The provision of a reward or reinforcement is believed to strengthen the response and therefore result in changes in behavior. Spillane (2002) states "the behaviorist perspective, associated

with B.F. Skinner, holds that the mind at work cannot be observed, tested. Or understood; thus behaviorists are concerned with actions (behavior) as the sites of knowing, teaching, and learning" (Spillane, p.380). One of the keys to effective teaching is discovering the best consequence to shape the behavior.

2.1.2. Constructivist Leaning

Constructivist is a synthesis of multiple theories diffused into one form. It is the assimilation of both behaviorialist and cognitive ideals. The "constructivist stance maintains that learning is a process of constructing meaning; it is how people make sense of their experience" (Merriam and Cafffarella, 1999, p.260)

Steffe and Gale (1995) refer to six different schools of constructivism, including cognitive, social constructivism, and postmodernism, each with different implications for educational practice. But whatever particular constructivist theories may variously emphasize, a consensus would be that learners arrive at meaning by actively selecting, and cumulatively constructing, their own knowledge, through both individual and social activity. The learner brings an accumulation of assumptions, motives, intentions, and previous knowledge that envelopes every teaching and learning situation and determines the course and quality of the learning that may take place (Biggs 1996)

Constructivist theory emphasized that learning is a process in which the learner is able to build on present and previous information. The student is able to take information, create ideas and make choices by utilizing a thought process. The teacher should encourage the student to develop the skills to find out principle on their own. there should be on-going dialogue between the student and the teacher. The teacher is responsible for making sure the information is in a format the student can comprehend. The key is to assure the course builds on what has already been learned.

2.1.3. Experiential Learning

Learning by doing is the vivid picture depicted of experiential learning. It is self-evident that experience gained through life, education and work plays a central role in the process of learning. Experiential learning is based on the notion that understanding is not a fixed or unchangeable element of thought but is formed and re-formed through 'experience'. It is a

continuous process, often represented as cyclical that we all bring to learning situations our own ideas and beliefs at different levels of elaboration.

Kolb (1984) is a representative of cyclical model of learning. This model consists of four basic elements:

Concrete experience (CE)

Reflective observation (RO)

Abstract conceptualization (AC)

Active experimentation (AE)

First, the learners are involved fully and freely in new experience (CE). Second, they must have the time and space to be able to reflect (RO) on their experience from different perspectives. It is this element in the cycle that will be strongly influence by feedback from others. Third, learners must be able to form and re-form, process their ideas, take ownership of them and integrate their new ideas into sound, logical theories (AC). This moves towards the fourth point (AE), using understanding to make decisions and problem solve, and test implications in new situations, all of which generate material for the starting point for the next round, the concrete experience again. Thus, learning is not achieved in a formal setting, but in the practice of reflection of daily experience. The learner can enter the process at any one of the element. The learner moves to the next step once he or she processes their experience in the previous step.

Another important view of experiential theory is Jarvis. He suggests, "all learning begins with experience (1987a, p.16)." He proposes that new experiences need to be experimented with, evaluated, reflected upon and reasoned about for the most effective change and therefore learning to take place. Jarvis continues, suggesting that these post experience behaviors culminate in the best and highest form of learning where change and increased experience have happened.

Jarvis' model seems to accept the maxim that **"***experience is the best teache*r**".** Learning from an older or more experience mentor provides an incredibly valuable learning forum and support network. Listening, and learning from a mentor's successes, failures, or mistakes can help expand one's knowledge base and shorten learning cycles experience alone would

require. It seems that living largely out of one's personal experiences also short-circuits meaningful. Relational connections that expand one's horizons and better equip one to succeed in this world and avoid so many of its pitfalls.

Theories of learning, like all scientific theories, come and go. The theories above are just a few among the numerous books and articles in professional journals. To sketch a bird's-eye view of the vast theoretical statements, Anna Sfard (1998) analyzed two dominate metaphors for learning: the *Acquisition metaphor* in which knowledge is treated as a commodity and learning is treated as gaining possession of that commodity and the *participation metaphor* in which learning is conceptualized knowledge construction through changing roles and identities within communities of shared practice. The acquisition metaphor constructs learning as a relatively neutral activity in which the mind is filled with knowledge as it were a container and the learning problem resides in the ability of the learner to absorb and hold information. The teacher may help the student to attain his or her goal by delivering, conveying, facilitating, mediating et cetera. Once acquired, the knowledge, like any other commodity, may now be applied, transferred and shared with others. The participation metaphor sees knowledge as actively constructed and relies on the possibility of establishing shared practice. Learning refers to the constant *flux of doing* from the context within which they take place.

2.2. Intercultural teaching and learning

Studying in a different country can be an exciting and challenging experience for international students who have to experience many adjustment problems, particularly those relating to academic, sociocultural, and psychological adjustment (Ward & Kennedy, 1993). In the context of internationalization, it is common that the classroom full of diversified students from all over the world. While engaging in "cultural learning," they have to try to make academic adjustments in a new territory where there are different patterns of teacher-student interactions, classroom cultures, academic requirements and expectations, and different concepts and definitions of what constitutes good teaching and learning (Ward et al., 2001). "Quality" in higher education is generally to be the identification and maintenance of components which constitute the best and most appropriate student experience and learning outcomes. Studies suggested that student learning experience and their satisfaction with them reflect attitudinal outcomes and perceptions of the education quality of the host

institution (Donald & Denison, 1996). A substantial weight in higher education should be given to student's satisfaction with, and their perception of, the value of their academic experience that are indicative of student's attitudes toward the curricula, program delivery, quality of instruction, and learning support of the host institution (Rautopuro & Vaisanen,2000). It is believed that the excellent courses attract excellent students, and excellent students from the wide range of intercultural background will in turn contribute to the quality of the educational program. However, to deliver a high quality of education experience for the students has to face many challenges.

In the broader context of teaching and learning, International students have long been faced with various problems in their adjustment in the new country. These problems could be identified as social withdrawal, inability to adapt new locatlity, sadness, depression, loss of self-esteem, ect. Such problems affect international students from concentrating on their study and making the most out of their foreign experience. Dealing with these problems is difficulty and exhausting. It is cruicial to identify and understand the factors that affect international students academic and social disastisfaction, which will help university administratiors creating a supportive service, and encourage faculty staff to improve their teaching strategis.

Paige (1993) articulates the challenge posed for both educators and learners by intercultural education. For educators the challenge is that: educators should know that communicating and interacting with culturally different students is psychologically intense. In order to response to the needs of learners and the demands intercultural experience, the educators have to self-reflect if the curricular content and instructional methodologies have developed for the purpose of international education. For learners, the challenge is that the process of adapting to a new culture requires learner to be emotionally resilient in responding to the challenges and frustration of cultural immersion. It requires learner to reflect upon matters with which they have had little firsthand experience.

Educators who are teaching international students, as Dewey (1916) pointed that educators should take account of individual differences by looking to the experiential learning of the students and the specific context of their experience. Intercultural teaching and learning, as a result, engages teachers and learners with the multiple social-cultural and linguistic memberships that each human engages with daily during one's lifetime, no matter the geographical location around the globe, no matter the perceived or proclaimed 'mono-

cultural', 'multicultural', 'trasns-cultural' educational environment. (Paige,1993). Duo to the differences amont international students from different cultural background, treating them as one homogenerous group is not reasonable in relation to the adjustment issues. Recent studies suggest that subgroup differences should not be neglected (Jennifer Wu Dun 2006). Each international students has their unique personality, characteristic and previous learning experience, when they come to a foreign cultural society the maladaptive existing in many aspects. Biggs (2007) has creatively suggested that effective teaching and learning in intercultural community relies on three domains of interaction: teacher-students interaction, teachers-institution interaction and student-institution interaction. These three parties' active cooperation and coordinate efforts will greatly promote the quality of education, and to promote intercultural rapport in particular.

In social constructivist's understanding, the challenges and culture difference can be solved by social integration and interaction because culture can be learnt from each other. In the context of intercultural leaning, as Papademememetre(2003) has observed that every teacher and learner can claim a variable linguistic, and socio-cultural identity on the basis of one's own multiple memberships in one's family context, work/study context, and everywhere-else context. in the intercultural classroom each person present can benefit from each other and make his/her own contribution by exposing them to differing perspectives, values, worldviews etc. however, if interaction between students and learners is not taking place, those benefits and contributions may not be realized. Thus, how to make interaction happens between the diverse student groups and teachers become the most concerns to researchers.

It is widely accepted that faculty and administrators should strive to encourage the integration of students into the university's formal and informal academic and social systems. Integration into the formal and informal academic and social systems in college increase the likelihood that students will achieve their academic potential (Tino, 1987). Research has demonstrated that student involvement is a positive factor influencing cognitive development, and failure to integrate has been associated with attenuated academic achievement. Overall dissatisfaction and high dropout rates (Astin, 1993; Pascarella and Terenzini, 1991; Tino, 1987). Faculty-student interaction, peer relationships, and participation in co-curricular activities are all strong indicators of involvement (Astin, 1993; Pascarella and Terenzini, 1991). Students who are involved in "intellectual activities reported the most progress in learning abstractions, comprehending ideas, and applying priciples" (Pascarella and Terenzini, 1991,p.17).

Teaching and learning take place both inside and outside the classroom. Duck University president Naner Keohane said,"A rich intellectual experience cannot come from two or three hours in the classroom once a week. It requires a climate in which [educators] and students alike see [the institution] as a place for shared discovery, for conversation, for intellectual and personal connections that stimulate new thought and action"(in Willimon & Naylor,1995,p 160).

