

JYVÄSKYLÄ STUDIES IN COMMUNICATION 17

Kaisu Korhonen

Intercultural Competence as Part of Professional Qualifications

A Training Experiment with Bachelor of Engineering Students

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UNIVERSITY OF JYVÄSKYLÄ

JYVÄSKYLÄ 2002

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ABSTRACT

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Summary; Diss.

The globalization of working life sets new kinds of requirements on various organizations, in which *intercultural competence* should be understood as part of *knowledge management* and *tacit knowledge* and as a source of *competitive advantage* and *added value*. Its development should be started as early as possible. Here proactive Finnish polytechnics have a market niche. They can provide intercultural training as part of professionally-integrated foreign language education, for example.

The present study was a *training experiment* in intercultural communication to Bachelor of Engineering (BEng) students (n = 117) at Kajaani Polytechnic, Finland. The study aimed at assessing the effectiveness of intercultural training in developing the students' cognition, affect, and behavior and skills (*summative assessment*). The study also aimed at mapping out what kind of communicators the students are and would like to be, whether they are motivated to develop their competence (*self- and peer assessment*), and what they think about intercultural training (*formative assessment*).

The one-credit course applied the approaches of *Content and Language Integrated Learning*, or CLIL, English as today's *lingua franca*, transformative learning (Mezirow 1991; Taylor 1994), and *attribution training*. A Culture-General Assimilator (Brislin & Cushner 1986; 1996) was implemented as a Web-based application, which was installed on the Intranet of Kajaani Polytechnic. As the measuring instrument a series of five *questionnaires* was used.

The BEng students' *cognition* developed considerably while their *affect* only developed a little. The students' *behavior* and *skills*, i.e. ability to analyze and solve *critical incidents*, and consequently intercultural problems, developed from 1 (poor) to 2 (satisfactory) on a quantitative scale. The students thought that, in general, they have no communication problems. The main factor preventing them from communicating with foreigners is their insufficient knowledge of English. Most students thought to be self-directed learners but were not in practice. The students accepted CLIL, although one third of them had language problems. The students found intercultural competence an integral and equal part of BEng engineers' professional qualifications. Besides critical incidents, a *portfolio* can be used to assess intercultural learning.

Key words: intercultural competence, intercultural training, Bachelor of Engineering studies, Content and Language Integrated Learning (CLIL), Culture-General Assimilator, Web-based learning, assessment

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I dedicate this PhD dissertation to Laura and her 6 years old brother Juho, "frequent fliers" since the age of 6 months.

In Kajaani, Finland, August 2002

Kaisu Korhonen

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"Man, by nature, is good; people's inborn characters are similar, but learning makes them different." (San Zi Jing - Southern Song Dynasty, AD 1127-1279)

1 INTRODUCTION

1.1 Background

Bachelors of Engineering, or BEng engineers, graduated from Finnish polytechnics (in Finnish *ammattikorkeakoulu*; in Swedish *yrkeshögskola*; in German *Fachhochschule*; see Sections 8.1 and 8.2) are expected to work in international and multicultural environments, including both long-term international assignments and short-term business trips abroad, as well as contacts with foreigners without leaving the home base. Traditional linguistic skills emphasizing grammar and lexis are no longer sufficient, but BEng engineers need *intercultural competence*, the components of which include cognition (i.e. knowledge), affect (i.e. attitudes and emotions), as well as behavior and skills, although not necessarily in any sequential order (e.g. Cui & Awa 1992; Ptak et al. 1995: 433; Gudykunst et al. 1996: 65; Seelye 1997: 34; see Sections 3.2-3.5 and 5.4). In other words, BEng engineers need *effectiveness* (Kealey 1996) and *sensitivity* (Bennett (1993) in communication and cultural adaptation, in specific contexts of working life. Becoming a competent intercultural communicator is a learning process involving some form of *perspective transformation* (Mezirow 1991; Taylor 1994; Ibid 1997; see Section 5.2). To make this change possible, conscious intercultural learning is usually required. (See Section 5.1.)

In the United States, intercultural training has traditions of tens of years, and there is plenty of US American literature produced and published in the field available, with recommendations of training objectives, contents, materials, and techniques. (See Subsection 4.3.2.) There is also research with evidence of the effectiveness of intercultural training (e.g. Kealey & Protheroe 1996: 142). The effectiveness of the so called *Culture-General Assimilator* method used in intercultural training has also been empirically proven (see Section 7.3).

In Finland, *multicultural education* was started in various educational institutions, e.g. comprehensive schools, in the 1970s. Besides multicultural

education terms such as *multicultural studies*, *international education*, *education for international understanding*, *global education*, and *intercultural education* have been used to describe areas of concern including peace education, human rights education, environmental education, cultural education, development education [i.e. awareness of issues in the developing world], and media education (Yli-Renko 1994: 7-10; Penttilä 2002: 8). *Intercultural training* is, however, rather a recent phenomenon, a phenomenon of the 1990s. This was the decade when Finland was accepted as a member country to the European Union, or EU. Along with Finland's membership in the EU and increasing internationalization in working life and in general, the need for intercultural training has become intensified. Because intercultural training does not have a long history in Finland, training materials adapted to the Finnish audiences are rather scarce. There is not much empirical evidence of the suitability and effectiveness of the existing training materials and techniques either. Therefore, existing materials and techniques need to be modified and adapted for Finnish trainees, and new ones need to be developed. The effectiveness of the materials and techniques in developing trainees' intercultural competence also needs to be tested.

Even if an interculturally competent staff can be seen as a source of *competitive advantage* (e.g. Hoecklin 1995: 15) and *added value* (see Section 3.5) for various organizations, and the reasons for and costs of failures, i.e. premature re-entries from international assignments, are known (see Subsection 6.3.3), it seems that object-oriented and sufficiently long-term intercultural training is often neglected when sending employees abroad. In Finland, there are only a few companies offering intercultural training to their employees.

According to their mission, Finnish polytechnics are to be proactive: They are to anticipate and meet the requirements of the labor markets. (See Subsections 8.1 and 8.2.) Considering intercultural training, there is a *market niche* that polytechnics can fulfill by providing professionally-integrated and interculturally-oriented education, intercultural competence as one of its overall goals. Part of the process of developing the Bachelor of Engineering, or BEng, education program is to design and test new training contents, materials, and techniques.

Even if nothing can entirely replace face-to-face tuition and learning, *information technology* (IT), including computers, hypermedia (see Section 1.2), and data networks, should also be made use of. Constructivism seems to support *Web-based learning*. According to *constructivism*, trainees construct pictures of the surrounding reality and themselves as part of that reality by selecting, interpreting, and using the feedback they have received (e.g. Raustevon Wright 1994: 131-132). If the computer infrastructure, i.e. hardware and software, is available and trainees are, or have learned to be, *autonomous* and *self-directed* enough (see Section 5.3), Web-based learning introduces flexibility to the time and place of learning and encourages to self-study.

1.2 New Learning Environments

When offering intercultural training to today's or future employees, a wide range of training techniques should ideally be used, including new technology. The idea of implementing a *Culture Assimilator* (see Sections 5.6-5.8) with computer technology was introduced as early as the 1960s. According to Triandis (1995: 183-184), a 150-incident assimilator could be worked through by an individual in about six hours. In 1993, Landis actually developed a computerized version of a Culture Assimilator. The version allowed any number of items from any number of assimilators to be used and mixed together in any order. (Cushner & Landis 1996: 198)

New learning environments are being developed to support and supplement the traditional ones. According to Auer and Pohjonen (1995: 14-15), the term *new learning environment* refers to new pedagogical and educational approaches together with opportunities provided by new technology. A new learning environment aims at promoting learning that is continuous, individual, autonomous, and self-directed. It is open and flexible as to the time, place, type, and right of study. In a new learning environment, trainees are expected to be able to *take responsibility* for their own learning, while trainers are facilitators supporting the learning process. Many of the elements of the new learning environments are still under experiment. (Cf. Section 5.3.)

One of the new learning environments is multimedia. The exact meaning of the word multimedia is vague. According to Woodhead (1991: 203), the term *multimedia* does not necessarily refer to a computer-based presentation but to a *media mix*: text, buttons, bitmap images, photos, animation sequences, video, sound, and special effects. Paananen and Lallukka point out (1994: 10-11) that often when speaking about multimedia people actually talk about hypermedia. According to Woodhead (1991: 205), the term *hypermedia* refers to computer-based materials linked by *non-linear* structures of information. By making use of association, a characteristic of human thinking, it is to make data management easier and more natural (Koski & Oesch 1993: 24; Paananen & Lallukka 1994: 12; 52).

Part of hypermedia is hypertext. According to Paananen and Lallukka (1994: 11; 53-57), *hypertext* is a method to write and read non-linear text, i.e. text with a built-in reference system, or links, within which the user can navigate. Data management can be split into several levels. It is possible to hide *hotwords*, i.e. elements of the media mix, in the text or graphics of the program. When the hotwords and picture elements are clicked, the program moves to another level containing further information about the topic. (Koski & Oesch 1993: 24)

In many fields of training and learning it is possible to create real-world problems to be simulated, in other words, practiced and solved with a computer program or application. This holds true in intercultural training, too. For the present study, the author designed and then implemented in cooperation with programming experts a *hypermedia-based program*, and later a *Web-based application*, a Culture-General Assimilator called *The Same but Different* to be used in the training experiment. The development work was originally part of the author's unpublished licentiate thesis called *Intercultural*

Communication through Hypermedia (1997. University of Jyväskylä. Department of Communication, Organizational Communication and Public Relations Program). After the experiment, the application was further developed into an Internet version to improve its availability.

1.2.1 A Hypermedia-Based Computer Program

The first version of *The Same but Different* was a hypermedia-based computer program, a Culture-General Assimilator, based on the original idea of Brislin et al. (1986; 1996), and the theories of experiential (Kolb 1984), transformative (Mezirow 1991; Taylor 1994; Ibid 1997), and programmed learning. The name of the program refers to cultural diversity although it also refers to similarities between cultures. The program consists of 25 critical incidents adapted for Finnish Bachelor of Engineering, or BEng, students. It provides the students with a self-study kit to be used along with and after the one-credit course (24 lessons; 45 min each) in intercultural communication. The students can work with the program either independently or in pairs. Working in pairs often increases interaction. Hence, besides the cognitive component of intercultural competence, the affective and behavioural components may also be involved.¹ (See Sections 3.2-3.5.)

The Same but Different has six main themes. Each theme starts with a general description of the topic and is then followed by a number of critical incidents with the alternative explanations and their rationales. The main *themes* are

- 1) *All Business Is Local* emphasizing the need to know both global culture and local conventions
- 2) *Interacting with People* focusing on the importance of social skills
- 3) *Making Adjustments* illustrating the cultural adaptation process and potential problems connected with it
- 4) *Tourist Experiences* providing information on some common culture clashes
- 5) *At Work* dealing with intercultural encounters in the workplace, and

¹ The first version of *The Same but Different* was designed and implemented in cooperation with a programmer [Juha Komulainen] at Kajaani Polytechnic in the years 1996-1997. The program runs in the Windows environment. To implement the program, the Asymetrix Multimedia *ToolBook* 4.0-CBT Edition authoring system and *ToolBook's* programming language called *Openscript* were used. The animations were also made with *ToolBook*. *The Same but Different* contains *ToolBook's* *objects* such as fields, buttons, graphics, and pages. The program makes use of *hypertext*. Each incident has *hotwords* that are linked to display further information about the word, either text or graphics.

The contents of the 25 critical incidents, originally very US American (Cushner & Brislin 1996), were shortened and modified to be more suitable for the computer screen and Finnish BEng students. (See Subsections 5.6.3 and 5.7.3.) Some of the language was also made easier to understand. The incidents were renamed, and most of the names of both people and target cultures were also changed. In addition, factual information about the target cultures, e.g. the number of population and the name of the capital, as well as examples of nonverbal behavior were added to the texts.

When designing and implementing the *program pages*, a lot of consideration was given to

- the amount of text to be read on the computer screen
- the size of fonts
- the choice of colors, and
- the ease of navigation.

- 6) *Returning Home* discussing the repatriation process and potential problems connected with it.

The additional *links* to the pages contain information on attribution training (Introduction), the description of the program (About the Program), the references used (References), and help to use the program (Help).²

1.2.2 A Web-Based Application for the Intranet

The Same but Different was tested and evaluated by BEng students both in the spring 1997 (n = 30) and 1998 (n = 48). The students filled in a questionnaire with a number of declarative statements about the characteristics, contents, and functions of the program (see Appendices; Questionnaire 5). On the basis of the BEng students' feedback (n = 78), the second version of *The Same but Different*, i.e. a Web-based application, was developed in the year 1999. (Korhonen 1999; 2000: 195-206; 2001a: 99-113; 2001b)³

² Each critical incident is displayed on its own page. Below the incident, there is a *question* asking the users to help the Finn(s) in the incident solve their problem, and 4-5 *alternative explanations*. On the basis of their prior and current learning, the users choose the "best" alternative explanation considering the context by clicking its number. The program immediately provides feedback whether the choice was the "best" one, and finally it displays a *rationale* in a separate window.

The Same but Different keeps track of the number of the incidents that the users read during one session. The users can also compete: If they provide the "best" response at the first attempt, they are awarded three points. If they provide the "best" response at the second attempt, two points are given. The third attempt provides one point.

³ *The Same but Different* was further developed in cooperation with a programming student [Hannu Riikonen] as part of his final year project. The purpose of the development project was to upgrade *The Same but Different*, especially to improve the access of the program. Other characteristics subject to upgrade were mainly related to the appearance of the program. The upgrade was implemented by using the *Hypertext Markup Language* (HTML), *Dynamic HTML* (DHTML), and *JavaScript*.

As the end result of the upgrade, *The Same but Different* was installed on the Intranet of Kajaani Polytechnic. An *intranet* is a form of organization networking. The application can be used in every workstation at Kajaani Polytechnic with a browser such as *Netscape Navigator 4+* or *Internet Explorer 4+*. The use of *The Same but Different* is no longer tied to individual machines with the program separately installed in each of them. Users can also print material from the program if they prefer to read text on paper.

The other *adjustments* made during the development project were as follows:

- the manuscript was partially modified, i.e. shortened and made easier to understand
- the dark colors were changed into eye-friendlier shades with a smaller contrast between the background and the text
- the readability of the text was improved by using bigger fonts and by reducing the need for scrolling
- the share of area briefings was increased, e.g. flags and maps
- part of the animation was replaced with a new one
- more pictures from the Internet Freeware (no copyright) were inserted
- a feedback form at the end of the Web-based application in the Adobe Acrobat format was developed to be printed out and filled in by the users after having finished studying with the application
- Introduction, About the Program, References, and Help were upgraded with a word of caution against stereotyping
- a reference to an electronic dictionary called M.O.T. was made
- a few links with further information on cultural differences were added
 - <<http://virtual.finland.fi>>
 - <<http://www.country.com>>

In the training experiment the second, i.e. Intranet, version of *The Same but Different* was used. *The Same but Different* was only used after the face-to-face tuition period to find out whether self-study with a Web-based application provides any added value considering the quantity and quality of learning. In other than experiment circumstances, the application can be used simultaneously during face-to-face tuition.

1.2.3 A Web-Based Application for the Internet

The third version of *The Same but Different* was developed in cooperation with a lecturer in English⁴ and a programmer⁵ to be installed and used on the Internet in the fall 2000. The application was finished in January 2001. The development project was financed by the Finnish Ministry of Education. The main objective of the project was to enhance the contents of the application and to further improve access to it.⁶ To get an impression of what the latest version of *The Same but Different* looks like, see Screen Prints 1-4 in Appendices.

-
- <<http://lonely.planet>>
 - <http://www.yahoo.com/regional_information/countries/>

Compared to the first version of *The Same but Different*, the Web-based application is easier to update, modify, and further extend. Because there was no programming capacity to implement the scoring system, the game-like elements of the first version were unfortunately lost during the development project. There may be the danger of *edutainment* [i.e. *education and entertainment*] connected with game-like elements in a learning program or application, but they may, on the other hand, increase motivation to study.

When developing *The Same but Different*, it has not been possible to make use of video or sound. This may be a shortcoming, but it may also be asked whether it is necessary to include every possible gimmick in one single program or application.

⁴ Jaana Härkönen

⁵ Minna Veljo

⁶ The main *adjustments* during the second development project included

- changing the names of two themes, the contents remaining the same (*All Business Is Local* was changed into *When in Rome...*, and *Tourist Experiences* was changed into *...Do as the Romans do.*)
- increasing the number of critical incidents by ten, the total number being 35
- increasing the number of backgrounds, pictures, animations, and pop-up windows
- making the selection of the incident to be studied easier; the selection can be done either from the menu, Index page, or the overview of each theme, i.e. group of incidents, and
- making it possible to send feedback via email.

1.3 Statement of the Research Problem

The present study is a *training experiment* involving Bachelor of Engineering, or BEng, students (n = 117), at Kajaani Polytechnic, Finland. Before implementing the training experiment, the objectives, contents, materials, and techniques for the one-credit (24 lessons; 45 min each) training course were designed and developed. The training techniques included *The Same but Different*, a Culture-General Assimilator, implemented as a Web-based application and installed on the Intranet of Kajaani Polytechnic. The design and development work was partially done in the present author's unpublished licentiate thesis (see Section 1.2). The *structure* of the study is shown in Figure 1.

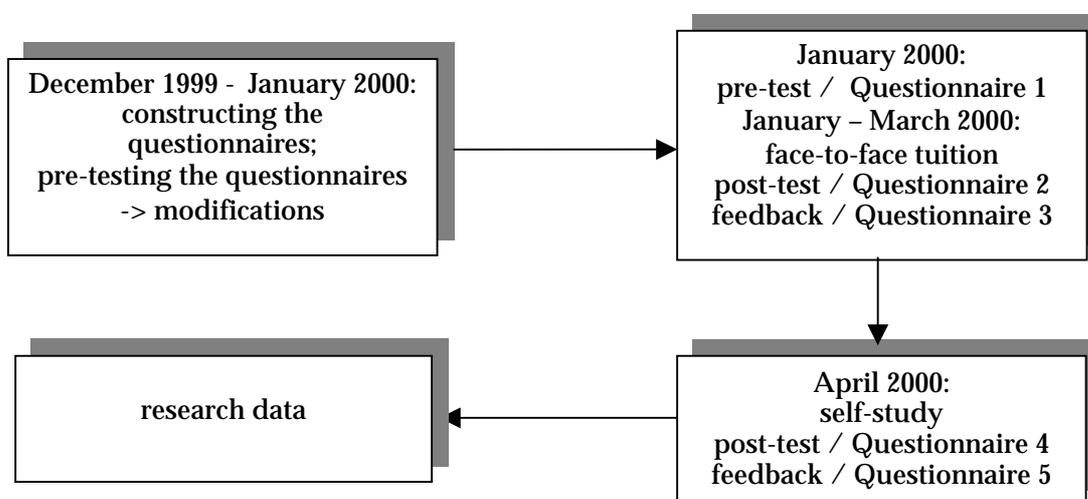


FIGURE 1 The various stages of the training experiment

The *practical objectives* of the present study are

- 1) to *implement* a one-credit (24 lessons; 45 min each) training course in intercultural communication to Finnish BEng students as part of their compulsory English studies, including both face-to-face tuition and self-study with a Web-based application called *The Same but Different*
 - by treating English as a *lingua franca*, an international link language, and
 - by integrating content and English studies (cf. *Content and Language Integrated Learning*, or *CLIL* [a term applied by the European Council])
- 2) to *assess* the effectiveness of the intercultural training course (*summative assessment*) and the course itself (*formative assessment*) in developing the BEng students' intercultural competence) as a whole including the cognitive, affective, and behavioral components of competence and at a group level by pre-testing and post-testing a group of BEng students with the aid of a sequence of five questionnaires and the Web-based application called *The Same but Different*,
- 3) to *map out* the BEng students' attitudes toward developing their intercultural competence as part of their professional qualifications on the basis of their self-reporting, and
- 4) to *provide* empirical evidence for the further development of intercultural training at Kajaani Polytechnic and in the Finnish polytechnic sector in general.

The actual data of the present study does not discuss

- intercultural communication as such, but competences required in intercultural communication in today's globalizing world of work on the basis of a variety of theories
- the BEng students' individual *learning styles* or *strategies*, i.e. how individual students approach learning and learning tasks, how they process, analyze, and store data, and how they connect the data with their prior data structures to be transferred to new situations (Dunn & Dunn 1978; O'Malley & Chamot 1990; Oxford 1990)
- the BEng students' *linguistic skills* as part of their intercultural competence; this is because language and communication studies take place over four years, and there is not much information available on the first- and second-year students who the present study focuses on

2 GLOBALIZATION FROM THE FINNISH PERSPECTIVE

2.1 Global Labor Markets and BEng Engineers

Social, economic, and technological changes are transforming the way people live, study, work, and spend their freetime. Economic integration and advances in transportation and telecommunications technology have broken down geographical isolation: The world is more mobile and virtual than ever before. In this shrinking world, everybody is a kind of immigrant - legal or illegal.

According to Lehtonen (2000), *globalization* refers to worldwide pressure of national economies and economic areas to change into a single marketplace. Globalization being an existing fact, it is not possible to choose to join it, or to opt out of it. Lehtonen (Ibid) argues that if nations and/or organizations want to survive, they need to globalize; if they do not penetrate into a specific market area, someone else will. There are two factors that accelerate globalization: technological development and the liberalization of the world economy.

The concepts of internationalization and globalization are not far from each other. The concept of *international* emphasizes the fact that the activity in question concerns or takes place in more than one country, whereas the concept of *global* suggests that the activity in question covers a number of countries and aims at the conscious standardization of marketing strategies between those countries (Mesdag 2000 according to Lehtonen 2000).

Globalization is linked by new technology, and global communications is becoming increasingly intensified via *electronic media* facilitating trade contacts and international projects. The key words include *multimedia* and *mobile telecommunications*. The Internet began as a military project in the 1970s, was then developed by a few scientists, and is now a medium of communication for almost everybody. The same infrastructures that facilitate flows of people, capital, and goods have generated and recently intensified new security threats for nations, in the form of international terrorism, eco-terrorism, transnational organized crime, and even Cyber-war. The world is more dynamic and competitive, but it is also more complex and unsafe than ever before. (EVA 1998)

As a result of internationalization and globalization, awareness and recognition of national and ethnic identity has become stronger everywhere. Even minor deviations from the conventions of the target culture may result in fatal misinterpretations of messages. (Lehtonen 1998a: 302) Because of the fast rate of the processes of internationalization and globalization in Finland, *intercultural competence*, i.e. the ability to behave in an effective and efficient way in different cultures speaking different languages and professing different religions (Ibid 310; see Sections 3.2-3.5), is becoming increasingly important for Finns as well. International contacts and work require awareness of foreign cultures, which goes beyond the traditional learning of foreign language skills (Prolang 2000: 117-118). (See Figure 2.)

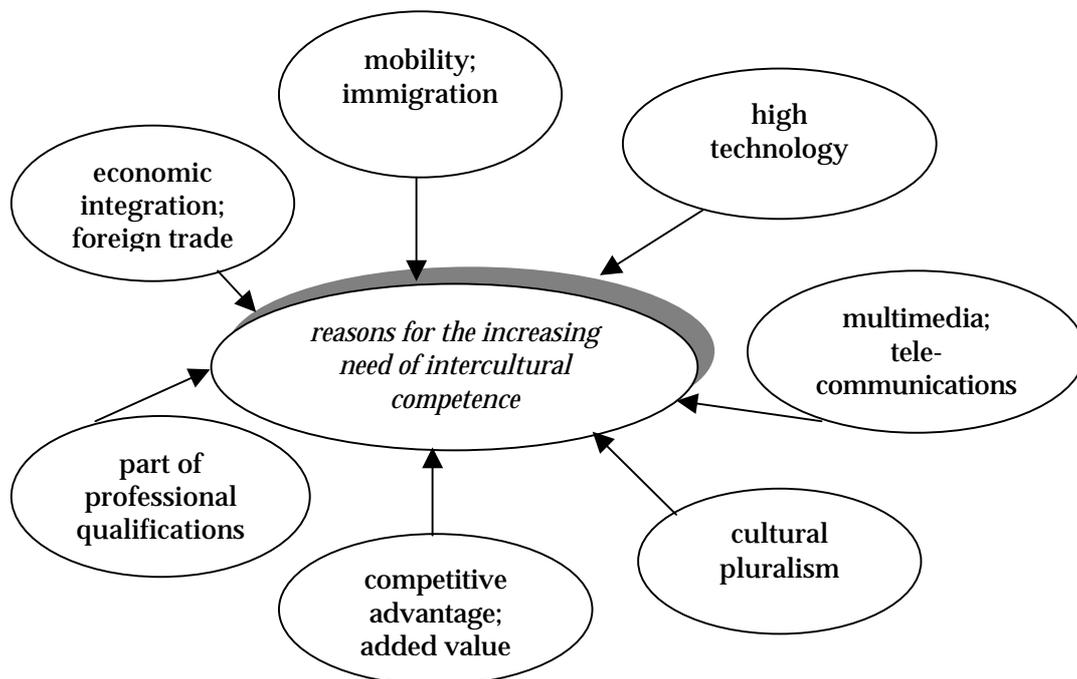


FIGURE 2 Reasons for the increasing need of intercultural competence in working life

Even if there are regulations connected with visas and work permits that slow down the free mobility of labor, the fact is that more and more Finns work in companies the ownership of which is partially or totally foreign, and the business operations of which are mostly outside Finland. As Adler (1997: 298) points out, international *mergers* [and *acquisitions*] take place more frequently than before. Thousands of Finnish *international transferees*, or *sojourners*, and *self-initiated international employees* work abroad: *Expatriates* have been sent within their companies to work in a local subsidiary of a home country multinational enterprise or with a project-type delivery for a specific time, which usually ranges from six months up to three years (Tahvanainen 1998: 8-9; Suutari & Brewster 2000). Self-initiated *professionals* such as nurses, builders, installers, and information technology, or IT, specialists, have made their own arrangements to get a job abroad, and independently relocate to work abroad. They often go to work in local organizations or foreign international organizations, including the United Nations, or UN, and the European

Commission, or EC (Suutari & Brewster 2000), mainly in countries like Sweden, Spain, Norway, the United States, Britain, and Germany. While expatriates often work in management and marketing functions, self-initiated professionals work in technical expert functions (Suutari & Brewster 2000).

Besides expatriates and self-initiated professionals, there are *lecturers*, *students*, and *trainees*, who participate in various international exchange programs, *short-term international employees*, and those who work, especially in foreign trade, with people from all over the world without leaving the home base. In addition to real mobility, *virtual mobility* is also strengthening its position. Instead of meeting people face-to-face, email, videoconferencing, and chat rooms are used. Hence, there is an increasing number of both professionals and students, who move into new cultural contexts for a limited or unlimited period of time both to transmit and receive know-how. In the present study all professionals working abroad are referred to as *international employees*.

In the year 1999, most of the Bachelors of Engineering, or BEng engineers, graduated from Finnish polytechnics started their careers in expert (59 %) and supervisor (21 %) tasks (Insinööriliitto 2000: 12). At the end of the 1990s, there were approximately 67 300 engineers in Finland, graduated either from polytechnics or their predecessors known as institutes of technology, 91 % of them being male. The biggest employers of BEng engineers were the export industry, engineering companies, commercial companies, and the public sector. There were also BEng engineers who worked as entrepreneurs. Most BEng engineers worked in design, management, and/or development tasks. Because BEng engineers' work is international, conventional engineering skills are no longer enough. BEng engineers, according to the Chairperson of their trade union (Viljanen 2000: 12-13), also need language and communication skills as well as business and cooperation skills.

2.2 Foreigners in Finland and Finns' Attitudes toward the Foreign

Until the 1950s Finland was an agricultural society. Compared to many other countries, the social change - industrialization - that started in Finland then was exceptionally fast. In two decades Finland turned into a "white-collar city culture". Since the transformation of society has been so hectic, many Finns, as Kolbe (1995: 333) argues, have a peasant background and a basic structure of the world view even today. The peasant culture has weakened Finns' ability to adapt to modern city culture. According to Porter and Samovar (1991: 16), *world view* deals with "a culture's orientation toward philosophical issues such as God, the universe, nature and humanity".

From the ethnic point of view, Finland is a very homogenous country: There are approximately 5.2 million Finns, including only two ethnic minorities: the Sami people and the Romany people. Besides ethnic minorities there is a linguistic minority, i.e. Finnish Swedes (n = approximately 300 000; 5.6 %). Foreign population in Finland grew steadily in the 1990s. In the spring 2002,

there were 98 640 *foreigners*, i.e. guest workers, refugees, asylum seekers, and other foreigners, living in Finland. The foreigners represent 1.9 % of Finland's population. Most of the foreigners living in Finland were from Russia (n = 22 684), Estonia (n = 11 637), Sweden (n = 8 025), Somalia (n = 4 344), and the former Yugoslavia (n = 4 229), followed by people from Iraq, the former Soviet Union, Vietnam, Iran, China, Britain, Germany, Turkey, and the United States [in this sequence], for example (Korva 2002).

Helsinki, the capital of Finland, with almost 560 000 inhabitants, is nowadays as multicultural as a typical European city. The number of foreign inhabitants is approximately 28 000 people, i.e. 5 %. Besides in Helsinki there are a lot of foreigners living in Espoo, Tampere, Vantaa, Turku, and Oulu [in this sequence]. If the ethnic origin of employees is taken as the criterion, Finnish labor markets are not yet very international. Unemployment among foreigners in Finland is approximately 30 %. (Ibid)

People's relationship to foreign cultures and languages is usually rather heterogeneous varying from the perspective of a tourist to that of a businessperson, for example. This relationship is constructed in different ways depending on factors such as the *frequency of contacts* with foreigners and the degree of *socio-economic threat* foreigners represent.

At the beginning of the 1990s, there was a recession and large-scale unemployment in Finland. Consequently, Finns' attitudes toward foreigners were very negative. Jaakkola (1999: 7) found out that along with the economic recovery and the decrease of unemployment at the end of the 1990s, Finns' attitudes toward foreigners in general became more positive than they used to be.

Jaakkola (1999: 100) argues that Finns have *ethnic hierarchies*, in other words, people tend to appreciate the species of their own higher than other species. This refers to *racism*: In Jaakkola's study (Ibid 102), 12 % of Finns considered themselves very racist, 26 % rather racist, 41 % a little racist, and 18 % not racist at all. Furthermore, Finns' attitudes toward Scandinavians (e.g., 74 % of Finns accept Swedish immigrants), Finnish-Ingrians, and Anglo-Saxons were more positive than toward Russians (35 %), Arabs, and Somalians (32 % each). Finns' fear of drugs (77 % of the Finns), aids (74 %), and organized crime (73 %) spread by foreigners was approximately as strong as before, while the fear of racism (83 %), unrest, and clashes (73 %) was stronger than before. Finns' readiness to raise the lingual and political rights of foreigners, e.g. voting in state elections, did not increase. (Ibid 7; 83; 75; 8)

In Jaakkola's (1999: 8) study, factors such as high education, a green world of ideas, personal contacts with foreigners, and a religious view of life accounted for positive attitudes toward foreigners. People living in the Helsinki, i.e. metropolitan, area and women had more positive attitudes than men. While women had humanitarian reasons for receiving foreigners, men, mostly under the age of 30, emphasized the importance of receiving "useful", i.e. trained, foreigners. The most important roles in which Finns accepted foreigners were friends [who can be selected] (83 % of the Finns), coworkers (83 %), cleaners, neighbors (77 %), and taxi drivers; 48 % of Finns could marry a foreigner. (Ibid 30; 32-33; 42; 77-78)

Besides Jaakkola's study (1999), there are other reports (e.g. the EUMC

Annual Report [1999: 28]) and studies (e.g. Suutarinen [2001] and Virrankoski [2001]), according to which there is racial discrimination in Finland.

Because *racial discrimination* in Finland is an existing fact, school, army, and working life should be prepared to meet racism, ethnic prejudices, and conflicts. Castles (1997: 8-9) refers to *cultural pluralism*, which according to Bennett (1993: 185; Ibid 1998: 29), refers to "the ability to shift into two or more rather complete cultural world views". This means that people have internalized one or more cultural frameworks in addition to the framework in which they were originally socialized.

There are many who find cultural pluralism unrealistic. The ability to tolerate, accept, and understand cultural diversity as well as the equality of immigrants is, however, one of today's challenges. Finnish Bachelors of Engineering, or BEng engineers, do not need to travel abroad to meet foreigners. It is possible that any Finnish BEng engineer working in Finland could one day have a foreigner as a colleague. The more information the BEng engineer in a situation like this has about cultural diversity, the more positive his/her attitudes toward other nationalities are likely to be. For that purpose intercultural training is needed. (For Finns' intercultural style, see Section 8.3.)

3 COMPETENCES NEEDED BY BEng ENGINEERS

3.1 Professional Competence

In Finland, polytechnic degree programs in engineering consist of 160 credits including basic, professional, and free-choice studies, as well as the practical training period, i.e. the industrial placement, and the final year project, also known as the Bachelor's thesis. When comparing various degree programs and their credits, there are differences between polytechnics. (See Figures 3-4.)

According to the evaluations by the BEng engineers graduated in the year 1999 (Insinööriliitto 2000: 20-22), the professional *strengths* provided by the engineering education program were

- the ability to adopt new things
- data processing skills
- team work skills
- increased initiativeness, and
- the ability to solve problems.

The *weaknesses*, on the other hand, included

- marketing skills
- skills to work in international settings
- leadership skills
- negotiation skills, and
- language skills.

The graduates also felt that their education was not international enough. When asked how to improve engineering education in Finnish polytechnics, the graduates referred to language education, in particular, emphasizing the need for communication skills in foreign languages. The graduates also emphasized the importance of the qualitative development of foreign language education.

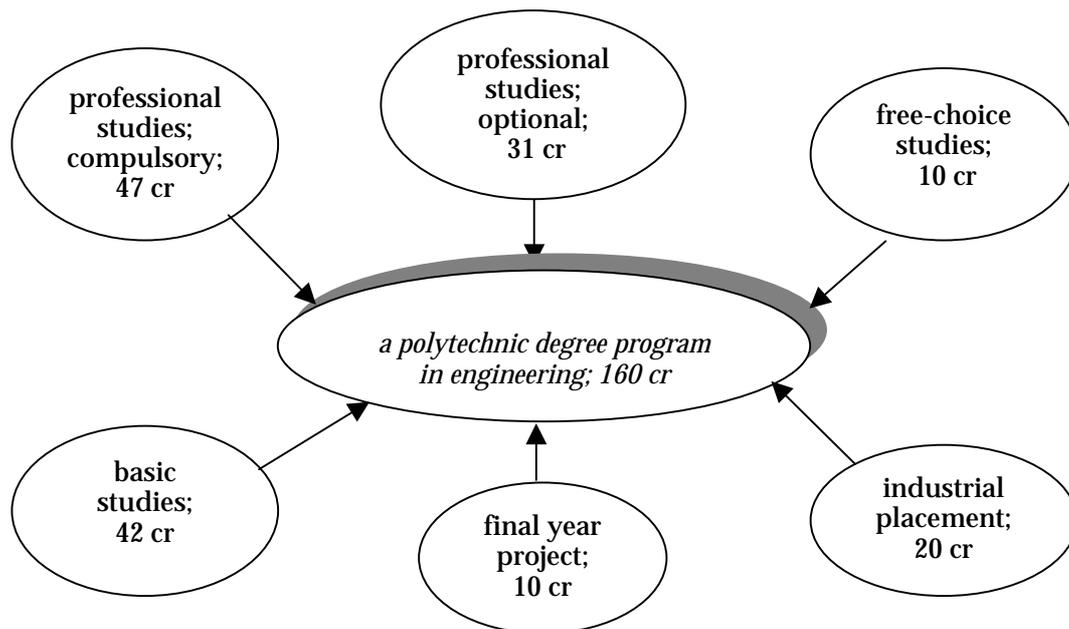


FIGURE 3 An example of the structure of a degree program in information technology; the one-credit course in intercultural communication is part of basic studies

3.1.1 Language and Communication Skills in Finnish Industry and Business

In the 1980s and 1990s, needs for language and communication skills in Finnish industry and business were mapped out by Berggren (1986), Huhta (1994), and Koskinen (1994) at least. The latest needs analysis was a Leonardo da Vinci project called *Prolang* at the end of the 1990s in cooperation with the Finnish National Board of Education and approximately 20 foreign language trainers from Finnish polytechnics, including the present author. In this analysis, requirements set on BEng engineers' language and communication skills in working life were mapped out so that the training contents, materials, and techniques of polytechnic foreign language education could be further developed to meet the requirements of industry and business.

During the project the trainers interviewed representatives of human resources (HR) departments and employees working in companies of various sizes around Finland ($n = 69$) in the major fields of Finnish industry. According to the end results of the *Prolang* project (Huhta 1999: 157), foreign language education in comprehensive and senior high schools provides good basic skills, but not enough skills relevant in working life, for instance speaking skills, command of more than two foreign languages, and intercultural competence.

3.1.2 Intercultural Competence When Recruiting BEng Engineers in Finland

When specified further, in their daily work, according to the *Prolang* project (Huhta 1999: 100), Bachelors of Engineering, or BEng engineers,

- are busy with client contacts
- socialize during company and other visits
- speak on the telephone

- attend meetings and negotiations
- give presentations
- solve technical problems
- describe processes
- read instructions and manuals
- do technical documentation, and
- write faxes and email messages.

Situations such as visits, meetings, negotiations, and solving problems represent the most demanding communication situations. In the contexts mentioned in the list above, social competence, communicative competence, as well as intercultural competence play a major role. (See Sections 3.2. and 3.3.)

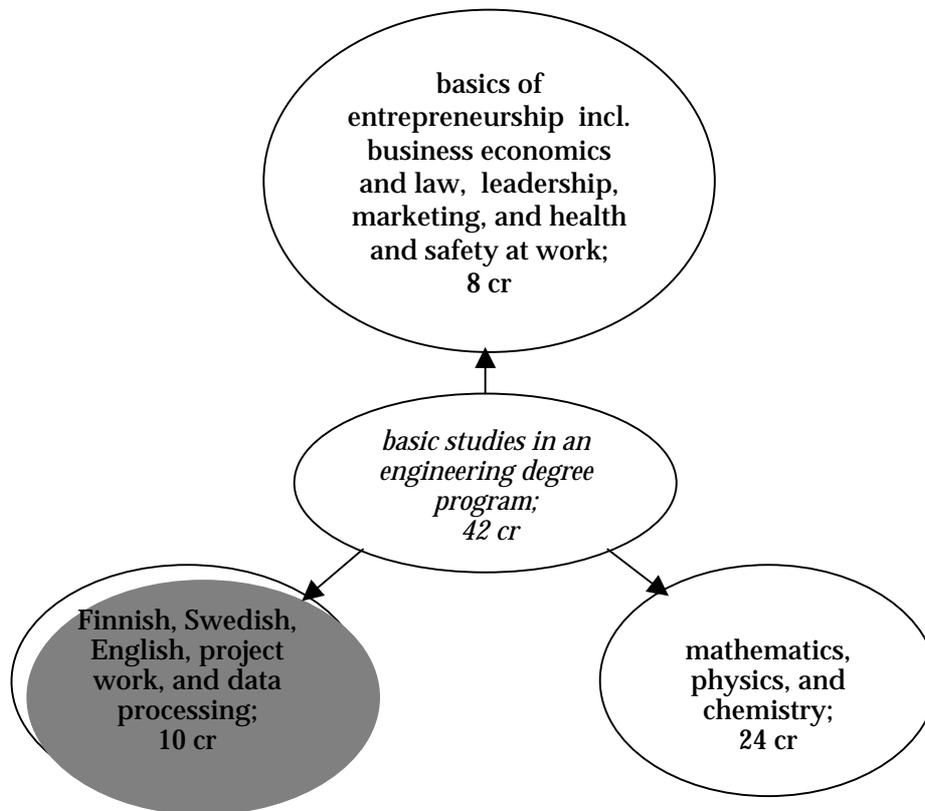


FIGURE 4 An example of the basic studies in information technology; the one-credit course in intercultural communication is part of English studies

Comparing the knowledge and skills provided by foreign language education in comprehensive and senior high schools with the contexts in which language and communication skills are needed in industry and business, there is an obvious gap to be filled by professionally-integrated and interculturally-oriented foreign language education, supported and assisted by other subjects.

Many jobs today have an *intercultural aspect*. Fields such as diplomacy, business, military cooperation, tourism, public administration, science, education, engineering, health care, religion, entertainment, and mass media all need employees who are interculturally competent. However, Marx (1999: 196), for example, argues that companies do not usually include intercultural

competence in professional qualifications when recruiting employees. To get an idea what the situation is like in Finnish industry, a small job ad study was carried out by the present author in January 2000.⁷

A command of English was required in one third of the job ads (35 %), while skill requirements in Swedish, German, French, and Russian were practically nonexistent. There were a few ads with an unspecified reference to "language skills", and a few either in Finnish or English with the job titles in English but no specified reference to any language skills. The rest of the ads (34 %) were in Finnish with no reference to language skills. In 16 % of the ads there was some kind of reference to intercultural competence, in addition to the language skills.

The *expressions* used to refer to skills other than language were

- communication skills
- interpersonal skills
- presentation skills
- negotiation skills
- willingness to travel abroad
- interest in international activities
- ability to work on international projects, and
- ability to recognize, understand, and manage cultural differences.

On the basis of the small job ad study it seems that employers in Finnish industry do not often require communication and intercultural skills when recruiting BEng engineers.

3.2 Social Competence

Lehtonen (1998b: 60) defines *social competence* as an individual's ability, i.e. behavior and skills, to control his/her social environment. It can also be defined as an individual's ability to overcome everyday obstacles. Besides language and other social skills, prerequisites for competence also include knowledge of society and its functions as well as social sensitivity, or the ability to understand a culture including its customs, norms, and social organizations.