A key to involving students in their educational experience is the faculty-student instructional relationship. When the student-professor relationship is positive, students take greater intellectual risks, increase their critical thinking, and increase their intrinsic motivation to perform academically. Moreover, when the relationship is positive, professors are more highly valued by students (Walsh & Maffei, 1995).

2.3. Analytical Framework

This study was grounded on two guiding theories: effective teaching and learning theory (Biggs 2007) and student involvement theory (Astin 1984). The effective of teaching and learning synthesized by Biggs (2007) from wide range of school of opinions which draw out some general characteristics of good teaching/learning contexts.

2.3.1. Effective teaching and learning

It is widely accepted that to make learning productive, both teachers and learners must firstly understand the meaning of learning and roles of teachers and learners. They need to know what it means to learn, when and where learning most effectively takes place, and what the outcomes and effects of learning are. To make teaching effective, teachers should have teaching competencies; understand instructional systems and the content of what they are to teach as well as knowledge of the philosophies of learning and teaching. It is necessary that teachers should be aware of the meanings of learning and conscious of the cultural background of their students.

Biggs conclude the characteristic of the effective teaching and learning as follows:

1. An appropriate motivational context. Leaning takes place through the active behavior of the student; it is what he does that he learns, not what the teacher does, so that students can take more responsibility for their learning.

2. A well-structured knowledge base. A powerful knowledge base is complex in structure and error free, built on accessible interconnections. Creating such a base involves: building on the known, making use of students' existing knowledge and emphasizing structural interconnections between topics.

3. Relevant learner activity. Knowledge is constructed through learner activity and interaction. Activity is good in itself: it heightens physiological arousal in the brain, which makes performance more efficient. When we learn something, each system is involved; we learn what we did, where it was and how to describe what it was.

4. Formative feedback. Errors are important learning opportunities, but formative feedback is essential in learning from error. In the course of learning, students inevitably create misconceptions that need to be corrected so that nay misunderstanding can be set right, literally in the formative stage.

5. Reflective practice and self-monitoring. Whatever the teaching and learning activities, it should encourage student's awareness of their own knowledge construction, largely by placing them in situations that require them to self-monitor and self-direct their own leaning. This is the way to achieve lifelong learning.

To support students in their learning achievement, the role of teachers is very important. In the past, teachers were considered as tellers or instructors who provided knowledge to students. However, today, the roles of teacher in the classroom have been considered differently by educators. According to Vvgotsky who contributed to ideas on constructivism, the role of teachers is to facilitate difficult learning tasks by providing help such as scaffolding. For Piaget, a teacher is an organizer of the leaning environment, an assessor and initiator of student's thinking. Astin has suggested that the function of teacher is stimulate and encourage student active participate in building their own knowledge and involvement is the key factors for quality of teaching and leaning.

2.3.2. Student Involvement Theory

The second guiding theory is Student involvement. The student involvement proposition argues that learning is a result of active participation in educationally purposeful activities, with the greater the quality and quantity of time and energy invested in those activities, the

large the education benefits (Astin 1984). Astin has outlined five assumptions about involvement that build the foundation for this concept.

1. Involvement refers to the investment of physical and psychological energy in various objects. The objects may be highly generalized (the student experience) or highly specific (preparing for a chemistry examnination).

2. Regardless of its object, involvement occurs along a continuum; that is, different students manifest different degrees of involvement in a given object, and the same student manifests different degree of involvement in different objects at different times.

3. Involvement has both qualitative and quantitative features. The extent of a student's involvement in academic work, for instance, can be measured quantitatively (how many hours the student spends studying) and qualitatively (whether the student reviews and comprehends reading assignments or simply stares at the textbook and daydreams).

4. The amount of student learning and personal development associated with any educational development with any educational program is directly proportional to the quality and quantity of student involvement in that program.

5. The effectiveness of any educational policy or practice is directly related to the capacity of that polity or practice to increase involvement.

With these two theoretic frameworks as starting points to study students' learning experience, and it is cover five dimension of discussion area, including academic environment; teacher and student interaction environment, peer students relationship environment, teacher's approach to teaching, students' approach to learning.

3. METHODOLOGY

3.1. Research Design

This thesis is based on qualitative research obtained through document analysis and in-depth interviews. Document analysis is one of the major resources for research data, and includes analysis of the Erasmus Mundus Student Annual Seminar Report, Bologna with Student Eyes Report, and the Erasmus Mundus Interim Evaluation Report. To support my arguments, different forms of learning theory were reviewed and range from the earliest learning interpretations of Socrates and Plato to modern constructivism and experiential learning theory. To establish a theoretic framework, student involvement theory, quality of teaching, and learning theory were also introduced. As this is a case study, it is unrealistic to analyze each of the over hundred EM master courses that have been carried out over the past five years, as there is only a limited amount of time to prepare a masters thesis. Thus, according to Tony Becher's disciplinary grouping, the EM courses have been categorized into four types, as seen in the table below.

Table 3.1 knowledge and culture, by disciplinary grouping

Disciplinary Grouping	**Nature of knowledge**	**Nature of disciplinary culture**
Pure science (e.g. physics): hard-pure	Cumulative, atomistic (crystalline/tree like); concerned with universals, quantities, simplification; resulting in discovery/ explanation.	Competitive, gregarious; politically well-organized; high publication rate; task-oriented.
Humanities (e.g. history) and pure social sciences (e.g.anthropology): soft-pure	Reiterative; holistic (organic/ river-like); concerned with particulars, qualities, complication; resulting in understanding/interpretation.	Individualistic, plurastic; loosely structured; low publication rate; person-oriented
Technologies (e.g. mechanical engineering): hard-applied	Purposive; pragmatic (know-how via hard knowledge); concerned with mastery of physical environment; resulting in products/techniques	Entrepreneurial, cosmopolitan; dominated by professional values; patents substitutable for publications; role oriented.
Applied social sciences (e.g. education): soft-applied	Functional; Unitarian (know-how via hard knowledge); concerned with enhancement of semi or professional practice; resulting in protocols/procedures.	Outward-looking; uncertain in status; dominated by intellectual fashions; publication rates reduced by consultancies; power-oriented

Source: Becher (1987)

In the hard-applied subject fields, knowledge is typified as having a cumulative, atomistic structure, concerned with universals, simplification, and has a quantitative emphasis. Knowledge communities tend to be competitive but gregarious. Because the knowledge base in the hard fields is fixed, both curriculum and assessment on problem-solving and practical skills are expected to manifest as a degree of products and techniques. Here, a strong value is placed on the integration and application of existing knowledge (Smart & Ethington, 1995).

Within soft-applied programs, the skills developed are also practice related, the knowledge base tends to be more eclectic, and the implicit emphasis is on the enhancement of personal growth and intellectual depth. A prominent place is given to the development of reflective practice and lifelong learning skills (Ballantyne et al., 1999).

The same disciplinary possess some kind of common characteristic of knowledge structure. Different disciplinary require different teaching instruction, assessment, and learning support from an institution. Hard-applied and soft-applied course samples represent two categories of characteristic EM master courses which will provide a different perspective, from students, on teaching and learning activities in the Erasmus Mundus program framework. Therefore, two Erasmus Mundus courses were selected as course samples to represent the **soft-applied disciplinary,** in the social science field, and **hard-applied disciplinary,** in the natural science field.

3.2. Course Sample and introduction

The two selected course samples involve 9 partner universities from 8 European countries. Each course's study duration is 2 years and the two course sample's titles are Space Master - Joint European Master in Space Science and Technology (2005-2007) and HEEM – European Masters Degree in Higher Education (2007-2009). To better understand these two programs, it is necessary to have a brief overview of them, respectively.

Space Master Course

This Master's Course aims to combine the great diversity of space expertise across six top-class European universities within a single international Master's program. It gives students cross-disciplinary experience, from working in a laboratory or computer simulation environment to experiments using balloon, rocket, satellite, robot, and radar control. The program brings together a core group of students from all around the world to share and

develop knowledge together, and to contribute to the global space industry and research community.

Partner Universities:

- Lulea University of Technology, Sweden (Coordinating Institution)
- Cranfield University, United Kingdom
- Czech Technical University in Prague, Czech Republic
- Helsinki University of Technology, Finland
- Bavarian Julius-Maximilians University of Wurzburg, Germany
- University of Toulouse 3 Paul Sabatier, France

HEEM Course

This two-year Masters Course in Higher Education program is focused on the changing functions, policies, and operations of higher education from a comparative perspective. This cross-disciplinary program aims to promote a clear understanding of higher education across Europe and the rest of the world, and to contribute to the structured training of the next generations of higher education researchers and managers. The course program is composed of a combination of modules; these include research methods and statistics, the history, governance, and management of higher education, economic and international dimensions of higher education, and the production of a Master's thesis.

Partner Universities:

- University of Oslo, Norway (Coordinating Institution)
- University of Aveiro, Portugal
- University of Tampere, Finland

3.3. Interviewee Sampling

This approach was taken to encourage students to reflect on their life and learning experience and articulate their own perceptions of the learning approach and cultural differences within the specific educational environment. The student responses are not

presented as a critique of the course, or of the EM program, but are intended to provide a realistic view of student experiences within one EM course.

In the Space Master program (2005-2007), there are 47 students of 20 different nationalities and 14 students participated in the interviews, which stands at 29% of the course participant population. There are 25 students of 20 different nationalities in the HEEM program (2007-2009) and 15 participants were interviewed, which is 60% of the course participants. Since the student body is diversified with various nationalities, the more students that participate in the interviews, the information that they provided is more typical. The selected interview comments in thesis will be lable by a capital letter A, B,C.....Q.