Socialization, or enculturation, refers to the process by which people learn their culture. It involves behavior and *communication* in various social contexts. If people move to a different environment, they may experience uncertainty, anxiety, and stress because they are not aware of the behaviors necessary to achieve their goals. People who speak different languages do not only behave

⁷ The study was based on a Sunday issue of Helsingin Sanomat (January 23, 2000, p. E5 -36), and an issue of Tekniikka & Talous, Tekninen Uratie (No 1, January 5, 2000, p. 5 -24). The study covered jobs potentially suitable for Bachelors of Engineering in the fields of information technology, production engineering, and construction engineering, especially facility management. If the number of vacant jobs in an ad was in plural but unspecified (e.g. designers), the number was specified as two (e.g. two designers). For this reason, the total number of jobs (n = 163) is approximate. References to the knowledge of Finnish were omitted.

and communicate differently: They also perceive the world differently. By learning the local language(s), it is possible to acquire a medium of communication as well as better understanding of why people think and behave as they do. Hoecklin (1995: 23) points out that "if we are fluent in the local language, some of the more 'hidden' differences become more apparent". Gudykunst and Kim (1997: 214) argue that if people are competent in a foreign language or languages, their uncertainty and anxiety can be reduced.

People can learn the formal system of a language without much cultural learning, but it is, very likely, difficult to learn much about a culture - or understand it - without knowledge of its language, or even languages. If people know the grammar, lexis, and pronunciation of a foreign language, they are expected to know the culture as well. If this is not the case, there is no coherence between words and behavior. Today the *cultural dimension* is of equal importance with the linguistic one. (Ferraro 1994: 47; Byram & Risager 1999: 76)

Aspects of intercultural competence have been discussed since the early 1980s under many different labels, such as *crosscultural awareness*, *crosscultural adjustment*, *crosscultural effectiveness*, *intercultural effectiveness*, *multiculturalism*, *cultural competence*, *intercultural competency*, and *intercultural communication competence* (Taylor 1994: 390). Discussion has focused on the identification of components, building blocks, or variables of competence, that could be used as predictors of effective and successful intercultural performance. Most of the measurement methods have relied on retrospective self-reports or reports by outsiders. (Dinges & Baldwin 1996: 106; 113; 121)

3.3 Intercultural Competence: Part of Communicative Competence

According to Lehtonen (1998b: 60), communicative competence is part of social competence, while intercultural competence is part of communicative competence. Language and culture being related, language trainers should include intercultural aspects in the curricula (Brislin & Yoshida 1994b: 3; 12-13), the word *intercultural* referring to communication between people from more than one culture. If people learn about cultures and how culture affects their thinking and behavior, it is possible to see that their solutions may not be the only, the best, or the most appropriate in the context at hand. This realization (e.g. Hoecklin 1995: 15; 21) is the first step in using cultural differences as a *strategic tool* of thinking and planning, both at the corporate and individual level.

Foreign language education is traditionally organized within various educational and training institutions in the trainees' own country. The fundamental problem of this is the geographical *distance* from the country or countries, i.e. target culture(s), where the language in question is spoken. Byram and Risager (1999: 123) argue that no other subject has, to the same degree, teaching content that lies outside trainees' immediate experience.

For much of the last hundred years, foreign language education has focused on finding training techniques which will give trainees a native like command of the grammatical system and as much as possible of the lexis. According to Byram (1997: 21), this has condemned the majority of trainees to

failure in communication. When it was realized that grammatical and lexical competence needed to be related to the *contexts* in which particular language is spoken by native speakers, the provision of information about a country began to develop. (Byram & Risager 1999: 3)

Kaikkonen (1994: 71) argues that in Finnish foreign language education, language has often been separated from its cultural background either because of tradition or for practical reasons, in other words, the focus has been on grammar and lexis. If the overall goal of foreign language education is intercultural competence, language and culture(s) cannot, however, in general be separated. A precondition for successful intercultural communication is awareness of one's native culture and its cultural conventions. The function of foreign language education is to help the trainee to "grow out of the shell of native language and culture" (Ibid 57; 124). Besides the awareness of one's own background, it is important to know the culture of the communication partner as well. (See also Byram 1989: 139; Fantini 1995: 149; Sawyer & Smith 1994: 295.)

In the case of English, i.e. today's main international link language, the *lingua franca*, trainees cannot necessarily be expected to acquire knowledge of all the continental and national [i.e. emic or culture-specific⁸] differences in grammar, lexis, pronunciation, cultures, and identities with which they may come into contact. (Schnitzer 1995: 227-236) Instead, *Content and Language [i.e.English] Integrated Learning*, or *CLIL*, and the etic, or culture-general, approach can be applied. This means that trainees can use English to study cultural differences from the etic perspective. They can also be encouraged to explore Cyber-English, i.e. the language used in Cyberspace. When needed, emic, or culture-specific, issues can also be discussed. (See Subsection 1.3 and Section 5.5).

On the basis of Byram and Risager (1999: 3-4), the term *cultural dimension* refers to three related aspects in foreign language education, these aspects being

- 1) *communicative competence* which enables a foreign speaker of a language to understand the ways in which a language is used in specific contexts
- 2) the ability of a foreign speaker to reflect upon his/her own culture, and how to establish a relationship between it and other cultures to facilitate communication and becoming an *intercultural speaker*
- 3) the ability of the foreign language trainer to help trainees become *mediators between cultures*, and to stimulate trainees' interest in other cultures in general (cf. English as the international link language)

To designate the cultural dimension as one of the language skill areas, the term *cultural awareness* has been used. *Cultural awareness* refers to knowledge about other countries, positive attitudes toward the speakers of other languages, and a heightened sensitivity to "otherness" of any kind. People need cultural awareness linked to a particular language and culture(s), but today they also need to know the ways in which learning another language can contribute to their understanding of and interest in people of other cultures *in general*. (Byram & Risager 1999: 4; 156) As Fantini (1997: 13) points out, intercultural competence provides people the possibility to transcend the limitations of their

⁸ Phonemics and phonetics come from linguistics (Pike 1967 according to Triandis 1994:20).

singular world view.

With intercultural competence as the overall goal of foreign language education, culture is increasingly joining the four traditional language skill areas - speaking, listening, reading, and writing - as a *fifth dimension*. Culture, however, differs from the others in that it is not separate from but *intertwined* with each. (Damen 1987 according to Ryffel 1995: 323; 326)

Learners of a foreign language, such as English, are not imitators of native speakers but *social actors*, as Byram (1997: 21) calls them, engaging with other social actors [with different accents] in a particular kind of communication and interaction, which is different from that between native speakers. Byram argues that the power of native speakers is decreasing: The foreign speaker who knows of his/her own culture as well as of the foreign culture(s) is in a position of power at least equal to that of the native speaker. This must not, however, decrease the ability to use English, or any language, accurately.

On the basis of interviews carried out by Insinööriliitto, the trade union of the BEng engineers, and the Prolang project, Bachelor of Engineering, or BEng, students need to develop their intercultural competence to become the social actors needed in working life, in both domestic and foreign functions.

3.4 Defining Intercultural Competence

3.4.1 Cognition, Affect, and Behavior

Considering working life, the impact of internationalization and globalization varies with the type of environment and the company's overall strategy. Research has, however, shown that the styles of planning, organizing, staffing, leading, motivating, making decisions, and communicating vary worldwide. Global companies must manage cultural diversity both within the company and its external environment. To work [and communicate] effectively, everyone from the Chief Executive Officer, or CEO, to the lowest employee needs intercultural competence. (Adler 1997: 124; 126)

Hiltrop and Janssens (1995: 358) mention three main factors associated with expatriate performance: personal characteristics, characteristics of the family, and the relations between the parent company and subsidiary. They continue by stating that, according to most of the studies considering the personal characteristics of successful expatriates, "successful expatriates have superior intelligence, self-confidence and a strong drive for responsibility and task completion". Hence, the lists of characteristics leading to effectiveness and success are not always totally realistic. Marx (1999: 152), for example, has developed a list of the desirable characteristics international employees should possess. In her order of priority the *desirable characteristics* are

- 1) social competence
- 2) openness to other ways of thinking
- 3) cultural adaptation
- 4) professional excellence
- 5) language skills

- 6) flexibility
- 7) ability to manage/work in a team
- 8) self-reliance/independence
- 9) mobility
- 10) ability to deal with stress
- 11) adaptability of the family
- 12) patience, and
- 13) sensitivity.

To be competent in international working life, people, according to Marx (1999: 152), need to work on

- the *thinking* side (openness to other ways of thinking, flexibility, language skills)
- the *emotional* side (ability to deal with anxiety and stress), and
- the *social* side (social competence, ability to manage and work in teams and on projects, cultural adaptation).

The problem in the above list of desirable characteristics is that the terms *social competence* and *sensitivity* each cover all the other characteristics mentioned. While the lists of desirable characteristics can be criticized for being unrealistic, the research in the field (e.g. Kealey 1996: 84; Dinges & Baldwin 1996: 107-112; Paige 1996: 155; Schneider & Barsoux 1997: 163-170) *does* indicate that an international employee must possess a number of characteristics to succeed: According to Kealey and Protheroe (1996: 142), knowledge about what personal qualities, skills, and knowledge it takes to succeed on an international assignment (see Chapter 6) has substantial empirical support.

According to Hiltrop and Janssens (1995: 364), human relations skills, understanding the host culture, and the ability to adapt are the most important skills required. Schneider and Barsoux (1997: 176) refer to *ethnorelativity*. It is important that other people's behavior is no longer evaluated as good or bad, as viewed through the filtering cultural lenses, but that people have different approaches to different people.

In addition to deep and versatile *linguistic skills, knowledge* about oneself, others, including e.g. norms, values, and conventions, and various aspects of communication, the concept of intercultural competence integrates a wide range of *personality traits* and *social skills* such as

- a strong *sense of self*
- *motivation* to communicate appropriately and effectively with others; also motivation to live, study, and work in another culture, i.e. cultural *curiosity*
- cultural *empathy* and low levels of ethnocentrism
- *tolerance of ambiguity* and uncertainty connected with new situations
- the ability to manage anxiety and *stress*, i.e. flexibility and stress resistance
- the ability to *disclose* oneself, including emotions, in an appropriate way
- the ability to *listen* interactively
- the ability to become *mindful*, i.e. cognitively aware, of the process of communication and *negotiate meanings* (Gudykunst 1991: 2; 20-21; 102; 119-120; 136; 139; Ibid 1995: 19-21; 24-28; 89-94); the ability to have a *dialog*
- *sense of humour*, a coping mechanism and for relationship building, remembering what is funny in one culture may not be that in another
- the ability to display *respect* and have *patience* for other people and different daily

- rhythms and customs
 - the ability to recognize cultural differences in one's own country
 - the ability to deal simultaneously with people from multiple cultures, i.e. an *etic* or *culture-general* approach
 - the ability to operate *independently* as well as to work in *teams* and on *projects*; presentation skills, negotiation skills, and decision making skills
- (Adapted from Schneider & Barsoux 1997: 163-170; see also Borden 1991 according to Chaney & Martin 1995: 12; Brislin & Yoshida 1994a: 40; Hiltrop & Janssens 1995: 359-361; 364; Scollon & Wong Scollon 1995: 67; Byram 1997: 16; Gudykunst & Kim 1997: 32; 40; 256; 269-271; Marx 1999: 196; Martin & Nakayama 2000: 317; 319)

The above list of personality traits and social skills emphasizes the strong sense of self as the foundation for the development of intercultural competence. Otherwise the list does not follow any order of preference but is to be considered as a whole.

In brief, intercultural competence refers to *sensitivity to cultural diversity*, i.e. the ability to behave in an appropriate way, and to adapt one's communication and interaction according to the context.

In Cui and Awa's opinion (1992: 311-314; 316; 324-325; 312-314), for example, , intercultural competence consists of *cognitive*, *affective*, and *behavioral* components. (See Figure 5.) Cui and Awa continue to argue that cultural adaptation emphasizes personality traits, whereas international job performance requires interpersonal skills. That is, cultural adaptation and effective job performance are correlated.

Goleman (1997: 13-14) argues that success in life is, in general, not dependent on I.Q. but on a metaskill called *emotional intelligence*, which controls other skills. Many of the components of emotional intelligence are the same as in the description of intercultural competence presented in the present study (cf. Goleman 1997: 13; 54-55; 65-66; 69; 127; 146; 236-237; 354-355).

3.4.2 Discussing Intercultural Competence Further

For effective functioning *multicultural teams* must use their cultural diversity to generate multiple perspectives, problem definitions, ideas, alternatives, and solutions. (See Figure 6.) They must also learn to reach consensus and balance the simultaneous needs for creativity (divergence) with those of cohesion (convergence). Holden (2002: 222; 317; 228-229) introduces the term *interactive translation* to describe crosscultural [intercultural] work in which members of multicultural teams negotiate common meanings and common understandings whereby the members also learn to work in those teams. (See Subsections 4.1.1 and 4.2.2.)

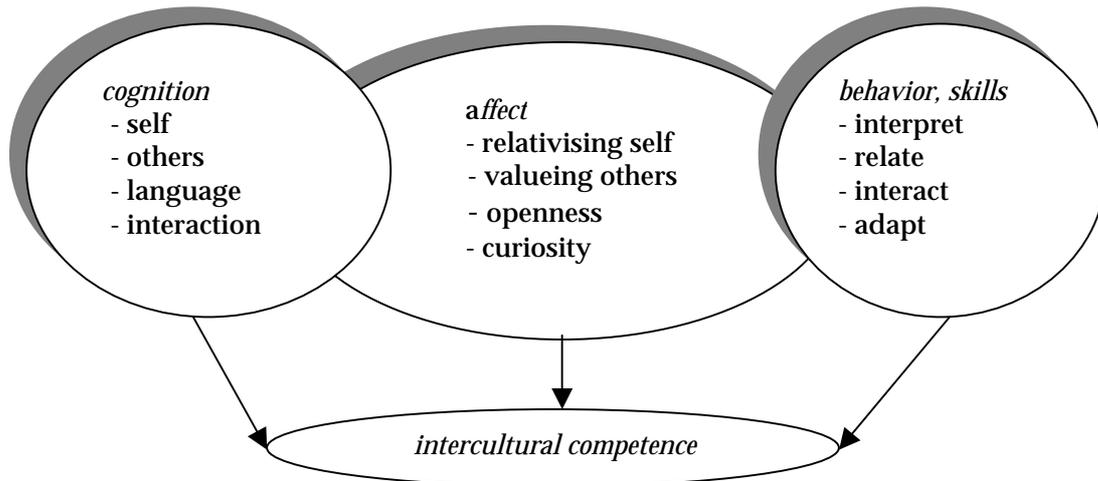


FIGURE 5 Intercultural competence as cognition, affect, and behavior (Adapted from Seelye 1997: 34)

Interactive translation calls for *participative competence*, i.e. an adeptness in crosscultural [intercultural] communication to engage in a discussion productively, even when using a foreign language. It is important to contribute to the common task under discussion, to be able to share knowledge, to communicate experience, and stimulate team learning. (Ibid)

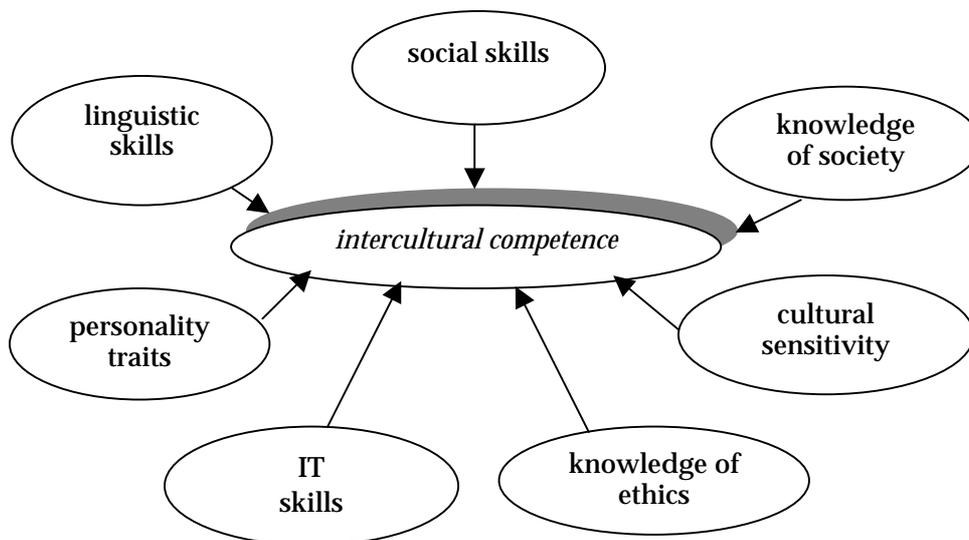


FIGURE 6 Intercultural competence: knowledge, skills, personality traits, and ethics (Adapted from Lehtonen 1998b: 60-62)

Besides working in multicultural teams, negotiating globally is also increasingly common. (See Figure 6.) To successfully manage *global negotiations*, negotiators need to know how to communicate with people from other cultures and how to influence them. Along with intercultural competence, diversity can become a source of competitive advantage and added value when attempting to reposition the company: to create a new idea, plan a new operation, develop a new marketing plan, launch a new product, or assess emerging trends from a new perspective. (Holden 2002: 144-145; 189; 101)

Computers are able to execute different kinds of *telecommunications* functions when they are connected to a telephone network. (See Figure 6.). Today and especially in the future it is possible to do almost everything from home. Consequently, all people should possess *computer literacy*, or information technology (IT) skills, to cope with new technology: to search for, apply, and convey data via networks. New communications technology does not only bring advantages, but it may also incorporate disadvantages such as the isolation of the user(s). People's perception may be manipulated, and as a result their interpretations of reality may be distorted. Social values such as sense of community, responsibility, and tolerance may also shift into the background.

The push toward globalization is causing "culture shocks" in the way business is conducted around the world, i.e. in *ethics*. (See Figure 6.) According to Schneider and Barsoux (1997: 242; 244-245), the success of globalization depends on being able to establish a *shared meaning* (see Subsections 4.1.1 and 4.2.2) of what is considered to be ethical and socially responsible behavior. Does the notion of "human rights" have a similar meaning in China and western countries? To have a shared understanding and way of responding to issues such as "What is corruption?", people first need to consider what is shared (i.e. *etic*) and what is culture-specific, i.e. *emic*.

Differences in local business practices will continue to challenge international businesspeople, when confronted with what in one's home country would be considered corrupt practice. (See Figure 6.) For example, while bribery is illegal in Finland, there is no such legislation that applies abroad. In business, the decision has to be made whether to impose parent company or home-country rules in host countries, or to play by the local rules. There is a danger that efforts of headquarters to insist on ethical practices in foreign subsidiaries may be taken as a sign of cultural imperialism. (Ibid 245; 252)

Schneider and Barsoux (1997: 259) argue that the way in which these decisions are taken by companies, will very likely remain culturally determined. For instance, in *low-context countries* ethical standards are likely to be explicit, to be found in writing and law, while in *high-context countries* ethical standards are likely to be more implicit, to be shared by members of the community (for the concepts of low- and high-context, see Section 8.3).

Considering the concept of competence, Gudykunst (1991: 3-4; 103-104; see also Triandis 1994: 182.) identifies four *stages of competence* which are

- 1) *unconscious incompetence*, where people misinterpret other people's behavior but are not aware of it
- 2) *conscious incompetence*, where people are aware that they misinterpret other people's behavior but do not know what to do about it
- 3) *conscious competence*, where people modify their behavior to take into account the fact that they are communicating with a person from another culture
- 4) *unconscious competence*, where the correct communication pattern has become such a part of people's habit structure that they no longer have to think about using a different pattern with people from another culture

According to Martin and Nakayama (2000: 317; 323), the overall objective in developing intercultural competence is *unconscious competence*, the level at which interaction goes smoothly but is not a conscious process. Gudykunst

(1991: 3-4; 103-104) points out that moving to the stage of unconscious competence requires practice.

When defining intercultural competence, it must first be remembered that *competence* does not actually reside in the performance, but is "an *evaluation* of the performance by someone" (Gudykunst 1991: 103-104). The same performance may be evaluated to be competent by one person and incompetent by another, in other words, competence is something that is perceived. The standards, or criteria, people use to evaluate competence vary across cultures. (Gudykunst & Kim 1997: 252-253) Secondly, competences are not static but change along with time. Therefore, people should look for *generic competences* that are important in international and multicultural work in general, and add specific ones when necessary. (Marx 1999: 195) Generic competences prepare for learning how to learn, provide a broader perspective, and make movement to culture-specific training easier. (Cf. Sections 3.3 and 5.5.) Finally, even the importance of intercultural competence varies from one culture to another (Adler 1997: 296).

According to Lehtonen (1998b: 65), in an information society, in addition to communication skills, a *competent [intercultural] communicator* should be able to

- recognize values which guide communication as well as social change
- recognize ways an individual has to guide his/her future
- collect and compare data to decide what is objective reality
- assess the ethical acceptability of his/her own communication behavior and guide the operation of his/her cooperation network according to common ethical principles.

How easily and quickly international employees - and their family members - can adapt to new environments is one of the most important aspects of a successful adaptation to life in another culture. For this adaptation to take place, the general willingness to communicate and interact is not enough but other qualifications are also needed. (Cf. Marx 1999: 152; Cui & Awa 1992: 311-314; 316; 324-325.)

3.4.3 Self-Awareness and Tacit Knowledge

Today's organizations have to search outside national boundaries to fully develop their capacity (Schneider & Barsoux 1997: 221). When companies expand their operations abroad, it means balancing between prospects of growth and the risk associated with operating in unknown markets. Successful companies and employees are those who see cultural diversity as an opportunity rather than as a threat, as something that can be learned, managed, and made use of, as an opportunity to higher productivity and more profits, and who are willing to develop their intercultural competence. Furthermore, successful companies are those who also understand the potential resources the foreigners living in and immigrating to Finland represent, while successful employees are those who understand and accept cultural diversity. Interculturally competent employees, including immigrants, represent *added value* to companies and their shareholders. Holden (2002: 71; 75-76) refers to

crosscultural management as knowledge management. The *knowledge management* perspective presents culture, not as a source of difference and antagonism, but as a form of organizational knowledge, company- and employee-specific knowledge, which can be converted into *tacit knowledge*, which both adds value to company activities and is difficult for rivals to copy.

Along with increasing internationalization and globalization, *intercultural competence* has become a key professional qualification and/or a requirement for successful life, study, and work. When developing competence, early challenges and diversified experience are considered important. What is important is that intercultural competence is required at all levels of the organization. (Schneider & Barsoux 1997: 171; 158) This means that intercultural communication should be included in professional education, such as Bachelor of Engineering, or BEng, education.

Developing intercultural competence is a slow, gradual *transformative* learning process (Mezirow 1991; Taylor 1994; Ibid 1997) consisting of language studies, *intercultural training*, and hands-on experiences of other cultures and their people. Knowledge and understanding of one's own culture, i.e. *self-awareness*, is of major importance in this process. Intercultural training is to improve trainees' interpersonal communication in situations in which the sender(s) and receiver(s) are coming from different cultures.

According to Lehtonen (1998b: 62), conventional, i.e. US American, definitions of intercultural competence are based on an individualistic concept of culture, emphasizing performance measured by the success of the individual. Lehtonen points out that a more humanistic approach taking into account the concept of community would additionally be appropriate when defining intercultural competence.

4 INTERCULTURAL COMMUNICATION

4.1 Defining Culture

In order to be able to define the concept of intercultural communication, first the concepts of culture and communication will be discussed in brief. Understanding other people's culture, which "manifests itself in many ways" (Marx 1999: 42) is a big challenge in internationalization and globalization. What is *culture* then? According to Hall (1970: 35), the pioneer of intercultural communication, culture controls people's behavior "in deep and persisting ways", many of which are outside their awareness and conscious control. Scollon and Wong Scollon (1995: 125) think that the term culture often brings up more problems than it solves, and define culture as follows:

"Culture is any of the customs, worldview, language, kinship system, social organization, and other taken-for-granted day-to-day practices of a people which set that group apart as a distinctive group." (Ibid 126)

Schneider and Barsoux (1997: 7; 10; 11) argue that "culture can be harnessed [e.g.] to drive business forward", and "rather than seeing culture as a problem to be solved, there is evidence that culture can provide a source of competitive advantage". They also argue that "Recognizing cultural differences is the necessary first step to anticipating threats and opportunities for business encounters." (See also Francesco & Gold 1998: 6.)

In intercultural communication, when people's "cultural perceptions and symbol systems are distinct enough to alter the communication event" (Samovar & Porter 1991: 316), the concern is not, according to Bennett (1998: 3), with "the finer things in life", the so called high culture, "culture writ large", with a capital C. Instead, the concern is with "everything that people have, think, and do as members of society" (Ferraro 1994: 16-17; Martin & Nakayama 2000: 55), i.e., with the anthropological aspects of culture, culture "seen as including everything that is human made" (Gudykunst 1991: 42; Martin & Nakayama 2000: 56), culture as a broad concept that embraces all aspects of human life, "culture writ small", subjective culture (Bennett 1998: 3).

The following definitions also emphasize the *anthropological* aspects of culture:

"Culture is a mold in which we are all cast, and it controls our daily lives in many unsuspected ways." (Hall 1970: 38)

"Culture is the link between human beings and the means they have for interacting with others." (Hall 1970: 167)

"Culture is the way of life of a people." (Hall 1970: 31; see also Francesco & Gold 1998: 18)

"Culture is man's medium; there is not one aspect of human life that is not touched and altered by culture." (Hall 1989: 16)

Besides definitions of culture influenced by anthropology, there are definitions influenced by *psychology*, for example. Hofstede (1994: 4-6; 9) defines culture as mental programs, "the software of the mind", culture providing the software, or "the collective programming of the mind which distinguishes the members of one group or category of people from another". Martin and Nakayama (2000: 57) point out that in this way "culture becomes a collective experience because it is shared with people who live in and experience the same social environments".

Cultures within cultures are called microcultures. *Microcultures* are groups of people possessing characteristics that distinguish them from others within a *macroculture*. (Chaney & Martin 1995: 2-3; 10) Microcultures can also be called subcultures. Examples of *subcultures* are civilizations, national, regional, and city cultures, as well as various cultural groups. (Schein 1986: 5-9) People can simultaneously belong to a number of subcultures. Adler (1992: 58) points out that organization culture, for example, does not erase or diminish national culture but superiors and subordinates bring their ethnicity to the workplace.

Gudykunst and Kim (1997: 18) use the term culture to refer to "the systems of knowledge used by relatively large numbers of people". This is culture at the *societal level*. The boundaries between cultures can coincide with national or political boundaries between countries.

Culture exists on various *layers* or *levels*. The outer layer consists of *explicit culture*, which is visible and can easily be described. It, for example, includes language, food, buildings, and fashions. This is where prejudices mostly start. The middle layer consists of *implicit culture* with norms, values, beliefs, expectations, attitudes, and styles of communication, for example. Implicit culture is not visible and presents difficulties. (Hall 1970: 64-65; Trompenaars & Hampden-Turner 1998: 21-22) To illustrate the concept of culture metaphors can be used: Culture can be unpeeled layer by layer like an onion. (Hofstede 1994: 9) Besides an onion, culture can be likened to an iceberg, with its largest, implicit part beneath the water level (e.g. Goodman 1994: 41; Francesco & Gold 1998: 18-19).

4.1.1 Culture as a Shared System of Meanings

Chaney and Martin (1995: 5) define culture as "the structure through which communication is formulated and interpreted". Lehtonen (2000) refers to interaction: Culture is continuous interaction between the ideas and actual behaviors of people. According to Bennett (1998: 3), a good working definition for culture is "the learned and shared patterns of beliefs, behaviors, and values of groups of interacting people".

In the present study, *culture* is

- 1) about groups; not about individual behavior
 - 2) a shared system of meanings; how a group of people perceive the world
 - 3) learned; not inherited
 - 4) relative; not superior or inferior: there is no cultural absolute; nonjudgmental
- (Adapted from Hall 1970: 54; Ibid 1989: 16; Ibid 1998: 64; Adler 1992: xi; Hoecklin 1995: 24-25; Schneider & Barsoux 1997: 11)

The above definition discusses the *communicative* aspect of culture which is emphasized in today's international and multicultural working life. The above definition also suits the purposes of intercultural training and foreign language education, "shared meanings" referring to "language learning as learning the meanings of a specific social group" (Byram 1997: 39; for English as the international link language, see Section 3.3). Although culture is something that we learn, all learned behavior is not, however, of cultural origin. Learned behavior is cultural if it is information shared by the in-group, and transmitted socially and historically. Language behavior is a subset of cultural behavior. (Seelye 1997: 22) (See Figure 7.)

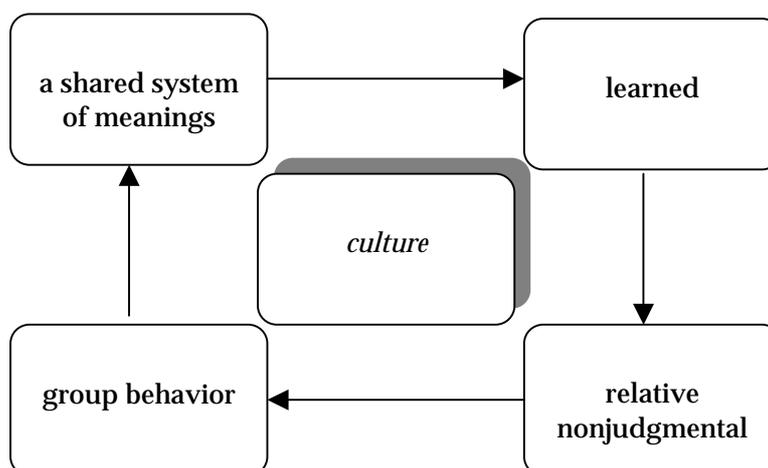


FIGURE 7 The definition of culture used in the present study

4.1.2 Converging or Diverging Cultures?

With the increasing globalization of the economy, the concept of a *global culture* has also emerged. There are people who fear that modernization and internationalization will create, or at least lead to, a common global culture. According to Schneider and Barsoux (1997: 222-223), most of the world's businesses are, however, less global than it is generally thought. Trompenaars and Hampden-Turner (1998: 3; 19) admit that as markets globalize, the need for standardization in organizational design, systems, and procedures will increase but, while there are many external manifestations of a global culture such as branded products, services, and even festivals becoming common to the world markets, that does not mean that people in different cultures attribute the same *meaning* to them. Hoecklin (1995: 2-3) emphasizes that it is the cultural *context* that matters. According to EVA (1998), we are talking about *consumerism*, not yet the deeper end of culture: If culture in globalization means the same as culture in a world of nation states, then a global culture is difficult to imagine [at least in the near future]. Lehtonen (2000) points out that changes in national cultures may be slower than expected, but the changes are, however, inevitable and irreversible.

Globalization means going beyond mere presence in the trading blocks or having a globally recognized brand name (Schneider & Barsoux 1997: 156). Besides globalization, organizations must pay attention to *localization*, i.e. the local characteristics of the market, the legislation, the fiscal regime, the socio-political system, and the cultural system (Trompenaars & Hampden-Turner 1998: 3).

According to Trompenaars and Hampden-Turner (2000; 2001), people have a number of options when dealing with cultural diversity. They can, first of all, ignore other cultures and stick to their own cultural standpoint, secondly, they can abandon their standpoint and "go native" by adopting the "When in Rome, do as the Romans do" approach, thirdly they can compromise, i.e. do sometimes in their way and sometimes give in to the others, or, eventually, they can reconcile. Trompenaars and Hampden-Turner emphasize that people should "ride the waves" of intercultural differences rather than ignore or fight them: When dealing with cultural differences, people should apply what Trompenaars and Hampden-Turner call *reconciliation*, i.e. an approach where the two opposing views fuse or blend, where cultural dilemmas are reconciled by understanding the advantages of each cultural preference. In practice this means, for example, having local variations of global ads, products, and services (see also Lehtonen 1998a: 302-303), and companies have to make adjustments to accommodate the tastes and preferences of individual countries and customers. (Chaney & Martin 1995: 3-4; Schneider & Barsoux 1997: 156) According to scholars in the field of *cultural synergy* (Lehtonen 2000), it is possible to combine the best sides of each culture, and in this way optimize production, for example. Lehtonen, however, argues that the idea is fine in theory: In reality the best sides are the best in their original context only.

According to Schneider and Barsoux (1997: 223), the personnel of today's organizations must possess a global mindset. A *global mindset* refers to "the capacity to appreciate the beliefs, values, behaviors, and business practices of

individuals and organizations from a variety of regions and cultures". Ward and Kennedy (1994: 334) point out that people must be able to think globally but act locally, i.e. *glocally*.

4.2 Defining Communication

4.2.1 Messages and Meanings

Perception, defined by Porter and Samovar (1991: 14) is "the process of creating meaning based on our experiences". According to Francesco and Gold (1998: 629), perception is "an individual's personal view of the world". What people perceive can, however, be misleading. Due to their different cultural backgrounds people can have different perceptions of the same stimulus, and all these perceptions can be equally valid. This is called *perceptual difference* (Hoopes 1981: 13-14).

When communicating, people exchange messages, not meanings: Meanings must be attributed. Francesco and Gold (1998: 622) define *communication* as "the process of transmitting thoughts or ideas from one person to another". According to Samovar and Porter (1991: 28), communication occurs "whenever meaning is attributed to behavior or the residue of behavior". Bennett (1998: 9) states that "The process of communication can be thought of as the mutual creation of meaning - the verbal and nonverbal behavior of communicating and the interpretations that are made of that behavior. The meaning itself can be called the content of the communication." *Attribution* means that people use their past experiences to give meaning to the behavior they observe. The meanings people give have developed throughout their life time as a result of their culture acting on them. (Samovar & Porter 1991: 28) Without attribution, communication is not complete.

Barnlund (1998: 39) argues that differences in meaning, far more than those in vocabulary, isolate cultures and cause them to regard each other as strange. According to Adler (1992: 75), culture strongly influences, and in many cases determines, people's interpretations. Because each individual is a unique human being with a unique background and set of experiences, meaning is relative. Usually attribution works well, but sometimes it fails due to people's "subconscious cultural blinders" (Ibid), and they misinterpret a message: People attribute a wrong meaning to the behavior they have observed. In other words, they do not make *isomorphic* attributions, isomorphic implying being similar. (Porter & Samovar 1991: 6-8)

In general, communication takes place on many levels. This means that many messages are encoded and sent with conscious intent while others are sent unconsciously (Samovar & Porter 1991: 29). Besides *verbal* communication, i.e. spoken and written words, there is nonverbal communication. *Nonverbal* communication involves all those stimuli, except verbal ones, that have "potential message value for the sender or receiver" (Ibid 179). Hall (1970: 10) calls nonverbal communication the *silent language* and the *hidden dimension*,

referring to the fact that nonverbal communication is often unconscious and therefore ambiguous.

Each successful message carries with it a second message, a *metamessage*, or a *contextualization cue*, which tells the receiver *how* to interpret the basic message, *what* was actually said. The prefix "meta" is from Greek and carries the meaning of "higher" or "more general". (Scollon & Wong Scollon 1995: 67) Contextualization cues are culture-specific, i.e. they pertain to a particular culture. In one's own culture contextualization cues are self-evident and it is usually not necessary to talk about them. They become meaningful when a listener does not react to a cue, or is not aware of its function. In a situation like this interpretations may differ and misunderstandings occur (Gumperz 1987: 131-132), or communication fails.

4.2.2 Mindfulness and Negotiation of Meaning

Blommaert (1995: 23-24) argues that members of one culture can learn the language of another culture, but even if they speak it perfectly, they still are not members of that culture: Language may trick people into believing that an individual, who has learned the language, has also adopted the culture. That is, foreigners use the language just verbally, their implicit behavior still being firmly rooted in their own culture. "Below the surface, foreigners will always remain foreigners. It will always be *us* and *them*."

In Seelye's (1994: 3: 6; 10; 275) opinion it is naive to assume that knowledge of a foreign language leads in itself to thinking like a native. "Learning a language in isolation of its cultural roots [i.e. target culture(s)] prevents one from becoming socialized into its contextual use". (Cf. Section 3.3.) Therefore, learning the cultural roots of a language is essential for meaningful fluency.

Bennett (1997: 16) uses the term *fluent fool* to describe a person who speaks a foreign language well but does not understand the social or philosophical content of that language. To avoid becoming a fluent fool, it is important to understand the cultural dimension of language more completely. Fantini (1997: 9) calls language a *double-edged sword*: Language both communicates and excommunicates. In other words, it includes only those who share the system; others are excluded.

Scollon and Wong Scollon (1995: 10-11; 13) argue that to improve communication between different cultures people must know as much as possible about the culture that they are communicating with, or they must learn to deal with misunderstandings, i.e. miscommunication. According to Samovar and Porter (1991: 150-151), the ability to communicate with other people does not only depend on the language, but people must also share common life experiences so that the words they use basically mean the same things. "If one is to use a language well, one must know the culture that uses the language."

Gudykunst (1991: 5-6) emphasizes that people must be *mindful*, i.e. consciously aware, of their communication. When people are mindful, they are able to recognize different perspectives and seek for clarification: They are able to *negotiate meanings*. (Gudykunst 1991: 5-6; 71; Ibid 1995: 16-17; Gudykunst & Kim

1997: 40-42; 268-269) Holden (2002: 99; 315; 317) also emphasizes the importance of negotiating common or shared meanings. (See Figure 8.)

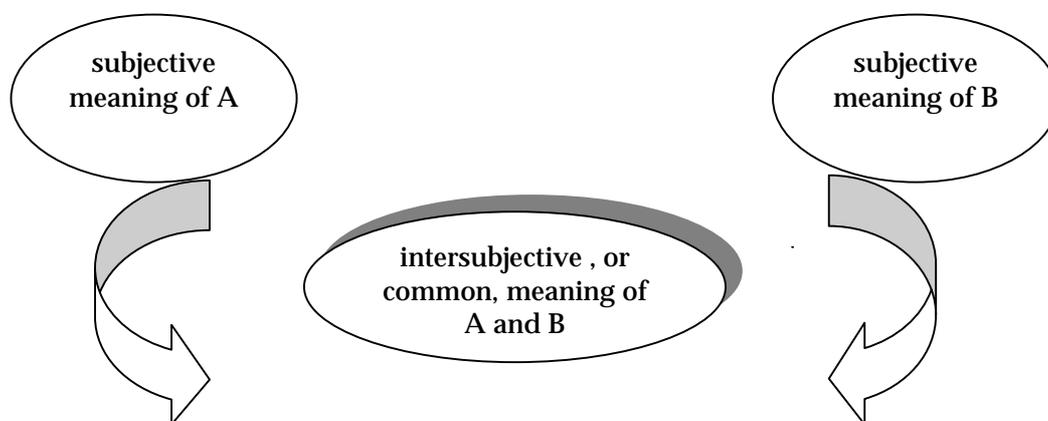


FIGURE 8 Negotiation of meaning

In intercultural communication, it is of major importance to identify one's own knowledge and the knowledge of the others so that it is possible to agree on a common working basis and sound compromises that can lead to common targets. (Prolang 2000: 124) If understanding is a measure of communicative success, a formula called the *interpersonal equation*, may, according to Barnlund (1998: 42), clarify the major factors that contribute to its achievement. The formula is

$$\textit{Interpersonal Understanding} = f(\textit{Similarity of Perceptual Orientations}, \textit{Similarity of Belief Systems}, \textit{Similarity of Communicative Styles})$$

Consequently, *Interpersonal Understanding* is a function of, or dependent on, the degree of Similarity of Perceptual Orientations, Similarity of Belief Systems, and Similarity in Communicative Styles.

4.3 Defining Intercultural Communication

4.3.1 Concept of Intercultural Communication

The term *intracultural communication* refers to "communication between members of the same culture" (Samovar & Porter 1991: 72; Gudykunst & Kim 1997: 19). To indicate communication between people from different cultures the terms intercultural, crosscultural, and even transcultural are used.

Intercultural communication refers to interaction between people with significantly different cultural backgrounds. According to Adler (1992: 66), in intercultural communication "a person from one culture sends a message to a person from another culture" (see also Porter & Samovar 1991: 19; Francesco & Gold 1998: 622; Bennett 1998: 2). Gudykunst and Kim (1997: 19) define intercultural communication as a process involving the attribution of meaning

between people from different cultures. Lehtonen (1998a: 301) points out that besides individuals, messages can also be sent between communities, i.e. groups of people. Samovar and Porter (1991: 28) argue that in intercultural communication *residue* is of great importance, referring to the importance of memory and past experiences in communication.

Communication may in general fail for a number of reasons, including inadequate information, poor-quality information, information overload, poor timing, problems with communication channels, different styles of communication (see Section 8.3), and lack of feedback (cf. O'Hair et al. 1995: 6-13). Intercultural communication may also fail because of conflicting perceptions, i.e. different world views, lack of similar life experiences, and cultural differences in nonverbal communication (Bell 1992 according to Chaney & Martin 1995: 11). Hoopes (1981: 30-31) points out that in intercultural communication the importance of understanding and feedback is emphasized, because so much of what is being communicated may be nonverbal, in other words, unconscious and/or invested with special meanings due to cultural differences. The term intercultural is usually associated with ethnic cultures, but as Lehtonen (1998a: 302) points out, due to various micro- or subcultures (see Section 4.1) all human interaction is, in fact, intercultural. In other words, besides between ethnic groups, there is intercultural communication also between cultural groups such as the young and old, men and women, and representatives of various professions, or occupations.

The term *crosscultural* implies a comparison of some phenomenon across cultures (Gudykunst & Kim 1997: 19) that does not involve interaction, whereas the term *intercultural* focuses more on what is interactive. Instead of the term intercultural communication the term *intercultural relations* is sometimes used, this designation even more emphasizing the role of interaction in interpersonal relationships. (Brislin & Yoshida 1994a: 2-3) The term *transcultural* means "across cultures" (Chaney & Martin 1995: 248).

The term *international communication* is most often used to refer to communication between nations and governments rather than individuals (Chaney & Martin 1995: 243; Lehtonen 1998a: 301).

4.3.2 History of Intercultural Communication

As an academic field the history of intercultural communication is young (Lehtonen 1998a: 310-311). The field has its origin in the United States (US), where it has grown out of practical needs. Factors contributing to its development include World War II as well as the Korean and Vietnam War with the need to know Far Eastern cultures. The factors also include foreign trade and economic cooperation, Christian missionary work, and international development projects. Within the US, differences between European, African, Asian, and Latin cultures have also intensified the need for intercultural research and the development of the field. (Ibid)

In the year 1946, the US government established the Foreign Service Institute. The Institute hired Edward T. Hall and other anthropologists and linguists to develop predeparture training to facilitate communication for overseas employees. (Martin & Nakayama 2000: 27) Hall was the first

researcher who differentiated cultures based on how communication is sent and received (Chaney & Martin 1995: 2). He concluded that nonverbal communication varied from culture to culture just as language did (Martin & Nakayama 2000: 27). The term *intercultural communication* was first used as late as in the year 1959 by Hall in his book *The Silent Language* (Chaney & Martin 1995: 2). Training applying the theories of culture and communication began with the staff of the Institute, and expanded in the 1960s to students and businesspeople.

Today intercultural communication can be considered an independent, multi- and interdisciplinary academic field (Martin & Nakayama 2000: 28), including history, geography, philosophy, anthropology, sociology, psychology, business economics, linguistics, communication, and information technology, at least. Most theories and models developed in intercultural communication are based on social psychology, or they apply the concepts of social psychology. Examples of such concepts include *anxiety*, *uncertainty*, *conformity*, *ethnocentrism*, *prejudices*, *stereotyping*, and *identity* (Lehtonen 1998a: 311-312).

A wide range of research data and theoretical models have been published in the field to serve the increasing needs of international and multicultural negotiations, international trade, global advertising, as well as education and training. There is also a wide range of literature, especially US American, discussing intercultural communication and cultural differences available. (Ibid 301)

When considering intercultural communication as an academic field, one of the challenges today is to find equally "correct" concepts to describe various cultures equally "correct". Besides intercultural encounters, ethnocentrism also tends to be a problem when describing cultures, i.e. when using concepts developed to describe phenomena in one culture to describe phenomena in another culture without testing the validity of the concepts. Lehtonen calls this *concept imperialism*. (Ibid 311-313)

If Bachelors of Engineering, or BEng engineers, understand the intercultural communication process, they will likely be able to break down communication barriers, which can be obstacles to effective and successful communication and the "art of crossing cultures". In that, intercultural training can be of assistance.

5 INTERCULTURAL TRAINING AND LEARNING

5.1 Learning or Acquisition?

Considering second, or foreign, language, *learning* is the product of formal instruction, i.e. education. It comprises a conscious process, which results in conscious knowledge about the language, for example grammar, lexis, and pronunciation. *Acquisition* is the product of a subconscious process similar to the process children undergo when they acquire their first, or native, language. Acquisition requires meaningful interaction in the target language [and culture]. (Krashen 1987 according to Schuetz 2001)

It is often thought that successful second language acquisition is accompanied by second culture acquisition, i.e. linguistic competence is accompanied by [inter-]cultural competence. Libben and Lindner (1996; 2001), however, argue that there are differences both in the ways in which linguistic and cultural knowledge are organized and in the acquisition process: Language is a tightly interwoven cognitive system, an “integrated module”, whereas culture is a more loose association of elements (cf. the various versions of English and the cultures connected with them). In other words, boundaries of language are clearer than those of culture: Language is something you do; culture is who you are. (See Section 3.2 English as the international link language, a *lingua franca*, Content and Language [i.e. English] Integrated Learning, or CLIL, and the etic, or culture-general, approach.)

Libben and Lindner (1996; 2001) continue that in the case of successful second language acquisition, two separate language systems are developed. In the case of second culture acquisition, instead of the development of a new system, the existing system involves an *expansion*, [cf. a change or perspective transformation; Mezirow 1991; Taylor 1994; Ibid 1997; Kealey & Protheroe 1996]. An individual cannot switch between cultural systems in the way (s)he can between languages in the midst of a conversation: An individual cannot maintain two [or more] cultural systems. Bi[- or multi]culturalism creates and integrates elements of two [or more] cultures in the same cognitive space. This

may result in stress, especially when considering a language like English that more than one national culture is connected with. Thus, one key to successful second culture acquisition would be successful stress reduction. (Ibid)

Literature discussing intercultural training and learning seems to favor the term learning, not acquisition. The term *learning* is, therefore, applied in the present study as well. When developing intercultural competence, exposure to the target culture(s) is of major importance, however.

5.2 From Experiential to Transformative Learning

The development of intercultural competence is an educational process (Byram 1997: 110). Pruegger and Rogers (1994: 370) argue that intercultural training should be focused on "increasing our ability to communicate with culturally diverse people and monitoring and adjusting our behavior to deal effectively with those of different cultures", i.e. communication and adaptation. According to Seelye (1994: 20), intercultural training is to have trainees learn how "to communicate with people who do not share their own hue of cultural conditioning", i.e. socialization. Hughes-Wiener (1995: 388) emphasizes the importance of interaction: Intercultural training is "to improve the performance and satisfaction of participants when they interact with another culture". Paige and Martin (1996: 45) emphasize change: Intercultural training is "to promote certain personal qualities and skills" as well as "to effect personal transformations among learners". Gudykunst et al. (1996: 65) argue that intercultural training is to improve "performance in specific intercultural situations", e.g. cultural adaptation. They also emphasize change: Intercultural training involves "some form of change in three areas: cognition, affect, and behavior".

According to Kolb (1984: 38), learning is "the process whereby knowledge is created through the transformation of experience". In *experiential learning*, learning is seen as a cyclic, continuous process: First of all, trainees engage in a concrete real life *experience* (or background) and use new information to *reflect* on the experience recalling what was notable (reflective observation or knowledge). Next, they make sense of, interpret, what they have experienced by relating the new information to existing meaning structures: They create new meanings (formation of abstract concepts and *generalizations* or understanding). Finally, trainees *test out* the conclusions that they have reached: What is proper behavior in a specific context (active experimentation or behavior). The cycle starts again. (Kolb 1984: 21; Hughes-Wiener 1995: 382-386) (See Figure 9.)

Since first introduced by Mezirow in 1978, the concept of transformative learning has been a topic of research and theory building in the field of adult education. According to Mezirow (1991: 3), the formative learning of childhood becomes transformative learning in adulthood. Mezirow suggests that *transformative learning* is a process in which people use a prior interpretation of the meaning of their experience to construe a new or a revised interpretation in order to guide future action. Action here includes producing a change in

behavior. In this process the role of *critical reflection* is emphasized. When reflection is critical, it involves "a searching view of the unquestioningly accepted presuppositions". People make interpretations based both on perception and cognition, both unintentionally and intentionally (Ibid 34). (Ibid 12; 87)

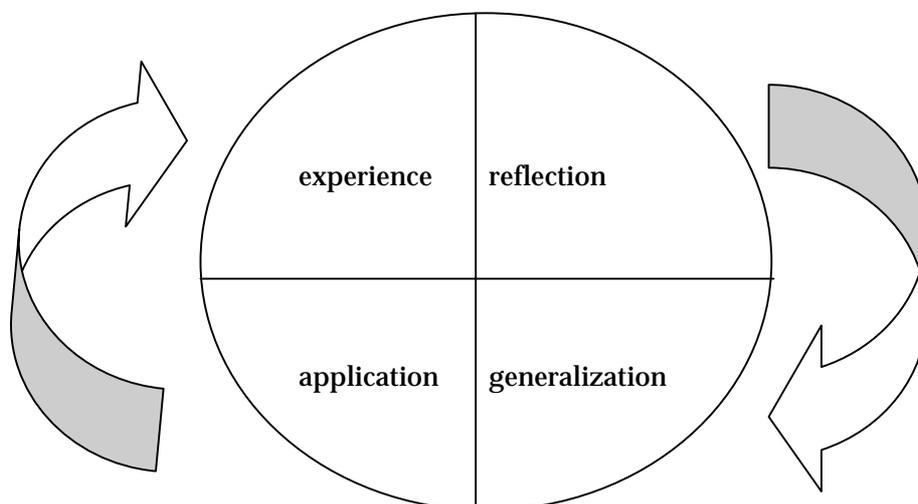


FIGURE 9 The experiential learning cycle Adapted from Kolb 1984: 21; Hughes-Wiener 1995: 382)

According to Mezirow (1991: 94), *learning through perspective transformation* is "becoming aware, through reflection and critique, of specific presuppositions upon which a distorted or incomplete meaning perspective is based and then transforming that perspective through a reorganization of meaning". In other words, learners must engage in critical reflection on their experiences, which in turn leads to perspective transformation. Mezirow (Ibid 155) continues that perspective transformation can be seen as *development*: Transformation *can* lead toward "a more inclusive, differentiated, permeable, and integrated perspective", i.e. a change in behavior. To sum up, transformative learning involves becoming more reflective and critical, being more open to the perspectives of others, and being less defensive and *more accepting* of new ideas.

Mezirow's theory of transformative learning can be criticized of granting too much importance to critical reflection in perspective transformation. There are researchers who view transformative learning more as an intuitive, creative, and emotional process. (See Taylor 1997.) In the present author's opinion critical reflection is, however, of major importance when developing, for example, the ability to analyze critical incidents, and thus intercultural competence

Referring to Kolb (1984) and Mezirow (1991), Taylor (1994: 389; 391; 394-395; 397; 399-400) argues that the theory of *perspective transformation* provides a model of the learning process of intercultural competence. Becoming a competent intercultural communicator is a slow, gradual transformative, or developmental, learning process providing understanding of how a person makes meaning of new cultural experiences and integrates the new learning into a more inclusive and discriminating world view which language both reflects and affects. According to EFIL (2001), intercultural learning can also be

defined as a process that moves a person to a deeper awareness of his/her own culture through a *qualitative immersion* in another culture

Culture shock refers to emotional stress experienced when moving to a different culture with a different style of communication (Samovar & Porter 1991: 314; Chaney & Martin 1995: 240). The term has been criticized a lot, and other terms such as *change shock* and *adjustment stress* have been recommended. Taylor (1994: 392), however, uses the term when stating that in the transformative learning process culture shock is a necessary precondition to change and growth, as people evolve from a lower to a higher level of intercultural competence. The outcomes of this process are seen in cognitive, affective, and behavioral abilities. (Cf. Paige & Martin 1996: 45; Gudykunst et al. 1996: 65.)

Kealey and Protheroe (1996: 147) emphasize that [intercultural] training does not attempt to transform people's fundamental personalities or basic character, but rather it "adds on" social skills, coping techniques, professional skills, ideas, and facts to the existing person whose cultural and personal make-up is respected. (See Figure 10.)

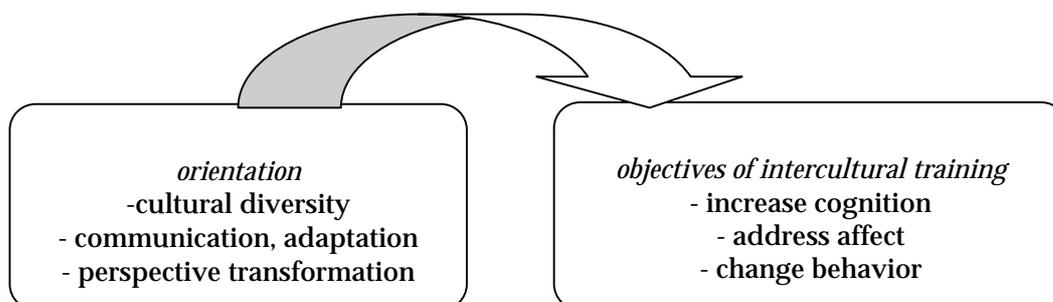


FIGURE 10 Orientation of intercultural training

Fostering *transformative learning* means recognizing that

- learning to become interculturally competent is a *process* with a series of interconnected events, a variety of approaches and experiences over time
- creating *supportive* learning environments
- assisting trainees to take increasingly more *responsibility* for the learning experience
- encouraging and training trainees to be critically *reflective*
- emphasizing the *experiential* and participative training techniques
(Taylor 1994: 402-404; 406)

The present author argues that fostering experiential training and learning techniques must not exclude didactic techniques. Didactic techniques are, for example, needed in foreign language learning.

According to Seelye (1994: 189), "behavior changed by school is changed for the better". Formal education is, in other words, seen as a catalyst for positive behavior that will benefit both the individual and society. This supports the idea that polytechnics should be proactive and provide intercultural training to their students.

5.3 Intercultural Facilitators and Training Design

Fostering transformative learning emphasizes *learner-centeredness* (see Sections 1.2 and 5.2), the trainer as a facilitator. The role of the intercultural trainer, or facilitator, is complex (see Figure 11). *Intercultural facilitators* are

- change agents
- curriculum specialists
- educators
- consultants, or advisors
- counselors
- intercultural communicators
- mediators or links between different cultures
- culture guides
- pragmatic ethnographers
- participant observers
- reflective persons
- culture learners
- assessment specialists

(Adapted from Ferdman & Brody 1996: 282; Paige 1996: 149-150; 152; 157; Ryffel 1995: 325-326)

When considering the various roles of intercultural facilitators, the role of the change agent is emphasized.

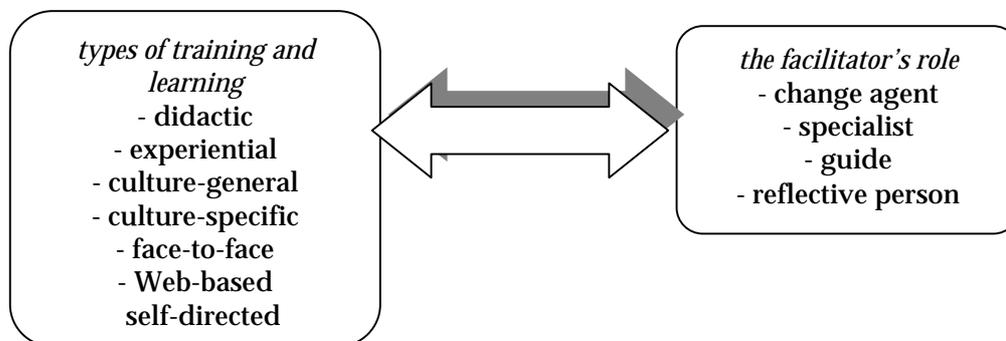


FIGURE 11 Types of intercultural training and learning and examples of the facilitator's role

The facilitator of intercultural communication is responsible for the design of training. An intercultural training course is a formal effort to prepare trainees to live, study, work, and communicate in cultures other than their own and/or with individuals from different cultural backgrounds [in trainees' own culture, too] (Ptak et al. 1995: 425). It should be based on *theory* that is supported by research. The theory not only provides the conceptual framework for training, it also provides the framework for improving communication and cultural adaptation. (Byram 1989: 136; Gudykunst 1991: 4) In addition to theory, practical applications and contacts with people from other cultures are needed.

A good training design pays attention to trainees' existing level of intercultural competence. According to Hughes-Wiener (1995: 392), an

assessment of trainees' readiness - their existing knowledge, attitudes, and skills - should be made before starting the training course. (See Figure 12.) A needs assessment is especially important if the trainees' background is not known. For this purpose, for example, Bennett's (1986; 1993) *developmental model of intercultural sensitivity* can be used. Bennett identifies six stages of development from the ethnocentric stages of denial of, defence against, and minimization of cultural differences to the ethnorelative stages of acceptance, adaptation, and integration. (Bennett 1993: 181-182; Paige 1996: 51) The use of Bennett's model provides the trainer with an idea at which stage of development the trainees are, in other words, what the trainer should emphasize during the training: cognition, affect, and/or behavior and skills.

An intercultural *training design* can include the following stages:

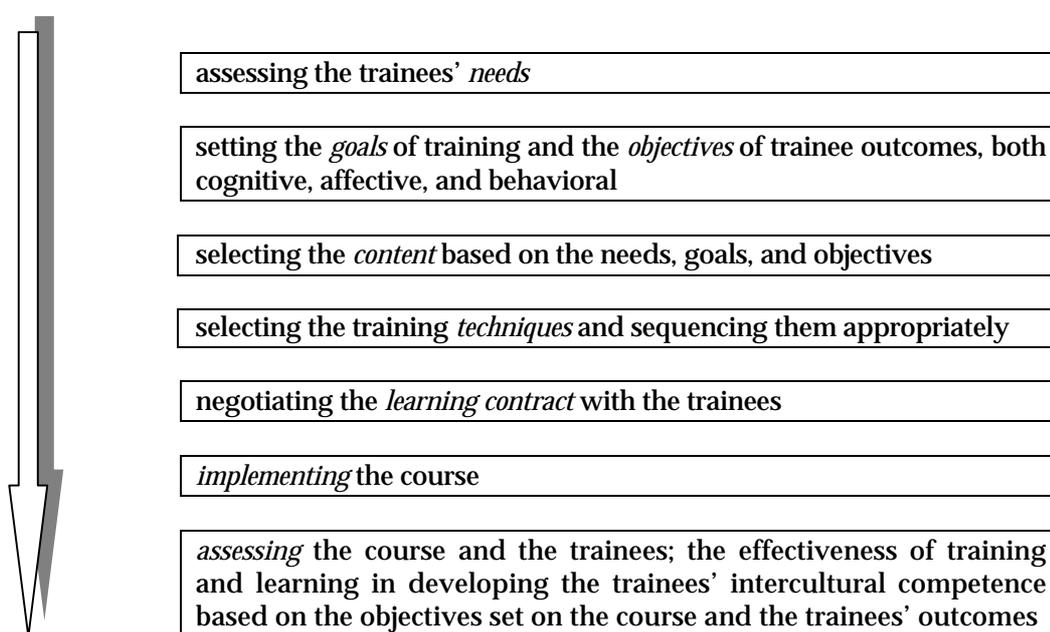


FIGURE 12 The stages of the intercultural training design (Adapted from Paige 1996: 151-154; Hughes-Wiener 1995: 388)

5.4 Objectives of Training

From organizations' point of view, there are at least two approaches to intercultural training. First, training is provided to any employee interested in developing his/her intercultural competence. Secondly, training focusing on predeparture and repatriation is provided to expatriates and their spouses/partners and families. In each case the main *goal* of training is to facilitate communication and cultural adaptation.

The *general objectives* of intercultural training include

- 1) *cognition*: raising awareness and providing *knowledge*, i.e. consciousness, of the dynamics that affect interactions with people from different cultural backgrounds, and of the cultural adaptation process and potential problems

connected with it

- 2) *affect*: addressing *attitudes* related to others who are culturally different, and *emotions* people experience when dealing with cultural differences, i.e. how to manage emotional reactions
- 3) *behavior*: acquiring *skills* that will increase the chances of effective communication with people from different cultural backgrounds as well as cultural adaptation (Adapted from Brislin & Yoshida 1994a: 24; 26-28; 30; 32-33; 36; 81; 115-118; 120; see also Ferdman & Brody 1996: 292-293)

According to Marx (1999: 204), the *company-customized objectives* of intercultural training might be as follows:

- to learn about the politics, economics, and working environment of the target culture
- to understand local business practices/attitudes and target culture
- to learn how host nationals/colleagues will perceive the international manager/employee and their expectations
- to develop an understanding of how to cope in a new environment
- to learn about living conditions, including schools, health, and free-time facilities

The above objectives emphasize the cognitive component of intercultural competence: background or area studies, practical information, and cultural awareness. The affective and behavioral components including stress management, leadership skills, communication skills, team work skills, and negotiation skills must not be forgotten either. From the perspective of educational institutions, such as polytechnics, training is to aim at providing generic competences which are useful in many different cultures. (Cf. Sections 3.3. and 5.1; Subsection 3.4.1; Cui & Awa 1992: 311; 324.)

The intercultural facilitator needs to *modify* the objectives of intercultural training according to the audience in question. Because dealing with a new environment is often more challenging than dealing with a new job, both technical competence and the nontechnical ability to handle a new cultural environment should be addressed.

Instead of defining what trainees should learn, understand, and/or develop (cf. Marx 1999: 204), the intercultural facilitator should identify a limited number of specific *competences that encapsulate the content* of each of the selected objectives. These competences should then be used as the *end-of-course indicators* for trainee performance and assessment. (Seelye 1994: 187) (See Section 9.2.)

A *performance objective* answers a number of questions such as:

- the *purpose*: why a given aspect of culture is taught
- desired *terminal behavior*: what the trainee should be able to do or say after learning a specific aspect
- the *conditions* for observing performance: what are the circumstances under which the student will be expected to do or say what (s)he has learned
- the *criteria* of acceptable performance: how well the student has to perform under the stated conditions

(Adapted from Seelye 1994: 190)

Since the development of intercultural competence is a learning *process*, assessment must not, however, be based on terminal behavior only (see Section 7.2). To assess the trainees' performance, i.e. the entire process, the Finnish polytechnic assessment scale from 0 (failed) to 5 (excellent) can, for example, be used.

5.5 Training Techniques

Training techniques used in intercultural training can incorporate didactic, experiential, culture-general, and culture-specific approaches. The *didactic approach* is based on the assumption that "a cognitive understanding of a culture, its people, and customs is necessary to interact effectively with people of that culture" [and to adapt into it] (Gudykunst et al. 1996: 65-66). Because the didactic approach is based on the cognitive domain, it is suitable to training that targets primarily awareness and knowledge objectives. The *experiential approach*, in contrast, is based on the assumption that "people learn best from their experiences" (Ibid). The experiential approach applies the idea of learning by doing, and presumes that the best learning occurs through active engagement and participation in real-life and/or simulated encounters, i.e. experience can be created from trainees' real-life experiences or through a facilitator-generated activity. Experiential methods involve attitudes and emotions. Because trainees can transfer the learning to real-life situations, they also promote communication skills and cultural adaptation. (Ibid; Ferdman & Brody 1996: 295-297) In experiential learning, processing the experience is as important as the experience itself. For that purpose a number of questions can be asked, for instance: What happened? What did you learn? How can you apply your learning? (Ryffel 1997: 29; 32-33)

The *culture-specific*, or emic, approach refers to interaction in one particular culture, while the *culture-general*, or etic, approach refers to interaction in many cultures (Gudykunst et al. 1996: 65-66). Emics are essential for understanding a culture but their uniqueness can make them inappropriate for crosscultural comparisons (Bhawuk & Triandis 1996: 23; Gannon & Poon 1997: 432).

Intercultural training techniques fall within four broad categories, that is, didactic and experiential, and culture-specific and culture-general. The *training techniques* can be combined and classified further as follows:

- 1) *didactic culture-general*, e.g. authentic readings, lecture discussions, video discussions, critical incidents, the Internet
- 2) *didactic culture-specific*, e.g. language training, authentic readings, background or area studies, the Internet
- 3) *experiential culture-general*, e.g. observations, cooperative learning, peer tutoring, workshops, project work, culture-general simulations, critical incidents, self-assessments
- 4) *experiential culture-specific*, e.g. language training, culture-specific simulations, critical incidents, role plays, behavior modification (e.g. what is rewarding/punishing in one's own culture and then in another culture), contacts with people of other cultures (e.g. correspondence by email, guest lecturers, exchange students and trainees, visitors from working life, and field experiences, i.e.

private, exchange, and group trips abroad)

(Adapted from Gudykunst et al. 1996: 66-72; see also Triandis 1994: 283; Hughes-Wiener 1995: 392; Cushner & Brislin 1996: 21-22; Landis & Bhagat 1996: 9; Blake et al. 1996: 168-169; Ryffel 1997: 29; Francesco & Gold 1998: 175; Byram & Risager 1999: 123-124)

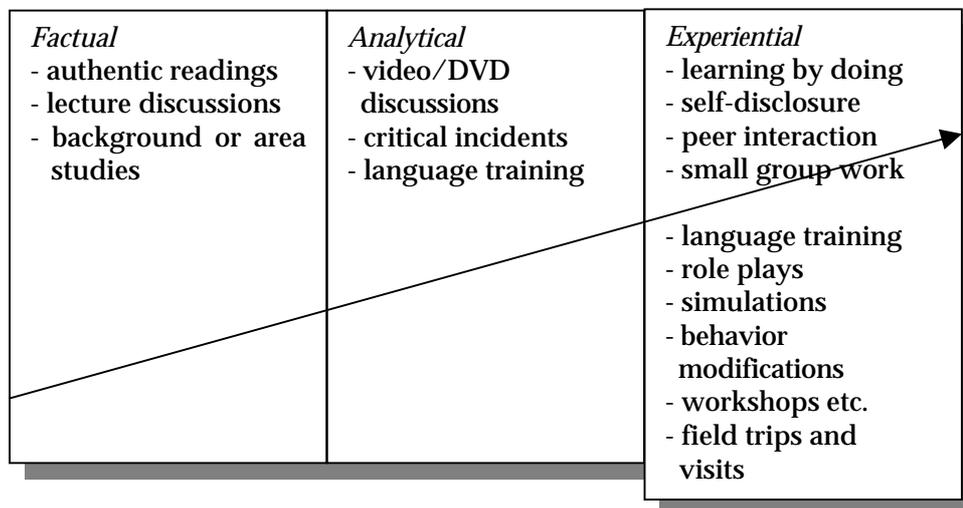


FIGURE 13 Degree of culture novelty and intercultural training techniques (Adapted from Francesco & Gold 1998: 176)

Seelye (1994: 187) points out that training techniques must be modified to suit the interests and maturity of the trainees. Ideally, an intercultural training course integrates a wide variety of training techniques. (Gudykunst et al. 1996: 78) (See Figure 13.) Barna (1998: 179) warns against providing lists of "dos and don'ts", mainly because human behavior is ambiguous - the same action can have different meanings in different contexts.

According to Hughes-Wiener (1995: 394), the training design must be brought to life by activities, which are interesting and excite in trainees "a sense of adventure and a desire to keep on learning". This is not necessarily easy considering how heterogeneous the groups of trainees can be. Nobody can be completely prepared for interaction in and adaptation to another culture. For this reason, learning how to learn [more] about other cultures is important. *Learning how to learn* can be defined as "the acquisition of new strategies, skills and procedures to attain one's goals efficiently and effectively" (Ibid 381). The main skills to be learned include observation and critical reflection as well as the ability to apply various sources of information. (See Section 5.6.5.)

In a study by Larpes (1999: 118) the most commonly used *predeparture support functions* applied by Finnish companies were a predeparture visit (65 % of the cases), a meeting with a person who had previously worked in the target country (34 %), and providing written materials (30 %). The most commonly used *in-country support functions* were offering written materials (29 %), lectures (13 %), discussions, and group work.

Because intercultural training is change-oriented challenging existing and preferred patterns of thinking and behavior, it can be threatening to some trainees who may become anxious and resistant to learning. Facilitators should anticipate this kind of *resistance* and *frustration*, and be prepared to address it.

(Ptak et al. 1995: 440; Paige & Martin 1996: 45-46) The trainer can, first of all, examine his/her own responses to resistance and frustration. To address resistance and frustration with the trainees the trainer can ask the trainees to specify their reasons for resistance and frustration, and then have a discussion. A novice trainer can also benefit from a mentor relationship (Ptak et al. 1995: 441).

5.6 Critical Incidents Exercise (CIE)

5.6.1 Background

At the beginning of the 1950s, US American researchers developed a structured method of observing and recording human behavior, which was named the *critical incident technique*. An *incident* was defined as "a segment of observed human behavior which by itself permitted inferences to be made about the people involved in it". An incident was deemed to be *critical* if "the intent of the observed behavior was clear and its consequences reasonably well predicted". (Baxter & Ramsey 1996: 211)

According to Baxter and Ramsey (1996: 212), critical incidents present trainees with a *microcosm of intercultural interaction*. Dant (1995: 142) defines a critical incident as a "*description of a situation that took place while you were overseas and which helped you better understand or appreciate the crosscultural experience*". Cushner and Brislin (1996: 13) call critical incidents *short vignettes*. According to Seelye (1996: 189), the word incident is a euphemism for *foul-up*. That is what may happen when people from different cultures interact. Lovejoy (1996: 191) calls incidents *red flags of warning* that a cultural misunderstanding has occurred. These red flags signal that something requiring further analysis has transpired. Other terms sometimes used instead of a critical incident are a *cultural encounter* and a *culture bump* (Archer 1986: 170-178).

Critical incidents were first used by Flanagan for developing job descriptions. Later they were used to assess training needs and to evaluate training programs. (Flanagan 1954: 327-358) According to Wight (1995: 127), the first use of critical incidents in a crosscultural situation was in the United States in the 1960s in the *Culture Assimilators* developed by Triandis and his associates. They were also used when selecting US Peace Corps volunteers. Since then the *Critical Incidents Exercise* (CIE) has been used in a variety of settings to prepare people to live and work in other cultures.

As the term is today understood, critical incidents are concise *descriptions of situations* in which there is a misunderstanding, problem, or conflict rising from cultural differences between interacting parties, or where there is a problem of cultural adaptation. Each incident is focused on a set of identifiable cultural issues and gives only enough information to set the stage, describe what happened, and possibly provide the reactions and feelings of the parties involved. It does not explain the cultural differences that the parties bring to the situation. (Wight 1995: 128) In brief, critical incidents are about communication

and adaptation, their setting being a foreign culture.

5.6.2 Objectives of Critical Incidents

The overall *goal* of critical incidents is to confront trainees - especially those who lack experiences of their own - with examples of confusing, perhaps frustrating, problems or conflict situations they can expect to encounter when interacting with people from another culture or adjusting to a new culture. (Wight 1995: 128)

The *objectives* of critical incidents are to

- increase trainees' awareness of culturally determined interpretations of other people's behavior
 - compare and analyze the various interpretations of trainees
 - clarify the cultural differences that might have contributed to the misunderstandings, problems, and conflicts
 - assist trainees in understanding cultural differences
 - help trainees learn to behave in a more appropriate way in similar situations
 - motivate trainees to continue learning, and
 - provide the basis for role plays that will build skills in handling problems.
- (Ibid 128-129)

5.6.3 Constructing Critical Incidents

There are volumes of prepared critical incidents available in the United States, but incidents can also be generated by both facilitators and trainees. The best contents for incidents come from actual *experience*. Besides personal experience, observation, reports from other people, books, articles, and videos can be used as a source material. (Baxter & Ramsey 1996: 212; See also Wight 1995: 129.)

When constructing critical incidents, it is important to make the incidents *intercultural*. First the cultural concepts and situations to be presented are selected. [Sometimes this is the last thing to be done.] Incidents should focus on one problem or a few related issues at a time. They should not be too long and complex, but they should provide enough background information to set the stage. (Wight 1995: 129-130; 132) Bennett (1995: 150) recommends that for the sake of clarity, there generally should be only two parties to the conflict, and each of them should be from a different culture. The incident can end with a dilemma trainees have to solve (Wight 1995: 129-130; 132). The following factors also need attention when *constructing critical incidents*:

- *who*: the participants' nationality, gender, and age; role relationships
 - *where*: location and physical conditions
 - *when*: time
 - *what*: the sequence of events; what is said and done
 - *how*: thoughts, actions, and feelings of the person from the trainees' culture
 - *how*: nonverbal aspects of the interaction
- (Adapted from Baxter & Ramsey 1996: 212; Dant 1995: 142; Wight 1995: 130)

Finally, each incident description is followed by a *question*, or a set of questions, in which the dilemma is referred to, and which require the trainees to analyze

what happened, give their interpretations, and indicate, what they think [cognition] would be appropriate attitudes [affect] and behavior in such a situation. (Wight 1995: 130)

The above considerations were applied, when modifying and constructing the critical incidents (Cushner & Brislin 1996) for *The Same but Different*, i.e. the Web-based application used in the present study. The same considerations have also been used, when analyzing the incidents with Bachelor of Engineering, or BEng, students during the face-to-face tuition period.

5.6.4 Uses of Critical Incidents

Pusch (1996: 207-208) describes a procedure in which trainees *discuss* critical incidents in small groups. Each group is asked to discuss one incident answering the following questions: a) What is the problem? and b) How can it be solved? Finally the trainees report on the results of their discussion. The facilitator assists the trainees in identifying the intercultural issues involved, and uses the issues to illustrate the basic concepts and processes of intercultural communication.

Baxter and Ramsey (according to Seelye 1996: 189) offer a variation in how critical incidents can be used. In their model trainees are given improvisation cards containing a brief description of their role and scenario. They then perform a *role-play* while the rest of the group serve as observers. The participants and observers are asked to describe the interaction, including nonverbal interplay. This activity involves all the trainees in experiential learning.

If trainees have personal intercultural experiences, they can construct critical incidents of their *own*. If trainees construct critical incidents of their own, they should pay attention to the instructions given in Subsection 5.6.3. Critical incidents can also be used in Intercultural Sensitizers or *Culture Assimilators* (see Subsection 5.7.3 and Section 5.8).

5.6.5 Critical Incidents: Experiential Learning

Wight (1995: 130) argues that asking trainees to identify with the person from their own culture results in increased cultural self-awareness; identifying with the person from the other culture results in increased awareness of the other culture and empathy with people from that culture in general. Besides *cognition*, there is the *affective* component of intercultural competence involved.

According to Bennett (1995: 149), the opportunity for individual analysis, small-group discussions and large-group debriefings helps develop effective two-way communication, i.e. interaction. In an ideal case there would be representatives of other culture(s) present in the groups (Wight 1995: 132-134). Group cohesion is served by trainees interacting with each other, and enthusiasm is maintained by coupling the presentation of concepts with the trainees' own consideration and discussion of the incidents. In this way, the *behavioral* component of intercultural competence is also involved. (Baxter & Ramsey 1996: 211)

The analysis of real-life intercultural interaction can lead trainees from an

understanding of specific behaviors to a recognition of underlying cultural *generalizations*. Through directed questioning, students identify cultural issues, trace reasons of misunderstanding, and recognize their consequences. (Baxter & Ramsey 1996: 212) Critical incidents help trainees to recognize the importance of learning more about themselves as products of their own culture, others as products of their culture, and the dynamics of interaction and cultural adaptation. Critical incidents orientate trainees toward problem solving and doing their own thinking. They can also be used to test trainees' ability to *apply* their cultural understanding. (Wight 1995: 131) (Cf. Kolb 1984; Mezirow 1991; Taylor 1994; Ibid 1997; Hughes-Wiener 1995.)

5.7 Intercultural Sensitizer (ICS)

5.7.1 Background

The *Intercultural Sensitizer* (ICS) is an instrument constructed to sensitize trainees to *likely* or *possible* cultural differences, i.e. to people from another culture: their perceptions, interpretations, behaviors, norms, values, and attitudes. The ICS was developed by Fiedler, Osgood, Stolurow, and Triandis in the early 1960s to improve communication in culturally heterogeneous work groups.

The instrument was first called the *Culture Assimilator*, and was later renamed the Intercultural Sensitizer (ICS) to avoid the suggestion of giving up one's own culture and assimilating into another culture. (Albert 1995: 157) The original idea was to develop a computer program but, according to Triandis (1995: 179), it turned out more preferable to use "the printed word" and later on, after having tested the method in print, "expect to see others adapting it to computer technology". (See also Cushner & Brislin 1996: 24; Cushner & Landis 1996: 186.)

5.7.2 Attribution Training

According to Chaney and Martin (1995: 239), *attribution* is something seen as belonging to, or representing something or somebody. In other words, attributions refer to the *conclusions* and *judgments* people make of themselves and/or other people after observing their behavior: what they and/or other people are like (Cushner & Brislin 1996: 319). When analyzing other people's behavior, people tend to use "trait labels" without taking the social context into account. Ross (1977 according to Cushner & Brislin 1996: 320) calls this error – i.e. making conclusions and judgments about other people and not taking situational factors into account – the *fundamental attribution error*. The fundamental attribution error is prevalent in intercultural encounters: When abroad, i.e. in a strange environment, people often make more attributions about other people than they would in their own countries. Therefore, it is important to be able to make *isomorphic attributions*, i.e. to interpret both people and events as host nationals do. (Ibid 22; see also Lehtonen 1998a: 308)

Attribution training explains behavior from the host nationals' point of view. The assumption behind attribution training is that many misinterpretations and misunderstandings stem from differing perceptions and attributions about given events (Cushner & Brislin 1996: 22). Cushner and Brislin (Ibid) argue that misunderstandings are reduced, when people know when, how, and why certain attributions will be made. Attribution training can deal with the when, how, and why of attributions so that trainees will understand some general principles that lie behind the multitude of specific behaviors they will confront and observe. (See Subsection 4.2.1.)

The Intercultural Sensitizer (ICS) is based on attribution theory. The Intercultural Sensitizer (ICS) aims at teaching trainees to take the social context and cultural differences into account, i.e. to make isomorphic attributions. Understanding another culture's perspective can make people more accurate in their interpretations of observed behavior (Cushner & Landis 1996: 187).

5.7.3 Constructing an Intercultural Sensitizer (ICS)

An Intercultural Sensitizer (ICS) consists of a number of critical incidents, approximately 20 incidents being a sufficient number for a single training course.

Each *critical incident* has the following *components*:

- 1) a *critical incident* describing a situation that has the potential for creating misunderstanding, or that signifies key differences between the source and target culture
- 2) one or more *questions* about the thoughts, feelings, and/or behavior of the member of the source culture
- 3) four or five *alternative explanations*, i.e. attributions or interpretations: trainees consider and choose one of the explanations, then check to see whether it is the *preferred* explanation; if not, additional choices are made until the most preferred explanation is found; more than one alternative can contribute to the understanding of the incident
- 4) a *rationale* for why this particular response is the preferred, or "best", in the context; the objective is to train trainees to see the situation from the perspective of people from the target culture, i.e. to train them to make *isomorphic attributions* (Albert 1995: 158-159; 163-164; see also Brislin 1995: 171; Triandis 1995: 180-183; Wight 1995: 135; Cushner & Brislin 1996: 5; 13-14; 24; Cushner & Landis 1996: 186)

The construction of an Intercultural Sensitizer (ICS) requires culturally valid information, expertise in research methods, extensive data collection and interviews, cultural expertise, observation, writing skills, as well as sensitivity to the nuances of language. (Albert 1995: 165). When constructing and interpreting critical incidents, *stereotyping*, or generalization, is unavoidable - all human thinking involves stereotypes. This is something that trainees must be warned against.

When constructing the critical incidents for *The Same but Different*, i.e. the Web-based application used in the present training experiment, the above considerations concerning the components of the critical incidents were taken into account. A warning against stereotyping was also added at the beginning

of the application. Furthermore, the dangers of stereotyping are discussed during the face-to-face tuition period.

5.7.4 Uses of the Intercultural Sensitizer (ICS)

The Intercultural Sensitizer (ICS) is a *flexible* instrument and can be used in many different training situations, trainees' number and level of knowledge varying. Trainees can read and react to the incidents on their own because the materials form a *self-contained learning kit*. This applies to *The Same but Different* as well. To make the ICS more interactive, two peers can work together so that they can discuss and compare their responses (Wight 1995: 136). The ICS can also be used in small-group discussions and the incidents can become scripts for role-playing sessions (Brislin 1995: 173-174; Cushner & Landis 1996: 194).

The Intercultural Sensitizer (ICS) can add a touch of reality for trainees who have not much intercultural experience of their own (Brislin 1995: 175), e.g. many polytechnic students. In working life, the ICS can be used before an international assignment, during the early stages of the assignment, or prior to a second assignment (Albert 1995: 162). Why not in re-entry workshops as well (Brislin 1995: 176).

5.7.5 Intercultural Sensitizer (ICS): Experiential Learning

Of all the approaches developed in intercultural training, the Intercultural Sensitizer (ICS) has been exposed to the most intense scrutiny and analysis.

According to Albert (1995: 157; 164-165), the ICS

- is research-based (both the development of the instrument and the evaluation of its effectiveness)
- has its theoretical foundation on attribution theory, and
- utilizes psychological principles to increase learning, e.g. trainee involvement, continuous feedback, and self-paced learning.

The ICS is often classified as a *cognitive* method because it focuses on the acquisition of knowledge or information by the trainee. Albert (Ibid), however, argues that the process by which the information is acquired by the trainee is, however, in a sense experiential: Information is acquired by a trial-and-error process, which mirrors, or simulates, the experience of entering a new culture, but without the risks of failure and embarrassment. (See also Cushner & Landis 1996: 185.) Albert continues that because the materials in the ICS also cover the *affect*, i.e. attitudes and emotions, as well as *behaviors* of the people involved, the cognitive, affective, and behavioral components are brought together in the ICS, both in the content of what is learned and the process of learning. Furthermore, the ICS uses the *behavioral techniques* of feedback and reinforcement.

By simulating problematic intercultural encounters, the Intercultural Sensitizer (ICS) deals with the kinds of situations trainees can expect when they enter a new culture. Thus the ICS helps trainees to develop "a more sophisticated understanding of the distinction between objective and subjective culture", i.e. the visible/invisible, tangible/intangible elements of culture: It helps trainees develop more accurate expectations in intercultural interactions.

(Ibid)

According to Albert (Ibid 157-158), the Intercultural Sensitizer (ICS) exposes trainees to a wide variety of situations in the target culture(s), focuses on differences in perceptions and interpretations in behaviors, simulates important aspects of the experience of entering a new culture, e.g. ambiguity and uncertainty, centers on key cultural differences between trainees' own culture and the target culture, and fosters trainees' active involvement.

5.8 Culture-General Assimilator

Brislin and his associates decided to call the Intercultural Sensitizer (ICS) method a *Culture Assimilator* because of the better familiarity of the latter (Brislin 1995: 169). Until the early 1980s, Culture Assimilators were developed for highly specific purposes to prepare individuals from one cultural group for interaction with people from another specific group. According to Cushner and Landis (1996: 187), *Culture-Specific Assimilators* have demonstrated considerable effectiveness at helping individuals achieve the goals of their intercultural experience. Then Brislin (1995: 169-170) found out that no matter what their exact role, e.g. student, businessperson, or engineer, people, engaged in extensive intercultural contacts, share some common characteristics.

These people

- have to adjust their thinking and behavior
- are faced with challenges to their pre-existing knowledge and prejudices
- find certain behaviors offensive when judged according to their own systems, and
- cannot accomplish tasks in familiar ways.