Table 3.1 interview participant

Title of Course	Student Population	Number of Nationalities	Number of Participants	Sample Proportion
Space Master	47	20	14	29%
HEEM	25	20	15	60%

3.4. Procedure

A qualitative research approach, in the form of open-ended individual interviews, was adopted to examine the learning experiences of EM students, both inside and outside class; the questions related to their perceptions of the education quality, and their personal and intellectual growths in the process of cultural adaptation. Before the interview, each participant was provided the interview questions by email in order to have time to think them over. The interview questions (see appendix) addressed their learning experience, learning skills, academic difficulties, and their attitudes toward instructional methods. The questions also inquired about their perceptions of teaching and learning, relationships with teachers and classmates, and their recommendations for institutions to improve practice for EM students. Two different methods for conducting interviews were used: one was by web camera through Skype and the other by face-to-face discussion. For Space Master's students, as they have already graduated and are working in different locations, interviews through Skype provided for the easiest and efficient method of collecting information. For HEEM students, since I am the part of this program and participants are classmates, face-to-face interviews were utilized. The HEEM online group forum was also another important way of

information gathering. Every interview lasted nearly 45 minutes. All interviews were transcribed and coded, with only a small portion of interviews being audio taped.

3.5. Limitations

The methodology in this research is subject to several limitations. Firstly, the relatively small sample size, compared with the hundreds of EM courses that have taken place, indicates that the findings and conclusion cannot provide for generalizations. Secondly, as I myself am a part of the HEEM program, my observations and personal experiences inevitably have, more or less, non-objective factors. Lastly, because of limited time, the research cannot cover every side of the student learning experience. The following chapter will report the main findings from the research conducted.

4. EMPIRICAL ANALYSIS

4.1. Student Reflection on Teaching and Learning Activities

4.1.1. Typical of Teaching Activity

Learning takes place through the active behavior of the student; it is what *he* does that enables him to learn, not what the teacher does (Ralph W.Tyler 1949). If students are to learn desired outcomes in a reasonably effective manner, then the teacher's fundamental task is to get students to engage in learning activities that are likely to result in their achieving those outcomes. It is helpful to remember that what the students does, rather than what the teacher does, is actually more important in determining what is learned (Thomas J.Shuell 1986).

My research results show that within the teaching practices, students are usually regarded as "empty vessels" and the teachers' role is to fill them with knowledge. As a matter of fact, in the Space Master program, a considerable amount of teachers are leading experts from relevant industry fields. The knowledge and information they delivered in lecture usually contained their most important research findings and the current projects or interests of the industry. As these academic "celebrities" are always busy, either on field research or attending worldwide academic conferences, they may not be able to fulfill the responsibility of the role they should take as a teacher, such as motivate students, understand students, guide students, and interact with students. For example, in a normal lecture class, the professor or sometimes called "PP person" (PP person is a name given to the teacher who uses only PowerPoint presentation in his lecture) plays a major role in the classroom rather than the teacher interacting with student.

Biggs' point of view has vividly described the picture of what actually happens in these classes. The teacher speaks according to the usual structure of the lecture; he introduces the topic, explains it, elaborates on it, takes questions about it, and then ends lecture. The students are engaged in receiving the content, listening, taking notes, and perhaps asking a question - but not necessarily in the "explaining". See the table below about the typical teaching method in used in classroom.

Table 4.1 What teachers and students usually do in a lecture.

Teacher activity	Student activity
Introduce Explain Elaborate Show some PPT slides Questions on slides Winds up (Ends lecture)	Listen Take notes Understanding (But correctly? Deeply enough) Watch, note points Write answers to questions Possibly ask a question

Resource: Biggs (2007)

This approach to teaching is widely applied in today's university classrooms. The advantages of this approach are embodied in the breadth of knowledge acquisition. In general, an experienced expert from a particular industry field brought his/her most important essence of knowledge, accumulated by their lifetime of work, to a class lecture. Moreover, every course was divided into several modules and each module was taught by a famous expert who presented the "cutting-edge" knowledge of their field. In other words, student received knowledge from multiple aspects of resources by many different teachers in one course module. Thus, in theory, the course was delivered by a considerably highly qualified teaching staff because of their expert knowledge. As teachers, they tended to be passionately committed to their profession and are anxious to convey its significance and knowledge base to students. However, they are so focused on presenting the subject matter that they neglect to consider how much of the subject knowledge is really transferred to students. For instance, in a typical fifty minute lecture class, students retain 70% of what is conveyed in the first 10 minutes, but only 20% of what is presented in the last minutes (Mckeachie, 1994, p.56).

Meanwhile, for some students who have the desire to gain a specific knowledge, such intensive PPP teaching methods may not allow for in-depth knowledge acquisition. Firstly, the knowledge and information given by those professors in class lectures is "tough" and abstruse in that it is hard for students to comprehend and digest, let alone raise critical questions about it. Secondly, students' professional backgrounds and previous knowledge structures are sometimes different and not interconnected with the current subject matter that professors are teaching in class. This reality may not comply with the principle of knowledge building. As a rule, teaching builds on the "known", it must not reject it; "proceed from the known to the unknown", as the old saying has it. In deep learning, new learning connects with old knowledge, so teaching should emphasize the interconnection of topics (Biggs 2007). Last, but not the least, students have little opportunity to communicate with teachers

after class. On the one hand, if the lecturer is a leader from an industry field, he/she will most likely leave immediately after the class in order to catch the next plane for another lecture or meeting. On the other hand, teachers and students are not familiar with each other in terms of research direction, interest, and topic, and this makes informal communication via emails or phone more unlikely to happen.

The same phenomenon also exists in HEEM program; not only do students have the same feeling as Space Masters students had, but have also experienced difficulties with the class schedule arrangement. For example, in the second semester in Tampere, sometimes there were intensive lectures given in one week, while at other times there were no lectures, at all, in the span of four consecutive weeks. Thus, students could take advantage of their free time for traveling or whatever they liked doing. However, during the intensive study week, there were at least five knowledgeable teachers, from all over the world, who came to classes and, in turn, "bombarded" students with substantial information. In the first two or three days, students were so excited to have such excellent lectures that the classroom atmosphere was very active. Many insightful questions were asked and most inquiries were accurately explained during the class. But in the last two days, there was an obvious lack of dynamics in the classroom and even the most active students were quiet and just sitting there, listening. Most students feel tired and can hardly concentrate, let alone interact. When that unit module had ended, a required reading list, plus books and articles recommended by each teacher during the class, were given to students. This week of intensive work was followed by more hardworking days.

4.1.2. Relevant learner activity

Knowledge is constructed through learner activity and interaction. It has been said that "two heads are better than one". It is common practice in university courses to divide students into small groups to explore or discuss an assigned topic, to discover some challenging problems, or to participate in an exchange of ideas and share some insights with teammates. Some researchers describe such practice as "cooperative learning," interchangeably used for group learning, peer learning, and collaborative learning. It has been widely accepted that cooperative learning provides a more comfortable and supportive learning environment for minority groups, fosters individual accountability in a context of group interdependence, develops interpersonal skills and teamwork, and provides students with real life experiences

that could be benefit for their future careers (Johnson 1989). In my case study, student perceptions and attitudes towards group discussion and group assignments will be discussed.

4.1.2.1. Group Discussion

In the HEEM program, at the University of Oslo for instance, seminars were an indispensable part of teaching and group discussions became a routine classroom activity. Usually, in a 90 minute class, the first 45 minutes were comprised of a teacher lecture, leaving the rest of class time for discussion and oral presentation. Most students viewed group discussions very positively, but a few students had negative feelings towards them. In general, there are two ways of organizing group discussions: teacher-assigned groups and self-assigned groups. In teacher-assigned groups, the group members were usually selected according to their different nationality, and background, with the purpose of promoting intercultural communication and rapport among diversified group members. In self-assigned groups, students usually just turned around and made a group with the people seated next to them, or joined a group whose members he/she was familiar with. In general, teacher-assigned groups function better than self-assigned groups as the goals are always clear and the task division is equal. This encourages each individual to actively be involved and contribute their understanding of problems, questions, insights, and solutions in diversified perspectives. However, in self-assigned groups, some students are very talkative and keep on expressing their personal experience and ideas, whilst others have less opportunity to share their own point of view and are even completely silent until discussion comes to the final summary. This phenomenon may be prone to causing frustration and gradually reduce some members' interest and devotion to group discussion. However, the most typical comments about group discussion are very positive. One interviewee's view may represent a general perception of many students:

> "I seriously enjoy the group discussion, I could interact with students from other cultures, and background which in deed enhance my cultural understanding through such intercultural encounters. There are lots of benefits from group discussion, because different people have different knowledge which comes up with wide range of their ideas. Sometimes it is so surprising to hear people with some unique ideas that I have never thought about and it really brings me to an endless imagination space". (Coment from interviewee A)

Some students consider group discussion as an opportunity to improve language ability and communication skills since English is not their native language. It is easier to understand the dialect accent in small group discussion simply by asking people to say again, or explain, the meaning of what they said, if there is difficulty in comprehension. The following comment illustrates some interesting views:

> "I feel that small group discussion helped reduced my anxieties since I am so nervous talking in a large class where my introverts shy personality could not fit. I am afraid that my poor spoken English is not as good as other students and that they won't understand what I mean. The fear of being embarrassment often oppressed my desire to express myself. But in a small group with three to five people, I feel less pressure to share my ideas and views with other student". (Interviewee B)

4.1.2.2. Group Assignments

A group discussion requires students to complete an assignment as a group with shared tasks to achieve shared marks. The marks for each individual are determined by the performance of the group. Group assignments aim to develop a students understanding of teamwork, skill in coordination, collaboration, contribution, sharing, and dedication. There were many contributing factors that affected group dynamics, such as members' attitudes and willingness to cooperate and contribute as a team, the composition of the group, and cultural values and beliefs held by the different group members. Student from the HEEM program have quiet different opinions on group assignments as compared to those students from the Space Master program.

For example, in the HEEM program, in the second semester at the University of Tampere, one of the group assignments was conducting an imaginary case study by putting students in a situation where they pretended to work as a committee of board members and discussed how to save a university (FUT) on the verge of bankruptcy. Students had one week to prepare and work on the "FUT" case study. A final integrated report, which included a wide range of ideas, had to be submitted and each individual had the opportunity to represent their group in an oral presentation in the class. Without surprise, many principles and HEI theories were applied in this case study, which made the group assignment interesting and provided intellectual growth. The key point is that, no matter how great or weird an idea was, it was simply a group paper, after all, and no one individual really took responsibility for proposals,

whatever the possible results. Thus, students are more likely to actively participate in group assignments due to shared responsibility of results.

However, there is a different story about group assignments in the Space Master program since space technology is a science based and professional-oriented field. The group assignments were usually laboratory and experiment based work, lasting for several months. This required group members not only to possess an adequate background of engineering fundamentals, but to also have the ability to participate in interpersonal communication, cooperation, and teamwork. The goals of group assignments were to coordinate efforts to solve very complicated problems. For example, in the first semester at Wuerzburg University, students were required to design a cube satellite model, connecting it with a computer to implement some basic function. The work required someone proficient in computer programming, automation control, signal processing, and structure design, respectively. It was impossible for a single person to complete this project. The following comment demonstrates how difficult an inter-culturally based group assignment can be:

> **"**The assignment helped tie the material together; we can apply the theory into the practice with real job. In the group work, you have to be more patient on people. We all have different motivations, attitudes, values, beliefs and personality which sometimes may cause misunderstanding and conflict with your colleagues. For instance, it's hard to make an agreement on commitment to attend, prepare and be on time for meetings. You can't blame your group member who is not punctual, who did not complete his part of work, and who did well or worse; otherwise, the work can never be finished if the time focus on disagreements and mutual condemnations". (Comment from interviewee C)

Some students have very mixed feelings about group assignments. They noted that group assignments, in deed, promoted mutual understanding and built confidence in recognizing win-win solutions. However, grading for group work seemed to penalize diligent and hardworking students and reward dull and lazy ones, which most likely promoted laziness and irresponsibility at the sacrifice of the efforts of assiduous students. Some interviewees reflected on their negative experience as follows:

> "It is very frustrated to work alone late at night for group assignment as some people always have a good reason avoiding and procrastinating doing their effort; they have their unchangeable personal learning schedule and consider group assignment as an extra burden

since their weightiness focus on the final exam or other project they interested in. The work need to make a holistic progress in order to start the next step and each single step need a collaborate efforts. Lot of time has waste on waiting, negotiation rather than doing actually work. I did learn a lot by struggling through them and something like control my anger and emotions and how to disagree without animosity". (Comment from interviewee D)

"It is unreasonable in group assignments where all members shared the same marks regardless of the contribution made by the members. Such unified assessment seemed to produce irresponsibility rather than fulfill obligation. It is necessary to introduce the confidential peer ratings in group assignment". (Interviewee E)

Such comments illustrate that different students have different attitudes towards the group assignment. The way of student thinking and doing varies with their background, motivation, and personality.

4.1.3. Assessment and feedback

The quality of assessment is the most important component for student learning progress. Giving students valuable, reflective, constructive, and facilitative feedback on their performance is an important skill for all lecturers (Collis, De Boer, & Slotman, 2001). There are two primary forms of assessment: formative and summative assessment. Formative assessment is provided *during* learning; telling students how well they are doing and what might need improvement. Summative assessment occurs *after* learning; informing students about how well they have demonstrated what they were supposed to have learned (Biggs 2007). When students submit their thorough assignments, they need to know how their work is being assessed and would like it to be returned in a timely fashion (frankly speaking, why should students have to observe work deadlines if staff do not also observe grading deadlines?). Also, once the work is returned with a mark, the students need sufficient comments to explain why that particular mark was given and to understand in what aspects they did good and where they could have improved their work.

My research results found that most of the feedbacks students received from professors are based on summative assessment. Students in the Space Master program were generally satisfied with their feedback, since students usually had a standard test paper and the errors or mistakes they made were visible on the returned tests, thus, the feedback could be given by a common seminar or discussion. However, most students in the HEEM program were not satisfied with the feedback on their assignments because the feedback was not returned

on time and was sometimes several months late, or because the comments were so simple that they were far much lower than what students expected.

Although students were not satisfied with their feedback, the behavior and attitude in which they deal with such dissatisfaction is thought provoking. In the HEEM group online forum, students discussed how to solve the problem of the delayed, perhaps procrastinated, feedback for one assignment, and to confirm who would, or would not, participate in making an official complaint to the faculty. Wide divergences of opinions emerged on this issue. Some students wanted to make a formal written complaint to send to the board of committee in faculty of education, while others suggested being more patient in waiting for the feedback. Some chose to keep silent and made no comments at all. The following comments were made by students and represent some of the main feelings the issue:

> "I did not receive feedback on my assignment yet, so I would like to participate in an official complaint to the faculty. Please sign me up. In case there is no response within a week, I would suggest complaining to the student union. I like my teacher and I understand that he has a lot to do but that has nothing to do with the fact that he did not do his job and did not give me his comments on my assignment till now. If me as a student did not submit an assignment I am asked to do, saying that I am busy, this will not be accepted as an excuse no matter whether the lecturer likes me or not. I think, as it is a duty that I have to do my job, it is also a duty that I have to ask for my rights".(Comments from F)

> "I have received my feedback. Even it is not, I will not join the formal complaint. It is because I don't want to put further much pressure for our teachers. I believe they already know that we are waiting for the comments and have tried the very best to give us on time. But the point is that they are really busy people and don't have much time. So even if we make the complaint, if they don't have time, it will just add them pressure but may not make the progress faster". (Comments from G)

> "I think that we already have feedback for the course in terms of grades, and as much as that might not be comprehensive enough, I am satisfied. I am used to not even knowing my grades till the end of the whole Bachelor program, so, for me, not getting feedback isn't such a big deal as it might be".(Coments from H)

> "The feed-back is crucial for each student's individual improvement of their own academic writing, and a waiting-period of up to 5 months on promised feed-back is not satisfactory. If

> we don't do anything things will remain the same and the quality of the program will remain questionable. It is not only your right to complain, but I feel it is your obligation as a student to speak up when something is not right".(Comments form I)

The narratives above vividly demonstrate how the students' cultural backgrounds, beliefs, and previous experiences have affected their way of thinking and attitudes in doing things.

4.1.4. Extra-curriculum Study

Learning is an active process in which the learner uses sensory input and constructs meaning from it. As the great American educator Dewey indicated, learning is not the passive acceptance of knowledge which exists "out there" but that learning involves the learner's engaging with the world (Bruner, 2007). The crucial action of constructing meaning is mental; in other words, it happens in the mind. Physical actions and hands-on experiences may be necessary for learning, but it is not sufficient enough, thus, teachers need to provide activities which engage the mind, as well as the hands, for an effective learning process. Biggs point out that, students learn through activating different sense modalities: hearing, touch, sight, speech, smell and taste. The more one modality reinforces another, the more effective the learning. It is just like the table showed below.

Table 4.2 most people learn…

10%	of what they read
20%	of what they hear
30%	of what they see
50%	of what they see and hear
70%	of what they talk over with others
80%	of what they use and do in real life
95%	of what they teach someone else

Source, Attributed to William Glasser; quoted by Biggs 2007

According to this rationale, a field study in the Space Master program and a visiting study in the HEEM program may be best proved effective through practical experimental learning.

4.1.4.1. Space Master Student Field study in EADS

For the Space Master students, the most stirring experience in their learning was perhaps the field study in EADS (European Aeronautic Defense and Space Company), which took place

in Germany and the UK. EADS is a global leader in aerospace, defense, and related services. The Group includes the leading aircraft manufacturer Airbus, the world's largest helicopter supplier Eurocopter, and EADS Astrium - the European leader in space programs, from Ariane to Galileo. Its Defense & Security Division is a provider of comprehensive system solutions and makes EADS the major partner in the Eurofighter consortium, as well as a stakeholder in the missile systems provider MBDA. A student who pursues studies in the space field has the opportunity to see the real world of advanced space technology and it is definitely a valuable experience for them. Students, accompanied by a professional narrator, visited the experimental base and research center. Such personal experiences not only opened their eyes and broadened their horizons, but also increased their motivation and stimulated their ambitious in pursuing future research in the “unknowns” of the space world. According to the interview results, all students spoke highly of this practical field study.