In the year 1983, Brislin and his associates introduced the possibility of a *Culture-General Assimilator* (Cushner & Brislin 1996: 25-26) to illustrate the commonalities mentioned above. A Culture-General Assimilator does not focus on one particular culture but includes incidents from different cultures, and thus prepares trainees for the kinds of experiences they are likely to have regardless of their backgrounds and roles in the new settings. (Cushner & Landis 1996: 188; See Sections 3.3. and 5.1.)

Because people are increasingly coming into contact with others from multiple backgrounds in both working life and free time, and because culture-general preparation can guide culture-specific preparation as well (Brislin 1995: 176; see also Cushner & Brislin 1996: 35-36), the Intercultural Sensitizer (ICS) was chosen as the main training technique to be used and empirically tested in the present study. In the present study, the term *Culture-General Assimilator* is, however, preferred. According to Lehtonen (1998a: 315), Culture-General Assimilators are well-suited for computer-aided self-study.

5.9 Pitfalls in Intercultural Training and Learning

Most intercultural communication is relatively unproblematic and does not deserve to be blown out of proportion. Culture can, however, act as a looking glass magnifying some aspects out of proportion and reducing others in size. For this reason, people have to be aware of some *pitfalls* or *stumbling blocks* that intercultural training and learning may contain.

First of all, although culture is a dominant force shaping people, there are also other factors that influence their thinking, behavior, communication, and cultural adaptation. These *other factors*, for example, include nationality, ethnicity, personality, gender, age, education, socio-economic status, religion, life experiences, and relationships with other people. Furthermore, both culture and communication are not something static but are in a *continuous state of flux*.

Categorization, or *stereotyping*, is another example of the potential pitfalls. People often refer to geographical areas such as Southern Europe, the Middle East, Latin America, Asia, etc. Culture does not, however, exist "in a simple and easily defined form for a specifiable number of people in a bounded area", but many cultural "facts" are based on samples of human behavior, and can only point out tendencies (Ferraro 1994: 65). Cultural differences exist between cultures in close proximity.

Next, people may assume that there are sufficient similarities among various nations of the world to make communication easy: People are people. Everyone is the same, deep down. Barna (1998: 173-174) calls this *assumption of similarities*. Difference should, however, be assumed until similarity has been proven but, on the other hand, differences should not be exaggerated either.

Finally, intercultural communication is not only about differences, misinterpretations, misunderstandings, and cultural conventions. Intercultural communication is, in fact, a highly politicized field, and culture can be, and is, the object of power struggles (Blommaert 1995: 9-12; 15-16; 19-20; 24-25). Consequently, intercultural training has a *political character*: It responds to the social and political changes of the contemporary world.

6 INTERNATIONAL ASSIGNMENTS

6.1 Global Staffing

Considering the number of *expatriates*, a rising trend has been found in many companies in both Europe and the United States: A major part of *international human resource management*, or *IHRM*, is managing expatriates. In Finland, companies such as Stora-Enso, UPM-Kymmene, KONE, Metso, and Nokia, in particular, have been pioneers, considering increasing internationalization: foreign ownership and business operations as well as employees. Nokia started transferring employees abroad in the middle of the 1980s. According to Tahvanainen (1998: 100-102), the growth in the number of expatriates was slow during the first years of Nokia's internationalization, but since then the number has been increasing steadily.

Marx (1999: 11; 99; 111) argues that *short-term international work* is becoming more and more common. According to Tahvanainen (1998: 100-102), the Nokia company has, in addition to long-term expatriates, numerous employees who are located abroad, working for a period shorter than six months. People working on international projects and/or in multicultural teams, the "frequent flyers", have responsibilities, which do not require relocation, but involve frequent traveling abroad and understanding a new culture at high speed. Even if the long-term adaptation process with its various stages is missing, the same experience of ambiguity and uncertainty can be present.

As to *inpatriates*, i.e. employees from companies' foreign units to Finland, the Nokia company, for example, is willing to transfer them whenever there are required skills available. Tahvanainen (1998: 100-102) assumes that Nokia's approach to global staffing has changed from an *ethnocentric* to a more *geocentric* one. According to the *ethnocentric* approach, home country employees hold important jobs, whereas according to the *geocentric* approach, the organization staffs on a global basis (Francesco & Gold 1998: 165).

6.2 Motives for International Assignments

In the United States, according to a study by Adler (1997: 305; 299), young future managers thought that compared to a global career, domestic careers offer slightly greater status, a more satisfying personal life, more rapid career advancement, and greater recognition for work. On the other hand, more than 80 % of these future managers also wanted an international assignment at some time during their career. An *international assignment* is a process starting from the decision to go to work abroad and ending to repatriation after the assignment (Ibid).

In Adler's (1997: 303-305) study, the most common *reasons for accepting an international assignment* were

- the opportunity for crosscultural and personal growth, i.e. to travel, see other cultures, learn new languages, and gain a better understanding of different ways of life
- the job itself which is expected to be more interesting and challenging, allowing for more independence, power, status, and responsibility
- money, i.e. a higher salary with more benefits than in a domestic position
- career advancement
- a good location, i.e. a politically stable and safe country, similar to the home country with good climate and standard of living
- more satisfying life with less routine, more fun, adventure, excitement, personal freedom, and a higher quality of life
- a good opportunity for the spouse and family, and
- no domestic jobs available.

In Finland, Nurminen (1996: 117) investigated the *socialization* process of business graduates and their motives to go on an international assignment. More than 50 % of interviewees had studied or worked abroad before the assignment. Other factors contributing to socialization included

- knowledge of languages
- interest in foreign languages
- traveling abroad
- relatives living abroad
- a desire to see the world to get a broader perspective, as well as
- the support and encouragement of parents.

When accepting an international assignment, most of the female graduates were less than 30 years old, unmarried and recently graduated, whereas most of the male graduates were 30-40 years old, married with children and working in a Finnish international company.

The main *reasons for accepting an international assignment* were

- the desire to see the world and new cultures
 - the desire to improve one's knowledge of languages and to use languages, and
 - money, i.e. higher salary with more benefits.
- (Ibid)

In another Finnish study, by Riusala and Suutari (2000), the main *reasons for accepting* an international assignment were

- personal interest
- search for new experiences
- professional development
- career development
- economical benefits
- employer initiative, and
- tough job-market situation in Finland.

In a study by Suutari and Tornikoski (2001), Finnish women's motives were individual (e.g. the desire to see the world), while Finnish men's motives were more work-related (e.g. salary with fringe benefits such as housing, education and car/transport allowances, insurance benefits, and vacation payments).

When comparing the end results of Nurminen's (1996) and Riusala and Suutari's (2000) study with those of Adler's (1997), it can be seen that the main motives for an international assignment were the same. Detailed information on Finnish Bachelors' of Engineering, or BEng engineers, reasons for accepting an international assignment has not been found, although it seems that the availability of domestic jobs plays an important role. In the year 1999, approximately 40 % of BEng graduates were not interested in working abroad; in 1998 the corresponding percentage was 30 %. The main reason for BEng engineers' unwillingness to work abroad was the good job situation in Finland. (Insinööriliitto 2001: 13)

In Adler's (1997: 305-307) study, the most common *reasons for turning down* an international assignment were

- bad location
- the job itself
- potentially negative career impact
- concern for spouse and family
- money, and
- potentially unpleasant cultural differences.

Corresponding information on Finnish expatriates has not been found. According to a study by Tahvanainen (1998: 100-102), the main reasons for international assignments from the Nokia *company's* perspective are

- know-how transfer
- position filling, and
- establishing the Nokia way of doing things, i.e. spreading company values, practices and culture.

One more reason for international assignments, from a company's perspective, may be the control of foreign operations (Suutari & Brewster 2000).

6.3 Stressful Life Events

6.3.1 Process of Change

Relocation within Finland mainly involves changing city, house, job, and perhaps school. When moving abroad people confront the above changes but, in addition, there are changes in language, culture, lifestyle, and style of communication. There are also changes at work, for example, different ethics, values, attitudes, and techniques.

An international, or foreign assignment is a *process* consisting of the following phases:

- the *decision* to go to work abroad
 - *recruitment* and selection
 - *orientation*: preparation and training before the assignment
 - the job; duties
 - the removal
 - look-see visit(s)
 - language training
 - intercultural training
 - *assignment*: ongoing support during the assignment
 - on location
 - by the headquarters
 - by tutors/mentors
 - by host family/host nationals/conationals
 - *repatriation* after the assignment
 - re-entry
 - a job guarantee or not
 - training on return or not
- (Adler 1997: 237; Marx 1999: 185)

The above description of an international assignment as a process applies to expatriates, in particular. From self-initiated international employees' point of view the process is not quite the same: Self-initiated international employees are more on their own both before, during, and after the assignment.

6.3.2 Failures

A professional successful in the home environment will not necessarily be equally successful when working in a new environment. According to Francesco and Gold (1998: 173), *expatriate failures* are those "who do not remain abroad for the duration of their assignment". Even if the word failure is used in the present study, the expression may sometimes be too harsh for the purpose. Information on self-initiated international employee failures has not been found.

Examples of *expatriate failure rates*:

- In a study by Tung (1988 according to Francesco & Gold 1998: 174), the expatriate failure rates for US American companies vary from less than 10 % to as high as 40

% with most companies in the 10 % - 20 % range. According to Mendenhall & Oddou (1995: 342), the expatriate failure rate in the US American companies during the years 1965 - 1995 fluctuated from 25 % to 40 %.

- In Tung's study (1988 according to Francesco & Gold 1998: 174), the majority of Western European companies have failure rates less than 5 %, with a few companies reaching as high as 15 %. On the basis of Hiltrop and Janssens (1995: 357), as many as 25 % of Swedish expatriates, however, return home before the end of their assignment. Hiltrop and Janssens point out that the failure rates tend to be higher in developing countries than in developed ones.
- According to Tung's study (1998 according to Francesco & Gold 1998: 174), the Japanese have the lowest failure rates, with a large majority at less than 5 %, and no company reporting higher than 15 %. A study of Japanese expatriates living in Hong Kong and Taiwan (Fukuda & Chu 1994 according to Francesco & Gold 1998: 174), on the other hand, concluded that Japanese failure rates may be as high as those found in the US American companies.
- According to Adler (1994 according to Francesco & Gold 1998: 174), men and women have different failure rates. In a study of 686 US American companies only 3 % had female expatriates, but 97 % of them reported a successful assignment. Marx (1999: 143) argues that, in general, approximately 70 % of international business executives perform well, leaving the remaining 30 % to struggle with their assignments.

While it is difficult to define expatriate failure rates precisely - the issue being rather delicate from the companies' perspective - and the estimates should not be taken as "hard data", it is obvious that an international assignment is a difficult process. Furnham and Bochner (1986 according to Marx 1999: 14-15; 107) call international assignments *stressful life events*. The expatriates and their families are at risk in terms of of psychological difficulties. International work can make or break relationships, also those of self-initiated international employees. Dealing with constant traveling, new environments, and a hectic lifestyle can produce similar effects in short-term international employees as well. Adler (1997: 277) points out that creating "a meaningful portable life" is not necessarily easy.

6.3.3 Failures: Reasons and Costs

The main *reasons for expatriate failures* include

- expatriates' inability to understand foreign ways of thinking, behavior, and communication, and to adapt to them; their inability to handle anxiety and stress as well as their inability to solve problems within the family, especially problems with the spouse (Parker & McEvoy 1993: 355; Ferraro 1994: 7-9; 13; Hiltrop & Janssens 1995: 359-360)
- differences in lifestyle, language, and business philosophy as well as financial problems, government problems, culture shock, and problems with housing, food, and family (Chaney & Martin 1995: 4)
- unclear tasks; interpersonal conflicts with conationals and/or host nationals; ignorance of language; administration; bureaucratic morasses; business hours; concerns about the future: life after the international assignment (Niitamo 1996)
- a different country, job, and house; dealing with the practicalities of settling down, unfamiliar tasks, isolation, family problems, things running not smoothly, different concept of time and punctuality, local business practices, local company

policy, false expectations connected with the job, and finding other expatriates boring (Marx 1999: 21-22)

Failures on international assignments do not, in general, result from professional incompetence. In Tung's study (1988 according to Francesco & Gold 1998: 174), US American and Western European expatriates generally failed because of lack of *social skills* or problems with their *families*. The number one reason was the failure of the *spouse* to adjust. For the Japanese the major reason for failure was the expatriate's inability to handle larger responsibilities. In Fukuda and Chu's study (1994 according to Francesco & Gold 1998: 174), the number one reason for failure was, however, family-related problems caused by the children's education and the spouse's social life - or the lack of it. Schneider and Barsoux (1997: 160) found that the most cited reason for failed assignments is the inability of expatriates and their families to *adapt* to the local culture.

Sometimes repatriation is considered the biggest challenge in the process of an international assignment, especially self-initiated international employees, or SFEs, being on their own in creating their career after repatriation.

The factors creating potential *repatriation problems* include

- uncertainty connected with re-entry in general
- an idealized image of the home country
- false job expectations, e.g. status and career development
- insufficient job guidance
- no appropriate job available
- being made redundant
- loss of lifestyle; lower standard of living
- family problems
- lack of excitement, and
- people without a similar international orientation.

(Adapted from Marx 1999: 132-134)

A lot of money can be lost because of expatriate premature return to the home country, the average *cost per failure* to the parent company ranging between USD 55 000 - 85 000 (Mendenhall & Oddou 1995: 342), even up to USD 200 000 (Francesco & Gold 1998: 173). Once again, the issue being rather delicate from the companies' perspective, it is difficult to obtain any exact figures. Invisible costs such as loss of time, effort, reputation, prestige, and self-esteem are not included in these figures. Business contracts can also be lost.

6.4 Intercultural Training in Working Life

6.4.1 Stages of Intercultural Training

Intercultural training in working life can be *categorized* into three stages which are

- 1) *minimum preparation*: country briefings as background reading or in groups
 - gives a fast orientation, an up-to-date overview of conditions in the target culture
 - 2) *intermediate preparation*: intercultural training in groups
 - deals with the country's history, social background, customs, social behavior, business culture, business negotiations, etc.
 - may last from one day to several days
 - 3) *in-depth preparation*: individual coaching
 - focuses on each trainee's personality, style, and the particular position
- (Adapted from Marx 1999: 201-204)

To become interculturally competent, i.e. from a novice to an *advanced expert* (see Figure 14), people can learn through the trial-and-error method, they can do background reading, or they can participate in intercultural training.

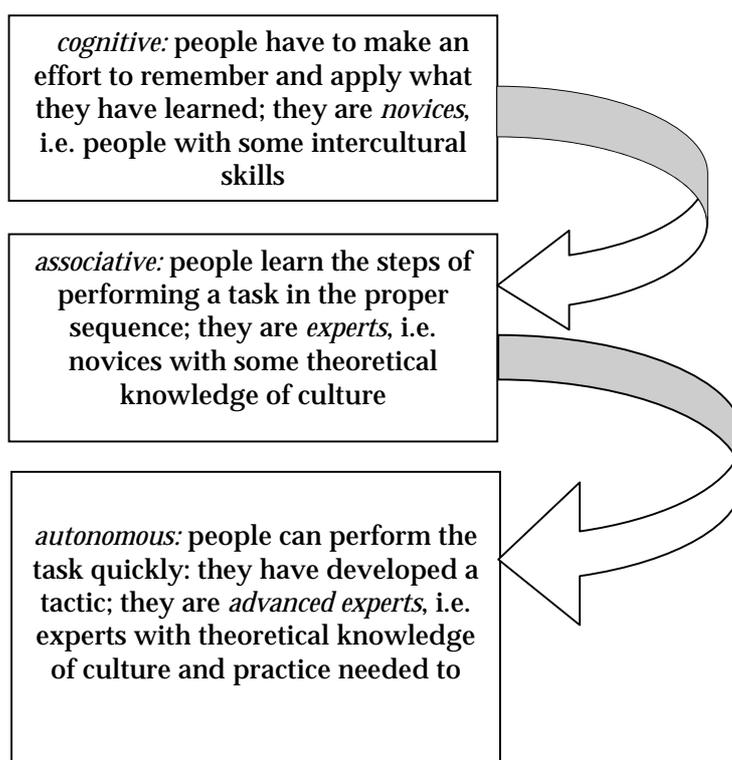


FIGURE 14 The stages of skill learning when developing intercultural competence
(Adapted from Anderson 1990 according to Bhawuk & Triandis 1996: 18-19)

The problem with the trial-and-error method and background reading is that culture is learned through people's own values. Good intercultural training,

instead, is value-free. Those who need intercultural training in working life include expatriates, repatriates, [and their families], self-initiated international employees, and "frequent fliers", without forgetting those who meet and work with foreigners in Finland. Considering expatriates and repatriates, in particular, intercultural training can be provided and attended before, during, and after international assignments. (See Figure 15.)

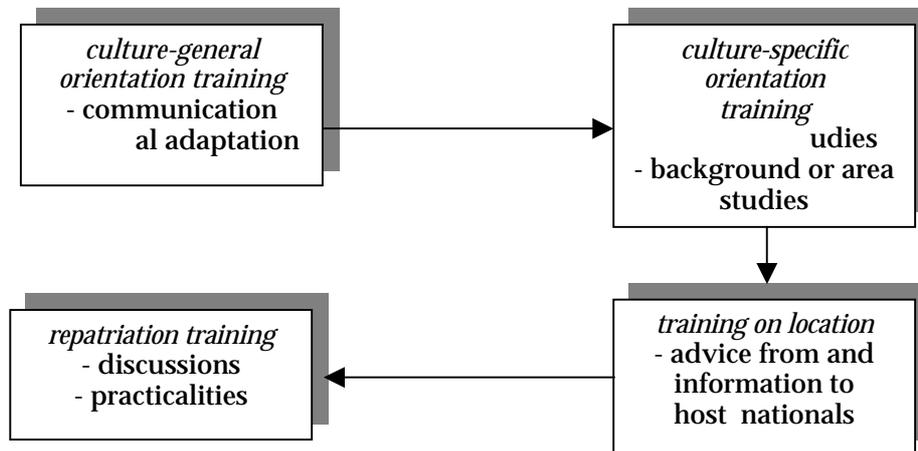


FIGURE 15 International assignments and the stages of intercultural training

The *culture-general orientation training* should focus on cultural differences in communication and the cultural adaptation process with its various phases and potential psychological problems and their symptoms. (Marx 1999: 187) Besides intensive language studies, *culture-specific orientation training* should cover target-culture topics such as

history, geography, political system, religion, school, education, ethnic relations, racism, family life, youth culture, gender roles and relationships, working life, organizational culture, environmental issues, literature, art, film, theater, daily life, shopping, food and drink, festivities, and customs. (Adapted from Marx 1999: 202)

Training on location should go deeper into the information provided during the orientation training and put it into practice. Help and advice from the host nationals will make adaptation to local people easier, while help from the conationals, other Finns, will make adaptation to the country easier. Some companies have a *mentor* system to facilitate effectiveness. Foreign coworkers can also be provided with information about Finland and the Finns: what kind of people and employees they are. (Marx 1999: 185-186; 188) The importance of training on location becomes emphasized if orientation training is minimal.

During long international assignments both people and their home countries change. *Repatriation training* should be started a few months before re-entry. It should involve discussions with coworkers, friends, and if there are children, also with their friends about the incoming separation. Later on, practical matters connected with the removal must be taken care of, potential symptoms of *re-entry shock* must be handled, and the new job must be oriented to. (Ibid 131; 185-186; 188)

In a study by Larpes (1999: 17-118), the most common *predeparture support functions* and percentages of Finnish expatriates receiving them were

- help with practical arrangements (65 %)
- job-related training (27 %)
- information about the organization (27 %)
- language training (17 %)

The most often offered *in-country support functions* and percentages of Finnish expatriates receiving them were

- help with practical arrangements (65 %)
- in-country training for the job (43 %)
- in-country information about the organization (41 %)
- in-country language training (39 %)

The average number of hours spent on predeparture training was 45.4 hours. In the above study, practical and job-related issues were emphasized even if there was language training as well.

6.4.2 Reasons for Not Providing Intercultural Training

International employees are more successful when they are trained for life, study, and work abroad (e.g. Kealey & Protheroe 1996). Björkman (1990 according to Dowling et al. according to Tahvanainen 1998: 51) found out that approximately 44 % of British and German companies provide "cultural training", while 30 % of Swedish, Norwegian, and Danish companies provide "cultural training" and 70 % of them also provide language training. The corresponding percentages for Finnish companies were 52 % ("cultural training") and 86 % (language training). It seems, however, that [inter-]cultural training is more an exception than the rule, for example:

- up to 50-60 % of US American companies operating abroad do not provide any preparation for their expatriates; the companies that do so, only provide "environmental summaries and some cultural and language preparation"; half of these programs last less than a week (McEnery & DesHarnais 1990 according to Dowling et al. according to Tahvanainen 1998: 51)
- despite the need to minimize culture shock [or adaptation stress] few companies offer formal training to help expatriates to deal with adaptation problems (Tung 1988 according to Hiltrop & Janssens 1995: 364)
- very few companies look beyond technical ability and include psychological assessment to establish international adaptability (Marx 1999: 192)

According to Mendenhall and Oddou (1995: 343), the reasons for not investing in predeparture training include

- training is not effective
- there is no time
- the international assignment being temporary it does not warrant training

- resources, and
- there is not enough information available about the cultural adaptation process, i.e. acculturation.

Kealey and Protheroe (1996: 142-144) define the reasons for not investing in predeparture training as follows:

- the hypothesis that competent international employees are “born and not made”, i.e. the selection procedures are more crucial than intercultural training
- trainees’ past experiences may have more influence on the training outcomes than the intercultural training itself does
- the foreign work environment or the organization of the project is the principal determinant of success
- training is not effective
- a top performer in the home country will also be a top performer in another culture

Considering the reasons for not providing intercultural training to international employees, it is possible that there is not much time available for it before the departure. There is, however, evidence (e.g. Kealey & Protheroe 1996; see Section 7.3) that intercultural training can be effective. This is a market niche that proactive Finnish polytechnics can fulfill by providing intercultural training to their students, that is, by preparing the students for the needs of globalizing industry and business.

6.5 Effects of International Assignments

How does international work really affect the life of international employees: How does it develop their intercultural competence? According to Adler (1997: 248-249), when reviewing *repatriates*, i.e. returnees, experiences abroad, they report that their “managerial skills improved more than their technical skills”. In addition to enhanced professional skills, repatriates often recognize improved self-image and increased self-confidence. They also mention competences such as better tolerance of ambiguity, a multiple perspective, and an ability to work with and manage others.

Marx (1999: 63-64; 137-138) found that there are effects on both personality and career. Most executives reported positive changes in their *personality*, the main effects being greater confidence, more open-mindedness, more tolerance and patience, and a broader outlook. Other effects included better listening ability, greater cultural sensitivity, better understanding of people, higher degree of independence, more assertiveness, as well as greater diplomacy and flexibility. It seems that the executives’ *communication* and *social skills*, in particular, developed. It is possible that along with these developments even some of their life values changed.

When looking at the effects of international assignments on *professional* development, the situation is slightly different. Here the executives reported both positive and negative changes as well as a combination of the two. Most

career effects were, however, *positive* including faster professional development, more responsibility, more marketability, improved intercultural skills, better strategic thinking and negotiation skills, and of course, more money and interesting time. Considering the *negative* career effects, international experience is not always appreciated, home-country contacts can be lost, and professional progress may be slower than in the home country. Furthermore, some executives were psychologically very tired after the assignments. (Ibid 139-140)

When looking at the effects of international assignments on *professionals* thought that the international assignment in Europe (69 % of expatriates), the United States (18 %), Asia (10 %), and other countries (4 %) [i.e. geographical areas where most Finnish expatriates go to] had promoted their career, and now worked in a more challenging job (71 % of the repatriates) at a higher level in the organization than before the assignment (68 %). Their level of income (84 %) and standard of living (74 %) had also increased.

Even if the international assignment developed professional skills, there were also those (approximately 25 %) who had met serious problems connected with repatriation. The problems included a high age [cf. age racism], a long assignment, adaptation problems abroad, an unspecified work role after re-entry, poor knowledge of events in Finland, and conflicts connected with the work role. There were also repatriates (35 %) who had changed employer after re-entry, many encouraged by active headhunters. (Ibid 4)

In Riusala and Suutari's study (2000), the *characteristics* and *skills* that mostly developed during an international assignment were

- understanding of the international business environment
- new ideas and a broader perspective
- language skills
- self-confidence
- interpersonal skills, and
- job-related technical skills.

It seems that, in general, organizations are not very interested in managing the repatriation process, although the problems are not necessarily so big as described in research literature (Ibid). If it is decided by a company that cultural diversity is a source of competitive advantage and even of added value, employers should focus more on what they can learn from repatriates, including both personal and professional development, as well as from foreign employees in Finland.

7 EFFECTIVENESS OF INTERCULTURAL TRAINING AND LEARNING

7.1 Assessment, Testing, and Measurement

Before discussing the effectiveness of intercultural training and learning in more detail, the concepts of assessment, testing, and measurement are defined. *Assessment* is a systematic process that plays an essential role in effective training and learning. It begins with the identifications of objectives set on the training and ends with a judgment concerning how well those objectives have been attained. Assessment is a general term that includes the full range of procedures used to gain information about trainee learning and the formation of value judgments concerning learning progress. *Testing*, or a *test*, is a particular type of assessment that consists of a set of test items [e.g. questions, declarative statements, and critical incidents] administered during a fixed period of time under reasonably comparable conditions for all trainees. *Measurement* is the assigning of points or numbers to the results of a test or other type of assessment according to a specific rule [e.g. counting the choices of the "best" alternative explanations or awarding points for particular aspects of a rationale to a critical incident]. Assessment is more comprehensive than testing or measurement. Assessment may include both *quantitative* and *qualitative* descriptions, i.e. both measurement and nonmeasurement. In addition, assessment always includes *value judgments* concerning the desirability of the results. (Linn & Gronlund 2000: 29; 31) (See Figure 16.)

7.2 Types of Assessment

Empirical assessment should be an intrinsic part of a training course to provide information on how good, helpful, and effective the training was. *Formative*

assessment provides information for modifying training. It focuses on how well the course was implemented and trainee satisfaction. In other words, information is gathered to perceive whether the training was worthwhile, what topics were important, what materials should be dropped, what materials should be added, and how to develop training techniques further.

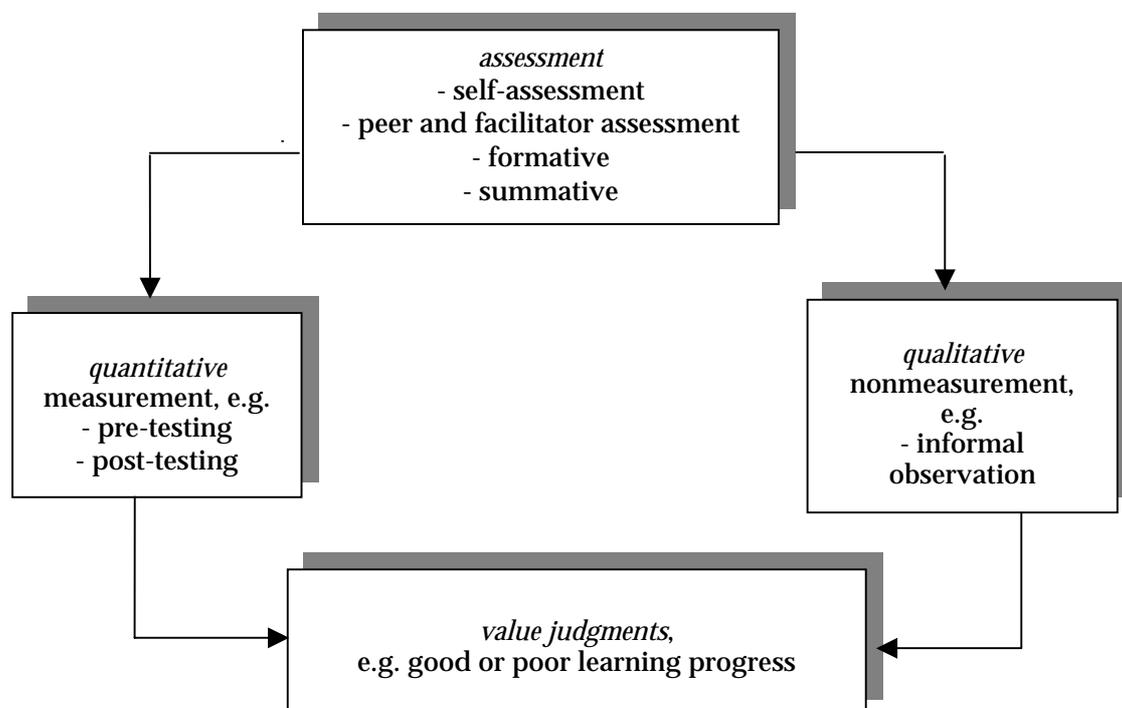


FIGURE 16 An example of the assessment process (Adapted from Linn & Gronlund 2000: 32)

The techniques used in formative assessment include trainer-made questionnaires and observation (Linn & Gronlund 2000: 41). *Summative assessment* is used to define to what extent the objectives set on the training course were achieved. It focuses on the degree to which the trainees were affected by the training, i.e. its effectiveness. (Brislin & Yoshida 1994a: 143; 145-147; Blake et al. 1996: 171; Byram 1997: 87) Intercultural training can have an impact on trainees' cognition, affect, and behavior (Linn & Gronlund 2000: 59; Blake et al. 1996: 170). The techniques used in summative assessment include trainer-made performance tests, ratings on various types of performance, and assessments of end products (Linn & Gronlund 2000: 42).

When assessing intercultural training and its effectiveness in developing intercultural competence, alternative *assessment techniques* should be used. These include

- self-reports
- peer and facilitator/evaluator observations
- judgments of outsiders, e.g. employers, coworkers, and host nationals
- surveys
- interviews
- questionnaires
- tests, including personality, attitudes, and skills

- audio- or videorecording of interaction
- experiments, and
- measures of overt behavior.

(Adapted from Bhawuk & Triandis 1996: 25; Blake et al. 1996: 172)

Most of the published assessments discussing the effectiveness of intercultural training and learning have relied wholly or partly on trainee self-reports and interviews. For this reason, the increased use of behavioral measures would improve assessment. Blake et al. (1996: 172) recommend a combination of home and host culture sources with multiple sources within each culture. On the other hand, they point out that self-report data has been found to relate to successful adaptation to host cultures.

If only externally controlled *quantitative* assessment is used to assess intercultural learning, the process of learning is not complete. According to Koro (1993: 63), at least part of assessment must in general be qualitative and based on either trainees' self-assessment or collaborative assessment of the learning process. Byram (1997: 93) argues that self-assessment presupposes a high degree of self-awareness and the ability to reflect on one's own learning and achievement. This suggests a particular mode of training and learning such as transformative learning (cf. Mezirow 1991; Taylor 1994; Ibid 1997), which emphasizes alternation between engagement and reflection, not only the end product with marks and grades, as well as learner autonomy and control over one's learning through developing the understanding of the processes of learning, i.e. metacognition. This will enhance the *transferability* of cognition, affect, and behavior (cf. Section 5.2; cf. also Byram 1997: 103).

To increase reflection, trainees can keep *learning diaries, journals, or logs*. They can also keep a portfolio with a wide range of evidence and evaluations of their learning. A *portfolio* is a personal document in which trainees can record their qualifications and other significant linguistic and [inter-]cultural experiences (cf. *The European Language Portfolio* [the Council of Europe 2001]).

Because interaction takes place in real time and usually in circumstances, which do not allow data collection, evidence of success in this is not likely to be available directly. Indirect evidence can be provided retrospectively by trainees themselves or by outsiders involved or able to observe. (Byram 1997: 93-96; 101; 106)

Should assessment be a separate analysis of each component of intercultural competence vs. each objective, or should it be holistic? The problem with *separate assessment* is that it atomizes knowledge and skills and does not reflect their dependency relationships. *Holistic assessment*, on the other hand, is based on descriptions of what is satisfactory performance - knowledge or skills. Holistic assessment is *criterion-referenced assessment* which describes trainee performance according to a specified domain of defined learning tasks; it is not *norm-referenced assessment* used to describe trainee performance according to a trainee's relative position in some known group (Linn & Gronlund 2000: 42; 46), i.e. the trainees are compared with each other. (See Figure 17.)

For *qualitative* assessment, trainees' expectations and experiences can be mapped out, and observation and interviews can be used. To assess factual knowledge "objective" questions can be used, while deep learning and trainees'

ability to reiterate facts can be assessed by traditional essay-writing [cf. analyzing and solving critical incidents]. Assessment should take place over a period of time: It should be *continuous*, rather than at one given point in time.

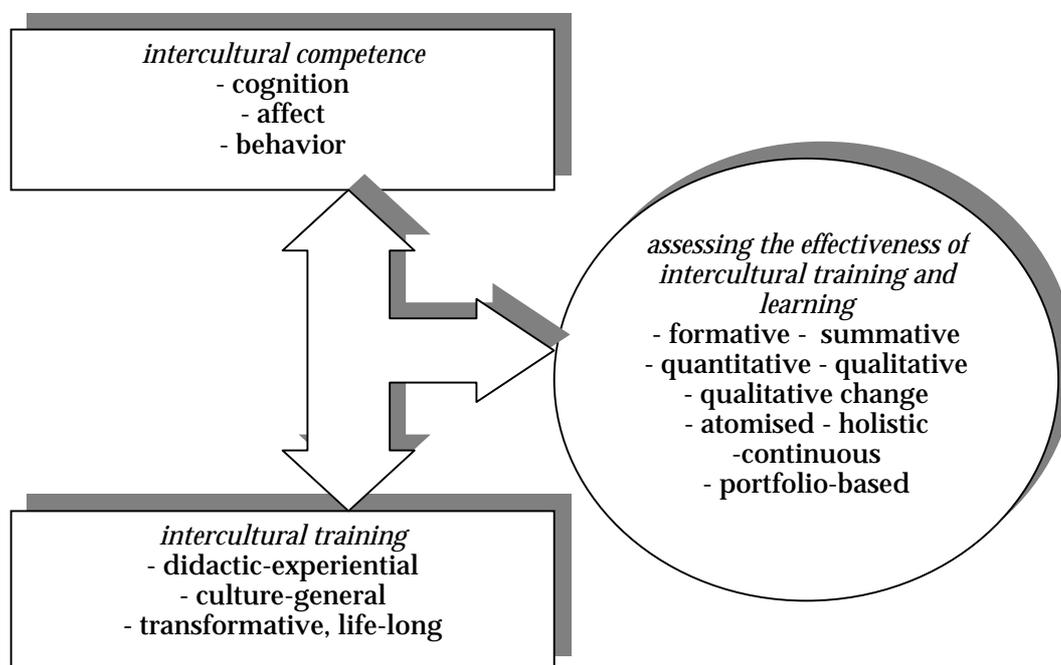


FIGURE 17 The relationships of intercultural competence, intercultural training, and assessing the effectiveness of intercultural training and learning

Intercultural competence is not the mathematical addition of "own culture" plus "other culture" (Baxter & Ramsey 1996: 212). Progression from one criterion to another need not be defined as increasing, quantifiable acquisition of knowledge, [attitudes, emotions], and skills on a linear scale, but it involves a *qualitative change* rather than a quantitative one, for example, a move to a new skill. In other words, progression does not depend on an increase in the quantity of knowledge, [attitude, emotion], and/or skill, but rather on a *leap in insight*. When assessing intercultural competence, the notion of a score, a single statistic, should be moved away from. If a portfolio is used to document intercultural competence, both holistic and atomized assessment can be applied. The portfolio allows the reader to see the *biographical progression* in intercultural competence, and the relationship of various documents to each other. (Ibid 104-105; 107-108; 111)

To get an idea of the effectiveness of predeparture and in-country training in Finnish working life, Larpes hypothesized in her study (1999: 119-120) that individuals with training would adapt better to work, interaction with host nationals, as well as the conditions of the host country than those without training. The end results of the interview showed that expatriates with training did not, in fact, adapt better than those without training. Trained expatriates, however, thought that the training had a significantly more positive impact on their adaptation than those without the training. Larpes assumes that factors such as accurate expectations and prior foreign work experience might explain the lack of difference between the trained and untrained individuals. She also

refers to the *quality of training* when considering support provided by it in cultural adaptation and task performance abroad. Becoming a competent intercultural communicator is a slow, gradual transformative learning process (cf. Mezirow 1991; Taylor 1994; Ibid 1997) during which practical applications and hands-on experiences of other cultures play a major role.

7.3 Effectiveness of the Culture Assimilator Method

Albert (1995: 158) argues that the Culture[-General] Assimilator, or the Intercultural Sensitizer (ICS), is effective in developing intercultural competence: Numerous assessments have shown it to improve trainees' understanding about patterns of thinking and behavior in the other culture, but also cultural adaptation and task performance. According to Cushner and Brislin (1996: 48-51; see also Blake et al. 1996: 169), the Culture[-General] Assimilator is the most thoroughly researched method in intercultural training. The method has proven to have positive impacts as to the cognitive, affective, and behavioral components of trainees' intercultural competence. Cushner and Brislin continue to argue that studies have shown that the Culture [-General] Assimilator is "of considerable use" in preparing individuals such as exchange students and various professionals for interaction in culturally diverse contexts.

Referring to research (e.g. Albert 1995: 165; Cushner & Brislin 1996: 14; 20; 25; 51; Cushner & Landis 1996: 188; 191-194), the *Culture[-General] Assimilator* is supposed to

- develop complex thinking and the ability to make isomorphic attributions
- impart knowledge of the subjective culture of the target group
- improve knowledge and application of concepts relevant to intercultural communication
- develop the ability to analyze and solve intercultural problems
- help to develop more accurate expectations in intercultural interactions
- decrease the use of negative stereotypes
- increase intercultural sensitivity to cultural diversity
- help to understand host nationals as judged by the hosts themselves
- help to interact more effectively with people from the target culture
- increase enjoyment in interaction with host nationals
- enhance intercultural adjustment
- improve task performance on international assignments
- increase tolerance of everyday stress
- reduce the rate of premature returns from international assignments, and
- make accepting ethnorelativity easier.

Triandis (1995: 184) found that when trainees are motivated, Culture[-General] Assimilator training improves their sense of well being and effectiveness (cf. competence) in the other culture. Cushner and Landis (1996: 193; 195) state that there is "ample evidence" that changes are produced in trainees but the extent of those changes is still problematic. Albert (1995: 165) refers to "a few minor inconsistencies" and the fact that all of the studies have not documented behavioral changes. According to Kealey and Protheroe (1996: 152), the method

is cognitive, but it aims at some degree of interpersonal skills development.

Because there is controversy in the results of research discussing the effectiveness of the Culture [-General] Assimilator method, more empirical research is required. This is what the present study tries to do, in other words, to test the effectiveness of the Culture[-General] Assimilator method in developing the intercultural competence of Bachelor of Engineering, or BEng, students. The emphasis is on developing the behavior of the students.

7.4 Effectiveness of Web-Based Learning

When evaluating the effectiveness of a *hypermedia-based program* or a *Web-based application*, attention can be paid to

- what type of competence, cognitive, affective, or behavioral, the program or application promotes
- how it is connected with previous real-world experiences and learning
- how motivating it is (i.e. how elements such as text, graphics, video, animation, and sound are presented), and
- how interactive it is.

(Adapted from Paakkola 1992: 121-122)

According to Hiltunen et al. (1995: 152-154; 160-161; 164), the cognitive learning theory and *constructivism* seem to support the use of hypermedia, including the self-directed nature of learning. The structure of information in hypermedia is non-linear and based on associations (cf. human thinking). Consequently, hypermedia supports knowledge construction from people's own experiences, i.e. knowledge acquisition, remembering, understanding, as well as problem solving. Being flexible, adaptable, and easy to expand, hypermedia provides an environment for active learning emphasizing the learning process, not the end product. The high level of interaction is often considered the main advantage of hypermedia. On the other hand, interaction is between man and machine, not face-to-face. It is, however, possible to increase interaction by using pair or team work.

7.5 Characteristics of Assessment

7.5.1 Validity

According to Linn and Gronlund (2000: 73), *validity* is an "evaluation of the adequacy and *appropriateness of the interpretations and uses of assessment results*". In other words, "validity is a quality of the interpretation of the results rather than of the assessment itself". Assessment results have a different degree of validity for each particular interpretation to be made. The degree can be high, moderate, or low. (Ibid 102; 75-76) There are different kinds of classifications or considerations for validity. In the present study the classification by Blake et al.

(1996) with the intercultural training orientation is used.

Blake et al. (1996: 177-180) classify the *types of* and *threats to validity* as follows:

- 1) *statistical conclusion validity, or conclusion validity*
 - asks if there is a *relationship* between the intercultural training course and the observed outcome(s)
 - the *threats* include too small a sample; test results based on chance; random error based on low-measure reliability; and changes in implementing the training (e.g. the facilitator is changed) and in the training setting (e.g. the time of the day)
- 2) *internal validity*
 - asks if there is a causal relationship between the training and the observed outcome(s); no other causal factors may be present that can act as plausible alternative explanations for the observed impacts
 - the threats include major changes in the training setting between the pre-test and the post-test(s) (i.e. changes in the world outside the polytechnic); trainees growing wiser between the pre-test and the post-test(s) for reasons other than the intercultural training (cf. Byram 1997: 97); trainees becoming familiar with the pre-test and remembering the test items; the change of the measurement instrument between the pre-test and the post-test(s); the test and the control, or comparison, groups being too different from each other; the test group and the control group being able to communicate with each other; and trainees dropping out of the training course
- 3) *construct validity*
 - asks if there is a relationship between how the concepts in the pre-test and post-test(s) were operationalized and the actual causal relationship that is being studied, i.e. to what degree a concept or a test item measures the particular piece of cognition, affect, or behavior that it is supposed to measure and not something else
 - the threats include defining the concepts too vaguely; using only one measure of an important concept; having all impact measures collected by one instrument only; having only one version of the training; providing the training always by the same facilitator and in the same physical environment; trainees' responses being influenced by the evaluation setting, e.g. trainees are afraid of being evaluated or their responses are influenced by the facilitator characteristics or cues; trainees basing their behavior on what they think the test(s) is/are about, so the outcome(s) is/are due to the training but also to trainees' reaction to the facilitator and the test(s)
- 4) *external validity*
 - refers to the ability to generalize the results of the test(s) to other settings
 - the threats include trainees having participated in other intercultural training as well, and the other training being excluded from the analysis (cf. Byram 1997: 97); trainees participating in the test(s) being very different from trainees participating usually; the pre-test sensitizing students to particular facets of the training and thereby altering the impact of those facets; evaluating the training in a setting very different from the setting in which the training was conducted; the observed impacts being based on exposure to media, for example, and not on the training

Blake et al. (1996: 172) emphasize how important it is that the *test items* directly reflect the components of success, i.e. intercultural competence, assumed in the

objectives of the intercultural training course. The items must be selected to ensure the various types of validity, especially internal and construct validity. Seelye (1994: 217-219) also refers to the special attention needed when validating test items. According to him, the most common error lies in *generalizing* "beyond the legitimate extension of a cultural practice". The validation of the test items can be based on the authority of the facilitator, pre-testing with the target culture people (65 % agreement recommended), or an expert opinion. Seelye (Ibid 209) argues that it is easy to build ambiguous item choices when constructing a test. Therefore, the measurement of any phenomenon always contains a certain amount of *chance error*.