4.1.4.2. HEEM Student Visiting Study in Brussels

The Brussels study trip, organized by host University of Oslo in 2007, was the most memorable experience for the HEEM students. Student visited the Directorate General of Education in the European Commission, the European Center for Strategic Management of Universities (ESMU), the Academic Co-operation Association (ACA), the European University Association (EUA), and the Education Audiovisual & Culture Executive Agency. It was an excellent opportunity for students to understand and discuss several initiatives, programs, and policies of important European institutions that focus on higher education. Since HEEM students are supposed to have a professional career in the field of HE, the comprehensive understanding of the challenges that the EU HE systems face, and attempts of different institutions to cope with them, is of essential importance to their academic studies and preparation for future professional careers. Therefore, the opportunity for face-to-face communication with EU experts and policy-makers is not only an honorable experience, but an insightful learning opportunity as well. Students considered this visit study as one of the most excellent aspects of the course.

4.2. Student Reflection on Mobility Scheme

Mobility is the unique selling point for EM programs as it requires students to study within at least three different European countries, at partner institutions. It aims to promote cooperation and academic integration, as well as intercultural understanding between Europe

and non-European countries. Living in, and experiencing everyday life in, three countries through one program seems very appealing yet challenging. Europe is rich in both culture and linguistics. In the Space Master program, the five partner institutions are in five different countries which speak five different languages. This is the same in the HEEM program too, where all three partner institutions are in various countries that each has their own unique languages, respectively. This made relocating challenging. Moving from one country to another is not as simple as booking a ticket and then moving, in the next few hours, to a new and exotic world. There are many logistical requirements to deal with, which are time consuming and laborious. Students, particularly in the Space Master program, expressed a strong negative feeling about mobility in terms of their academic experience:

> "There were definitely frustration with the mobility, the time I should have been concentrating on research, studying, reading or writing papers, but instead, I was applying for visas, working on organize transportation, booking tickets, inquiring housing information, etc. with regards to an individual basis, it looks like a easy case and will not take much time. However, when you consider that mobility-related things take place in both city and institution, such as finding housing, unpacking, settling down, being familiar with campus, library, city, opening bank account, buying transport passes, shopping essentials, etc. it actually takes up a lot of time. Moreover, many unexpected problems happened only because we do not understand the local language or the rules of the city". (Comments from interviewee J)

Although there were negative aspects regarding mobility, the positive aspects associated with the required mobility are obvious, as many students emphasized. Take for example the following comment:

> "I have learned many things from the mobility. I have become quite flexible to new environments, and being more tolerance to different people, acceptance to different culture. Having the opportunity to live in so many new places helped my personal growth in dealing with new people in a completely different language and culture background. Studying in three different European universities enriched my knowledge and broadened my horizons, and all these experience will benefit my professional career in future". (Comments from interviewee K)

The comments of these students show that mobility is indeed a great value, but to a large extent, the distractions of the mobility on an academic level need serious re-consideration. Besides all the research for preparing to move, there are more hidden challenges after settling down regarding life and learning. According to the interview results, the main challenges students have experienced are the difficulty in adjusting new environment and integrating into the local community.

4.2.1. Difficulty in adjusting new academic environment

How to effectively use academic resources for research is the first concern for students arriving in a new location. For example, the library navigation system varies from country to country, and the rules of book reservation, or lending period, are different from one institution to another. Sometimes, in the libraries, there is not enough English index information provided in the library database, which leads to inefficient research resources. For the Space Master students, they had to adapt to the new laboratory environment where the experimental equipment, and tools, may vary from the previous university they worked with.

Teacher-student relationships are the most important component of the academic environment. At the Master's level, it is essential to establish good working relationships with professors or tutors. However, a good communication dynamic pattern cannot be built in a day. Constant movement between partner institutions leads to students being not familiar with any of their professors' research areas, let alone the opportunity to strike up a mutual interactive relationship. Furthermore, students had to take some time to get used to each new professor or professor's teaching style, and even their speaking accent. For most students from non-European countries, they are unfamiliar with European academic conventions; they do not know how to criticize without being offensive when they disagree with an argument or how to approach faculty for learning support after class. For instance, many teachers wind up their lectures by giving contact information, like an email address, and say that, "if you have any further questions, you are welcome to drop by my office or send an email". Students don't know whether this is a genuine invitation or just a "lip service". So, sometimes, they hesitate to contact their professors even when they have a desire to. Perhaps if they provided exact office hours, it would help reduce the hesitation.

Adapting to each partner institution's assessment system is the biggest challenge for students. How to pass the exam or get a high score, are the primary concerns for students, particularly for the Space Master students. There were at least 6 students who were "washed out" in the first academic year, including 2 scholarship students. More than 30% of the students failed one course in the first semester at Wurzburg University. These fierce elimination measures put students under great pressure to survive the courses. Students noted that homework was usually over-loaded and most assignments were considerably difficult at the University of (JMUW) in Germany. However, in the second semester at Luleå University of Technology (LTU) in Sweden, students felt more at ease with both assignments and exams. A student expressed her totally different experiences in Germany and Sweden:

> "In Würzburg, failed all my expectations in every way, damaged my health by overly time demanding schedule, working on homework late at night is not unusual, the exam is so tough that hardly complete all the questions within two hours, I got a zero for one assignment only because one minute late to tutor's office where the mailbox has closed. In Germany, No excuse and only rules talk. The second semester in Kiruna, Sweden, however, was very well prepared. The administrative was simple, the dormitory organisation did not rob us, the lectures schedule allowed for self-study time, the teachers did speak fluent English (which is more than we can say about Würzburg), we were not forced into absurd, time consuming and pointless homeworks and even the examinations were much more thought through, we can have drinks and cookies during the four hours exam period". (interviewee L)

4.2.2. Having difficulty integrating into the local community

Erasmus Mundus students, as a special group of international students, hardly define themselves by the university they belong to. In principle, once a student is accepted by the program, he/she will automatically be recognized as a student in all the partner universities. However, to what extent are these students treated as "customers" as they are required to pay the tuition fee, and to what degree have the students been involved in academic affairs where they can raise their own voice to discuss their rights, duties, and obligations at each institution they participate at. All these questions are related to the academic and social integration that the initial purpose of the EM program emphasizes. However, in practice, students noted that they feel, themselves, more like visiting students and have little academic belonging to each partner institution.

Most participants reported that they were rarely involved in any campus political events, such as University presidential elections or student parliament campaign. For example, the biggest event for local students at the University of Oslo is the election of representatives to the University Board, in 2009, but most HEEM students in Oslo don't even know that. The reasons are either for indifference to political issues or the lack of English information about it for international students. Either way, international students do not seem to be included in such kinds of campus events, which are actually in the basic rights of all students.

Perhaps questioning and complaining are the primary reasons for students involved in academic affairs. However, when students' interests have undergone inappropriate treatment, it is hard to organize a formal complaint in a diversified international student group since ideas always vary and a consensus is rarely made. A few students' voices are usually so small that they are hardly paid any attention to by related organizations. Even though students do make some effective complaints, the process of problem resolution was so slow that only the next year students could benefit from these "fruits of change".

Interaction with local students can quicken the process of cultural adaptation for international students. Research findings indicated that students, particularly Asian students, had difficulty making friends with domestic students. Usually, friendships were established during the academic and social activities. As local students seldom join the same courses with EM students, the opportunity for "striking up" friendships mostly relies on social activities available, such as parties, quizzes, or sporting games. From the psychological points of view, as a foreign student, the need for a sense of belonging contributes to a strong desire to be a part of the local community; to have local friends and to understand the host culture and society. Moreover, friendship formation can significantly facilitate students' adaptation to university life by reducing anxiety and uncertainty, and providing support networks for students. However, in reality, many different factors affect students' engagement in diversified social activities. For example, some students expressed their feelings about social activities in the following comments:

> "I do want to engage in all the social activities with local students or my peer classmates. But, my English proficiency is not good enough to join their chatting. Sometimes, they talking jokes which make themselves laugh to tears, but there is nothing meaningful for me, and I did not know where the humor it is. What I should do? Laugh with them in the same way and pretended understand very well for what

they talked? Sometimes, the conversation they had with slang and idiom that really made me hard to understand. So, gradually, with the feeling of frustration, I lost my interests to participate any informal social gathering". (comments of interviewee M)

"In my understanding, I found that go to pub is the most favorable activities for EU students. They enjoy drinking, chatting, singing and dancing in the pub and maybe that is a kind of forms of socializing for them. For me, I am not getting used to the noisy place and I have the problems with alcohol allergy. I would like to stay with my Christian friends and sometimes cooking together at home with my fellow countryman rather than go for parties".(comments from interviewee N)

"For me, I don't belong to any established friends circle, I have my own lifestyle. Listen to music, watch online movie at home. Sometimes, I have a feeling of isolation; I am the only person from my country in this program, I have to rely on myself dealing with every thing in my everyday life. Maybe, it is my own personality problem that hardly integrates with other people". (comments from interviewee P)

With the responses above, it is clear that a student's language ability, cultural difference, and personality are the main factors that affect their life and learning experience. The extent of involvement in different types of in-class and out-of-class activities and the quality of students' relationships with peers, faculty members, and administrators are important indicators of a students learning experience satisfaction**.** Therefore, the following topics will be discussed in the next chapter:

- How a students' previous cultural background affects their current learning
- What are the student expectations from their institution, faculty, staff, and peers.
- What the institution or faculty staff can do to help them overcome the difficulties and improve the quality of learning.

5. DISCUSSION

5.1. What factors affect students learning experience?

From the analytical analysis, I found that there are two dominate factors affect students learning experience: the extent of student involvement in different types of in-class and out-of-class activities and the quality of students' relationship with peers, faculty members, and administrators.

Research has demonstrated that student involvement is a positive factor influencing cognitive development, and failure to integrate has been associated with attenuated academic achievement, overall dissatisfaction, and high dropout rates (Astin, 1993; Pascarella and Terenaini, 1991; Tinto,1987). Faculty-student interaction, peer relationships, and participation in co-curricular activities are all strong indicators of involvement (Astin, 1993; Pascarella and Terenzini, 1991). Integration into the formal and informal academic and social system in college increases the likelihood that students will achieve their academic potential (Tino, 1987). Hanks and Eckland (1976) also posit that social integration creates opportunities for students to acquire international communication skills, self-confidence, specialized knowledge, and other skills that are essential to academic adjustment.

It is widely accepted that international students are an invaluable resource to the University, adding a truly global dimension to academic and student life. Research shows that learning in a diverse environment can benefit all students by exposing them to different perspectives, values, worldviews etc. in the other words, students diversity can foster educational benefits once interaction is taking place. However, my findings found that interaction between home and international students tends to be low and students involvement with academic lower than the level of expectations. For international students, especially the Third country students, most of them are living away from home country for the first time, begin adjusting new academic and social environment has always been an important, and sometimes difficult, task for students. From my interview I found that three main factors affect student involvement and quality relationship with faculty staff and peers: language, cultural difference, and personality.

5.1.1. Proficiency of Language

The importance of the English language proficiency in student adjustment has been well recognized. Many researchers tend to agree that the higher the level of English proficiency is, the easier it is for students to adjust (Jennifer Wu Dunn 2006). Adequate English language skills are not only helpful in breaking down intercultural barriers but also crucial in academic success (Church, 1982; Pruitt, 1978; Yang & Clum, 1995; Ying & Liese, 1991). The lack of English proficiency is considered to be the greatest problems of international students. Dolan's (1997) study indicates that limited English language proficiency discourages students from classroom participation: poor listening abilities make it hard for them to understand classroom discussions, and weak speaking abilities prevent them from effectively communicating their ideas. Barratt and Huba (1994) found that those with poor English language skills have lower self-esteem. Spaulding and Flack (1976) assert that students with poor oral and written English skills tend to have both academic and social adjustment problems.

From the interview, many students emphasized that language is the biggest barrier for intercultural communication, for the difficulty in understanding accent, slang, speed, and humor emerged during the conversation. Most Asian students except Indians consider that the linguistic competency constitute a major stumbling block in their social integration and academic development. This might be mainly due to the fact they rarely use English outside the classroom in their home country. For instance, for the fear of to be considered as ignorance, they usually reluctant to participate in group games such like Quiz Show, movie commentary, and current affairs discussion. This is not really because they are lack of such kind of knowledge, but they are not used to express it by English. The insufficient of language ability also hindered them to active attend the public presentation, let alone to join the international conference.

5.1.2. Culture differences

Culture provides tools, habits, and assumptions that pervasively influence human thought and behavior, and the task of learning does not escape this influence (Brislin, Bochner, & Lonner, 1975; Brunner, 1996, Cole, 1996). Erasmus Mundus students are exceptionally diverse in their racial identity, religious preferences, and cultural practices, and each culture has its own unique feature. In general, student from different culture background have

different learning style and attitude toward the teaching method. For example, according to my own experience in HEEM program, I found that the most active students in classroom are mainly culturally western or English-speaker students (e.g. Europe, American, Austrian,). They get used to frequently raise questions anytime as long as they have doubts. However, on the contrast, most students from the Third country, especially those who are from Asian are more quietly and rarely ask questions, let alone participate the critical debating with teachers. We can not help asking why is it so? What are the causes? Rofer G. and Darrin R. Lehamn identified two domains learning rationale within a cultural context: one is Confucian-oriented Asian students' approach to learning, another is Socratic-oriented culturally western students' approach to learning.

Socrates (469-399 B.C.E), a western exemplar, thought by many to be the father of Western philosophy, wrote nothing that survives today. Socrates approach to learning tended to question his own and others' beliefs, evaluated other's knowledge, esteemed self-generated knowledge, began teaching by implanting doubt, and sought knowledge for which he had good reasons (Roger,G. Tweed & Barrin R. Lehamn 2002). While, Confucius (551-479 B.C.E), an eastern exemplar, were considered as the greatest teacher in ancient China. His educational ideology influenced Chinese scholars for thousands years and also widespread transmitting to Southeast Asian. Confucius valued effortful learning, behavioral reform, pragmatic learning, acquisition of essential knowledge, and respectful learning (Roger,G. Tweed & Barrin R. Lehamn 2002).

Possibly because of Socrates' influence, in today's western culturally classroom teachers are always encouraging students to ask questions, and highly praise those critical thinking and creative thinking. Pratt (1991) also explains that teachers are facilitators who promote learner autonomy. However, in a Confucian Heritage Culture (Biggs & Watkins, 2001) the teacher is generally well respected with all the wisdom, a mentor, guide or maybe even guru figure for the students who are the apprentices. For example, in the traditional Chinese classroom, the teacher is viewed as a model, an authority, and a parent; students are result focused and learn by listening and reflection, therefore, critical questioning is perceived as "disruptive and disrespectful" (Cortazzi and Jin, 1997; Pratt). Many western teachers consider Asian students are rote leaner. For instance, Margaret Robertson et al (2000) in their research they found Australian teachers described international student's reflection in classroom like this:

Many international students are reluctant to give a personal opinion or to involve themselves in tutorial/ class discussion, especially the Japanese. Female international students are often reluctant to argue with an older person, especially if the older person is in a position of authority, e.g., the tutor or lecturer. (Interview survey from Margate 2000)

International students have a different attitude to learning and consequently to about learning differently, they tend to take the world of the book or lecturer as truth, and won't question it. They see learning as receiving the knowledge of an authority. Therefore, to regurgitate text from books etc. is seen as normal learning. (Interview survey from Margate 2000)

From the Australian' teachers points of view we can say that Confucian culture' has deep roots in most Asian students mind. However, the surface a phenomenon does not necessary indicated that Asian students are really lack of critical thinking and innovation, they are not arguing against in front of people, but do disagree with you in their mind perhaps. Influenced by Confucius, Asian students usually are respect to their teachers and advisors and consider them as eldership rather than friends. But surprisingly, western culturally students seems have closer relationship with teachers, for example, they joke with their advisors, and not afraid of argue with them.

5.1.3. Personality differences:

Personality is one of the most important factors affect student involvement. Keuning (1998: 366-367) defines personality as the "combination of psychological characteristics to classify individuals". For example, confidence is an attitude that "I can do it" principle, which is associated with the learner's belief in his/her own ability to accomplish the task. Many EM students reported some degree of anxiety when they arrive in new location. The feeling of powerlessness, rejection and isolation always affect their academic achievement. Some students are open mind to their experience; once they face difficulties they take initial step seeking for help from institution, while others are reluctant ask for support from administrator but turn to their close friends. Generally speaking, people with extravert characteristic tend to more active integrate into the academic and social life than their counterpart introvert fellows.

5.2. What students expect to change?

> *To know how to teach them, we must understand our students better. We must have a clear-eyed view of who they are, where they come from, how they have been instructed, what values they hold, and what their expectations and goals are (Erickson & Strommer, 1991.p.4)*

In theory, many research and instrument emphasis of important differences among learners, however, uniformity still plays a dominate role in educational practice. Despite of the diversified EM students, our research findings presented a fact that most faculty still function as if all students were the same. Students have the same reading materials for learning. They study the same content and attend the same curriculum on the same learning schedule. Teachers giving lecture to whole groups of students, delivering the same information to everyone at the same time. In the end, students were assessed the quality of learning in the same way.

In a diversified student classroom, the "one fit all" teaching method, materials, assessment may not work effective. Students demanding are various, in order to link the teaching objective and students needs, it is necessity to involve students to the learning process, and take students' voice matter since the best courses focus on a process of continuous improvement through a partnership between the staff and the students. Rosenshine (1982) has suggested that learning will be greatest when the learning environment is structured to encourage active participation by student. Astin (1999) point out that student involvement takes many forms, such as absorption in academic work, participation in extracurricular activities, and interaction with faculty and other institutional personnel. According to the theory, the greater the students' involvement in college, the greater will be the amount of student learning and personal development.

Although all the good will in theory, in the reality, however, students complaint that few teachers have opportunity to know them quite well since most of their teachers are international scholar, and they have so many student that can not remember them all. As one of my interview participant said:

> In each course module, we had the opportunity to hear lectures from a wide range of experts, I don't feel that I was actually able to interconnected with professors, because they were

> even not to get to know "who" I was. Even though I muster up my courage write to my professor, the chance to get reply are so small. (comment from interviewee Q)

The response above reflected the ineffective teacher and student interaction. To change the status quo is necessary. During the interview, when ask student's recommendation for improvement in EM program, most responses wish to have a better learning support from faculty staff, have a better relationship with peers, provide more effective student service.

5.2.1. Improving Teacher-Student Relationship

Janet Billion (1991) have defined a set of positive relationships between teachers and learners which we have called the "alliance." Key features underlying the alliance are mutual respect; shared responsibility for learning and mutual commitment to goals; effective communication and feedback; cooperation and willingness to negotiate conflicts and a sense of security in the classroom. At master level, especially in professional technology field such like, only specific professor could help to solve the difficulties and doubts. Therefore, when the student-professor relationship is positive, students take greater intellectual risks, increase their critical thinking, and increase their intrinsic motivation to perform academically. Moreover, when the relationship is positive, professors are more highly valued by students (Walsh & Maffei, 1995). In order to help teacher and student knowing each other, a formal detailed written introduction with academic background and research interests is needed to provide by each other. Each teacher should read student' personal profile and understand who they are, what their background, what are their motivation before start to giving lectures. Maybe it could be open a teacher-student online forum, which students can leave questions online, and teachers can find their convenient time to answer.