There are, according to Seelye (Ibid 227), at least five limitations imposed upon any test(ing) by chance and circumstance, the *limitations* being as follows:

- 1) the aim of the facilitator/evaluator limits the test content
- 2) the validation technique employed further limits content
- 3) the time available for testing limits both content and the format of the test
- 4) the format of the test limits both content and the circumstances of the testing
- 5) the imagination of the test designer limits everything

As to a Culture[-General] Assimilator with *critical incidents*, the validity of each incident as well as its alternative explanations and rationales should be ascertained by pre-testing with host nationals (Seelye 1994: 163), or people familiar with the culture to make sure the incident is plausible (Wight 1995: 130). Triandis (1984 in Cushner & Landis 1996: 197-198) argues that to get 150 validated incidents, up to 300 draft incidents may be needed. This means that the construction of critical incidents takes a lot of time and costs a lot of money. The validity of the questionnaires used in the present study will be discussed in Section 10.7.

7.5.2 Reliability

Next to validity, reliability is the most important characteristic of assessment results. According to Linn and Gronlund (2000: 74; 107-108), *reliability* refers to the *consistency* of measurement, how consistent, i.e. *generalizable* or repeatable, assessment results are from one measurement to another. How similar would the results have been had they been assessed yesterday or next week? How much would the results have differed had a different facilitator assessed the test? Reliability is needed to obtain valid results, but it is possible to have reliability without validity.

According to Seelye (1994: 208), perfect reliability would be achieved by a test if each time it were given, the same trainees would make the same scores - assuming that nothing happened in the intervals between testing to alter their knowledge or feelings on the topic tested. Seelye argues that trainee performance at different times is, however, never quite the same, i.e. assessment results cannot be expected to be perfectly consistent. (Cf. Linn & Gronlund 2000: 108.)

Seelye (1994: 231-232) recommends the following questions to be used when assessing the *reliability of test items*:

- 1) How evident is the cultural pattern to a member of the target culture?

- 2) Which group does the pattern apply? (e.g. tourists, businesspeople, or engineers)
- 3) What documentation is the "right" answer based on? (e.g. the facilitator/evaluator's expertise and experience)
- 4) Is the answer too easy /difficult?
- 5) Which cultural goal (i.e. component of intercultural competence) is being tested: cognition, affect, or behavior?
- 6) In what proportion are the above goals included in the test?
- 7) Does each item measure just one cultural element?
- 8) Does test achievement depend on, e.g., language ability, general intelligence, or imitating the facilitator/evaluator's opinions?
- 9) Can the test be objectively scored?
- 10) When measuring attitudes, are opinions confused with facts?
- 11) Can the item be recast to test a skill rather than a fact?
- 12) What is the reliability of the test as determined through item analysis?

On the basis of Linn and Gronlund (2000: 132), *high reliability* is demanded, when the decision to be made is important, final, irreversible, unconformable, concerns individuals, and has lasting consequences. On the other hand, *low reliability* is tolerable, when the decision is of minor importance, decision making is in early stages, the decision is reversible, confirmable by other data, concerns groups, and has temporary effects. The reliability of the questionnaires used in the present study will be discussed in Section 10.8.

7.5.3 Usability

An assessment procedure must meet certain *practical requirements*, too. It should be economical considering both time and money, it should be easily administered and scored, and it should produce results than can be accurately interpreted and applied. (Linn & Gronlund 2000: 75) The usability of the questionnaires used in the present study will be discussed in Section 10.9.

7.6 Theoretical and Methodological Framework of the Present Study: Summary

The *theoretical framework* of the present study is based on the concepts developed and applied by scholars and practitioners in the field of intercultural communication. When defining the concept of intercultural competence, data from scholars such as Lehtonen; Byram and Risager; Cui and Awa; Schneider and Barsoux; Gudykunst; Brislin and Yoshida; Marx; and Martin and Nakayama were made use of.

To strengthen the pedagogical perspective, *experiential* learning based on constructivism by Kolb and the change-oriented nature of intercultural training by Gudykunst are emphasized. As the main model for the intercultural learning process the theory of perspective transformation by Mezirow and Taylor is applied. According to the theory of *perspective transformation*, becoming a competent intercultural communicator is a slow, gradual learning process.

The *methodological framework* of the present study is based on experiential training and learning techniques emphasizing trainee participation, autonomy,

and *self-directedness* (e.g. Mezirow, Taylor, Koro). To enhance the Bachelor of Engineering, or BEng, students' intercultural competence, group and video discussions as well as small talk exercises were favored in the face-to-face tuition. The techniques also include a self-study period by using a Culture-General Assimilator based on attribution theory (e.g. Albert; Wight; Brislin; Cushner & Brislin) with a set of critical incidents. The Culture-General Assimilator called *The Same but Different* is a Web-based application implemented in hypertext by the present author and programmers, and installed on the Intranet of Kajaani Polytechnic.

To assess the BEng students' motivation to study intercultural communication and the effectiveness of the intercultural training course in developing the students' intercultural competence as a whole at a group level, a series of five *questionnaires* were used. When constructing the questionnaires with open-ended and structured questions, declarative statements, and critical incidents, a few ideas were obtained from Gudykunst; Jaakkola; Sawyer and Smith; as well as Singelis. To construct the *scoring system* for the training experiment with the Web-based application, the polytechnic assessment scale was applied. Ideas emphasizing *holistic*, *criterion-based*, and *qualitative* assessment were obtained from Seelye as well as Linn and Gronlund.

When analyzing the research data and results, both quantitative and qualitative methods were used. To discuss the *validity* and *reliability* of the measuring instruments, i.e. questionnaires, used in the present study, the classification developed by Blake et al. for the purposes of intercultural communication is used.

Finally, the present study can be considered *action research*, in which some current practices in working life and Bachelor of Engineering, or BEng, education are challenged to find new ideas and techniques to develop BEng students' intercultural competence to meet better the requirements set by today's globalizing industry and business.

8 RESEARCH QUESTIONS WITH BACKGROUND INFORMATION

8.1 Finnish Polytechnics: Institutions of Higher Education

Before presenting the research questions, their background will be discussed. Employees of the 21st century should be citizens not just of their own regions and countries but also of Europe and the world. The expansion of horizons is particularly important in higher education where there are possibilities to provide intercultural training and acquire intercultural experiences and skills through living, studying, and working abroad (ERT 1995: 18; White Paper 1996: 18; 51).

The Finnish system of *higher education* comprises two parallel sectors: universities and polytechnic institutes (in Finnish *ammattikorkeakoulu*; in Swedish *yrkeshögskola*; in German *Fachhochschule*). *Universities* have roots going back to the 17th century. They are characterized by scientific research and the highest education based thereon. There are 20 universities in Finland, with approximately 152 000 students. (The Education System of Finland 1999; Discover Finland 2001)

Following the restructuring of the Finnish higher education, i.e. bringing it in line with other European countries, the *polytechnic institute* system was built during the 1990s. The system was established in the institutions, which previously provided post-secondary professional education. The overall goal of studies leading to a polytechnic degree is to provide the knowledge and skills required for operating in *professional expert functions* in national, international, and multicultural contexts. (Polytechnic Act 255/95)

Most polytechnics in Finland are maintained by municipalities. Their basic funding is granted by the State and local authorities. Cooperation between polytechnics, companies, and other business-sector organizations is emphasized. Lecturers are to have a Master's degree, and senior and principal lecturers an academic postgraduate degree. Academic staff are also required to

have 35 credits of pedagogical studies and three years of work experience. Polytechnics vary in size from the smallest with approximately 1 000 students to the largest with 8 000 students. There are 31 polytechnics, and they have approximately 100 000 registered students. (The Education System of Finland 1999; Discover Finland 2001)

Polytechnics are multidisciplinary institutions providing education, for example, in technology and communications; business and administration; health care and social services; and tourism, catering, and institutional management. One third of the students study technology and communications. The Ministry of Education confirms the degree programs, but curricula are independently decided by the polytechnics. Studies leading to a polytechnic degree, equivalent to the academic Bachelor's degree, take 3.5-4.5 years (140-180 credit units), which the students can exceed by one year. The studies consist of basic and professional studies, optional and free-choice studies, a work placement of at least half the academic year, and a final year project (see Figure 3). Instruction is free of charge. (Ibid) At the beginning of the year 2002 postgraduate degree programs were launched. The admission criteria are a polytechnic degree and related practical experience of three years after graduation.

The studies for the degree of Bachelor of Engineering, or BEng engineer, take four years to complete. The admission requirement is the completion of the senior high school (in British English upper secondary school), the high school diploma (in British English matriculation examination or A-level examinations), or a vocational qualification. According to the goal set by the Ministry of Education, 35 % of the annual intake should have a vocational qualification. Application takes place through the national joint application system, and passing an entrance examination is required. (Ibid) There will be changes in the application system in the year 2003.

The goals of polytechnic degrees are defined in the Polytechnic Decree (256/95). According to its 7§, polytechnic studies are to give sufficient *communication* and *language skills* and qualifications for *international working life*. The language studies are defined further in 8§, according to which the student must in either his/her polytechnic studies or by other means show to have acquired 1) proficiency in either *Finnish* or *Swedish* which, according to the Law (149/22), is required of civil servants, and which is necessary for professional work and development, and 2) proficiency in *one* or *two other languages* needed for professional work and development. Hence, specialized, profession-integrated and interculturally-oriented foreign language education is emphasized.

The international contacts of polytechnics are mainly implemented through various multilateral student and trainee *exchange programs*, in which both students and lecturers participate, e.g. EU-launched cooperation such as Socrates and Leonardo da Vinci and various global schemes. An important element of internationalization is *teaching degree programs in foreign languages*, usually in English.

8.2 Kajaani Polytechnic, BEng Education, and the Role of Intercultural Training

Kajaani Polytechnic is a small polytechnic in Northern Finland. It has approximately 1 500 students in total, including approximately 550 Bachelor of Engineering, or BEng, students. The degree programs in the fields of technology and communications are information technology (IT), production engineering, and construction engineering with a special emphasis on facility management. Most students study full-time, but there are also part-time students who study alongside work in the evenings.

To find out what opportunities the BEng students have to develop their English skills and intercultural competence during their polytechnic studies in various subjects, a small email survey was carried out by the present author in March 2000 among the lecturers who taught mathematical and/or professional subjects. The message was sent to 20 lecturers, the response rate being 13. According to this survey, more than half of the lecturers taught theoretical concepts of their specialization field(s) in English. They also used teaching and learning materials in English, for example text books, data books, manuals, journals, magazines, handouts, Helps, videos, cases, and MathCAD exercises. In addition they completed some technical documentation in English with their students. They did not provide lectures in English. [There are occasionally visiting lecturers from partner universities who do so.]

Even if English used in the mathematical and professional subjects very likely develops the BEng students' knowledge of professional terminology and reading comprehension skills, it does not develop their intercultural competence, i.e. the overall goal of foreign language education from the perspective of the working life. It seems that developing intercultural competence is, at least, at Kajaani Polytechnic the responsibility of language and communication education, and more interdisciplinary cooperation is needed.

At Kajaani Polytechnic, BEng students study English as their compulsory foreign language, the number of credits depending on the degree program, and varying from five in information technology to four in production and construction engineering. Besides the compulsory credits, there are two free-choice credits available.

When designing the objectives and contents of the courses and credits, attention has been paid to the end results of the Prolang project (see Subsection 3.1.1). The one-credit (24 lessons; 45 min each) course in *intercultural communication* is to be a foundation, which the other courses are built on. Besides intercultural communication, the BEng students have courses in both *engineering* and *business* English, the focus being on reading comprehension, technical documentation, presentation skills, telephoning, and written business communication. The free-choice courses are to supplement and support the compulsory courses, the focus being on socializing with business associates inside and outside Finland with topics such as Finnish economy and industry, traveling by air, staying at a hotel, eating out, trade fairs, and meeting and negotiation skills, in particular. (See Figure 18.)

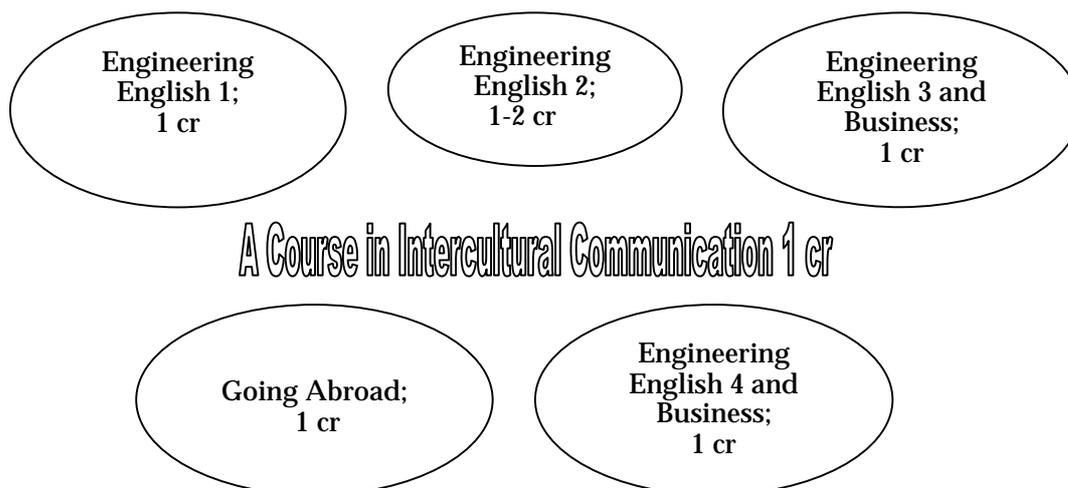


FIGURE 18 The courses and credits of engineering English at Kajaani Polytechnic

8.3 Finns' Intercultural Style

According to Barnlund (1998: 44), the term *communication style* refers to the topics people prefer to discuss, their favorite forms of interaction, and the depth of involvement they demand from each other. It includes the extent to which they rely on the same channels to convey information and the extent to which they are tuned to the same level of meaning.

Hall (1984: 60; 229; Ibid 1989: 91-92) argues that no communication is totally independent of context, *context* referring to the information that surrounds an event and is therefore bound up with the meaning of that event. Hall uses the terms low-context and high-context to refer to the amount of information, or meaning, that is given in a specific context. In *low-context* communication meaning is best expressed through explicit verbal messages, whereas in *high-context* communication meaning is best expressed through the context and the nonverbal channels of the verbal messages. Bennett (1998: 17; 20-21) calls low-context communication *digital* and *linear*, and high-context communication *analogic* and *circular*, or *contextual*.

The Finnish style of communication contains both low- and high-context elements. Perceptions on Finns as communicators can be based on the image Finns have of themselves as communicators, or on the image foreigners have of Finns as communicators, i.e. Finns' *intercultural style*.

First of all, the concept of *communication reticence*, including shyness, has often been connected with Finnish communicators. Sallinen-Kuparinen (1986: 162-168), however, found in her study that the level of Finnish communication reticence is not higher than that of people in other cultures. Instead, it varies along with the social context, and is connected with public speaking, in particular, including social contexts such as speaking to a large and unfamiliar audience, asking questions, and disagreeing. Sallinen-Kuparinen also found that Finns are less likely to initiate a conversation and to interrupt another speaker.

According to Lehtonen and Sajavaara (1985: 193-201), Finns speak when

they have something to say, use observation when approaching new situations, respect privacy, appreciate what other people think, prefer listening to speaking, and have high tolerance of *silence*, i.e. they tolerate pauses both in and between turns of speaking. Lehtonen and Sajavaara continue to argue that besides being passive, nonresponsive speakers, Finns seem to be passive, not interactive, listeners. In Finnish conversations the speaker is the focus of communication, while the listener is silent: The speaker is not interrupted. According to Lehtonen (1994: 56), the Finnish style of communication also lacks feedback, e.g. the use of fillers, gestures, and friendly eye contact.

Carbaugh (1995: 51-60; 1995 according to Sajavaara & Lehtonen 1997: 274-275) argues that Finns avoid expressing obvious things and need something important to say before speaking. Carbaugh continues to argue that when Finns think, they do not verbalize the thinking process in the way US Americans do but tend to be silent. The interpretation process is also slower. This results in long pauses, i.e. *silence*, in conversations. According to Carbaugh, Finnish silence is harmonious: Silence is accepted and means relaxation. Finns think that they have the right to listen: Finnish listening is quiet. Finns respect privacy: It is considerate to let other people be in peace. The threshold to open up a conversation with a stranger is very high. Finns respect what other people say. In intercultural contexts Finns tend to be reserved. A way to avoid the loss of face arising from communicative failure is to be silent. When speaking foreign languages, Finns may suffer from conscious control of language production, which may result in *dysfluency* in social contexts: Social sensitivity is reduced, nonverbal behavior is frozen, and social participation is clumsy. Many of these characteristics are different from what Finns do when speaking Finnish.

Yli-Renko (1993: 68; 71; 75; 77; 79) gathered information on perceptions of Finns by a number of English- and German speaking interlocutors. The findings of her study indicate that Finns have quite a good grammatical command both of English and German. Difficulties in communication are due to limited vocabulary and, thus, wrong word choices. Attributes used by English- and German speaking interlocutors to describe Finns as communicators include *silent*, *slow*, *shy*, *guarded*, and *reserved* speakers of English and German. The same interlocutors thought that Finns are rather formal and keep a distance. They seldom address a person by his/her name. Finns especially suffer from the lack of intercultural social conversation, i.e. there is not much idle talk. There is not much nonverbal communication either.

According to Sajavaara and Lehtonen (1997: 271), *Nordic silence* refers to solitude and non-communication. This is different from *silence in high-context Asian countries* such as Japan, Korea, and China. In these countries non-talkativeness is mainly active silence, which is to create the right kind of atmosphere and make an evaluation of the other party possible. Salo-Lee (1996: 44) points out that, when comparing the styles of conversation, there are similarities between many Asian cultures and Finland, e.g. the speaker is not interrupted or criticized and the listener is silent.

Laine-Sveiby (1987) suggests that for Swedes, better mastery of social skills is a *strategic tool* in intercultural communication with Finns. The strong strategic tools of Finns in intercultural communication with Swedes are the way Finns

show flexibility as well as appreciation of education, knowledge, and know-how.

Consequently, Finns seem to favor a brief and efficient style of communication and negative, *avoidance-based politeness* (cf. the concept of positive, approach-based politeness; see Brown & Levinson 1987: 70; 130). Other examples of Finnish avoidance-based politeness include minimal small talk (cf. Salo-Lee 1996: 44-50) and difficulties in paying compliments and returning them (Keltikangas-Järvinen 2000: 187; 118-119).

Lehtonen (1994: 56), for instance, argues that when communicating in Finnish, Finns may be indirect and implicit. When communicating in a foreign language, on the other hand, Finns often sound direct and explicit. This is usually an indication of insufficient foreign language skills and an inability to apply polite softeners. According to Yli-Renko (1993: 71), barriers to communication [with foreigners in particular] may be caused by Finnish culture-related communication patterns that Finns transfer into communication in English, German [, and other foreign languages as well].

Sajavaara and Lehtonen (1997: 277-278) point out that Finns have certain features in their communicative behavior that strike the foreign observer as different. In Finland it is often important to conform with what is considered the mainstream international culture. Characteristics of Finnish communication must not, however, be considered as handicaps: They are differences. When observing Finns as communicators, attention must also be paid to the other party. Finns may be considered silent and uncommunicative by representatives of some cultures, while others may find them excessively spontaneous and communicative. Furthermore, there is a lot of variability in the speech behavior of one individual: People speaking the same language share their respective codes only partially. (Ibid 268) To understand people from other cultures and their styles of communication, people, first of all, need to understand themselves, their own culture, and its intercultural style.

According to Jaakkola (1999), Finns have ethnic hierarchies on the basis of which they tend to appreciate the species of their own more than other species (see Section 2.2). It is possible that this is reflected in Finns' willingness to study foreign languages and communicate in foreign languages. That is, Finns are more willing to learn and use English than Russian, for example.

To summarize, because the Finnish style of communication is different from styles of communication in many other countries, it is important that professionals, such as Bachelors of Engineering, or BEng engineers, are today, first of all, aware of these differences and gradually also learn to negotiate meanings and adapt their style of communication according to the context. BEng students can, for example, learn about differences in styles of communication during their engineering education as part of their compulsory foreign language [English] studies at a polytechnic, where professionally-integrated and interculturally-oriented foreign language courses are provided.

In BEng and foreign language education at Kajaani Polytechnic, cultural diversity both in verbal and nonverbal communication is, first of all, discussed during the one-credit (24 lessons; 45 min each) course in intercultural communication (see Section 9.2). Besides the course in intercultural communication, the one-credit courses called Going Abroad, Engineering English 3 and Business, and Engineering English 4 and Business discuss cultural diversity in working life's social contexts such as traveling, eating out,

trade fairs, presentations, telephoning, export documents, and meetings and negotiations. Cultural diversity is also discussed when studying engineering texts in English (i.e. the one- or two-credit courses called Engineering English 1 and Engineering English 2). Part of the courses belong to basic studies, part to professional studies; part to compulsory studies, and part to free-choice studies. (See Figure 18.)

8.4 Research Questions

The *research problem* of the present study (see Section 1.3) was divided into five *problem areas*, or subproblems, with the corresponding *research questions*. The problem areas and research questions are as follows:

Problem area 1

The BEng Students: Effectiveness of the Intercultural Training in Developing Intercultural Competence; Facilitator Assessment

- How does the students' affect develop?
- How does the students' cognition develop?
- How do the students' behavior and skills develop?

Problem area 2

The BEng Students: Intercultural Competence after the Face-to-Face Tuition Period; Self-Report

- What are the students' learning outcomes after the face-to-face tuition period like?
- What are the benefits of the face-to-face tuition period?

Problem area 3

The BEng Students: Developing Intercultural Competence: Motivation and Attitudes; Self-Report

- Are the students motivated to study and/or work abroad, and what kind of expectations do they have?
- What do the students think about intercultural competence as part of BEng engineers' professional qualifications?
- What do the students think about Content and Language Integrated Learning, or CLIL?
- What are the students' English and communication skills like?
- What kind of communicators would the students like to be?

Problem area 4

The BEng Students: Self-Directedness and Feedback on the Face-to-Face Tuition and Self-Study Periods; Self-Report and Peer Assessment

- Are the students self-directed?
- How do the students assess the face-to-face tuition period?
- What about the self-study period with the Web-based application?

Problem area 5

The BEng Students: Suggestions How to Further Develop the Intercultural Training Course

- How can the intercultural training course be further developed?

9 IMPLEMENTING THE RESEARCH

9.1 Sample

The *basic group* of the present study consisted of approximately 550 Bachelor of Engineering, or BEng, students at Kajaani Polytechnic. Because researching the basic group would take a few years, a research *sample* was used. The sample (n = 117) consisted of first- (n = 53), second- (n = 42), and third-year (n = 9) students in the field of information technology, and second-year (n = 13) students in the field of construction engineering during the academic year 1999 - 2000. Both full-time students (n = 108) and students studying alongside work (n = 9) participated in the intercultural training experiment. The number of female BEng students being minimal, no attention was paid to the issue of gender.

The BEng students participating in the experiment were the students who took the one-credit (24 lessons; 45 min each) course in intercultural communication, as part of their compulsory English studies, scheduled in January-April 2000, which was the semester when the experiment was implemented. In this sense the sample was randomly chosen.

9.2 Training Kit

To establish the theoretical and conceptual framework first for the present author's licentiate thesis (*Intercultural Communication through Hypermedia*. 1997. University of Jyväskylä. Department of Communication, Organizational Communication and Public Relations Program.), secondly for the construction of the training course in intercultural communication for Finnish Bachelor of Engineering, or BEng, students, and thirdly for the present study, a wide range of scientific but also opinion *literature* in the fields of intercultural

communication, pedagogy, and educational technology was studied (see References).

As part of the licentiate thesis, a one-credit (24 lessons; 45 min each) training course for the face-to-face tuition period of intercultural communication was constructed. To support and supplement the face-to-face tuition period, a hypermedia-based program for autonomous and self-directed learning was also designed and implemented in cooperation with a programmer in the year 1997. The hypermedia-based program was developed into a Web-based application in cooperation with a programming student in the year 1999 to be installed on the Intranet of Kajaani Polytechnic and used in the training experiment. (See Section 1.2.)

When designing the training experiment, the BEng students' *readiness* in and *needs* for intercultural communication were mapped out. For that purpose there was student feedback on intercultural training (n = 157), collected during the years 1998-1999, available. The students were then, by using a questionnaire, asked to tell what was good and/or poor in the training, and why. The students were also asked to write down their own ideas how to develop the training further. To map out the students' readiness and needs, the present author's observations as well as experience as a facilitator were also made use of. In the end results of the readiness and needs analysis, the etc, i.e. culture-general, approach and opportunities to speak English were emphasized (cf. Section 8.3. discussing Finns' intercultural skills).

The overall *goal* of the intercultural training course was to enhance the BEng students' intercultural competence as a whole including the cognitive, affective, and behavioral components of intercultural competence so that the students would possess the basic qualifications to live, study, and work in international and multicultural environments. After the intercultural training course, developing the students' intercultural competence will be continued during the other English courses (see Figure 18).

The *objectives* set on the intercultural training course were as follows:

At the end of the intercultural training course the BEng students will be better equipped to

- describe the history and development of the field of intercultural communication
- identify contemporary events that illustrate the increased need for intercultural communication skills
- define their own cultural identity
- explain the basic concepts of intercultural communication
- compare cultures and styles of communication
- tolerate and understand cultural diversity and ambiguity connected with it
- communicate with people from different cultures, and
- adapt to another culture.

The *contents* of the face-to-face tuition period were divided into a set of seven modules with the following topics:

- 1) the pros and cons of increasing internationalization and globalization
- 2) the concept of culture including characteristics of Finnish culture, Finns' attitudes toward various groups of foreigners, and ethnocentrism vs. ethnorelativism
- 3) concepts (e.g. perception, norms, values, beliefs, and expectations) and variables

- (e.g. Hofstede's dimensions) used when comparing national and other cultures; dangers connected with the concepts and variables
- 4) the concept of communication including the interactive communication process, low- and high-context communication, and the Finnish style of communication
 - 5) the concept of intercultural communication including the past and present of intercultural communication, the intercultural communication process, and the concept of intercultural competence
 - 6) cultural differences in nonverbal communication
 - 7) the cultural adaptation process with its various stages and potential practical, psychological, and physical problems

The *training materials* and *techniques* applied during the face-to-face tuition period included a handout of approximately 60 pages with the basic theory and concepts of intercultural communication and an English-Finnish vocabulary, lecturettes, group discussions, videos followed by discussions, discussions of the BEng students' experiences of their intercultural encounters, and reflection. To warm up, or tune in, there were also small talk exercises. The students were encouraged to speak English as much as possible (cf. Section 8.3. discussing Finns' intercultural skills). Because the emphasis was on spoken language, no written assignments were used. Another reason for not using written assignments was the intercultural training experiment with the series of five questionnaires to be filled in.

The face-to-face tuition period of approximately eight weeks was followed by a *self-study* period of approximately three weeks using the Web-based application, a Culture-General Assimilator called *The Same but Different* (see Figure 1 and Section 1.2). The application was installed on the Intranet of Kajaani Polytechnic.

When *introducing* the intercultural training course, the BEng students were told about the intercultural training experiment, its objectives and contents as well as the series of five questionnaires. They were also told about attribution training and the Culture-General Assimilator method with critical incidents. It was then explained to the students that an important part of the training experiment would be testing the suitability and effectiveness of the Culture-General Assimilator in developing their intercultural competence. To finish with, a *learning contract* was made with the students. In the contract the students committed themselves to the training and an 80 percent attendance rate during the face-to-face tuition period. The students practiced analyzing the critical incidents in the pre- and post-test before and after the face-to-face tuition period, although the incidents were not analyzed with the facilitator. It is, however, possible that the students discussed the incidents with each other.

The reason for not analyzing any critical incidents with the BEng students during the face-to-face tuition period was that one of the purposes of the present study, and the training experiment (see Section 1.3), was to find out whether self-study with a Culture-General Assimilator, implemented as a Web-based application, provides added value, i.e. whether the students' learning outcomes, especially as to behavior and skills, after the self-study period are any better than before it, i.e. after the face-to-face tuition period.

At the beginning of the self-study period the BEng students were reminded of what had been explained before. They were also told in which computer and tutor classrooms they could use the Web-based application and

what they should do to get started. A demonstration in a classroom was considered unnecessary because engineering students are used to working with computers, and the application is equipped with the Help function. The students were told to study the critical incidents during their own time either independently or, to increase interaction, in pairs. It was also mentioned that should they prefer to study at home, they could print the critical incidents on paper. Printing all the incidents was not, however, recommended.

Finally, critical incidents, like intercultural training in general (see Section 5.9), may contain some pitfalls or stumbling blocks that the BEng students were warned against before they started the self-study period with the Web-based application: First of all, overgeneralizations and oversimplifications must be avoided, in other words, *stereotyping*.

9.3 Questionnaires

9.3.1 Contents of the Questionnaires

To collect data on the intercultural training experiment, a series of five questionnaires with both structured and open-ended test items were constructed. When constructing the questionnaires, student feedback (n = 157) on the intercultural training courses during the years 1998-1999 was made use of. Some ideas were also obtained from available literature (Gudykunst 1991: 15; 49; 69; 72; 75; 110; 116; 120-122; 126-127; 136; 139; 143; Sawyer and Smith 1994: 296-297; Singelis 1994: 269-271). The students were to fill in the questionnaires under controlled conditions, i.e. the lessons, both before and after the face-to-face tuition period and after the self-study period (see Questionnaires 1-5 in Appendices).

The *contents* of the *questionnaires* were as follows:

Questionnaire 1: *Before the Face-to-Face Tuition Period*

The BEng students'

- | |
|--|
| <ul style="list-style-type: none"> - demographic data by using structured and open-ended questions - affect by using declarative statements with agree/disagree/cannot say alternative responses - cognition by using declarative statements with agree/disagree/cannot say alternative responses - behavior and skills by using five critical incidents to be analyzed and solved (new incidents; not in the Web-based application) - assessment of oneself as a communicator in general and with foreigners |
|--|

Questionnaire 2: *After the Face-to-Face Tuition Period*

The BEng students'

- affect as above
- cognition as above
- behavior and skills as above, and three additional critical incidents to be analyzed and solved (randomly chosen from the Web-based application)

Questionnaire 3: *Feedback on the Face-to-Face Tuition Period: Self-Report and Peer Assessment*

The BEng students' opinions and attitudes by using open-ended questions

- importance of intercultural communication
- own performance
- performance of the facilitator
- performance of the peers
- training contents, materials, and techniques
- own learning
- suggestions for how to further develop the training course

Questionnaire 4: *After the Self-Study Period with the Web-Based Application*

The BEng students'

- behavior and skills by using five critical incidents to be analyzed and solved (randomly chosen from the Web-based application)
- intercultural skills based on self-assessment; the development of competence as a whole

Questionnaire 5: *Feedback on the Web-Based Application and Web-Based Learning in General*

The BEng students' opinions and attitudes by using a five-point Likert scale from "I agree totally" to "I disagree totally"

- the characteristics and contents of the Web-based application
- the Web-based application vs. a conventional study book
- the user interface of the Web-based application

9.3.2 Declarative Statements

For measuring relatively simple learning outcomes, single *declarative statements* can be used. The trainees are asked to mark a declarative statement "true" or "false", "agree" or "disagree", or the like. Probably the most common use of the alternative-response test items is in measuring the trainees' ability to identify the correctness of statements of fact, definitions of terms, and statements of principles. (Linn & Gronlund 2000: 178-180) In the present study, tens of declarative statements with the "agree" or "disagree" alternative responses were used to measure the BEng students' basic affect toward intercultural issues and foreigners living in Finland. Besides affect, declarative statements with the "agree" and "disagree" alternative responses were used to measure the students' basic cognition in intercultural communication. To decrease the

students' chances of guessing and to provide them with an "undecided" alternative, a third alternative called "cannot say" was added. The major advantage of the alternative-response test items was that the students could respond to a large number of test items in a relatively short period of time (cf. Ibid 2000: 180-182).

9.3.3 Scoring System for the Critical Incidents

Complex achievement includes learning outcomes based on the higher mental processes, such as understanding, critical thinking, and problem solving (Linn & Gronlund 2000: 217). In the present study, to measure the BEng students' complex learning outcomes, i.e. potential changes in behavior and skills, *critical incidents* were used (see Sections 5.7-5.9). Considering assessment, the rationales of critical incidents can be compared with open-ended essay questions. To assess the students' responses a quantitative *scoring system* based on the polytechnic assessment scale was developed: 0 (failed), 1-2 (satisfactory), 3-4 (good), and 5 (excellent).

A set of four *assessment criteria* for each rationale was constructed. The criteria were based on materials used during the intercultural training course, i.e. the handout and the Web-based application with hotwords. (See Tables 14-16.) The preferred, or "best", alternative explanation and each of the four criteria provided one point, the maximum number of points, i.e. grade, per each incident being five. Human life is often complicated: There is usually more than one way to solve a specific problem. Consequently, it can be assumed that critical incidents can also be solved in a number of ways. Because of this, even if the students had not chosen the "best" alternative explanation, they could get a point on the basis of their rationale, i.e. how well they had been able to state arguments for their choice. There was no sanction for a "not best" choice either.

9.4 Progress of the Training Experiment

Questionnaires 1-4 for the intercultural training experiment were constructed in December 1999, and pre-tested in January 2000 with the adult students studying alongside work ($n = 9$). Questionnaire 5 was constructed in the year 1997 for the first version of *The Same but Different*, i.e. the hypermedia-based program. (See Figure 1.) On the basis of the pre-testing, to get more accurate answers, the language used in all Questionnaires was changed from English into Finnish. Even if the intercultural training course was part of the BEng students' compulsory English studies, the primary purpose of the training experiment was to assess the potential development of the students' intercultural competence, not proficiency in English. A few phrases and expressions were also remodified.

The first part of the intercultural training experiment, i.e. the face-to-face tuition period with the 24 contact lessons (45 min each), was implemented in January-March 2000. The BEng students studied in their own groups, the size of one group varying from 9 to approximately 20 students. During the first contact

lesson, the students were told that the experiment was part of the present author's PhD studies at the University of Jyväskylä, and secondly, that there would be a series of questionnaires to be filled in and a Web-based application to be studied and tested by them. Thirdly, to receive a complete series of five questionnaires from each student, the students were asked to use their names when providing the answers. The students were guaranteed full anonymity when analyzing the research data. Next, the students were asked to answer the questionnaires as accurately and frankly as possible: There was no need to please the facilitator. To finish with, the students were asked to do the pre-test, i.e. to fill in Questionnaire 1. After the face-to-face tuition period, at the beginning of March 2000, the students took the first post-test, i.e. filled in Questionnaire 2 and provided feedback by filling in Questionnaire 3. (See Figure 1 and Appendices.)

The BEng students had three weeks to work with the Web-based application, *The Same but Different*, either independently or in pairs. After the self-study period, at the beginning of April 2000, the students took the second post-test, i.e. filled in Questionnaire 4 and provided feedback, i.e. filled in Questionnaire 5 (see Appendices) to find out, whether self-study with the Web-based application had provided any added value considering the learning outcomes, especially in behavior and skills. (See Figure 1.)

Because all the questionnaires were filled in under controlled conditions, i.e. during the first and last face-to-face lessons and the follow-up discussion after the self-study period, and because the BEng students agreed to use their names, the *response rate* was 100 % ($n = 117$). There were a couple of students who were not present when some of the questionnaires were filled in, and their contribution to the intercultural training experiment was omitted. The *time* the students spent on replying each questionnaire varied from approximately one hour to two hours.

9.5 Processing the Data

Before commencing the training experiment, the research problem (see Section 1.3) was divided into five problem areas each with a set of research questions (see Section 8.4). When processing the results of the experiment, both qualitative and quantitative research methods were applied.

Qualitative research was used to read, interpret, classify, and quantify the contents of the questionnaires. Qualitative research was also used to discuss the end results as well as to reach conclusions. *Statistical description* was used to compare the results of the pre-test and the two post-tests with each other. For Problem Areas 1-5, the frequency and percentage scores were computed. For the self-study period of Problem Area 1, i.e. behavior and skills, the mean scores were also computed.

To define the *statistical significance* of the percentage scores in Problem Area 1, i.e. potential changes in affect and cognition when measured before and after the face-to-face period, the non-parametric *Chi Square* test was used. The

test is, however, valid only for large samples. Considering the number of small frequency scores in the present research data, the criterion set on the test was not met, and part of the results of the test were not valid. Therefore, a decision was made to reject all the end results of the Chi Square test. The comparison between the situations before and after the face-to-face tuition period, i.e. whether there was any change in the BEng students' affect and cognition, was made on the basis of the percentage scores, instead.

To define the statistical significance of the mean scores in Problem Area 1, i.e. potential changes in behavior and skills when measured before and after the face-to-face tuition period and after the self-study period, the *Wilcoxon matched-pairs signed-ranks* test was used. In the statistical description *Microsoft Excel 97* and *SPSS 8.0 for Windows* were utilized.

10 ANALYZING THE DATA

To begin with, the background of the Bachelor of Engineering, or BEng, students participating in the training experiment will be introduced (Section 10.1). The analyses of the research data are based on the research problem (see Section 1.3) divided into five problem areas each with a sequence of research questions (see Section 8.4) and their answers. First, the development of the BEng students' intercultural competence, including affect, cognition, and behavior, as a result of the intercultural training course is discussed (Problem Area 1; Section 10.2), secondly, the learning outcomes and benefits of the intercultural training course as experienced by the BEng students are described (Problem Area 2; Section 10.3), thirdly, the BEng students' motivation to develop their intercultural competence is considered (Problem Area 3; Section 10.4), fourthly, the BEng students' input in the intercultural training course and their feedback on it are dealt with (Problem Area 4; Section 10.5), and finally, the BEng students' suggestions for the further development of the intercultural training course are introduced (Problem Area 5; Section 10.6).

10.1 The BEng Students: Background

The background data on the BEng students is based on the responses provided by the students in Questionnaire 1 before the face-to-face tuition period. (See Appendices.)

10.1.1 The BEng Students: Demographic Data

Gender, age, and home place. As many as 89.7 % of the BEng students were male, the percentage of female students being 10.3 %. The average age of the students was 23.3 years. Most students (76.1 %) were from the town of Kajaani or the

province of Kainuu, the rest being from the region of Oulu (17.1 %) and the other parts of Finland (6.8 %).

Prior education. A little more than two thirds of the BEng students (68.4 %) had taken the senior high school diploma, a little less than one third (31.6 %) having a vocational background. There were also a few students who had both high school diploma and some kind of vocational education, for example, a technician engineer (in Finnish *teknikko*) or business graduate (in Finnish *merkonomi*). (See Table 1.)

TABLE 1 The BEng students: prior education

Educational institutions	Students (n = 117)	Students %
Senior high school	80	68.4
Vocational institute	23	19.7
Business college	7	5.9
Institute of technology	5	4.3
Other	2	1.7
Total	117	100.0

Knowledge of foreign languages. More than two thirds of the BEng students (70.0 %) had studied two foreign languages: Swedish and English. Almost one quarter of the students (24.7 %) also knew some German. The knowledge of other languages was minimal. (See Table 2.)

TABLE 2 The BEng students: knowledge of foreign languages

Languages	Students (n = 117)	Students %
Swedish, English	82	70.0
Swedish, English, German	29	24.7
Swedish, English, French	3	2.6
Swedish, English, Russian	1	0.9
Swedish, English, German, Italian	1	0.9
Swedish, English, French, Russian	1	0.9
Total	117	100.0

10.1.2 The BEng Students: Foreign Experiences

Countries visited. As a group the BEng students had visited 40 different countries around the world, the most popular ones being Sweden (n = 88; 75.2 % of the students); Norway (n = 55; 47.0 %); Estonia (n = 27; 23.1 %); Denmark and Spain (n = 26; 22.2 % each); and Russia and Greece (n = 25; 21.4 % each). An average student had been abroad on holiday for 5.4 weeks, (s)he had studied abroad for 1.3 weeks, and (s)he had worked abroad for 1.1 weeks.

Cultural differences in everyday conventions. While being abroad, the BEng students had encountered a number of foreign customs that they found different from Finnish ones. These included

traffic; dress code; greetings (e.g. frequent hand shaking in Germany, kissing on the cheek in France); food, meals, meal times, use of alcohol, restaurants; shopping,

bargaining, bakeries (availability of fresh bread), tipping; siesta; wearing/not wearing shoes at home; how positive, friendly, open, talkative, polite people are/are not; complimenting; attitudes toward foreigners, and work ethics.

To sum up, the average BEng student at Kajaani Polytechnic participating in the intercultural training experiment (see Table 3) was a 23 years old male called Juha from Kajaani. Juha had taken the senior high school diploma. Juha's foreign languages included Swedish and English, with a better knowledge of English than Swedish. At Kajaani Polytechnic Juha has been studying information technology. So far Juha has visited Sweden, but he would like to work and/or study abroad, working being the more attractive option. When working abroad, Juha would like to develop his linguistic and other intercultural skills in particular (see Sections 3.4 and 6.2).