5.2.2. Providing Effective Learning Support

Support for students is usually set up in response to perceived needs, or in order to reach a set of aims and objectives. These will be related to students' performance, students' overall satisfaction, or the institution's attractiveness to student from abroad (Maria Kelo 2006). It seems that most EM students lack of knack in searching academic resource for doing research, especially in using the network of library resource. Not only because the various library navigation system, but also the insufficient English information guide. To provide adequate library training program is needed. Since student frequently reported that EM program teaching staffs are not always available for instruction after class, thus, providing

coaching support by senior student might be a great help. Since the coach, senior student could help providing learning tools, study tips, and academic issues such as study habits and techniques, study resources, coping and problem solving strategies, and academic tutoring and advice. Moreover, seeking learning support from student staff is efficient and feeling comfort, benefit Asian student especially since they are more willing to discuss their work with a student rather than academic staff. For EM students, providing a host country's culture and social system course will help them adjust the new environment.

5.2.3. Strengthening Peer Relationship

For many students starting university, friendship formation in their new environment constitutes a major concern (Milem, Chang, & Antonio, 2005). This is unsurprising given that friendship formation can significantly facilitate students' adaptation to university life by reducing anxiety and uncertainty, providing support networks, and orienting the student. A good peer relationship will create group cohesion, which further promote intercultural relationships (Ciarán Dunne 2009). EM students are required to move between partner institutions, a good peer relationship will promote teamwork, cooperation, and mutual aid which make the journey more pleasant, and learning experience more satisfactory. Selecting a capable class representative will help facilitating peer group interaction and establishing an effective learning community both in and outside classroom.

5.2.4. Improving Student Service

Students are assumed to perform better if they are happy and content with student life as a whole. The critical mobility issue is well known and EM student reflect that they experience significant logistical challenges in obtaining visas, registering within the local community and integrating within it for residence and services during moving from one to other partner institutions. It is really in need to build support facilities around the course so that logistical challenges with the student mobility are overcome. Introducing full support for mobility, not just a partial assistance will make movement easier. With student service regards, nothing is more important than the effective communication with the program coordinator. To a large extend, the quality of the coordinator's work represented a quality of EM program organization. In general, students' first impression to the EM program is based on the responses from coordinator in the begining of consultation information. when students

accepted in the program, all matters dealing and problem-solving rely on coordinators ability which is directly affecting students leaning experience.

Summary

This section study reveals that the extent of student involvement in different types of in-class and out-of-class activities and the quality of students' relationship with peers, faculty members, and administrators are the two main factors affecting students' learning experience. Through analysis the causes of the problems, I found that the teachers, students and institutions three parties all should responsible for the insufficient education quality. Improvements are needed by three parties' coordinate efforts. Teacher should reflective their teaching method and obligation. Students should active adapt to new academic environment; institutions should provide relevant support service.

6. CONCLUSION

Erasmus Mundus as a window of European higher education intended to promote the European Union as a centre of excellence in learning around the world. What makes Erasmus Mundus genuinely different as an educational venture is that the course must be offered by a consortium of HEIs in at least three different European countries. With the diversified student body and teaching staff, working across different institutions and different countries, made the process of building an excellence Erasmus Mundus course was full of challenges.

According to my case analysis with two EM course, the study found that students learning experience were not always positive and rewarding, especially for non-European students. Students' voice and narratives on which this research was based have challenged some of our taken-for-granted superiority complex in which assume that excellent staff and an excellent curriculum will attract excellent students, and then will generate excellent learning outcomes in the end. Although all this good will, the reality is that the excellent education depends on how those excellent resource are integrated together.

In the teaching and learning dimension, it is undeniable that the teaching staffs are very qualified and most of them are expert and with high reputation in the relevant academic community. However, the point is to what extent that student can learn from those well-known professor? How much time can professor devote to discuss the profound knowledge with students? To what degree that student will have opportunity involving in knowledge production and innovation? Most students have a great desire to have more time discussing with professor. that not only they expect to gain a breadth knowledge which lectures surely provide, but also expect to gain the in-depth knowledge which need a long-term study and discussion with professors or lecturers. With this regard, the reality is far beyond the students' expectation as the insufficient academic integration between teacher and students.

With respect to the mobility dimension, students have mix feeling toward the constant movement between partner sites. On the one hand, traveling and studying in different universities and countries has provided student with rich knowledge and experience and diversified European culture context. However, on the other hand, students consumed huge time and energy on logistics which serious affect their academic studies. In order to survive in different academic environment, the process of adjusting and adaptation are challenging

and exhausting. Comparing the weightiness of academic and social life, majority of students noted that would rather stay in one place longer than move between partner institutions. Thus, less mobility may actually be better for EM student to obtain a higher level of academic quality overall.

With regard to the student service, this is very important part for pursuing excellence of academic. As Maria Kelo (2006) points out that in the increasing global competition for the best students, the quality and attractiveness of an institution does not no longer depend only on its academic, teaching and research standards: service to students have come to play an important role in the quality assessment—and thus competitiveness of institutions. It is true that EM students take the service as a considerable important element of quality evaluation criterion. Most students consider the service can not keep up their demanding since the mobility requirement make EM student has always facing the new challenges and difficulties in all aspects of learning life. Moreover, it has been said that "everybody's business is nobody's business", the same logic could also happen in a consortium of HEIs in terms of providing student service. Especially, when there is an inconsistency between students' interest and consortium, such as dealing the complaint.

Although there are many negative effects, the EM program has generated genuine enthusiasm amongst students and higher education institutions alike, and promoted high quality of EM Course brand. From the development tendency, EM has make a positive contribution to the academic excellence in European higher education, in particular by encouraging European higher education institutions to foster co-operation and joint working with other HEIs regarded as "world-class" in particular subject disciplines. From the perspective of political strategies, EM program has gained a great success in terms of promoting of European higher education reputation, and opening up European HE to the rest of the world which provided a more choice for international student in selection HE.

European higher education area is characterized by its diversity of national system and institutions. The development of EM program depends on mutual trust and cooperation between the partner sites. Since the new system has not yet widely accepted, for example the European Credit Transfer and Accumulation System (ECTS), the European quality framework (EQF) and each country's has it own rooted educational system and academic cultural, which makes the cooperation full of conflicts and disharmony. However, the progress is slowly but in struggling move forward.

Perhaps, Burton Clark's points of view will be best reflect in the changing of Europe higher education and the status development of EM program, which EM program indeed need coordinated efforts to make things change and work.

Incremental adjustment is the pervasive and characteristic form of change, since tasks and powers are so extensively divided, global change is ordinarily very difficult to effect. The more advanced the system, the more it is true that "anything that requires a coordinated effort of the organization in order to start is unlikely to be started. Anything that requires a coordinated effort of the organization in order to be stopped is unlikely to be stopped." (Burton R. Clark 1983)

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Appendixes

Appendix 1: Interview Questions:

1. Please make an overall evaluation about the quality of your program. Did the program fulfill your expectations? (Based on the curriculum structure, learning facilities and academic environment)

2. How would you evaluate the quality of teacher's teaching? (Teaching methods, knowledge acquisition, classroom dynamics)

3. How would you evaluate the relationships between you and

    a) Your teachers (academic communication both in and outside classroom)

    b) Academic staff (academic support and student service)

    c) Peer classmates (friendship, intercultural understanding, group work)

4. What did you learn through group discussion and group assignment in your course? What challenges have you meet in group work?

5. What are the obvious difference between your home culture and European culture both on academic and social life aspects? (Giving some examples)

6. What has been the highlight of your learning experience in your program? Please tell some about you happy/bad experience in your program

7. What difficulties, if any, have you experienced as an international student during the course? Especially in mobility scheme.

8. Please tell me about your experience in seeking academic support from lecturers, peer tutors, fellow students, and administrative office.

9. What are your recommendations for improvement in your program?

10. Anything else that I missed out but you would like to discuss?

Appendix 2: The Course Participating in the Case Study

Space Master – Joint European Master in Space Science and Technology

Duration: 2 years

Course description:

This Master's Course aims to combine the great diversity of space expertise across six top-class European universities within a single international Master's programme. It gives students cross disciplinary experience, from working in a laboratory or computer simulation environment to experiments using balloon, rocket, satellite, robot and radar control. The programme brings together a core group of students from around the world to share and develop knowledge together, and to contribute to the global space industry and research community. The consortium is comprised of Lulea University of Technology (Sweden), Cranfield University (UK), Czech Technical University in Prague (Czech Republic), Helsinki University of Technology (Finland), Bavarian Julius-Maximilians University of Wurzburg (Germany), and the University of Toulouse 3, Paul Sabatier (France). All the consortium universities have experience in the exploitation of key technology areas to advance science and planetary exploration, using space instrumentation, autonomy, tele-robotics and distributed systems. In addition, the students will benefit from the unique space facilities in the Kiruna region, robotics test platforms in Helsinki and satellite communications facilities in Wurzburg. For an added international dimension, Space Master has a specific collaboration with four other universities outside Europe: Shanghai Jiao Tong University (China), Stanford University (USA), the University of Tokyo (Japan) and the University of Toronto (Canada). The European and third-country students apply to the consortium administrated by Lulea University of Technology. All students are enrolled at the consortium and at the university - called their home university – where they spend their second year of studies. The Course begins with a semester of introductory space related-modules (in Germany) and further modules in the second semester using local space facilities and expertise at Kiruna Space Campus (Sweden). Students then go on to take engineering and science modules at their home universities. The second year of the course is divided into five engineering and three scientific tracks, drawing on the specific strengths of the partner institutions. Topics include structural dynamics and control (UK), space automation and control (Czech Republic), robotics including space applications (Germany

and Finland), space technology and instrumentation (Sweden), space, atmospheric and solar physics (Sweden), and space physics, astrophysics, planetary science, spatial techniques and instrumentation (France). During the final semester of the Course, students complete a Master's thesis, supervised by academics from at least two universities. The language of instruction is English except at the University of Toulouse 3, Paul Sabatier, where French will also be used. Enrolment will be around seventy students in total, with a professor/student ratio of around one professor to every two students. The Course leads to two officially recognised Master's degrees issued by the home and one partner university. Diploma Supplements describing the complete study programme are provided by the consortium. All students must have a quality Bachelor's degree in Engineering, Natural Sciences, Mathematics or equivalent qualifications to apply. Students from non-English speaking countries are required to prove their language competency with a recognised test.

Website: http://www.spacemaster.eu

Partners:

Lulea University of Technology, Sweden (Co-ordinating Institution)

Cranfield University, United Kingdom

Czech Technical University in Prague, Czech Republic

Helsinki University of Technology, Finland

Bavarian Julius-Maximilians University of Wurzburg, Germany

University of Toulouse 3 Paul Sabatier, France

Contact:

Sven Molin

Luleå tekniska universitet

Universitetsområdet

SE-7187 Luleå, SWEDEN

Grant:

1 104 000 € (15 000 € consortium + 1 089 000 € scholarships), 2005

1 320 000 € (15 000 € consortium + 1 305 000 € scholarships), 2006

1 020 000 € (15 000 € consortium + 1 005 000 € scholarships), 2007

865 000 € (15 000 € consortium + 850 000 € scholarships), 2008

Appendix 3: The Course Participating in the Case Study

HEEM – European Masters Degree in Higher Education

Duration: 2 years

Course description:

In co-operation with several European universities and independent research centres, the University of Aveiro (Portugal), the University of Oslo (Norway) and the University of Tampere (Finland) offer a joint, two-year Masters Course in Higher Education. The programme is focused on the changing functions, policies, and operations of higher education in a comparative perspective. This is a cross-disciplinary programme that aims to promote a clear understanding of higher education across Europe and internationally, and to contribute to the structured training of the next generations of higher education researchers and managers. The course involves at least one semester of study in Oslo, and a period of study in either (or both) Finland or Portugal. There are also opportunities for selected European students to spend short amounts of time in two partner institutions associated with the consortium: the University of New England (Australia) and Obirin University (Japan). The language of instruction is English. The Course involves a maximum of forty students, with a professor/student ratio of approximately one to four. The course programme is composed of a combination of modules, including research methods and statistics, the history, governance and management of higher education, economic and international dimensions of higher education and a Master's thesis. The Master's Course consortium awards successful students a Joint Master's Degree. Entry to the Course requires a university degree based on no less than three years of study (bachelor's degree) or equivalent educational qualifications approved by the admission commission and an adequate knowledge of English.

Website: http://www.uv.uio.no/hedda/masterprogramme/heem.html

Partners:

University of Oslo, Norway (Co-ordinating Institution)

University of Aveiro, Portugal

University of Tampere, Finland

Contact:

Peter Maassen

University of Oslo

Faculty of Education

P. O. Box 1161 Blindern

NO-0316 Oslo, NORWAY

Grant:

474 000 € (15 000 € consortium + 459 000 € scholarships), 2004

936 000 € (15 000 € consortium + 921 000 € scholarships), 2005

936 000 € (15 000 € consortium + 921 000 € scholarships), 2006

894 000 € (15 000 € consortium + 879 000 € scholarships), 2007

907 000 € (15 000 € consortium + 892 000 € scholarships), 2008

Appendix 4: The Background to Erasmus Mundus

Erasmus Mundus is a co-operation and mobility programme in the field of HE. It aims to enhance quality in European HE and to promote intercultural understanding through co-operation with Third Countries.

Inspired by the highly successful Erasmus programme (an internal EU programme supporting cooperation and mobility between European HE institutions) Erasmus Mundus also offers a framework for valuable exchange and dialogue between cultures.

Erasmus Mundus has a global scope, providing a distinctly European offer in HE to those beyond EU borders in Third Countries. By supporting the international mobility of scholars and students, Erasmus Mundus prepares its European and non-European participants for life in a global, knowledge-based society.

The programme confirms the European Commission's interest in opening up European HE to the rest of the world. Erasmus Mundus complements the European Union's existing regional programmes in HE with Third Countries. Regional programmes, such as Tempus, ALFA and Asia-Link, will continue to foster international co-operation in HE between the European Union and its partners.

The programme is intended to strengthen European co-operation and international links in HE by supporting high-quality European Master Courses, enabling students and visiting scholars from around the world to engage in postgraduate study at European HE institutions, as well as encouraging the outgoing mobility of European students and scholars towards Third Countries.

Erasmus Mundus was first introduced in July 2001, when the European Parliament and Council received a Communication by the European Commission on strengthening EU-Third Country cooperation in HE. Following the positive reception to the Communication, the Commission adopted a programme proposal, Erasmus World, in July 2002. The programme was then renamed Erasmus Mundus.

On 5 December 2003, the Erasmus Mundus Programme Decision was adopted. It was published in the European Union's Official Journal on 31 December 2003 and entered into force on 20 January 2004. During its first phase (2004-2008) more than 6,000 students from outside Europe will have received an Erasmus Mundus scholarship to obtain a Master degree

in Europe and more than 1,000 teaching staff from Third Countries will have been given a scholarship to actively contribute to Master courses in teaching or research activities.

The Erasmus Mundus programme was allocated a budget of €230 million for the period 1 January 2004 to 31 December 2008. In addition, supplementary 'Window funds' from the Community's external relations budget were incorporated into the Erasmus Mundus scholarship scheme. These resources allowed for the funding of additional scholarships for students coming from particular world regions. More specifically, these were €57.3 million through the Asian Windows and €8.8 million through the Africa, Caribbean and Pacific (ACP) Window and the Western Balkans Window. Consequently a total budget of €296.1 million has been available for the programming period 2004-2008.

More recently the Commission has also launched the "*Erasmus Mundus External Cooperation Window*" which complements the Erasmus Mundus Programme. This new initiative funds student (from undergraduate to post-doctorate level) and academic staff mobility between European HE institutions and institutions from targeted Third Countries.

The Operation of Erasmus Mundus

The specific aims of the programme have been:

- To promote a quality offer in HE with distinct European added value, attractive both within the European Union and beyond its borders;
- To encourage and enable highly qualified graduates and scholars from all over the world to obtain qualifications and/or experience in the European Union;
- To develop more structured co-operation between European Union and third-country institutions and greater European Union outgoing mobility as part of European study programmes;
- And, to improve accessibility and enhance the profile and visibility of HE in the European Union.

Action 1 – Erasmus Mundus Master Course

These courses constitute the central component around which Erasmus Mundus is built. They are high-quality Master level programmes offered by a consortium of HEIs in at least

three different European countries. The courses must be integrated to be selected under Erasmus Mundus, which means that they must include a study period in at least two of the three institutions and lead to the award of a recognised double, multiple or joint degree.

Action 2 - Erasmus Mundus Scholarships

In order to give the Erasmus Mundus Master Courses selected under Action 1 a strong external projection, a scholarship scheme for Third Country graduate students and scholars is linked to them. This scholarship scheme funds highly qualified individuals who come to Europe to follow the Erasmus Mundus Master Courses or to work for them.

Scholarships are awarded on a competitive basis and are targeted at students with the best academic performance record. Scholarships are also available through Action 2 for incoming Third Country scholars of high academic quality to carry out teaching or research assignments relating to Erasmus Mundus Master Courses. Scholarships for visiting scholars from Third Countries for teaching and research assignments are also available with an average duration of three months.

Action 3 – Partnerships

In order to encourage European HEI's to adopt a more global perspective and to reinforce their world-wide presence. Erasmus Mundus Master Courses selected under Action 1 also have the possibility of establishing partnerships with Third Country HEIs. These partnerships allow for outgoing mobility of graduate EU students and scholars involved in the Erasmus Mundus Master Courses.

This provides support for the establishment of partnerships between HEIs in the EU (involved in an Action 1 Erasmus Mundus Master Course) and Third Countries. It also makes provision for short mobility periods for EU students and scholars to Third Countries. Action 3 projects are between one and three years in duration. Support is also available through Action 3 for teachers' exchanges, the development and dissemination of new methodologies in HE and for the development of co-operation schemes with Third Country institutions.

Action 4 - Enhancing Attractiveness

Erasmus Mundus also supports projects aimed at enhancing the attractiveness of, and interest in, European HE. It supports activities that improve the profile, visibility and accessibility of European HE as well as issues crucial to the internationalisation of HE, such as the mutual recognition of qualifications with Third Countries. HEIs and other public and private organisations active in the field of HE play a key role.

Projects contribute towards improving the profile, visibility and accessibility of HE in Europe. Projects aimed at the internationalisation of European HE are also supported. Action 4 is open to HEIs and other bodies involved in HE anywhere in the world, regardless of participation in other Actions.