TABLE 3 A typical BEng student in the training experiment (n = 117)

Data		Students %
Name	Juha	6.0
Gender	male	89.7
Age	23.3	-
Where...from	Kajaani/Kainuu	76.1
Prior education	senior high school diploma	68.4
Knowledge of languages	English, Swedish	70.0
Degree program	information technology	88.9
Holidays abroad	Sweden	75.0
	Norway	47.0

10.1.3 Discussing the Results

Engineering studies with their mathematical orientation do not attract many female students, the percentage of female Bachelor of Engineering, or BEng, students at Kajaani Polytechnic being 10 %. The percentage equals with the national percentage of female BEng students (cf. Section 2.1). Most students (76 %) participating in the intercultural training experiment were from the town of Kajaani and the province of Kainuu. Two thirds of the students (68 %) had a senior high school background, one third (32 %) having a vocational education. This is almost in accordance with the goal (35 %) set by the Finnish Ministry of Education.

Because of their different educational backgrounds, the BEng students' basic skills in subjects such as foreign languages are extremely different, the level varying from fluent to poor. Polytechnic foreign language education must be able to meet this challenge by providing counseling and tutoring, for example. The gap students with a vocational background have in their English skills, especially at the beginning of their polytechnic studies, had to be specially taken into consideration when designing and implementing the intercultural training course.

Because of the Content and Language Integrated Learning, or CLIL, approach applied in the intercultural training course, some of the language used in the course materials, i.e. the handout, and during the face-to-face tuition period had to be simplified. When designing and implementing *The Same but*

Different, i.e. the Web-based application, its language was also simplified to some extent. Because the BEng students must, on the other hand, get used to authentic language, simplifying language cannot, in general, be recommended. *Authentic language* refers here to language used in real-world contexts, not produced and simplified for training purposes.

Another issue connected with language(s) is that most BEng students' (70 %) knowledge of foreign languages only contained Swedish and English, Swedish actually being one of the two national languages of Finland (cf. Table 2). Even if English is the *lingua franca* used in industry and business globally, it does not exclude the need for other languages (cf. e.g. Prolang 2000). As Hoecklin (1995), for example, points out, the knowledge of the local language(s) helps understand the "hidden" aspects of the local culture(s). An unfortunate fact is that there is not much time to enhance the students' proficiency in foreign languages during the engineering studies, the overall studying schedule being so intensive. There are, however, other ways to support and supplement polytechnic foreign language education. These include self-study utilizing new technology such as Web-based learning, use of foreign languages in other subjects (cf. CLIL), participation in various internationalization activities provided by polytechnics, traveling abroad on holiday, studying and/or working abroad, and following the media. It is of major importance to accept and understand the fact that enhancing foreign language proficiency is indeed a life-long process.

10.2 The BEng Students: Effectiveness of the Intercultural Training Course in Developing Intercultural Competence

Summative assessment is used to define to what extent the objectives set on the training were achieved (Brislin & Yoshida 1994a). The data discussing the effectiveness of the intercultural training course in developing the Bachelor of Engineering, or BEng, students' intercultural competence, including affect, cognition, and behavior, was gathered before the face-to-face tuition period (Questionnaire 1; Test 1 [Pre-test]), after the face-to-face tuition period (Questionnaire 2; Test 2 [Post-test 1]), and after the self-study period with the Web-based application (Questionnaire 4; Test 3 [Post-test 2]). (See Appendices.)

The first *component* of intercultural competence to be discussed was affect because it is a kind of foundation, which the other components are built on. Affect was followed by cognition and behavior and skills. Tests 1 and 2 were used for affect and cognition, while Tests 2 and 3 were used for behavior and skills. The time interval between Tests 1 and 2 was approximately two months, and between Tests 2 and 3 approximately three weeks.

To assess the *development* of the BEng students' affect and cognition, a number of "agree" and "disagree" statements, i.e. variables, were used. To obtain quantitative data on the potential change, i.e. perspective transformation (Mezirow 1991; Taylor 1994), in the students' affect and cognition, the frequencies and percentages of the variables were computed.

To assess the development of the BEng students' behavior and skills,

simulated intercultural encounters, i.e. a Culture-General Assimilator consisting of 25 critical incidents and implemented as a Web-based application, were used. To obtain quantitative data on the potential change, i.e. perspective transformation, in the students' behavior, a scoring system based on the polytechnic assessment scale from 0 (failed) to five (excellent) was developed (see Subsection 9.3.3).

In addition to the frequencies of the Beng students' choice of the preferred, or "best", alternative explanations and mentioning of the four criteria determined for each rationale, the mean scores of the students' grades per each incident were computed. The statistical significance of the potential changes in the mean scores was tested with the *Wilcoxon* test.

In the Tables below, T1 refers to the pre-test before the face-to-face tuition period (Questionnaire 1), while T2 refers to the post-test after the face-to-face period (Questionnaire 2). *Sig* refers to the statistical significance. To determine the statistical significance of the tested differences, or independences, the following *Sig*, or *p*, values were applied:

statistically very significant	$p < 0.001$	***
statistically significant	$0.001 \leq p < 0.01$	**
statistically almost significant	$0.01 \leq p \leq 0.05$	*
statistically non-significant	$p \geq 0.05$	ns

The declarative statements, i.e. variables, used to assess the BEng students' affect and cognition were in Finnish in the Questionnaires. For the Tables below, the main contents of the variables were translated into English. When discussing the results, the first percentage in the parentheses refers to Test 1 (i.e. pre-test), the second one referring to Test 2 (i.e. post-test).

10.2.1 Development of Affect

The impact of world view and acceptance of cultural diversity. Most BEng students (86.3 % T1; 94.9 % T2) agreed that people's cultural backgrounds, i.e. prior cultural experiences, being different, they may attribute meanings that are not isomorphic when they perceive something. Most students (70.1 % T1; 87.2 % T2) also agreed that misinterpretations and misunderstandings caused by different attributions are the main reason for problems and conflicts in intercultural communication. Furthermore, most students (86.3 % T1; 94.0 % T2) found mindfulness, i.e. the ability to make isomorphic attributions and/or to negotiate meanings (e.g. Gudykunst 1991), an integral part of intercultural competence. Another integral part of intercultural competence found by most students (75.2 % T1; 94.0 % T2) was the ability to tolerate and understand cultural diversity without excessive anxiety and stress. To finish with, most students (71.8 % T1; 92.3 % T2) thought that to be able to function beyond their own world view, people usually need intercultural training. (See Table 4.)

TABLE 4 The BEng students: the impact of world view and acceptance of cultural diversity (n = 117; %)

Variables	T1	T1%	T2	T2 %
1. People have different world views.				
Agree	115	98.3	114	97.4
Disagree	-	-	1	0.9
Cannot say	2	1.7	2	1.7
Total	117	100.0	117	100.0
2. Perception is influenced by culture.				
Agree	108	92.3	113	96.6
Disagree	5	4.3	2	1.7
Cannot say	4	3.4	2	1.7
Total	117	100.0	117	100.0
3. There can be different meanings.				
Agree	101	86.3	111	94.9
Disagree	9	7.7	2	1.7
Cannot say	7	6.0	4	3.4
Total	117	100.0	117	100.0
4. Different meanings cause problems.				
Agree	82	70.1	102	87.2
Disagree	20	17.1	8	6.8
Cannot say	15	12.8	7	6.0
Total	117	100.0	117	100.0
5. Negotiation of meanings is important.				
Agree	101	86.3	110	94.0
Disagree	9	7.7	1	0.9
Cannot say	7	6.0	6	5.1
Total	117	100.0	117	100.0
6. All intercultural communication is not problematic.				
Agree	95	81.2	96	82.1
Disagree	10	8.5	10	8.5
Cannot say	12	10.3	11	9.4
Total	117	100.0	117	100.0
7. In today's working life tolerance of difference is required.				
Agree	110	94.0	114	97.4
Disagree	4	3.4	3	2.6
Cannot say	3	2.6	-	-
Total	117	100.0	117	100.0
8. Because internationalization is increasing, intercultural competence and training are more and more important.				
Agree	108	92.3	113	96.6
Disagree	4	3.4	2	1.7
Cannot say	5	4.3	2	1.7
Total	117	100.0	117	100.0
9. One of the main objectives of training is to develop a multiple world view.				
Agree	84	71.8	108	92.3
Disagree	19	16.2	5	4.3
Cannot say	14	12.0	4	3.4
Total	117	100.0	117	100.0

(Continues)

TABLE 4 (Continues)

10. It is important to be able to tolerate differences without excessive anxiety and stress.

Agree	88	75.2	110	94.0
Disagree	17	14.5	3	2.6
Cannot say	12	10.3	4	3.4
Total	117	100.0	117	100.0

Approach- and avoidance-orientedness in general. Most BEng students (97.4 % T1; 95.7 % T2) found it acceptable that people have contacts with foreigners, i.e. people whose citizenship is not Finnish. Two thirds (63.2 % T1; 70.9 % T2) of the students had foreign contacts of their own, and almost half of them (40.2 % T1; 45.3 % T2) would like to have more contacts in the future.

The roles in which the BEng students accepted foreigners varied. Half of the students (48.7 % T1; 55.6 % T2) accepted foreigners as their neighbors. [We cannot usually choose our neighbors.] Almost half of the students (46.2 % T1; 42.8 % T2), however, considered the neighbors' nationality of importance. Most students (77.8 % T1; 77.8 % T2) thought that marrying a foreigner in general is acceptable, and they (74.4 % T1; 79.4 % T2) could marry a foreigner themselves. More than half of the students (52.1 % T1; 55.6 % T2), however, found the spouse's nationality of importance. Approximately one fifth of the BEng students (18.0 % T1; 23.9 % T2) thought that it is harder to accept foreigners coming from very different cultures compared with the Finnish culture than foreigners coming from cultures closer to the Finnish one. Practically all students (94.9 % T1; 96.6 % T2) would at some point like to have some contacts with foreigners. (See Table 5.)

TABLE 5 The BEng students: approach- and avoidance-orientedness (n = 117; %)

Variables	T1	T1%	T2	T2%
1. Other people's contacts with foreigners are OK.				
Agree	114	97.4	112	95.7
Disagree	-	-	3	2.6
Cannot say	3	2.6	2	1.7
Total	117	100.0	117	100.0
2. I have contacts with foreigners.				
Agree	74	63.2	83	70.9
Disagree	40	34.2	32	27.4
Cannot say	3	2.6	2	1.7
Total	117	100.0	117	100.0
3. I would like to have more foreign contacts.				
Agree	47	40.2	53	45.3
Disagree	37	31.6	29	24.8
Cannot say	33	28.2	35	29.9
Total	117	100.0	117	100.0

(Continues)

TABLE 5 (Continues)

4. Foreign neighbors are nice.				
Agree	57	48.7	65	55.6
Disagree	27	23.1	19	16.2
Cannot say	33	28.2	33	28.2
Total	117	100.0	117	100.0
5. Neighbors' nationality is not important.				
Agree	50	42.7	52	44.4
Disagree	54	46.2	50	42.8
Cannot say	13	11.1	15	12.8
Total	117	100.0	117	100.0
6. If a member of my family marries a foreigner, it is OK.				
Agree	91	77.8	91	77.8
Disagree	11	9.4	12	10.3
Cannot say	15	12.8	14	11.9
Total	117	100.0	117	100.0
7. I could marry a foreigner (if I were not dating/engaged/married.)				
Agree	87	74.4	93	79.4
Disagree	20	17.1	12	10.3
Cannot say	10	8.5	12	10.3
Total	117	100.0	117	100.0
8. The spouse's nationality is not important.				
Agree	45	38.5	37	31.6
Disagree	61	52.1	65	55.6
Cannot say	11	9.4	15	12.8
Total	117	100.0	117	100.0
9. The more different the other person's culture is, the harder it is to accept him/her.				
Agree	21	18.0	28	23.9
Disagree	72	61.5	62	53.0
Cannot say	24	20.5	27	23.1
Total	117	100.0	117	100.0
10. I don't want to have anything to do with foreigners.				
Agree	2	1.7	2	1.7
Disagree	111	94.9	113	96.6
Cannot say	4	3.4	2	1.7
Total	117	100.0	117	100.0

Prejudices toward foreigners living in Finland. Most BEng students (T1 92.3 %; T2 85.5 %) thought that there is racism in today's Finland. During the face-to-face tuition period a little bit more than half of the students (T1 35.9 %; T2 53.0 %) started thinking that it is more ethnocentrism rather than real racism. More than half of the students (53.8 % T1; 54.7 % T2) found racial discrimination a problem in Finland.

Approximately one fifth of the BEng students (23.1 % T1; 18.8 % T2) thought that the Finnish media pays too much attention to foreigners living in Finland. When asked whether foreigners' demands for equal [lingual and political] rights with Finns are unjustified, the students had difficulties in deciding: The percentage of those who thought "no" increased (25.6 % T1; 36.8

% T2), while the percentage of those who thought "yes" remained almost the same (31.6 % T1; 29.0 % T2). The percentage of those who could not decide decreased (42.8 % T1; 34.2 % T2).

A few BEng students (13.7 % T1; 12.0 % T2) referred to the socio-economic threat caused by immigrants, especially by foreign employees, and experienced by Finns. More than two thirds of the students (70.9 % T1; 73.5 % T2) did not have any such fear. More than one third of the students (40.2 % T1; 36.7 % T2) found immigrants lazy while another approximate third (30.8 % T1; 41.9 % T2) found them hard-working. More than one fifth of the students (29.0 % T1; 21.4 % T2) could not decide whether immigrants are lazy or not.

Whether foreigners spread drugs was also a difficult issue to decide, the percentages of "cannot say" answers being 42.7 % (T1) and 34.2 % (T2). At the beginning of the face-to-face tuition period less than one third of the BEng students (30.8 % T1) thought that foreigners do not spread drugs while at the end of it more than one third thought so (38.5 % T2). The percentage of those who thought that foreigners spread drugs (26.5 % T1; 27.3 % T2) did not change significantly during the face-to-face tuition period. Almost half of the students (49.6 % T1; 47.0 % T2) thought that along with the increasing number of foreigners there will be more organized crime in Finland. Less than one fifth of the students (15.4 % T1; 17.9 % T2) thought that foreigners spread aids and other diseases. (See Table 6.)

TABLE 6 The BEng students: prejudices toward foreigners living in Finland (n = 117; %)

Variables	T1	T1%	T2	T2%
1. There is racism in Finland.				
Agree	108	92.3	100	85.5
Disagree	4	3.4	13	11.1
Cannot say	5	4.3	4	3.4
Total	117	100.0	117	100.0
2. It is ethnocentrism, not real racism.				
Agree	42	35.9	62	53.0
Disagree	45	38.5	32	27.4
Cannot say	30	25.6	23	19.6
Total	117	100.0	117	100.0
3. Discrimination of foreigners is not a problem in Finland.				
Agree	35	30.0	30	25.6
Disagree	63	53.8	64	54.7
Cannot say	19	16.2	23	19.7
Total	117	100.0	117	100.0
4. Finnish media is too interested in foreigners.				
Agree	27	23.1	22	18.8
Disagree	55	47.0	57	48.7
Cannot say	35	29.9	38	32.5
Total	117	100.0	117	100.0

(Continues)

TABLE 6 (Continues)

5. Foreigners' demands for equality are unjustified.

Agree	37	31.6	34	29.0
Disagree	30	25.6	43	36.8
Cannot say	50	42.8	40	34.2
Total	117	100.0	117	100.0

6. Immigrants take jobs from Finns.

Agree	16	13.7	14	12.0
Disagree	83	70.9	86	73.5
Cannot say	18	15.4	17	14.5
Total	117	100.0	117	100.0

7. Many foreigners are lazy and don't work.

Agree	47	40.2	43	6.7
Disagree	36	30.8	49	41.9
Cannot say	34	29.0	25	21.4
Total	117	100.0	117	100.0

8. Many foreigners spread drugs.

Agree	31	26.5	32	27.3
Disagree	36	30.8	45	38.5
Cannot say	50	42.7	40	34.2
Total	117	100.0	117	100.0

9. Many foreigners increase organized crime.

Agree	58	49.6	55	47.0
Disagree	30	25.6	38	32.5
Cannot say	29	24.8	24	20.5
Total	117	100.0	117	100.0

10. Many foreigners spread aids and other diseases.

Agree	18	15.4	21	17.9
Disagree	53	45.3	56	47.9
Cannot say	46	39.3	40	34.2
Total	117	100.0	117	100.0

Ethnocentrism vs. ethnorelativism. A few BEng students (6.0 % T1; 6.0 % T2) thought that foreigners are not needed in Finland, i.e. most students (81.2 % T1; 82.0 % T2) thought that foreigners are needed. When judging foreigners, one third of the students (33.3 % T1; 33.3 % T2) told to apply their own, i.e. Finnish, values, while half of the students (45.3 % T1; 50.4 % T2) told to apply a broader perspective.

When in Finland, most students (84.6 % T1; 84.6 % T2) liked the idea of working with Finns as well as foreigners. Most students (79.5 % T1; 83.8 % T2) also liked the idea of working abroad with foreigners. Almost half of the students (43.6 % T1; 45.3 % T2) preferred working with Swedes to working with Russians. Approximately one quarter of the students (28.2 % T1; 24.8% T2) preferred working with Russians to working with Somalians. More than half of the students (58.9 % T1; 59.8 % T2) found coworkers' nationality unimportant. When asked about foreigners' attitudes toward Finns, more than one third of the students (35.9 % T1; 35.9 % T2) thought that they are positive.

More than half of the BEng students (58.1 % T1; 62.4 % T2) found foreign values in general as sensible as Finnish ones. Almost all students (91.4 % T1; 96.6 % T2) thought that there are cultural differences when considering values

in working life. Most students (70.9 % T1; 78.6 % T2) thought that foreign coworkers can have a lot to give to Finns. (See Table 7.)

TABLE 7 The BEng students: ethnocentrism vs. ethnorelativism (n = 117; %)

Variables	T1	T1%	T2	T2%
1. We don't need foreigners in Finland.				
Agree	7	6.0	7	6.0
Disagree	95	81.2	96	82.0
Cannot say	15	12.8	14	12.0
Total	117	100.0	117	100.0
2. I use my values to judge foreigners.				
Agree	39	33.3	39	33.3
Disagree	53	45.3	59	50.4
Cannot say	25	21.4	19	16.3
Total	117	100.0	117	100.0
3. When in Finland, I prefer to work with Finns.				
Agree	27	23.1	26	22.2
Disagree	79	67.5	82	70.1
Cannot say	11	9.4	9	7.7
Total	117	100.0	117	100.0
4. When in Finland, I like to work with foreigners, too.				
Agree	99	84.6	99	84.6
Disagree	5	4.3	6	5.1
Cannot say	13	11.1	12	10.3
Total	117	100.0	117	100.0
5. I also like to work abroad with foreigners.				
Agree	93	79.5	98	83.8
Disagree	10	8.5	6	5.1
Cannot say	14	12.0	13	11.1
Total	117	100.0	117	100.0
6. I prefer working with Swedes to working with Russians.				
Agree	51	43.6	53	45.3
Disagree	27	23.1	25	21.4
Cannot say	39	33.3	39	33.3
Total	117	100.0	117	100.0
7. I prefer working with Russians to working with Somalians.				
Agree	33	28.2	29	24.8
Disagree	28	23.9	27	23.1
Cannot say	56	47.9	61	52.1
Total	117	100.0	117	100.0
8. I don't understand why foreigners wouldn't like Finns.				
Agree	42	35.9	42	35.9
Disagree	48	41.0	51	43.6
Cannot say	27	23.1	24	20.5
Total	117	100.0	117	100.0

(Continues)

TABLE 7 (Continues)

9. Foreigners' values are just as sensible as Finns' values.

Agree	68	58.1	73	62.4
Disagree	22	18.8	20	17.1
Cannot say	27	23.1	24	20.5
Total	117	100.0	117	100.0

10. There are cultural differences in the values of working life.

Agree	107	91.4	113	96.6
Disagree	5	4.3	-	-
Cannot say	5	4.3	4	3.4
Total	117	100.0	117	100.0

11. Coworkers' nationality is not important.

Agree	69	58.9	70	59.8
Disagree	34	29.1	35	29.9
Cannot say	14	12.0	12	10.3
Total	117	100.0	117	100.0

12. Foreign coworkers have a lot to give.

Agree	83	70.9	92	78.6
Disagree	1	0.9	6	5.2
Cannot say	33	28.2	19	16.2
Total	117	100.0	117	100.0

10.2.2 Discussing the Results

To assess the effectiveness of intercultural training in developing the BEng students' *affect* as part of their intercultural competence, the students filled in two questionnaires: before the face-to-face tuition period (Questionnaire 1; Test 1; [Pre-test]), and after it (Questionnaire 2; Test 2; [Post-test 1]). To determine the significance of the tested differences the percentage scores were used.

The first set of variables measuring the potential change, i.e. perspective transformation (Taylor 1994), in the BEng students' affect discussed perceptual difference and its impact on people's *world view* (e.g. Hoopes 1981). It also discussed the tolerance and understanding of *cultural diversity* in general and in working life. (See Table 4.) Most BEng students (86 % T1; 95 % T2) grasped the relationship between the socialization process (see Section 3.2) and the concept of attribution (e.g. Samovar & Porter 1991; see Subsections 4.2.1 and 5.7.2) before the face-to-face tuition period, and (70 % T1; 87 % T2) found the inability to make isomorphic attributions the main reason for problems and conflicts in intercultural encounters. They (86 % T1; 94 % T2) also found mindfulness, i.e. the ability to negotiate meanings (e.g. Gudykunst 1991), an integral part of intercultural competence (see Section 3.4).

Most BEng students (92 % T1; 97 % T2) also thought before the face-to-face tuition period that along with the internationalization and globalization of working life [including mergers, foreign assignments and business trips, multicultural teams, projects, meetings, and negotiations], the demand for intercultural competence and intercultural training has increased, respectively. Most students (72 % T1; 92 % T2) thought that intercultural training aims at broadening trainees' perspective, i.e. world view. They (75 % T1; 94 % T2) found the ability to tolerate cultural diversity, i.e. to manage ambiguity and

uncertainty connected with unknown and new situations without excessive anxiety and stress (e.g. Gudykunst 1991), an integral part of intercultural competence (see Section 3.4).

When comparing the percentage scores of the variables discussing the impact of world view and acceptance of cultural diversity before and after the face-to-face tuition period (see Table 4), there was some change, i.e. perspective transformation, in the BEng students' affect. This applies to Variable 9 discussing the development of a multiple world view as one of the objectives of intercultural training (T1 72 %; T2 92 %), and Variable 10 discussing the tolerance and understanding of difference without excessive anxiety and stress (T1 75 %; T2 94 %), in particular. Most of the variables discussing the impact of world view and cultural diversity actually measured cognition in affect rather than affect itself. In this respect the construct validity of the declarative statements, i.e. variables, was not so good as possible. It is also likely that the end result would have been different, if the students had been asked to define concepts such as world view, perception, and attribution instead of asking them to agree or disagree with the given declarative statements.

The second set of variables measuring potential change, i.e. perspective transformation, in the BEng students' affect discussed the students' *approach-and avoidance-orientedness* (see Table 5). Most students (97 % T1; 96 %) had no problems in accepting people's contacts with foreigners in general (cf. Jaakkola 1999: 83 % of Finns accepted foreigners as friends [friends can be chosen]). Two thirds of the students (63 % T1; 71 % T2) had foreign contacts of their own, and more than one third (40 % T1; 45 % T2) would like to increase the number of their contacts. According to Jaakkola (1999), the number of personal social contacts with foreigners accounts for positive attitudes toward them.

The roles in which the BEng students accepted foreigners varied from that of neighbor to that of spouse. Half of the students (49 % T1; 56 %) accepted foreigners as neighbors (cf. Jaakkola 1999: 77 % of Finns [neighbors cannot usually be chosen]). Almost half of the students (46 % T1; 43 % T2) found the nationality of the neighbors important. Most students (74 % T1; 79 % T2) could marry a foreigner (cf. Jaakkola 1999: 48 % of Finns). A little bit more than half of the students (52 % T1; 56 % T2), however, referred to the importance of the spouse's nationality. Before the face-to-face tuition period almost two thirds (62 % T1) of the BEng students found the degree of foreigners' cultural diversity, when compared with Finnish culture, of no importance. After the face-to-face tuition period this percentage, for an unknown reason, decreased to 53 % (T2). In Subsection 10.4.4, when asked whether the interlocutor's nationality is of importance in communication, one third of the students (32 %) answered "yes", another third (33 %) "no", the remaining third (35 %) providing no answer at all. The nationality of the interlocutor seems to be important to approximately half of the BEng students. The importance of nationality refers to the ethnic hierarchies Finns tend to have (cf. Jaakkola 1999). In other words, Finns have ranking lists in which nationalities closest to Finnish one, e.g. Swedes, are ranked higher than those very different from it, e.g. Somalians. The ethnic hierarchies may be reflected in Finns' willingness and motivation to communicate in specific foreign languages as well.

When comparing the percentage scores of the variables discussing the

BEng students' approach- and avoidance-orientedness before and after the face-to-face tuition period (see Table 5), there was actually no change, i.e. perspective transformation, in the BEng students' affect. When comparing the BEng students with other Finns (cf. Jaakkola 1999), there was some difference, that is, the BEng students' attitudes toward a foreign spouse were more positive than those of other Finns. Their attitudes toward a foreign neighbor were, instead, more negative than those of other Finns. In the BEng students' opinion the spouse's nationality was a bit more important than that of a neighbor.

The third set of variables measuring potential change, i.e. perspective transformation, in the BEng students' affect discussed the students' *prejudices* toward foreigners in Finland and especially foreign job seekers (see Table 6). Even if the percentage score decreased a little during the face-to-face tuition period, most students (92 % T1; 86 % T2) thought that there is racism in Finland. In Jaakkola's study (1999), 79 % of Finns assessed themselves more or less racist. At the end of the face-to-face tuition period more than half of the BEng students (36 % T1; 53 % T2) thought that it is not real racism but ethnocentrism. More than half of the students (54 % T1; 55 % T2) thought that foreigners living in Finland suffer from racial discrimination. This is in accordance with the Annual Report of EUMC (1999) according to which half of foreigners living in Finland (51 %) reported having had personal experiences of increased discrimination in everyday life.

More than one third of the BEng students (26 % T1; 37 % T2) only found foreigners' demands for equality with Finns justified after the face-to-face tuition period. This is in accordance with Jaakkola (1999): The economic boom and increased number of foreigners has not increased Finns' readiness to raise foreigners' lingual and political rights. Almost half of the students (47 % T1; 49 % T2) thought that the Finnish media is not too active transmitting news on foreigners.

Most BEng students (71 % T1; 74 % T2) made no reference to the socio-economic threat caused by foreigners living in Finland and experienced by Finns. At the end of the face-to-face tuition period almost half of the students (42 % T2) thought that foreigners are not lazy, i.e. their attitudes toward foreigners were more positive than before the face-to-face tuition (31 % T1). In Finland, unemployment among foreigners has been high, more than 30 %. Therefore it is important to separate laziness from unemployment based on external circumstances. Half of the students (50 % T1; 47 % T2) assumed that foreigners spread organized crime in Finland (cf. Jaakkola 1999: 73 % of Finns). Less than one third of the students (27 % T1; 27 % T2) thought that foreigners distribute drugs (cf. Jaakkola 1999: 77 % of Finns). A few students (15 % T1; 18 % T2) assumed that foreigners spread aids and other diseases (cf. Jaakkola 1999: 74 % of Finns).

When comparing the percentage scores of the variables discussing the BEng students' prejudices toward foreigners, especially immigrants, before and after the face-to-face tuition period (see Table 6), there was some change, i.e. perspective transformation, in the students' affect. This applies to Variable 2 discussing racism vs. ethnocentrism, in particular. When comparing the BEng students with other Finns (cf. Jaakkola 1999), there were a couple of differences. First, unlike other Finns the students had no fear of foreign job seekers. This

can, at least partially, be explained by the students' short work experience and today's good job situation in industry. Secondly, the BEng students' fear of foreigners spreading organized crime, drugs, aids, and other diseases was smaller than that of other Finns.

The final set of variables measuring potential change, i.e. perspective transformation, in the BEng students affect, discussed the students' *ethnocentrism* and/or *ethnorelativism* (see Table 7). Most BEng students would like to work with foreigners both in Finland (85 % T1; 85 % T2) and abroad (80 % T1; 84 % T2). This is in accordance with Jaakkola's study (1999), in which 83 % of Finns accepted foreign coworkers. Almost half of the students (44 % T1; 45 % T2) found working with Swedes more preferable to working with Russians (cf. Jaakkola 1999: 74 % of Finns accepted Swedish immigrants), and less than one third (28 % T1; 25 % T2) found working with Russians more preferable to working with Somalians (cf. Jaakkola 1999: 35 % of Finns accepted Russian immigrants and 32 % Somalian immigrants).

Most BEng students (81 % T1; 82 % T2) thought that foreigners are needed in Finland (cf. Jaakkola 1999: 62 % of Finns thought that Finland should receive foreign job seekers). In Jaakkola's study (1999), men in their early thirties emphasized the importance of receiving "useful", i.e. educated and/or trained, foreigners. According to EVA's report (2001), 39 % of Finns thought that, due to the shortage of qualified labor, some highly specialized fields could employ foreigners. According to the same report, 28 % of Finns thought that, due to the ageing of the Finnish population, immigration to Finland should be made easier. When asked about foreigners' attitudes toward Finns, the students' answers were spread over the three options, more than one third of the students (36 % T1; 36 % T2) assuming that there is no reason why foreigners would not like Finns.

In Section 10.4.4 Table 29, when assessing themselves as communicators with foreigners, 80 % of the BEng students try to understand foreigners' life experiences from their perspective. Here half of the students (45 % T1; 50 % T2) thought they would be able to apply foreigners' values when judging them. More than half of the students (58 % T1; 62 % T2), however, found foreigners' values as sensible as Finns' values. The majority of the students (92 % T1; 97 % T2) thought that each culture has its own values connected with working life [including the work itself, salary, benefits, free-time, permanence of work, and advancement in career]. Even if foreigners' values make sense, applying them is not easy. Most students (71 % T1; 79 % T2) thought that foreign coworkers can have a lot to give to Finns.

When comparing the percentage scores of the variables discussing the BEng students' ethnocentrism vs. ethnorelativism before and after the face-to-face tuition period (see Table 7), there was not much change, i.e. perspective transformation, in the BEng students' affect. When comparing the BEng students with other Finns (cf. Jaakkola 1999), there were a couple of differences. First, considering the need for foreigners in Finland, the students seemed to have more positive attitudes than other Finns. Secondly, the students' ethnic hierarchies connected with coworkers' nationalities were a bit less strict than those of other Finns. Considering the potential shortage of qualified labor in the European Union (EU) countries, including Finland, in a few years' time, it is of

major importance that Finns have positive attitudes toward foreign job seekers and employees. Even if there is a possible need for unskilled labor, foreigners coming to Finland for humanitarian reasons will not solve the problem if /when there are positions requiring special qualifications to be filled.

To sum up, the BEng students' affect as one of the three components of their intercultural competence did not develop much during the training experiment. It was proven that transforming affect is a difficult and time-consuming process. Even if there was not much perspective transformation in the students' affect, the students' attitudes toward foreigners were in some cases more positive than those of Finns' in general (cf. Jaakkola 1999). These included people's contacts with foreigners in general (Table 5 Variable 1), the idea of marrying a foreigner (Table 5 Variable 7), foreigners as the source of increased crime (Table 6 Variable 9), drugs, aids, and other diseases (table 6 Variables 8 and 10), and the socio-economic threat foreigners represent (Table 6 Variable 6). In order to be able to explain these differences further research would be required.

In relation to people's attitudes toward foreigners, education, i.e. intercultural training, is needed to make a positive perspective transformation possible. The *benefits of intercultural training* include

- knowledge of cultural diversity which may increase tolerance of difference, and consequently decrease negative stereotyping
- cognitive competence which may increase resistance to propaganda hostile to immigration
- material well-being and control over one's life
- other people's increased expectations of tolerance toward immigrants, and
- entrance to qualified and appreciated jobs in which there is less frequently need to compete with foreign job seekers, i.e. the socio-economic threat will decrease. (Adapted from Jenssen & Engesbak 1994 according to Jaakkola 1999: 64-65)

10.2.3 Development of Cognition

To assess the effectiveness of intercultural training in developing the BEng students' cognition as part of their intercultural competence, the students filled in two questionnaires: before the face-to-face tuition period (Questionnaire 1; Test 1; [Pre-test]), and after it (Questionnaire 2; Test 2; [Post-test 1]). (See Appendices.) To determine the significance of the tested differences the percentage scores were used.

The concept of culture. During the face-to-face tuition period, most BEng students (35.9 % T1; 73.5 % T2) realized how problematic it is to define the concept of culture. They also learned different ways to define culture based on the subjective and communication-oriented aspects of it. Most students (74.4 % T1; 86.3 % T2) knew in advance that everyday customs have their roots in the deeper layers or levels of culture such as norms and values, the understanding of which is a precondition for understanding customs. All students (100 % T1; 100 % T2) knew before the face-to-face tuition period that besides culture, there are also other factors affecting human behavior. Most of them (77.8 % T1; 80.4 % T2) also knew in advance that there are various micro- or subcultures that people can simultaneously belong to. More than two thirds of the students (68.4

% T1; 82.1 % T2) knew before the face-to-face tuition period that to be able to understand foreign cultures people must first understand their own culture. (See Table 8.)

TABLE 8 The BEng students: the concept of culture (n = 117; %)

Variables	T1	T1%	T2	T2%
1. I know different definitions for the concept of culture.				
Agree	42	35.9	86	73.5
Disagree	29	24.8	11	9.4
Cannot say	46	39.3	20	17.1
Total	117	100.0	117	100.0
2. Culture consists of layers or levels. Customs represent the outer layer.				
Agree	106	90.6	111	94.9
Disagree	1	0.9	2	1.7
Cannot say	10	8.5	4	3.4
Total	117	100.0	117	100.0
3. It is important to know about the deeper layers with norms and values.				
Agree	87	74.4	101	86.3
Disagree	17	14.5	5	4.3
Cannot say	13	11.1	11	9.4
Total	117	100.0	117	100.0
4. Besides culture there are other factors that affect human behavior.				
Agree	117	100.0	117	100.0
Disagree	-	-	-	-
Cannot say	-	-	-	-
Total	117	100.0	117	100.0
5. An individual can simultaneously belong to a number of subcultures.				
Agree	91	77.8	94	80.4
Disagree	9	7.7	13	11.1
Cannot say	17	14.5	10	8.5
Total	117	100.0	117	100.0
6. To understand foreign cultures we must first understand our own culture.				
Agree	80	68.4	96	82.1
Disagree	22	18.8	11	9.4
Cannot say	15	12.8	10	8.5
Total	117	100.0	117	100.0

Communication: processes and contexts. Most BEng students learned both the interactive (37.6 % T1; 70.9 % T2) and the intercultural (24.8 % T1; 72.6 % T2) communication process during the face-to-face tuition period.

Most BEng students (92.3 % T1; 99.1 % T2) agreed before the face-to-face tuition period that the concept of intercultural competence contains both linguistic and social skills (see Section 3.4). Only a couple of students (4.3 % T1) were familiar with the concepts of low- and high-context communication in advance. Afterwards more than two thirds of them (68.4 % T2) knew the major differences between the two concepts. Most students (13.7 % T1; 72.7 % T2) learned that differences between low- and high-context communication styles (Hall 1984; 1989) are apparent come up in various settings of working life.

Almost two thirds of the BEng students (64.1 % T1; 74.4 % T2) knew before the face-to-face tuition period that on international assignments technical, i.e. professional, know-how is not sufficient but nontechnical know-how [including linguistic and social skills] is also required. More than half of the students (53.8 % T1; 81.2 % T2) also knew in advance that the main reasons for premature repatriation include family problems and poor social skills. In each case, most students did afterwards. (See Table 9.)

TABLE 9 The BEng students: communication processes and contexts (n = 117; %)

Variables	T1	T1%	T2	T2%
1. I know the interactive communication process.				
Agree	44	37.6	83	70.9
Disagree	41	35.0	11	9.4
Cannot say	32	27.4	23	19.7
Total	117	100.0	117	100.0
2. I know the intercultural communication process.				
Agree	29	24.8	85	72.6
Disagree	51	43.6	9	7.7
Cannot say	37	31.6	23	19.7
Total	117	100.0	117	100.0
3. Intercultural competence contains both linguistic and social skills.				
Agree	108	92.3	116	99.1
Disagree	4	3.4	-	-
Cannot say	5	4.3	1	0.9
Total	117	100.0	117	100.0
4. I know differences between low- and high-context communication.				
Agree	5	4.3	80	68.4
Disagree	67	57.3	12	10.2
Cannot say	45	38.4	25	21.4
Total	117	100.0	117	100.0
5. Differences in communication are apparent in working life.				
Agree	16	13.7	85	72.7
Disagree	43	36.7	8	6.8
Cannot say	58	49.6	24	20.5
Total	117	100.0	117	100.0
6. The success of international assignments is not based on technical know-how only.				
Agree	75	64.1	87	74.4
Disagree	19	16.2	15	12.8
Cannot say	23	19.7	15	12.8
Total	117	100.0	117	100.0
7. The main reasons for premature repatriation are the lack of social skills and family problems.				
Agree	63	53.8	95	81.2
Disagree	13	11.1	9	7.7
Cannot say	41	35.1	13	11.1
Total	117	100.0	117	100.0

Verbal communication. Most BEng students (95.7 % T1; 99.1 % T2) knew before the face-to-face tuition period the importance of small talk as part of positive, approach-based politeness (Gumperz 1987). They also knew that there are both "safe" and "unsafe" topics for small talk. The concept of interactive listening as part of small talk was not so familiar (80.4 % T1; 96.6 % T2).

More than half of the BEng students (56.4 % T1) knew before the face-to-face tuition period that outside the Nordic countries people are not automatically addressed by their first names; afterwards most students did (80.3 % T2). Three students (2.5 % T1) knew in advance the Southeast Asian practice of not frequently mentioning other people's names; afterwards a few students did (14.5 % T2). The percentage score of the students who found the frequent mentioning of other people's names a common practice was actually higher for some reason after the face-to-face tuition period (45.3 % T2) than before it (19.7 % T1). In other words, there was "mislearning".

Less than one fifth of the BEng students (18.8 % T1) knew before the face-to-face tuition period about the difference in the concept of time between Finland and Arabic countries, i.e. with Arabs a time delay is needed and getting straight to the point should be avoided (cf. the linear and event-related concept of time); afterwards 53.0 % (T2) did. Correspondingly, a few students (14.5 % T1) knew in advance that keeping one's face is important to Chinese people, and therefore, e.g. in meetings and negotiations, providing direct negative answers should be avoided. After the face-to-face tuition period the percentage score of those who knew about this was 50.4 % (T2). When asked about the importance of keeping one's face in Southeast Asia, most students (71.8 % T1; 94.9 % T2) knew in advance how essential it is.

In Southern European countries, e.g. in Spain, many people tend to be more impulsive than Finns are. One third of the BEng students (33.3 % T1) thought before the face-to-face tuition period that to get the floor, e.g. in a meeting or negotiation, it is appropriate to interrupt a Spaniard such as a supplier. After the face-to-face tuition period more than two thirds of the students (70.1 % T2) found polite interrupting acceptable.

Most BEng students (90.6 % T1; 94.9 % T2) realized before the face-to-face-tuition period that paying compliments is not a waste of time. They (82.1 % T1) also knew in advance that when receiving a compliment, e.g. from a French customer, the compliment must be returned. Surprisingly, the percentage was a bit lower (79.5 % T2) after the face-to-face tuition period.

Most BEng students (72.6 % T1) thought before the face-to-face tuition period that it is inappropriate to sit without speaking with a group of foreigners, e.g. Dutch buyers, even if there is nothing important to say. The percentage was 78.6 % (T2) after the face-to-face tuition period. When asked about Central and Southern Europeans' tolerance of silence (see Table 11), more than half of the students (61.5 % T1) thought in advance that long pauses in conversations are problematic; afterwards the percentage was 90.6 % (T2). (See Table 10.)

TABLE 10 The BEng students: verbal communication (n = 117; %)

Variables	T1	T1%	T2	T2%
1. Small talk is context-related positive politeness.				
Agree	112	95.7	116	99.1
Disagree	1	0.9	1	0.9
Cannot say	4	3.4	-	-
Total	117	100.0	117	100.0
2. Interactive listening includes non-verbal communication, asking questions, and the use of fillers.				
Agree	94	80.4	113	96.6
Disagree	4	3.4	1	0.9
Cannot say	19	16.2	3	2.5
Total	117	100.0	117	100.0
3. Outside Scandinavia addressing people by their first names is not automatic.				
Agree	66	56.4	94	80.3
Disagree	6	5.1	5	4.3
Cannot say	45	38.5	18	15.4
Total	117	100.0	117	100.0
4. In Southeast Asia you should mention the business partner's name as often as possible.				
Agree	23	19.7	53	45.3
Disagree	3	2.5	17	14.5
Cannot say	91	77.8	47	40.2
Total	117	100.0	117	100.0
5. When negotiating with Arabs, it is polite to get straight to the point to save their time.				
Agree	10	8.6	25	21.4
Disagree	22	18.8	62	53.0
Cannot say	85	72.6	30	25.6
Total	117	100.0	117	100.0
6. When discussing with a Chinese company visitor, direct negative answers should be favored.				
Agree	24	20.5	33	28.2
Disagree	17	14.5	59	50.4
Cannot say	76	65.0	25	21.4
Total	117	100.0	117	100.0
7. When talking to a Spanish supplier, you must know how to interrupt him/her.				
Agree	39	33.3	82	70.1
Disagree	11	9.4	13	11.1
Cannot say	67	57.3	22	18.8
Total	117	100.0	117	100.0

(Continues)

TABLE 10 (Continues)

8. Paying compliments is a waste of time.

Agree	4	3.4	4	3.4
Disagree	106	90.6	111	94.9
Cannot say	7	6.0	2	1.7
Total	117	100.0	117	100.0

9. There is no need to return a compliment from a French customer.

Agree	-	-	9	7.7
Disagree	96	82.1	93	79.5
Cannot say	21	17.9	15	12.8
Total	117	100.0	117	100.0

10. If a German seller's verbal and non-verbal messages are not in harmony, it is best to rely on his/her verbal messages.

Agree	22	18.8	29	24.8
Disagree	37	31.6	58	49.6
Cannot say	58	49.6	30	25.6
Total	117	100.0	117	100.0

11. You can sit without speaking if you have nothing important to say in a negotiation with Dutch buyers.

Agree	9	7.7	13	11.1
Disagree	85	72.6	92	78.6
Cannot say	23	19.7	12	10.3
Total	117	100.0	117	100.0

12. In a conflict a Latin-American production manager knows how to separate facts from feelings.

Agree	5	4.3	5	4.3
Disagree	67	57.3	95	81.2
Cannot say	45	38.4	17	14.5
Total	117	100.0	117	100.0

Non-verbal communication. Most BEng students knew before the face-to-face tuition period the importance of a positive first impression (75.2 % T1) as well as that of dress code (96.6 % T1). After the face-to-face tuition period the percentage score of the importance of a first impression rose to 88.0 % (T2) while that of dress code remained the same.

More than one fifth of the students (22.2 % T1) knew, at the beginning of the face-to-face tuition period, that a firm handshake is not a universal way of greeting people; afterwards more than half did (57.3 % T2). Half of the students knew in advance that many facial expressions are culture-specific (51.3 % T1), and, for instance, smiling can have different meanings in different cultures (60.7 % T1). At the end of the face-to-face tuition period the percentage scores were 85.5 % (T2) and 88.9 % (T2). Almost one third of the students (27.4 % T1) did not know about cultural differences in the levels of expressing emotions, especially strong ones [e.g. Southeast Asia], before the face-to-face tuition period; after it half of the students did (51.3 % T2). Before the face-to-face tuition period a few students (11.1 % T1) knew about cultural differences in the appropriate levels of eye contact [e.g. in Japan]; afterwards the corresponding percentage was 63.2 % (T2). Most students (85.5 % T1; 93.2 % T2) knew, in advance, that gestures often have culture-specific meanings.

More than half of the BEng students (53.9 % T1) knew before the face-to-face tuition period about people's varying need of space, i.e. preferences in the talking distance; afterwards the percentage score was 82.9 % (T2). Cultural differences in the concept of time, e.g. between Finland and African countries, were familiar to a few students (15.4 % T1) in advance. Afterwards more than half of the students (59.0 % T2) knew about them. (See Table 11.)

TABLE 11 The BEng students: non-verbal communication (n = 117; %)

Variables	T1	T1%	T2	T2%
1. You never get a second chance to make a good first impression.				
Agree	88	75.2	103	88.0
Disagree	26	22.2	10	8.6
Cannot say	3	2.6	4	3.4
Total	117	100.0	117	100.0
2. Dress code is not of importance when meeting foreign business associates.				
Agree	4	3.4	4	3.4
Disagree	113	96.6	113	96.6
Cannot say	-	-	-	-
Total	117	100.0	117	100.0
3. The proper way to greet engineering trainees from Thailand is a firm hand-shake.				
Agree	33	28.2	21	17.9
Disagree	26	22.2	67	57.3
Cannot say	58	49.6	29	24.8
Total	117	100.0	117	100.0
4. Interpreting facial expressions is not a problem because expressions are universal.				
Agree	29	24.8	7	6.0
Disagree	60	51.3	100	85.5
Cannot say	28	23.9	10	8.5
Total	117	100.0	117	100.0
5. Smiling and happiness are always connected.				
Agree	26	22.2	8	6.8
Disagree	71	60.7	104	88.9
Cannot say	20	17.1	5	4.3
Total	117	100.0	117	100.0
6. When negotiating with Southeast Asian customers, you should avoid expressing strong emotions.				
Agree	32	27.4	60	51.3
Disagree	6	5.1	9	7.7
Cannot say	79	67.5	48	41.0
Total	117	100.0	117	100.0

(Continues)

TABLE 11 (Continues)

7. When your Japanese boss addresses you, you must have direct eye contact with him/her.

Agree	30	25.6	23	19.7
Disagree	13	11.1	74	63.2
Cannot say	74	63.3	20	17.1
Total	117	100.0	117	100.0

8. It is best to avoid using gestures the meaning of which you don't know.

Agree	100.0	85.5	109	93.2
Disagree	7	6.0	1	0.8
Cannot say	10	8.5	7	6.0
Total	117	100.0	117	100.0

9. Arabs often talk in a louder voice than Finns.

Agree	13	11.1	46	39.3
Disagree	27	23.1	29	24.8
Cannot say	77	65.8	42	35.9
Total	117	100.0	117	100.0

10. The distance people find comfortable in conversations is the same in different cultures.

Agree	13	11.1	12	10.3
Disagree	63	53.9	97	82.9
Cannot say	41	35.0	8	6.8
Total	117	100.0	117	100.0

11. Being 15 minutes late for a meeting in Africa indicates poor manners.

Agree	34	29.1	22	18.8
Disagree	18	15.4	69	59.0
Cannot say	65	55.5	26	22.2
Total	117	100.0	117	100.0

12. Keeping one's face in Southeast Asian cultures is of major importance.

Agree	84	71.8	111	94.9
Disagree	1	0.9	2	1.7
Cannot say	32	27.3	4	3.4
Total	117	100.0	117	100.0

13. Central and southern Europeans find long pauses and silence in conversations problematic.

Agree	72	61.5	106	90.6
Disagree	1	0.9	4	3.4
Cannot say	44	37.6	7	6.0
Total	117	100.0	117	100.0

Concepts used to compare cultures. Most BEng students agreed with the declarative statement before, and especially after, the face-to-face tuition period when asked about the increasing importance of ethics (82.1 % T1; 94.0 % T2). Most students also agreed with the brief definitions of the following concepts: norms (73.5 % T1; 92.3 % T2), values (82.9 % T1; 93.2 % T2), attitudes (67.5 % T1; 76.1 % T2), and customs (71.8 % T1; 90.6 % T2). (See Table 12a.)

TABLE 12a The BEng students: concepts used when comparing cultures (n = 117; %)

Variables	T1	T1%	T2	T2%
1. Along with globalization, more attention must be paid to cultural differences in ethics.				
Agree	96	82.1	110	94.0
Disagree	2	1.7	-	-
Cannot say	19	16.2	7	6.0
Total	117	100.0	117	100.0
2. Norms explain what is right and wrong in a culture.				
Agree	86	73.5	108	92.3
Disagree	6	5.1	5	4.3
Cannot say	25	21.4	4	3.4
Total	117	100.0	117	100.0
3. Values are inherited and tell what is important in a culture.				
Agree	97	82.9	109	93.2
Disagree	12	10.3	8	6.8
Cannot say	8	6.8	-	-
Total	117	100.0	117	100.0
4. Attitudes such as prejudices and ethnocentrism are learned and therefore difficult to change.				
Agree	79	67.5	89	76.1
Disagree	27	23.1	24	20.5
Cannot say	11	9.4	4	3.4
Total	117	100.0	117	100.0
5. Customs represent the outer layer of culture and are based on norms and values.				
Agree	84	71.8	106	90.6
Disagree	13	11.1	3	2.6
Cannot say	20	17.1	8	6.8
Total	117	100.0	117	100.0

When considering Hofstede's dimensions of national culture (Hofstede 1994) including the concepts of individualism vs. collectivism (55.6 % T1; 94.9 % T2), power distance (89.7 % T1; 96.6 % T2), uncertainty avoidance (63.3 % T1; 86.3 % T2), and masculinity vs. femininity (50.4 % T1; 89.7 % T2), most students agreed with the brief definitions of the concepts after the face-to-face period. More than one third of the students (37.6 % T1) knew about the use of Hofstede's dimensions of national culture in international business in advance; afterwards most students did (76.1 % T2). More than half of the students (54.7 % T1) also knew about the pitfalls or stumbling blocks connected with the overgeneralization of the dimensions; once again, afterwards most students did (80.3 % T2). (See Table 12b.)

TABLE 12b The BEng students: Hofstede's dimensions of national culture (n = 117; %)

Variables	T1	T1%	T2	T2%
1. Individualism emphasizes the importance of an individual; collectivism the individual's membership in various groups.				
Agree	65	55.6	111	94.9
Disagree	2	1.7	1	0.8
Cannot say	50	42.7	5	4.3
Total	117	100.0	117	100.0
2. The acceptance of power distance or inequality between supervisors and subordinates varies.				
Agree	105	89.7	113	96.6
Disagree	1	0.9	-	-
Cannot say	11	9.4	4	3.4
Total	117	100.0	117	100.0
3. There are cultures in which uncertainty represents threat and vice versa.				
Agree	74	63.3	101	86.3
Disagree	4	3.4	2	1.7
Cannot say	39	33.3	14	12.0
Total	117	100.0	117	100.0
4. Masculinity refers to sexual differentiation and performance; femininity to human relations and quality of life.				
Agree	59	50.4	105	89.7
Disagree	12	10.3	4	3.4
Cannot say	46	39.3	8	6.9
Total	117	100.0	117	100.0
5. Hofstede's dimensions are useful first-hand information when planning business in a new target culture.				
Agree	44	37.6	89	76.1
Disagree	1	0.9	2	1.7
Cannot say	72	61.5	26	22.2
Total	117	100.0	117	100.0
6. When applying Hofstede's dimensions, there is the danger of overgeneralization.				
Agree	64	54.7	94	80.3
Disagree	2	1.7	3	2.6
Cannot say	51	43.6	20	17.1
Total	117	100.0	117	100.0

The adaptation process. The basic meaning of both socialization (86.3 % T1; 94.0 % T2) and acculturation (93.2 % T1; 98.4 % T2) was familiar to most BEng students before the face-to-face tuition period, whereas the concept of deculturation was not, even after the face-to-face tuition period (17.9 % T1; 47.0 % T2).

More than half of the BEng students (59.8 % T1; 94.0 % T2) knew before the face-to-face tuition period that culture shock is connected with acculturation, and refers to a kind of adaptation stress (57.2 % T1; 90.6 % T2). The relationship between ethnocentrism and adaptation stress [i.e. a very

ethnocentric person is not likely to experience any stress] was familiar to a few students (8.5 % T1) before the face-to-face tuition period, and was familiar to less than one third of them after it (30.8 % T2). More than one third of the students (38.5 % T1), instead, knew before the face-to-face tuition period about the relationship between intercultural sensitivity and adaptation stress, the percentage doubling (76.1 % T2) during the face-to-face tuition. Practically all the BEng students (90.6 % T1; 92.3 % T2) were aware of the importance of knowing the local language(s) and socializing with local people before the face-to-face tuition period. The concept and function of various in-groups was, however, less familiar (50.4 % T1; 62.4 % T2).

Approximately only one fifth of the BEng students (22.2 % T1) knew about the difficulties connected with repatriation before the face-to-face tuition period; afterwards the percentage score was 86.3 % (T2). Even more unknown was the fact that quite many repatriates, or returnees, move to a new job within a few months of repatriation (6.0 % T1; 49.6 % T2). The students (85.5 % T1; 91.5 % T2) understood the importance of intercultural training when trying to make the cultural adaptation process easier.

TABLE 13 The BEng students: the cultural adaptation process (n = 117; %)

Variables	T1	T1%	T2	T2%
1. We learn our culture during the socialization process.				
Agree	101	86.3	110	94.0
Disagree	6	5.1	4	3.4
Cannot say	10	8.6	3	2.6
Total	117	100.0	117	100.0
2. To learn a new culture we must unlearn something from the first one.				
Agree	21	17.9	55	47.0
Disagree	87	74.4	51	43.6
Cannot say	9	7.7	11	9.4
Total	117	100.0	117	100.0
3. Adaptation is an individual learning process.				
Agree	109	93.2	115	98.4
Disagree	1	0.8	1	0.8
Cannot say	7	6.0	1	0.8
Total	117	100.0	117	100.0
4. When moving to a new culture, we may experience a culture shock with potential psychological and physical symptoms and diseases.				
Agree	70	59.8	110	94.0
Disagree	29	24.8	4	3.4
Cannot say	18	15.4	3	2.6
Total	117	100.0	117	100.0
5. Culture shock refers to anxiety and stress.				
Agree	67	57.2	106	90.6
Disagree	25	21.4	7	6.0
Cannot say	25	21.4	4	3.4
Total	117	100.0	117	100.0

(Continues)

TABLE 13 (Continues)

6. Very ethnocentric people probably don't experience adaptation stress.				
Agree	10	8.5	36	30.8
Disagree	73	62.4	64	54.7
Cannot say	34	29.1	17	14.5
Total	117	100.0	117	100.0
7. Adaptation stress indicates that we are able to identify cultural differences.				
Agree	45	38.5	89	76.1
Disagree	32	27.3	17	14.5
Cannot say	40	34.2	11	9.4
Total	117	100.0	117	100.0
8. The best way to manage adaptation stress is to learn the local language(s) and get involved in local life.				
Agree	106	90.6	108	92.3
Disagree	1	0.9	3	2.6
Cannot say	10	8.5	6	5.1
Total	117	100.0	117	100.0
9. Entry to local in-groups may take a long time.				
Agree	59	50.4	73	62.4
Disagree	30	25.7	29	24.8
Cannot say	28	23.9	15	12.8
Total	117	100.0	117	100.0
10. The repatriation process can be harder than the original adaptation process.				
Agree	26	22.2	101	86.3
Disagree	68	58.1	14	12.0
Cannot say	23	19.7	2	1.7
Total	117	100.0	117	100.0
11. Many returnees change their job soon after repatriation.				
Agree	7	6.0	58	49.6
Disagree	20	17.1	17	14.5
Cannot say	90	76.9	42	35.9
Total	117	100.0	117	100.0
12. Intercultural training aims at making the entire adaptation process easier.				
Agree	100	85.5	107	91.5
Disagree	1	0.8	1	0.8
Cannot say	16	13.7	9	7.7
Total	117	100.0	117	100.0

10.2.4 Discussing the Results

To assess the effectiveness of intercultural training in developing the BEng students' *cognition* as part of their intercultural competence, the students filled in two questionnaires: before the face-to-face tuition period (Questionnaire 1; Test 1; [Pre-test]), and after it (Questionnaire 2; Test 2; [Post-test 1]). (See Appendices.) To determine the significance of the tested differences the percentage scores were used.

The first set of variables measuring potential change, i.e. perspective

transformation (Taylor 1994), in the BEng students' cognition discussed the concept of *culture* (see Table 8). Defining the concept of culture is problematic: There is culture written with a capital C, and there is culture written with a small c (Bennett 1998). During the face-to-face tuition period, the subjective, everyday (cf. Martin & Nakayama 2000), and communication-oriented (cf. Holden 2002) aspects of culture were applied.

Before the face-to-face tuition period more than one third of the BEng students (36 % T1) knew about the everyday aspect of culture; after it most students (74 % T2) knew how to define culture for the purposes of intercultural communication, including the various layers or levels of it (74 % T1; 86 % T2). All the students (100 % T1; 100 % T2) realized in advance that, in addition to culture, there are other factors, e.g. age, gender, education, economic level, and status, that make people behave in a specific way. Most students (78 % T1; 80 % T2) also knew in advance that people can simultaneously be members of a number of micro- or subcultures such as family, friends, neighbors, coworkers, trade unions, religious groups, and clubs (Adler 1992). More than two thirds of the students (68 % T1; 82 % T2) understood before the face-to-face tuition period that to be able to understand foreign cultures people must first understand their own culture (Hall 1970); afterwards most did.

When comparing the percentage scores of the variables discussing the concept of culture before and after the face-to-face tuition period (see Table 8), there was change, i.e. perspective transformation, in the BEng students' cognition. The least familiar topic was Variable 1 discussing how to define the concept of culture. Variable 6 discussing the importance of understanding one's own culture and Variable 3 discussing the deeper layers or levels culture were also rather unfamiliar before the face-to-face tuition period. Variable 4 discussing factors other than culture influencing human behavior was, when formulated as in Questionnaires 1 and 2, a truism.

The second set of variables measuring potential change, i.e. perspective transformation, in the BEng students' cognition discussed the concept of *communication* (see Table 9). Both the interactive (38 % T1; 71 % T2) and the intercultural (25 % T1; 73 % T2) communication process and their main difference, i.e. the fact that the initiator and the recipient are from different cultures, were unfamiliar to most BEng students before the face-to-face tuition period. The initiator and recipient being from different cultures emphasizes the importance of attribution and feedback (Samovar & Porter 1991; Hoopes 1981).

Most BEng students (92 % T1; 99 % T2) realized before the face-to-face tuition period that besides linguistic proficiency, the concept of intercultural competence also contains a wide range of social skills (see Section 3.4). Almost two thirds of the students (64 % T1; 74 % T2) knew before the face-to-face tuition period about the importance of social skills on international assignments. More than half of them (54 % T1; 81 % T2) also knew about the main reasons for failures, i.e. premature repatriation due to family problems, especially those with a spouse (see Subsections 6.3.2 and 6.3.3). Afterwards most students did.

Before the face-to-face tuition period a tiny minority of BEng students (4 % T1) was familiar with the concepts of low- and high-context communication (Hall 1984; 1989); afterwards more than two thirds (68 % T2) knew the two

concepts and how they differ from each other. Most students (14 % T1; 73 %) also knew afterwards that the characteristics of low- and high-context communication come up in working life settings such as team and project work; discussions, meetings and negotiations; and reading and writing agreements, contracts, business letters, faxes, and email messages. They also come up in management and leadership styles.

When comparing the percentage scores of the variables discussing the concept of communication before and after the face-to-face tuition period (see Table 9), there was change, i.e. perspective transformation, in the BEng students' cognition. The least familiar topic was Variable 4 (T1 4 %; T2 68 %) discussing differences between the concepts of low- and high-context communication. Variable 5 (T1 14 %; T2 73 %) discussing communication differences in various working life environments, Variables 2 (T1 25 %; T2 73 %) and 1 (T1 38 %; T2 71 %) discussing the intercultural and interactive communication processes, as well as Variable 7 (T1 54%; T2 81 %) discussing the reasons for premature repatriation were rather unfamiliar to most BEng students before the face-to-face tuition period.

The third set of variables measuring potential change, i.e. perspective transformation, in the BEng students' cognition discussed *verbal communication* (see Table 10). There is different kind of politeness, e.g. approach-based, positive politeness and avoidance-based, negative politeness (Gumperz 1987), which Finns often seem to favor (see Section 8.3). Small talk, interactive listening, and frequent mentioning of the other person's name are part of approach-based politeness. Most BEng students (96 % T1; 99 % T2) were aware of the function of small talk before the face-to-face tuition period. They (80 % T1; 97 % T2) also knew how to show the other person that they are listening to him/her. Furthermore, more than half of the students (56 % T1; 80 % T2) knew that outside Scandinavia it may take a long time before people start calling each other by their first names. Almost unknown (3 % T1; 15 % T2) was, instead, the Southeast Asian practice of not frequently mentioning the interlocutor's name during a conversation.

Less than one fifth of the students (19 % T1) knew in advance that Arabs tend to be polychronic people (Hall 1984; 1989) to whom building up a relationship with the other person is of major importance. After the face-to-face tuition period 53 % (T2) of the students knew that to build up this relationship, a time delay with circling around in communication is required. Most students (72 % T1; 95 % T2; see Table 11) knew about the importance of keeping one's face in Southeast Asia in advance, but only a few of them (15 % T1) knew about its connection to the avoidance of direct negative answers: Never say just "no" in China, for example. Afterwards the percentage was 50 % (T2).

In Finland, especially in formal meetings and negotiations, it is not appropriate to interrupt another speaker: The Chairperson gives the floor (see Section 8.3). One third of the BEng students (33 % T1) knew before the face-to-face tuition period that this practice does not necessarily work in Latin countries such as Spain. After the face-to-face tuition period more than two thirds of the students (70 % T2) thought that there may be situations in which polite interruption would be needed. Paying compliments is not very common in Finland (Keltikangas-Järvinen 2000). Yet, most students (91 % T1) knew

before the face-to-face tuition period that in international working life paying compliments is not a waste of time; afterwards practically all did (95 % T2). They (82 % T1) also knew in advance that a compliment must be returned. For an unknown reason, the percentage was slightly lower after the face-to-face tuition period (80 % T2).

In the Finnish style of communication, speaking is considered worthwhile when you have something important to say (see Section 8.3). Most BEng students (73 % T1; 79 % T2), however, realized before the face-to-face tuition period that when negotiating with foreigners, such as Dutch buyers, you must be prepared to speak even if you do not have anything so important to say. In Finns' intercultural style, having something important to say is not necessarily sufficient, but what you say must also be well formulated (see Section 8.3). Formulating phrases and sentences especially in a foreign language, results in long pauses in conversations. Almost two thirds of the students (62 % T1) found these kinds of pauses, i.e. nonresponsiveness (Francesco & Gold 1998), problematic from the Central and Southern European people's perspective before the face-to-face tuition period. The percentage was 91 % (T2) after the face-to-face tuition period.

When comparing the percentage scores of the variables discussing verbal communication before and after the face-to-face tuition period (see Table 10), there was change, i.e. perspective transformation, in the BEng students' cognition. The least familiar topics were Variable 7 (T1 33 %; T2 70 %) discussing whether it is appropriate to interrupt another speaker, e.g. a Latino, Variable 4 (T1 20 %; T2 45 %) discussing the mentioning of names during conversations in Southeast Asian countries, Variable 3 (T1 56 %; T2 80 %) discussing the use of first names outside the Nordic countries, Variable 5 (T1 9 %; T2 21 %) discussing cultural differences in the concept of time, e.g. between Finland and Arabic countries, and Variable 6 (T1 21 %; T2 28 %) discussing the use of direct negative answers in a high-context culture such as China.

The fourth set of variables measuring potential change, i.e. perspective transformation, in the BEng students' cognition discussed *non-verbal communication* (see Table 11). Most students knew the importance of the positive first impression (75 % T1; 88 % T2) and dress code (97 % T1; T2) before the face-to-face tuition period.

Before the face-to-face tuition period half of the BEng students (51 % T1; 86 % T2) knew about cultural differences in the meanings of facial expressions, while more than one quarter (27 % T1; 51 % T2) knew about differences in acceptable levels of expression. A few students (11 % T1; 63 %) only knew about cultural differences in eye contact vs. gaze avoidance. Differences in the meanings of gestures, both emblems and illustrators, were, instead, familiar to most students (86 % T1; 93 % T2). Less than one quarter (22 % T1; 57 % T2) knew about differences in greetings. The percentage scores were better after the face-to-face tuition period: 7 % - 52 % of the students knew more about the differences.

Spatial behavior, or briefly space, and the concept of time are also parts of non-verbal communication. Before the face-to-face tuition more than half of the BEng students (54 % T1) knew about cultural differences in spatial behavior; afterwards most students did (83 % T2). Cultural differences in the concept of time, e.g. monochronic and polychronic time (Hall 1984; 1989), were less

familiar before the face-to-face tuition period (15 % T1), but became familiar to more than half of the students (59 % T2) during the face-to-face tuition period.

When comparing the percentage scores of the variables discussing non-verbal communication before and after the face-to-face tuition period (see Table 11), there was a lot of change, i.e. perspective transformation, in the BEng students' cognition. The least familiar topics were Variable 7 (T1 11 %; T2 63 %) discussing cultural differences in the acceptable levels of eye contact between Finland and Japan, Variable 11 (T1 15 %; T2 59 %) discussing cultural differences in punctuality between Finland and African countries, Variable 4 (T1 51 %; T2 86 %) discussing difficulties connected with the interpretations of facial expressions, and Variable 3 (T1 22 %; T2 57 %) discussing cultural differences in greetings, e.g. hand-shaking in Finland and Thailand. Cultural differences in non-verbal communication were, as a whole, rather an unfamiliar topic to the BEng students. On the other hand, it seems to be a topic in which many students are interested in (cf. e.g. Table 16). Non-verbal communication is an essential element in critical incidents, for instance. Traditional foreign language education, on the other hand, does not pay much attention to it.

The fifth set of variables measuring potential change, i.e. perspective transformation, in the BEng students' cognition discussed tools, i.e. concepts, that are needed when *comparing cultures*. The BEng students were given brief definitions of some of the main concepts used when comparing cultures, and they were asked to agree or disagree with them (see Table 12a). The students' responses before and after the face-to-face tuition period were as follows: ethics, i.e. how to react to corruption, bribery, patent rights, environmental issues, negotiation tactics based on cheating, etc. (82 % T1; 94 % T2), norms (74 % T1; 92 % T2), values (83 % T1; 93 % T2), attitudes (68 % T1; 76 % T2), and customs (72 % T1; 91 % T2).

Hofstede's four dimensions of national culture (Hofstede 1994) were also given brief definitions, and the BEng students were asked to agree or to disagree with them (see Table 12b). The students' responses before and after the face-to-face tuition period were as follows: individualism vs. collectivism (56 % T1; 95 % T2), power distance (90 % T1; 97 % T2), uncertainty avoidance (63 % T1; 86 % T2), and masculinity vs. femininity (50 % T1; 90 % T2). How to apply Hofstede's dimensions in real-life contexts was less familiar, however. Before the face-to-face tuition period more than one third of the students (38 % T1) agreed that the dimensions can be useful when planning business operations in a new target culture; afterwards most students did (76 % T2). Before the face-to-face tuition period more than half of the students (55 % T1) realized that there are limitations connected with the application of Hofstede's dimensions; the percentage was 80 % after the face-to-face tuition period. One of the limitations is how to interpret the dimensions: the meanings can be culture-specific. Another limitation is the danger of overgeneralization. (Cf. conceptual imperialism by Lehtonen 1998a.)

When comparing the percentage scores of the variables discussing the concepts and dimensions used to compare cultures before and after the face-to-face tuition period (see Tables 12a and 12b), there was a lot of change, i.e. perspective transformation, in the BEng students' cognition. The least familiar topics were Variable 4 (T1 50 %; T2 90 %; Table 12b) discussing masculinity vs.

femininity, Variable 5 (T1 38 %; T2 76 %; Table 12b) discussing the usefulness of the dimensions, and Variable 6 (T1 55 %; T2 80 %; Table 12b) discussing the danger of overgeneralization connected with the use of the dimensions. If the students had been asked to define the concepts and dimensions used to compare cultures, instead of giving them the definitions to be agreed or disagreed on, the end result would have been different, i.e. the percentage scores especially before the face-to-face tuition period would have been lower. There were a few students (n = 9), who, when asked about the interesting and/or useful topics, referred to Hofstede's dimensions (see Table 16). Usually the students find the above topics rather abstract and difficult to discuss even in Finnish.

The final set of variables measuring potential change, i.e. perspective transformation, in the BEng students' cognition discussed *cultural adaptation* (see Table 13). Most students understood the concepts of socialization (86 % T1; 94 % T2 of the students) and acculturation (93 % T1; 98 % T2) before the face-to-face tuition period. The concept of deculturation was, however, less familiar and remained so even after the face-to-face tuition period (18 % T1; 47 % T2).

More than half of the BEng students knew before the face-to-face tuition period that the concept of culture shock refers to anxiety and stress (57 % T1) connected with acculturation (60 % T1); afterwards most students did (91 % T2; 94 % T2). Before the face-to-face tuition period the fact that very ethnocentric people less likely than ethnorelative ones experience adjustment stress was familiar to ten students (9 % T1). During the face-to-face tuition period it became familiar to almost one third of the students (31 % T2). More than one third of the students (39 % T1) knew in advance that adaptation stress is an indication of the ability to recognize cultural differences; the percentage was doubled during the tuition (76 % T2). Half of the students (50 %) understood before the face-to-face tuition period how time-consuming it may be to become accepted as a member of various local in-groups (Adler 1992; 1997). The percentage was a bit higher after the face-to-face tuition (62 % T2).

Besides entry to a new culture, adaptation is also needed with re-entry to one's own culture, i.e. repatriation. There is evidence (e.g. Marx 1999) that repatriation is often more difficult than initial adaptation. Before the face-to-face tuition period more than one fifth of the students (22 % T1) were aware of potential repatriation problems, the percentage being 86 % (T2) after the face-to-face tuition.

When comparing the percentage scores of the variables discussing the various stages and potential problems of the adaptation process before and after the face-to-face tuition period (see Table 13), there was a lot of change, i.e. perspective transformation, in the BEng students' cognition. The least familiar topics were Variable 10 (T1 22 %; T2 86 %) discussing the home coming process, Variable 11 (T1 6 %; T2 50 %) discussing how many repatriates often change jobs, and Variable 7 (T1 39 %; T2 76 %) discussing the experience of culture shock, or adaptation stress, as an indicator of the ability to identify cultural differences. It, in other words, refers to cultural sensitivity (Bennett 1993). The cultural adaptation process as a whole was rather an unfamiliar topic to the students.

To summarize, when considering the variables measuring the BEng

students' cognition as part of their intercultural competence, there were a few truisms that many or most BEng students were aware of before the face-to-face tuition period. There were also a few variables with more than one cultural element. On the other hand, there was a lot of basic theory of intercultural communication with concepts that many or most students were not particularly aware of in advance. The topics included the concept of culture, the intercultural communication process, cultural differences in verbal and especially in non-verbal communication, tools, i.e. concepts and dimensions, used to compare cultures, and the cultural adaptation process. On the basis of the above end results, it can be argued that the BEng students' cognition obviously needs further development. Intercultural training seems to be an effective vehicle for developing it.

10.2.5 Development of Behavior and Skills

To assess the effectiveness of the intercultural training course in developing the BEng students' behavior and skills as part of their intercultural competence, a Culture-General Assimilator called *The Same but Different* was used. *The Same but Different* consists of 25 critical incidents. It is a Web-based application and was installed on the Intranet of Kajaani Polytechnic for the training experiment. (See Sections 5.7-5.9 and Subsections and 1.2.1-1.2.3.)

The BEng students were tested three times: before and after the face-to-face tuition period as well as after the self-study period. For the testing purposes five new critical incidents were constructed, three of which were used (Numbers 1, 2, and 5 below). (See Questionnaires 1 and 2 in Appendices.) The new incidents were constructed for the Internet version of the Web-based application (see Subsection 1.2.3). They were used in the training experiment to test their validity. The other critical incidents used (Numbers 6 and 7 below) were from the Web-based application (see Subsection 1.2.2). (See Questionnaires 1, 2, and 4 in Appendices.)

The tests and critical incidents used in them were as follows:

Test (T) 1: Pre-testing before the face-to-face tuition period

(Questionnaire 1) Incident 1: Passipoliisi/Facing the Red Tape Incident 2: Kiinalainen työtoveri/The Chinese Connection Incident 5: Meriittä vai ei?/Merit or Not?

Test (T) 2: Post-testing after the face-to-face tuition period

(Questionnaire 2) Incidents 1, 2 and 5 Incident 6: Jutustelua ja sen seurauksia/Let's Have Some Small Talk! Incident 7: Lähentelyä vai ei?/Amorous Advances?

Test (T) 3: Post-testing after the self-study period with the Web-based application

(Questionnaire 4) Incidents 6 and 7
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When considering the effectiveness of the Culture-General Assimilator method and learning outcomes in the students behavior and skills, the main *objective* was to find out whether the self-study period with the Web-based application had any impact on the students' behavior when compared with the situation after the face-to-face tuition period and before the self-study period, i.e. whether the self-study period provided any *added value*.

To obtain quantitative data for the comparisons, a *scoring system* was constructed. For the scoring system the polytechnic assessment scale from 0 to 5 was applied, 0 being failed, 1-2 satisfactory, 3-4 good, and 5 excellent. The "best" alternative explanation provided one point, while the choice of the "not best" alternative explanation provided no sanction. Each of the rationales was constructed a set of four *criteria*. (See Subsection 9.3.3.) The criteria were constructed on the basis of the written material, i.e. the handout used in the face-to-face tuition period, and the Web-based application with the critical incidents and hotwords. Each of the four criteria also provided one point, the highest number of points, i.e. grade, for each incident thus being five. The criteria of the rationales are introduced in Tables 14-16. The criteria are not in any specific order. To determine the statistical significance of the tested differences in the mean scores of the grades the *Wilcoxon* test was used.

TABLE 14 Test (T) 1/Questionnaire 1: before the face-to-face tuition period

<i>The critical incidents</i>	<i>The criteria</i>
1. Facing the Red Tape	1) negative ethnic attitudes, prejudices, ethnocentrism 2) ambiguity connected with the situation: why the official is asking the questions; the ability to disclose oneself 3) false expectations connected with the USA 4) first impressions and national images
2. The Chinese Connection	1) individualism vs. collectivism 2) cultural differences in age 3) communicating in English (i.e. in a foreign language) with a group of unfamiliar people; topics of discussion 4) Finns' avoidance-based politeness; need for privacy, withdrawal
5. Merit or Not?	1) motives and expectations connected with international assignments 2) the importance of intercultural training 3) benefits of intercultural assignments 4) repatriation problems

TABLE 15 Test (T) 2/Questionnaire 2: after the face-to-face tuition period

<i>The critical incidents</i>	<i>The criteria</i>
1. Facing the Red Tape	(See above.)
2. The Chinese Connection	(See above.)
5. Merit or Not?	(See above.)
6. Let's Have Some Small Talk!	1) the importance of first impressions 2) approach-based, positive politeness 3) small talk and safe vs. unsafe topics 4) dangers of stereotyping

(Continues)

TABLE 15 (Continues)

7. Amorous Advances?	1) contact vs. no-contact cultures 2) cultural differences in spatial behavior 3) function of cocktail parties 4) Finns' need for space and privacy
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TABLE 16 Test (T) 3/Questionnaire 4: after the self self-study period with the Web-based application

<i>The critical incidents</i>	<i>The criteria</i>
6. Let's Have Some Small Talk!	(See above.)
7. Amorous Advances?	(See above.)

Before the BEng students started studying either independently or in pairs with *The Same but Different*, i.e. the Web-based application, they were told about attribution training and the Culture-General Assimilator method (see Subsections 5.7.2-5.7.5 and Section 5.8). They were also told in which computer and tutor classrooms they could work, and how to get started with the Web-based application. The Help and printing functions of the application were referred to. To finish with, the students were warned against the dangers of ethnocentrism and stereotyping. Because the BEng students are used to working with computers, the introduction was rather short (see Section 9.4).

After the self-study period of approximately three weeks, the BEng students filled in Questionnaire 4. They also provided feedback on the Web-based application (Questionnaire 5). Because the students studied the Web-based application in English, they also wrote their rationales in English. When assessing the rationales, mistakes in grammar and spelling were not paid attention to. Instead, the assessment focused on the "best" alternative explanations and the four criteria providing points. The students were asked to write the rationales as if they were essays, assuming that the reader did not know anything about the topic. Table 17 demonstrates which alternative explanations (n) the students chose, while Table 18 demonstrates which criteria (n) the students mentioned.

TABLE 17 The BEng students: the choice (n) of the "best" alternative explanations (Alt alternative explanation, No number, T1 pre-test, T2 post-test, T3 post-test, Inc critical incident)

Alt No	0	1	2	3	4	Total
T1 Inc1 Alt	2	21	31	37	6	117
T2 Inc1 Alt	-	16	27	39	35	117
T1 Inc2 Alt	3	79	-	19	16	117
T2 Inc2 Alt	3	104	-	4	6	117
T1 Inc5 Alt	3	6	93	10	5	117
T2 Inc5 Alt	-	5	97	6	9	117
T2 Inc6 Alt	1	6	2	87	21	117
T3 Inc6 Alt	-	2	-	108	7	117
T2 Inc7 Alt	1	111	3	-	2	117
T3 Inc7 Alt	2	112	2	-	1	117

When comparing the choices of the "best" alternative explanations and their mentionings, i.e. frequencies (see Table 17), there was an increase in the

frequencies of two incidents out of five. These were Incident 2 (n = 79 T1; n = 104 T2) and Incident 6 (n = 87 T2; n = 108 T3). There was a slight increase in the frequency of Incident 5, while there was actually no increase in the frequency of Incident and 7. Incident 1 was a problematic one, the frequencies spreading widely over the various alternatives. As to the mentionings, i.e. frequencies, of the most obvious criterion (see Table 18), all the frequencies were higher after the face-to-face tuition period than before it. Excluding Incident 6 Criterion 4 (n = 5 T2; n = 55 T3), the number of the criteria per one critical incident did not, however, increase.

Even if the total number of the previously defined criteria (see Tables 14 - 16) per one critical incident only increased in one incident out of five (i.e. Incident 6, Criterion No 4), the contents of the rationales written by the BEng students enhanced and/or became more accurate when compared before and after the self-study period. The students had studied the rationales of the incidents, and consequently their ability to analyze and solve critical incidents had improved. In other words, there was some qualitative change, or perspective transformation.

TABLE 18 The BEng students: the mentioning (n) of the various criteria/rationale
(Inc incident, No number, T1 pre-test, T2 post-test, T3 post-test, Crit criterion)

Inc No	T	Crit1	Crit2	Crit3	Crit4
1	1	35	69	12	1
	2	36	77	6	0
2	1	42	4	11	9
	2	79	2	3	7
5	1	0	0	0	37
	2	0	0	0	61
6	2	4	0	73	5
	3	4	2	89	55
7	2	2	85	0	9
	3	3	111	6	4

Here are two *examples* of the *rationales* written by the BEng students:

Student X: Incident 6: *Let's Have Some Small Talk!*

Before self-study:

"Brunssin tapoihin kuuluu muuta kuin puhua innokkaasti työstä pomon kanssa."
(When having brunch, you are not supposed to talk about business with the boss.)

After self-study:

"Aleksi was right when he tried some small talk that may be interesting to Mr O'Neil. But Aleksi used too strong a stereotype because he thought that O'Neil has strong Irish roots. Sojourners must be careful that they won't use too strong stereotypes if they are not sure about this issue. Mr O'Neil felt that he was put into the Irish category and that was bad because he didn't belong to that category."

Student Y: Incident 6: *Let's Have Some Small Talk!*

Before self-study:

"Tuntemattomia ulkomaalaisia ihmisiä tavatessa on vaarallista ottaa puheenaiheeksi esim. uskonto tai muu vakava aihe, jolla voi tietämättään loukata toista." (When meeting foreigners you don't know, it's dangerous to start talking, e.g., about religion or some other serious topics so that, without intention, you may insult the other person.)

After self-study:

"Aleksi assumed that O'Neil was Irish although he didn't know it for sure. It's right to choose topics for conversation about the things that both parties know about. But Aleksi made a big mistake when he brought up religion and politics. These topics should be avoided when dealing with strangers. He was also categorizing and used stereotypes."

To obtain more quantitative data on the effectiveness of the intercultural training course in developing the BEng students' behavior and skills, the *mean scores* of the grades for Incidents 1, 2, 5, 6, and 7 were computed (see Table 19). The computation was based on the scoring system described above (see Subsections 9.3.3 and 10.2.5). According to the scoring system, the "best" alternative explanation and each of the four criteria provided one point, i.e. grade, on the polytechnic assessment scale, the maximum grade being five. To determine whether the differences in the mean scores, when compared before and after the self-study period, were statistically significant, the Wilcoxon test was used.

The mean scores for all the incidents were somewhat higher after the self-study period with *The Same but Different* than before it (see Table 19). Even if the change, i.e. perspective transformation in the BEng students' behavior and skills, was less than one grade, it was statistically very significant in Incidents 2, 6, and 7, and statistically significant in Incident 5. In Incident 1 the change was statistically nonsignificant (see Section 10.2.). The values of the standard deviations varied from 0.4 to 0.8.

TABLE 19 Incidents 1, 2, 5, 6 and 7: the mean scores, standard deviations and significance (T1 pre-test, T2 post-test, T3 post-test, N number)

		Incident 1		Incident 2		Incident 5	
		T1	T2	T1	T2	T1	T2
N	Valid	117	117	117	117	117	117
	Missing	0	0	0	0	0	0
Mean		1.22	1.32	1.25	1.66	1.10	1.38
Standard deviation		.73	.75	.81	.66	.70	.74
Minimum grade		0	0	0	0	0	0
Maximum grade		3	3	3	3	2	2
Significance		.191ns		.000***		.002**	

		Incident 6		Incident 7	
		T2	T3	T2	T3
N	Valid	117	117	117	117
	Missing	0	0	0	0
Mean		1.43	2.21	1.76	2.01
Standard deviation		.77	.69	.61	.46
Minimum grade		0	0	0	0
Maximum grade		3	4	3	3
Significance		.000***		.000***	

Table 20 shows the frequency and percentage scores of the various grades for Incidents 1, 2, 5, 6, and 7. Excluding Incident 7 with no change, the percentage score of zeros, i.e. failed grades, is lower after the self-study period. The most

frequent grades after the self-study period are 1 (poor) and 2 (satisfactory), with grade 4 (very good) occurring once, and grade 5 (excellent) totally missing.

TABLE 20 Incidents 1, 2, 5, 6, and 7: the frequencies and percentages of the grades (n = 117; %), (Inc incident, T1 pre-test, T2 post-test, T3 post-test)

Grades	Inc1 T1	Inc1 T1%	Inc1 T2	Inc1 T2%	Inc2 T1	Inc T1%	Inc2 T2	Inc2 T2%	Inc5 T1	Inc5 T1%	Inc5 T2	Inc5 T2%
0	14	12.0	9	7.7	22	18.8	8	6.9	23	19.7	18	15.4
1	70	59.8	72	61.5	49	41.9	28	23.9	59	50.5	37	31.6
2	26	22.2	25	21.4	41	35.0	77	65.8	35	29.9	62	53.0
3	7	6.0	11	9.4	5	4.3	4	3.4	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-
Total	117	100.0	117	100.0	117	100.0	117	100.0	117	100.0	117	100.0

Grades	Inc6 T2	Inc6 T2%	Inc6 T3	Inc6 T3%	Inc7 T2	Inc7 T2%	Inc7 T3	Inc7 T3%
0	16	13.7	2	1.7	3	2.6	3	2.6
1	39	33.3	11	9.4	30	25.6	3	2.6
2	58	49.6	65	55.6	76	65.0	101	86.3
3	4	3.4	38	32.5	8	6.8	10	8.5
4	-	-	1	0.8	-	-	-	-
5	-	-	-	-	-	-	-	-
Total	117	100.0	117	100.0	117	100.0	117	100.0

10.2.6 Discussing the Results

A training experiment based on the BEng students' behavior modification, and followed by observation and a survey among host nationals in the target culture(s), was not possible for economic and other practical reasons. To develop the behavioral component of the students' intercultural competence further after the face-to-face tuition period, the experiential approach based on the idea of learning by doing was, therefore, applied. Real-life intercultural encounters not being available, *simulated encounters*, i.e. a Culture-General Assimilator consisting of 25 critical incidents (Cushner & Brislin 1996), were used (cf. Gudykunst et al. 1996; Ferdman & Brody 1996). The Culture-General Assimilator, called *The Same but Different*, was implemented as a Web-based application suitable for self-study (see Subsection 1.2.2).

The Same but Different exposed the BEng students to a wide variety of situations in the target cultures; concentrated on cultural differences in people's perceptions, interpretations and behaviors, respectively; simulated important aspects of the experience of entering a new culture; centered on key cultural differences between the Finnish culture and the target cultures both in working life and free time, and fostered the active involvement of the students. (Albert 1995: 157-158)

Intercultural training is change-oriented (Paige & Martin 1996; Gudykunst et al. 1996). To assess the effectiveness of the Culture-General Assimilator method in developing the behavioral component of the BEng students' intercultural competence, *pre-* and *post-testing* was used. The BEng students analyzed and solved critical incidents both before and after the face-to-face

tuition period (Tests 1 and 2), and then after the self-study period with the Web-based application (Test 3).

Because there were no resources to test the *validity* of the critical incidents with host nationals in the target cultures before the training experiment, the BEng students simultaneously tested the validity, especially that of the alternative explanations. Excluding Incident 1, there were no problems. In Incident 1, the choice of the "best" alternative explanation caused some confusion among the students, the students' choices being divided rather evenly between the four alternatives (see Table 17).

When comparing the situation before the face-to-face tuition period (T1) with that after it (T2) (see Table 17), the BEng students chose a more appropriate "best" alternative explanation in one critical incident out of three (Incident 2: $n = 79$ [T1]; $n = 104$ [T2]). In other words, more than one fifth of the students improved their performance. When comparing the situation after the face-to-face tuition period (T2) with that after the self-study period (T3) (see Table 17), the students chose a more appropriate "best" alternative explanation in one critical incident out of two (Incident 6: $n = 87$ [T2]; $n = 108$ [T3]). Here, less than one fifth of the students improved their performance. In general, the frequencies of the "best" alternative explanations were a bit higher after the self-study period than before it.

When the BEng students started studying the critical incidents, they were told that there is a set of four *pre-defined criteria* for each rationale written by them. The students were asked to write their rationales as essays assuming that the reader was not familiar with the topic in question. Most students were able to identify the most obvious criterion, i.e. reason, for the problem or conflict described in the critical incident (see Table 18), especially after the self-study period. Recognizing nuances was, however, less frequent. It is possible that some students forgot what they had been told about the number of the criteria: They thought that recognizing the most obvious criterion would be sufficient, and did not bother to analyze the incidents any further.

When comparing the situations after the face-to-face tuition and self-study periods (see Table 18), the BEng students' ability to analyze and solve critical incidents was enhanced in one critical incident out of five (Incident 6: $n = 5$ [T2]; $n = 55$ [T3]). In other words, almost half of the students improved their performance. Even if the total number of the criteria mentioned only increased slightly, the contents of the rationales written by the students enhanced at the group level, especially after the self-study period. The students had studied the rationales and were able to provide more informative and accurate answers.

Besides the frequencies of the "best" alternative explanations and criteria per one incident and rationale, the *mean scores* of the grades for Incidents 1, 2, 5, 6, and 7 were computed and statistically tested by using the *Wilcoxon test*. (See Table 19.) On the basis of the mean scores, when comparing the situation before and after the face-to-face tuition period (Test 1 and 2) and especially after the self-study period (Test 3), there was change, i.e. perspective transformation, in four critical incidents out of five. The transformation varied from statistically very significant to statistically significant. The BEng students' choices of the "best" alternative explanations being so widely divided in Incident 1, the validity of its alternative explanations decreased, and the explanations need to

be remodified.

According to Cushner and Landis (1996), for example, the Culture-General Assimilator is capable of producing changes in trainees, but the *extent* of the changes is problematic. Albert (1995) points out that not all studies have documented changes in behavior.

On the basis of the present training experiment, the Culture-General Assimilator method developed the BEng students' complex thinking, provided the students knowledge of the target cultures and cultural diversity, improved the students' knowledge and its application, and developed the students' ability to analyze and solve critical incidents and thus intercultural problems and conflicts. Due to the nature of the present study, it was not possible to test abilities such as enhancement of cultural adaptation, interaction with host nationals, or improvement of task performance in the target culture(s). (Cf. Section 7.3.)

After the self-study period, there was a *quantitative* change, or perspective transformation (Mezirow 1991; Taylor 1994), of less than one grade from 1 (poor) to 2 (satisfactory), when considering the development of the BEng students' knowledge and problem solving skills. When considering the contents of the rationales written by the students, there was some *qualitative* change as well (cf. Subsection 7.2).

The Culture-General Assimilator method makes use of the behavioral techniques of feedback and reinforcement, i.e. interaction (Bennett 1995). Interaction is often considered the main strength of hypermedia, and thus of the Web-based application used in the present study. It can be argued that a Web-based application is a simulation of human behavior, and interaction is not between man and man, but between man and machine. Interaction between man and man can, however, be increased, the techniques including pair and group work [The BEng students studied the application both independently and in pairs.] and follow-up discussions, or debriefings, in which both the facilitator and trainees participate [There was a debriefing, when the students filled in Questionnaires 4 and 5 after the self-study period.]. These kinds of activities may develop two-way communication, i.e. interaction, and behavior, respectively. It is possible that the pair work and debriefing had a positive impact on some BEng students' behavioral component of intercultural competence.

In sum, the self-study period with the Web-based application provided some *added value*, when considering the BEng students' intercultural knowledge and problem solving skills, in particular. On the polytechnic assessment scale and at the group level the students experienced a quantitative perspective transformation of approximately one grade (see Table 19). Within the group, there were, however, a few individuals who did not experience any transformation, or whose transformation was negative, i.e. their performance was better before the intercultural training course than after it (see Table 20). Even if there was positive transformation in the students' problem solving skills, it is not possible to state that the students' behavior was transformed. In order to be able to state whether there was real behavior transformation, part of the training experiment should have been carried out in the target cultures including behavior observation. The self-study period proved that the Culture-

General Assimilator method is transformation-oriented, but the process of transformation is time-consuming and gradual.

10.3 The BEng Students: Learning Outcomes and Benefits of the Face-to-Face Tuition

The BEng students assessed the effectiveness of the intercultural training course in developing their intercultural competence after the face-to-face tuition period. The assessment included both the learning outcomes (summative assessment) and the potential current and future benefits offered by the training (formative assessment). The data was collected by means of Questionnaire 3 (see Appendices).

10.3.1 Self-Reported Learning Outcomes

When considering *cognition*, i.e. knowledge, of cultural diversity, most BEng students (76.1 %) thought that they had learned about etc, or culture-general, differences during the face-to-face tuition period. There were no other relevant answers. (See Table 21.)

TABLE 21 The BEng students: learning outcomes in cognition

Knowledge	Students (n = 117)	Students %
Knowledge of cultural diversity	89	76.1
Other or no answer	28	23.9
Total	117	100.0

As to *behavior* and *skills*, two thirds of the BEng students (66.7 %) thought that either their social or English skills developed a little during the face-to-face tuition period. A few students (11.1 %) thought they knew better how to behave properly in different contexts, i.e. their cognition in behavior developed. A few students (5.1 %) thought that the face-to-face tuition period [i.e. one credit including 24 contact lessons, 45 min each, during a period of two months] was too short, and a longer period of time would be needed to develop behavior and skills. They also thought that the future will tell whether there was any development in their behavior and skills. (See Table 22.)

TABLE 22 The BEng students: learning outcomes in behavior and skills

Skills	Students (n = 117)	Students %
Developed a little	33	28.2
Communication; small talk	25	21.4
English; new words	20	17.1
How to behave properly	13	11.1
Will be tested in practice	6	5.1
Other or no answer	20	17.1
Total	117	100.0

Less than one third of the BEng students (30.8 %) thought that their *affect*, i.e. attitudes and emotions, became more positive, open, and tolerant toward foreign cultures and foreigners during the face-to-face tuition period. Less than one quarter of the students (23.1 %) became more aware of cultural differences in attitudes, and a few students' (6.8 %) awareness of the dangers of prejudices increased; i.e. their cognition in affect developed. Less than one quarter of the students (21.4 %) thought that face-to-face tuition had no impact on their attitudes. (See Table 23.)

TABLE 23 The BEng students: learning outcomes in affect

Attitudes	Students (n = 117)	Students %
Became more positive, open, tolerant	36	30.8
Did not change	25	21.4
Knowledge of cultural diversity increased	27	23.1
Knowledge of dangers of prejudices increased	8	6.8
Other or no answer	21	17.9
Total	117	100.0

10.3.2 Benefits Provided by the Tuition

Almost one third of the BEng students (29.0 %) thought that their *cognition* in cultural differences increased during the face-to-face tuition period. One fifth of the students (19.7 %) thought that their ability to *behave* properly improved including intercultural encounters such as international assignments and business trips abroad as well as meetings with foreign business associates in Finland. A few students (12.0 %) thought that their *affect* became more positive including a broader world view and enhanced tolerance and understanding, for example. The rest of the students (39.3 %) found specifying the benefits difficult. (See Table 24.)

TABLE 24 The BEng students: benefits of the face-to-face tuition

Benefits	Students (n = 117)	Students %
Knowledge of cultural diversity	34	29.0
Skills for intercultural encounters	23	19.7
More positive attitudes	14	12.0
Too early to say	17	14.5
Other or no answer	29	24.8
Total	117	100.0

The BEng students were also asked to specify the benefits connected with potential international assignments, in particular. More than one third of the students (41.0 %) increased their *cognitive* competence, including knowledge of cultural differences and how to prepare for an international assignment in advance. One third of the students (33.3 %) developed their *behavioral* competence when considering cultural adaptation and appropriate behavior. A few students (7.7 %) thought that their *affect* was enhanced, i.e. their attitudes toward the foreign became more positive and their world view became broader. (See Table 25.)

TABLE 25 The BEng students: benefits of the face-to-face tuition considering international assignments

Benefits	Students (n = 117)	Students %
Knowledge of cultural diversity	29	24.8
Knowledge of how to prepare in advance	19	16.2
Ability to adapt to a new culture	21	18.0
Ability to behave properly	10	8.5
More positive attitudes, a broader world view	9	7.7
Other or no answer	29	24.8
Total	117	100.0

Here are some examples of the BEng students' comments:

"Tiedän nyt enemmän kulttuurienvälisistä eroista ja osaan toimintamalleja joihinkin tilanteisiin." (I know now more about intercultural differences; I also know how to behave in some specific situations.)

"Tiedostan paremmin ongelmia, jotka liittyvät kulttuurienväliseen kanssakäymiseen. Kieliongelmat eivät olekaan yleensä suurin ongelma." (I am more aware of problems connected with intercultural encounters. Surprisingly language is not the biggest problem.)

"Taidot huomata kulttuurienvälisistä eroista johtuvat ristiriidat ja yleensä kulttuurierot esim. lännen ja idän välillä." (The ability to notice conflicts based on intercultural differences and cultural differences in general e.g. between the West and the East.)

"Taito ymmärtää, mistä erilaiset ongelmat voisivat johtua ja taito olla herkempi erilaisille tilanteille. Havahdun nyt entistä useammin vertailemaan eri tilanteita eri kulttuurien omista lähtökohdista, esim. TV-uutisten eri tapahtumien taustojen pohtimisessa." (The ability to understand what problems can be based on; increased sensitivity to differences. More often than before, e.g. when watching TV news, I view things from the perspective of the target culture.)

"No sopeutuminen tohon kulttuurishokkiin on varmaan pienentynyt, ei tuntunu juuri mitenkään oudolta kun naapurihuoneeseen muutti unkarilainen opiskelija, kuten tässä syksyllä kävi, kun hoksasi, että on ranskalainen kämpppis." (Well, cultural adaptation has become easier. Last fall it was strange to have a French roommate. Now it was OK when a Hungarian student moved to the next room.)

Test item Number 14 in Questionnaire 3 was called *Other remarks* [connected with the intercultural training course]. Here are the remarks written by the students:

...a lot of generalization; did not learn any English; a lot of reading; poor timing of the lessons (n = 2); a nice package; nice; intensive studying; left a positive feeling; no grammar: good; encouraged to speak (n = 2); some attitudes changed; thank you for the course...

10.3.3 Discussing the Results

When considering the BEng students' self-reported *learning outcomes in cognition* after the face-to-face tuition period (see Table 21), most students (76 %) thought that their knowledge about cultural diversity was better than before the face-to-face tuition period. Two thirds of the BEng students (67 %) thought that their

behavior (see Table 22), i.e. linguistic and social skills, also developed during the face-to-face tuition period. There were a few students (11 %) who thought that their cognition in behavior developed, and a few (5 %) who found the length of the face-to-face tuition period too short for behavioral skills to develop.

As to the BEng students' *affect* after the face-to-face tuition period (see Table 23), approximately one third of the students (31 %) thought that their *attitudes* toward foreign cultures and their representatives were more positive, open, and tolerant than before the face-to-face tuition period. Approximately one third of the students (30 %) became more aware either of cultural differences in attitudes or the dangers of prejudices. In other words, their affect did not develop but their cognition in affect did. Less than half of the students thought that the face-to-face tuition period had no impact on their attitudes, or provided some other answer or no answer at all.

After the face-to-face tuition period, the biggest *benefit*, according to more than one quarter of the BEng students (29 %), was increased *cognition* in cultural diversity. (See Table 24.) The second biggest benefit, according to one fifth of the students (20 %) was improved *social skills*. The third biggest benefit, according to 12 % of the students, was positive development in *affect*. Almost 40 % of the students could not name the biggest benefit, or thought it to be something else from those mentioned above.

When considering the benefits of the face-to-face tuition period for *international assignments* in particular (see Table 25), the biggest benefit also here, according to one quarter of the students (25 %), was increased cognition in cultural diversity. Other benefits were connected with cultural adaptation (18 %), predeparture preparation (16 %), proper behavior (9 %), and more positive attitudes (8 %).

When comparing the BEng students' answers after the face-to-face tuition period (see Tables 21 - 25), the *general trend* is the same. First of all, the intercultural training course proved its effectiveness in developing the BEng students' intercultural competence, i.e. there was change, or perspective transformation (Taylor 1994), both by the measures of the intercultural training experiment and the students' self-reports. Secondly, the various components of the BEng students' intercultural competence changed to the same direction, the perspective transformation being bigger in cognition than in behavior and affect, in this order.

According to the BEng students, the face-to-face tuition period focused more on intercultural communication than on the English language (cf. Content and Language Integrated Learning, or CLIL). This is in accordance with the overall goal and objectives set on the intercultural training course (see Section 9.2) and the purpose of the present study (see Section 1.3).

10.4 The BEng Students: Motivation to Develop Intercultural Competence

The data was collected before (Questionnaire 1) and after the face-to-face tuition period (Questionnaire 3). (See Appendices.)

10.4.1 Studying and/or Working Abroad

Almost two thirds of the BEng students ($n = 74$; 63.2 %) were motivated to study abroad, while most students ($n = 99$; 84.7 %) were motivated to work abroad. The students had quite a wide range of expectations connected with studying and/or working abroad, improving linguistic (37.6 % of the students) and other intercultural (15.4 %) skills being the most important one. A few students looked forward to new and challenging experiences (12.8 %) and creating new contacts (4.3 %). Better income, lower taxation, and developing technological expertise seemed to be of lesser value. (See Table 26.)

TABLE 26 The BEng students: expectations connected with studying and/or working abroad

Expectations	Students ($n = 117$)	Students %
Better language skills	44	37.6
Knowledge of new, different cultures	18	15.4
New, challenging experiences	15	12.8
New friends, contacts	5	4.3
Better income, lower taxes, technology	4	3.4
Other or no answer	31	26.5
Total	117	100.0

10.4.2 Professional Qualifications and Intercultural Competence

Almost all the BEng students ($n = 114$; 97.4 %) thought that intercultural competence is part of BEng engineers' professional qualifications. Almost two thirds of the students ($n = 72$; 61.5 %) found intercultural competence important, while the rest ($n = 42$; 35.9 %) found it useful. There were three students (2.6 %) who thought that intercultural competence is not important.

According to the BEng students, the contexts in which intercultural competence is needed include business trips abroad and international assignments ($n = 53$; 45.3 %), intercultural encounters in general ($n = 18$; 15.4 %), and meetings with foreigners in Finland ($n = 4$; 3.4 %). The rest of the students ($n = 42$; 35.9 %) did not name any specific context.

Examples of the BEng students' comments:

"Jonkinlainen tieto ja taito kulttuurienvälisistä asioista kuuluu jokaisen yleissivistykseen, myös insinöörin." (Some kind of know-how of intercultural issues is part of all people's basic education, including engineers.)

"AMK-insinöörin työnkuva on pakostakin yleismaailmallinen, joten

kulttuurienvälinen viestintä on ammattitaidon perustaan kuuluva oleellinen asia. Se on samanarvoinen muiden ammattiaineiden kanssa.” (A BEng engineer’s job description is global, so intercultural communication is an integral part of his/her professional qualifications. It is equal with other professional subjects.)

10.4.3 Content and Language Integrated Learning (CLIL)

Twenty BEng students (17.1 %) had difficulties in understanding the test item handling the integration of content, i.e. intercultural communication, and language, i.e. English, studies. Therefore they provided no answer or they provided an answer that did not fit the item. (See Questionnaire 3; Test item 2.) There were also 20 students (17.1 %) who found CLIL a poor idea.

Examples of the BEng students’ comments:

”Kieliopillisesti tässä kurssissa ei tapahtunut yhtään mitään.” (There was no grammar.)

”Saisi olla enemmän ammattienglantia.” (There should be more professional [i.e. engineering] English.)

Two thirds of the BEng students (n = 77; 65.8 %) found CLIL a good idea, however.

Examples of the BEng students’ comments:

”Ruusuja junteille.” (Roses for country bumpkins.)

”Kaksi kärpää yhdellä iskulla.” (Two birds with one stone.)

”Tämä oli hyvä yhdistelmä. Asiasisällöltään tähän mennessä mielenkiintoisin englannin kurssi.” (A good combination. Considering the contents, the most interesting English course so far.)

”Hyvä homma tämä oli. Oli vähän erilainen englannin kurssi. Ei kielioppia. Kiitos siitä.” (This was good. A slightly different English course. No grammar. Thank you for that.)

”Kulttuurienvälisen viestinnän opetukseen on panostettava. Asiasisältö yleisellä tasolla tai painottaen yleisimmin kohdattuihin kulttuureihin ja sanastoa/käyttäytymistapoja tilanteisiin, joissa kohdataan vieraan kulttuurin edustajia.” (Intercultural training is important. Culture-general orientation, or the focus on the cultures the representatives of which Finns most commonly encounter. Vocabulary for and information on intercultural encounters.)

10.4.4 English and Communication Skills

English skills. Two thirds of the BEng students (66.7 %) thought that their English skills are either good or satisfactory. One fifth of the students (23.1 %) found their English skills poor. A few students (4.3 %) mentioned that they do not have courage to speak English. (See Table 27.)

TABLE 27 The BEng students: English skills

Assessment	Students (n = 117)	Students %
Good	42	35.9
Satisfactory	36	30.8
Poor	27	23.1
No courage to speak	5	4.3
No answer	7	5.9
Total	117	100.0

Communication skills in general. Most BEng students (n = 100; 85.5 %) thought that, in general, they are able to communicate without any major problems. The rest provided no answer (n = 17; 14.5 %).

When asked about being *shy* or *social*, more than one quarter of the BEng students (26.5 %) referred to shyness while approximately the same percentage of the students (24.8 %) described themselves as social. Less than half of the students (41.9 %) expressed that they are either shy or social depending on the *context*. A few students (6.8 %) did not provide any answer. (See Table 28.)

TABLE 28 The BEng students: shy or social?

Assessment	Students (n = 117)	Students %
Both shy and social	49	41.9
Shy	31	26.5
Social	29	24.8
No answer	8	6.8
Total	117	100.0

Communication skills with foreigners. When asked whether the interlocutor's nationality is of significance in communication, approximately one third of the BEng students (n = 38; 32.5 %) answered "no", while another third (n = 37; 31.6 %) answered "yes". The remaining third of the students (n = 42; 35.9 %) did not answer at all.

According to the BEng students' answers, the major factor preventing effective communication with foreigners was not shyness, i.e. communication reticence, but the lack of language skills. More than half of the students (n = 68; 58.1 %) named insufficient knowledge of foreign languages as the main reason for communication problems with foreigners. Five students (4.3 %) referred to the lack of communication experience while one student (0.9 %) referred to racism. It is worth noticing that 43 students (36.7 %) gave no reason at all.

When communicating with foreigners, most BEng students (80.3 %) to apply a broad perspective, i.e. world view. Most students (84.6 %) also told to pay attention to the social context. They (82.9 %), for example, thought themselves able to apply a different style of communication with friends and at work. Even if most students considered themselves empathic, they (81.2 %) admitted that they are not able to tune in into the emotions of foreigners. (See Table 29.)

TABLE 29 The BEng students: ability to express empathy (n = 117; %)

<i>When communicating with foreigners,</i>		Agree		Disagree		Cannot say		Total	
		%		%		%		%	
1. I try to understand their life experiences from their perspective.	94	80.3	5	4.3	18	5.4	117	100.0	
2. I know how to tune into their emotions.	22	18.8	37	31.6	58	49.6	117	100.0	
3. I pay attention to the context.	99	84.6	2	1.7	16	13.7	117	100.0	
4. I communicate in a different way e.g. with friends and coworkers.	97	82.9	9	7.7	11	9.4	117	100.0	
5. I look for rationale reasons if they behave in a way I find negative.	86	73.5	4	3.4	27	23.1	117	100.0	

Almost half of the BEng students (47.0 %) thought themselves able to tolerate ambiguous and uncertain situations, i.e. feel either comfortable (28.2 %) or relaxed (18.8 %) when communicating with foreigners. The other half of the students (49.6 %) thought they would feel a bit uncomfortable. Even if most students (81.2 %) thought that they would not know how to solve unexpected problems, two thirds of them (66.7 %) assumed not to get frustrated, however. (See Table 30.)

TABLE 30 The BEng students: ability to tolerate ambiguity and uncertainty (n = 117; %)

<i>When communicating with foreigners,</i>		Agree		Disagree		Cannot say		Total	
		%		%		%		%	
1. I feel comfortable.	33	28.2	28	23.9	56	47.9	117	100.0	
2. I can solve unexpected problems without any difficulty.	22	18.8	42	35.9	53	45.3	117	100.0	
3. I feel relaxed.	22	18.8	50	42.7	45	38.5	117	100.0	
4. I feel a little uncomfortable.	58	49.6	28	23.9	31	26.5	117	100.0	
5. I do not get frustrated even if things do not go as I expected.	78	66.7	11	9.4	28	23.9	117	100.0	

More than two thirds of the BEng students (70.1 %) informed to avoid forming negative stereotypes about foreigners. Most students (88.0 %) accepted foreigners as they are. More than half of the students (52.1 %) informed that they try to find similarities between foreigners and themselves. Even if the students do not necessarily understand foreigners' emotions (cf. Table 29), almost half of them (47.9 %) told trying to express their own emotions. Half of the students (51.3%) also thought themselves able to adapt their style of communication according to the context (cf. Table 29). (See Table 31.)

TABLE 31 The BEng students: ability to communicate in an appropriate way (n = 117; %)

<i>When communicating with foreigners,</i>									
	Agree		Disagree		Cannot say		Total		
		%		%		%		%	
1. I look for and find similarities between myself and them.	61	52.1	25	21.4	31	26.5	117	100.0	
2. I accept them as they are.	103	88.0	5	4.3	9	7.7	117	100.0	
3. I avoid forming negative stereotypes.	82	70.1	6	5.1	29	24.8	117	100.0	
4. I express my feelings.	56	47.9	32	27.4	29	24.7	117	100.0	
5. I adapt my communication to their style of communication.	60	51.3	20	17.1	37	31.6	117	100.0	

10.4.5 Characteristics of Ideal Communicators

The *ideal communicator* of the BEng students is clear and fluent (35.0 %), able to communicate with different kinds of people (15.4 %) so that both the interlocutors understand what is being said (14.5 %). This ideal communicator is also open and relaxed (11.1 %). (See Table 32.)

TABLE 32 The BEng students: an ideal communicator

Characteristics	Students (n = 117)	Students %
Clear, fluent	41	35.0
Able to communicate with different people	18	15.4
Able to understand and become understood	17	14.5
Open, courageous, relaxed	13	11.1
Active	5	4.3
Businesslike	5	4.3
Multilingual	3	2.6
Able to listen	2	1.7
As I am now	2	1.7
Better than I am now	2	1.7
Other or no answer	9	7.7
Total	117	100.0

10.4.6 Discussing the Results

Besides short visits to Sweden (75 % of the students), the BEng students' hands-on international experiences were rather limited. Two thirds of the students (63 %) were interested in studying in a partner university within a European Union (EU) student exchange program, while most students (85 %) were interested in working abroad, preferably after graduation. Consequently, more than one fifth of the students (22 %) found working abroad more attractive than studying abroad.

Even if there seems to be interest in studying and/or working abroad, the BEng students, who have studied and/or worked abroad during their engineering studies, represent a minority of a few students per academic year. The reasons for not making better use of the international exchange programs provided by Kajaani Polytechnic may include the fear of a longer study time

than four years and the good job situation in Finland (cf. Insinööriliitto 2001). One more reason may be that Kainuu people in general seem to prefer traveling in Finland. While 56 % of the Uusimaa people in Southern Finland were planning to travel abroad on holiday in April-September 2001, the corresponding percentage of the Kainuu people was 21 %. (Tilastokeskuksen kuluttajabarometri 2001)

When - and if - working abroad, more than two thirds of the BEng students (70 %) expected to be able to develop their *nontechnical* competence, i.e. intercultural competence (see Sections 3.2-3.4), and less so their technical expertise. Similar expectations connected with international assignments can be found in studies by Adler (1992; 1997), Kealey (1996), Nurminen (1996), and Riusala and Suutari (2000), for example.

Before commencing the intercultural training course, the overall goal and structure of the professionally-integrated and interculturality-oriented BEng English studies at Kajaani Polytechnic were introduced to the BEng students (see Figure 18). In addition, they were explained the approach of integrating content, i.e. intercultural communication, and language, i.e. English, studies (Content and Language Integrated Learning, or CLIL). On the basis of the introduction a *learning contract* was made in which the students accepted the objectives, contents, materials, techniques, and scoring system of the course. After the face-to-face tuition period two thirds (66 %) of the students found *CLIL* a new and positively different way of studying. There were, however, students (17 %), who had missed the introduction, and who expected a conventional English course with engineering lexis and grammatical structures used in engineering texts. There were also those students (17 %) who had problems in understanding the test item (see Questionnaire 3; Test item 2), i.e. the wording of the item was not explicit enough to them.

Two thirds of the BEng students (67 %) found their *English skills* either good or satisfactory, the remaining third (33 %) finding them poor. None of the students found his/her English skills very good or excellent. It is very likely that the educational background of the students had an impact on this result, i.e. one third of the students have a vocational background with a minimal input in foreign language studies. Most students (86 %) thought that, in general, they have no *communication* problems. This is a positive result considering the frequent references to Finns' communication reticence (cf. Sallinen-Kuparinen 1986). When asked about being shy or social, i.e. factors that can prevent or promote effective and successful communication, one quarter of the students found themselves shy, while another quarter of them found themselves social. The rest (42 %) were either shy or social depending on the social context (cf. Sallinen-Kuparinen 1986).

When considering communication with foreigners, most BEng students (88 %) argued being able to accept foreigners as they are. More than two thirds of the students (70 %) also argued to avoid forming negative stereotypes. To facilitate communication, more than half of the students (52 %) told to look for similarities between themselves and foreigners. [This must not be confused with the assumption of similarities discussed by Barna 1998; cf. Section 5.9.] One third (32 %) of the students, however, found the nationality of the other party important in communication. This refers to the *ethnic hierarchies* Finns

tend to have (cf. Jaakkola 1999 in Section 2.2).

Most BEng students (80 %) referred to cultural pluralism, i.e. they thought themselves able to apply a multiple *world view* when communicating with foreigners. Most students (85 %) also thought themselves able to *adapt* their style of communication to the context. When communicating with foreigners, a little less than half of the BEng students (47 %) felt comfortable and relaxed (cf. *tolerance of ambiguity and uncertainty*).

Most BEng students (81 %) thought that they would not be able to solve potential *communication problems* with foreigners. Almost half of the students (48 %) told to try to disclose their own emotions, while most students (81 %) found interpreting foreigners' emotions problematic. More than half of the students (58 %) thought that the main reason for communication problems with foreigners is their insufficient knowledge of foreign languages, especially that of English. The students found it difficult to define the characteristics of their *ideal communicator*. Those who answered this test item would like to be clear and fluent communicators (35 %) able to communicate interactively with different kinds of people (30 %).

When considering the end results in terms of communication with foreigners and their reliability (see Subsection 7.5.2), it must be remembered that the answers are based on the BEng students' self-assessment. Because most students did not actually have any hands-on foreign experiences of foreign cultures (cf. Section 10.1), many of the answers must be based on the students' assumptions of themselves. For example, if your knowledge of a language is insufficient, are you able to adapt your style of communication to the context? On the other hand, self-assessments have been found to be good predictors of success on international assignments (Blake et al. 1996).

Finally, the BEng students, who participated in the training experiment (97 %), found *intercultural competence* an integral and equal part of BEng engineers' professional qualifications.

10.5 The BEng Students: Self-Directedness and Feedback on the Face-to-Face Tuition and Self-Study Periods

To be able to develop and modify training, assessment is an essential part of a training course (Linn & Gronlund 2000). *Formative assessment* provides feedback on the quality of training (Brislin & Yoshida 1994a). The feedback on the face-to-face tuition period was collected by using Questionnaire 3 containing both self- and peer-assessment. The feedback on the self-study period with *The Same but Different*, i.e. the Web-based application, was collected by using Questionnaire 5. (See Appendices.)

10.5.1 Self-Directed or Not?

Attitudes. The BEng students' attitudes toward intercultural training and learning varied from positive (78.6 %) to mostly positive (6.9 %) and fairly

positive (11.1 %). A couple of students (3.4 %) found their attitudes neutral. None of the students had a negative attitude. (See Table 33.)

TABLE 33 The BEng students: attitudes toward intercultural training and learning

Assessment	Students (n = 117)	Students %
Positive	92	78.6
Mostly positive	8	6.9
Fairly positive	13	11.1
Neutral	4	3.4
Total	117	100.0

Preparation before the contact lessons. A few students (12.0 %) only told that they prepared for the contact lessons in advance by studying the handout connected with the intercultural training course. Approximately half of the students (48.7 %) prepared a little, while more than one third of the students (39.3 %) did not prepare at all, in advance. (See Table 34.)

TABLE 34 The BEng students: preparation before the contact lessons

Preparing	Students (n = 117)	Students %
Yes	14	12.0
A little	57	48.7
No	46	39.3
Total	117	100.0

Activeness during the contact lessons. More than one third of the BEng students thought themselves to be active (36.8 %) or somewhat active (41 %) during the contact lessons. Almost one quarter of the students (22.2 %) found themselves passive. When measuring activeness by using another question [Did you speak actively, i.e. without asking to speak?], the end result was very similar. (Cf. Table 35.)

TABLE 35 The BEng students: activeness during the contact lessons

	A) Active in general		B) Speaking without asking		
	Students (n = 117)	Students %	Students (n = 117)	Students %	
Yes	43	36.8	Yes	42	35.9
A little	48	41.0	A little	52	44.4
No	26	22.2	No	23	19.7
Total	117	100.0	Total	117	100.0

To obtain an even more reliable result, the BEng students also assessed the activeness of their peers. [Did the peers participate in the discussions or the other activities during the lessons?]

TABLE 36 The BEng students: activeness of peers during the contact lessons

Peers: active or passive	Students (n = 117)	Students %
Active	16	13.7
Same students active	43	36.8
Rather passive	23	19.7
Passive	29	24.7
Other or no answer	6	5.1
Total	117	100.0

When assessed by their peers, the percentage of active BEng students was 50.5 % with an emphasis on the word *same*, i.e. there was a group of active students the make-up of which did not change during the face-to-face tuition period. The percentage of the rather passive or passive students was 44.4 %. (See Table 36.)

Examples of the BEng students' comments:

"Kaikki olivat halukkaita oppimaan, mutta jokin tekee opiskelijoista passiivisia." (All were willing to learn but something makes the students passive.)

"Kaikki oltiin liian hiljaisia, kun jokainen odottaa, että joku muu sanoisi jotakin." (We were all too silent. Everybody waits and hopes that somebody else will say something.)

"Melko passiivista; tyypillistä nuorisolle." (Rather passive; typical of young people.)

"Melko passiivista; kieliopinnot saavat opiskelijat hiljaisiksi. Muutamat olivat aktiivisia; tyypillistä; kuten muillakin tunneilla. Jotkut olivat aktiivisia keskustelijoita, suurinta osaa ujosutti. Useimmat osaavat puhua, mutta eivät uskalla." (Rather passive; language studies make the students silent. There were a few active students; typical; like in the other lessons. There were a few active speakers while most students were shy. Most students are able to speak but they have no courage.)

"Hiljaista oli! Myönnän omankin osuuteni, mutta se on minulle normaalia." (It was silent! I admit I was silent but that is typical of me.)

"Ihmiset eivät halua saattaa itseään naurunalaiseksi." (People don't want to make fools of themselves.)

"Ei halua osallistua, nolata itseään." (People don't want to participate, make a fool of themselves.)

In Subsection 10.4.4, when asked what prevents them from communicating effectively with foreigners, more than one third of the BEng students (36.7 %) provided no answer. Here, when asked about the reasons for their passiveness during the contact lessons, almost half of the students (46.2 %) provided no answer. The reasons for passiveness during the contact lessons, given by the students, are listed in Table 37.

TABLE 37 The BEng students: reasons for passiveness during the contact lessons

Reasons	Students (n = 117)	Students %
Just passive, tired, lazy	23	19.6
Shy, silent	12	10.2

(Continues)

TABLE 37 (Continues)

Cannot say in English	10	8.5
No courage to speak	10	8.5
Fear of making mistakes	5	4.3
Stupid, too easy	3	2.7
No answer	54	46.2
Total	117	100.0

According to one fifth of the BEng students (19.6 %), there was no specific reason for passiveness. According to another fifth of the students (21.3 %), reasons included an insufficient knowledge of English, a lack of courage, and a fear of making mistakes. There were also a few students (10.2 %) who found themselves shy and silent. In Subsection 10.4.4, more than half of the students (58.2 %) referred to satisfactory or poor knowledge of English. The percentage of shy and silent students was also higher (26.5 %) in Table 28 than here.

Reflection on learning after the contact lessons. A few BEng students (n = 13; 11.1 %) told that they reflected on what was discussed during the contact lessons at home afterwards. Half of the students (n = 62; 53.0 %) sometimes reflected, while the rest (n = 42; 35.9 %) never did. In Table 34, the BEng students' preparation before the contact lessons was discussed. It turned out that more than one third of the students (39.3 %) never prepared for the contact lessons. When comparing the percentage of those who never prepared with that of those who never reflected, it can be seen that the percentages are almost equal.

Self-directedness. Most BEng students (n = 89; 76.1 %) considered themselves self-directed adult learners able to take responsibility for their own learning. There were a few students (n = 17; 14.5 %) who found themselves partially self-directed, or not self-directed at all (n = 11; 9.4 %).

10.5.2 Discussing the Results

Most BEng students (79 %) had a positive *attitude* toward intercultural training and learning, while a few students were a bit reserved their attitudes being mostly (7 %) or fairly positive (11 %). The result is in accordance with Subsection 10.4.2 in which most students (97 %) found intercultural competence an integral part of BEng engineers' professional qualifications.

Even if the BEng students found the topic of intercultural communication important and useful, they found *preparation* for the contact lessons in advance less important (49 %), or not important at all (39 %). This is a big problem connected with language and communication studies, and very likely with other studies as well. There was homework (i.e. the handout) to be done for all contact lessons. This was explained at the beginning of the training course, but it was not necessarily repeated each time when finishing the lessons. It was assumed, as part of the training experiment, that the students are self-directed adults able to take responsibility for their own learning.

More than one third of the BEng students found themselves *active* (37 %), and told to speak without being asked to (36 %). According to their peers, there were a few active students in general (14 %), and then a group of active students the make-up of which did not change (37 %), i.e. the activeness was

too concentrated: Speaking was the responsibility of the same students. The results of the self- and peer assessment were very similar. Like competence, activeness is somebody's evaluation of a performance, i.e. it is perceived (cf. Gudykunst 1991). Therefore, self-assessments are not always enough, but outsider, e.g. peer, assessments, or appraisals, are also needed.

When asked about the *reasons for passiveness*, especially for not speaking during the contact lessons, the BEng students found it difficult to provide any specific reasons. The reasons mainly included insufficient knowledge of English (here 9 % of the students; in Section 10.4.4 when communicating with foreigners 58 %), and a kind of communication reticence (32 %). According to Sallinen-Kuparinen (1986: 162-168), Finns, however, speak a lot when in a small, familiar, and safe setting. Is a classroom with 20 students not a setting like that?

A few BEng students (11 %) told that they *reflected* on their learning at home after the contact lessons. More than half of the students (53 %) sometimes reflected, while one third (36 %) never did. Most students (76 %) found themselves *self-directed* learners, a few (15 %) thought that they are sometimes self-directed, and a few (9 %) that they are not self-directed at all. Using new information to reflect on the learning experience after the face-to-face lessons is, however, a characteristic of self-directed learning and of major importance considering the outcome(s) of learning (Kolb 1984; Hughes-Wiener 1995; see Figure 9).

To summarize, most BEng students (79 %) had a positive attitude toward intercultural training and learning while less than one fifth of the students (18 %) had a mostly or fairly positive attitude. Half of the students (49 %) prepared a little for the contact lessons, while more than one third (39 %) did not prepare at all. Almost two thirds of the students (63 %) were passive during the contact lessons, i.e. they did not participate in the discussions without being asked to. Half of the students (53 %) sometimes reflected on their learning experience after the contact lessons, while more than one third (36 %) never did.

10.5.3 Face-to-Face Tuition: Feedback

The most and least interesting and/or useful topics. (See Questionnaire 3 in Appendices.) Most students (n = 87; 74.4 %) found the intercultural training course interesting and/or useful, or otherwise positive. The most interesting and/or useful topics included culture-general differences (22.2 % of the students) as well as cultural differences in non-verbal communication (15.4 %) and everyday customs (12.8 %). Very theoretical topics such as Hofstede's (1994) dimensions of national culture (7.7 %) were less popular. (See Table 38.)

TABLE 38 The BEng students: the most interesting and/or useful topics discussed

Topics	Students (n = 117)	Students %
Culture-general differences	26	22.2
Cultural differences in non-verbal communication	18	15.4

(Continues)

TABLE 38 (Continues)

Cultural differences in everyday customs	15	12.8
All the modules and topics	12	10.3
Hofstede's dimensions of national culture	9	7.7
Finnishness through foreigners' eyes	7	6.0
Other or no answer	30	25.6
Total	117	100.0

When asked about the least interesting and/or useful topics, almost half of the BEng students (n = 54; 46.2 %) provided no answer and almost one quarter (n = 26; 22.2 %) provided the answer "cannot say". A few students (n = 9; 7.7 %) thought that there were too many theoretical concepts. The rest of the students (n = 14; 12 %) referred to a specific course module [e.g. Modules 4 and 5 discussing the concepts and dimensions used when comparing cultures], topic [e.g. internationalization in general], and/or video that they had found less interesting [e.g. the US American TV program called Tango Finlandia in which Finns are introduced as silent people who like to drink alcohol and dance tango in the forest]. A few students (n = 14; 12.0 %) thought that all the topics were interesting.

The written course material. Two thirds of the BEng students (n = 78; 66.7 %) found the written course material, i.e. the handout, either good (41.1 % of the students), suitable for the purpose (14.5 %), or comprehensive enough (11.1 %). The percentage of "other or no answer" was 33.3 %. Those who did not enjoy the handout commented it as follows:

difficult to understand (n = 5), too few exercises (n = 3), too small vocabulary (n = 2), unnecessary (n = 2), fairly monotonous (n = 1), pretty boring (n = 1), handouts are handouts (n = 1)

The training techniques. When describing the training techniques, some BEng students used adjectives, some referred to a specific technique. The students found the techniques good (n = 37; 31.6 %), versatile /different/interesting (n = 8; 6.9 %), and suitable for the purpose (n = 7; 5.9 %). One fifth (n = 24; 20.5 %) enjoyed the videos and transparencies, while a few (n = 12; 10.3 %) referred to the group discussions. In brief, most students (n = 88; 75.2 %) found the techniques positive. The frequency of "other or no answer" was 29, the percentage being 24.8 %. Here, a few students (n = 11; 9.4 %) thought that there should have been more discussions and exercises in general.

Examples of the BEng students' comments:

"Kaikilla oli mahdollisuuksia puhua, jos vain halusi." (Everybody could speak. It was up to you.)

"Puhumismahdollisuuksia oli, mutta opiskelijat eivät käyttäneet niitä." (There were opportunities to speak but the students didn't use them.)

"Opettajan tulee pakottaa opiskelijat puhumaan." (The facilitator must make the students speak.)

"Enemmän aikaa kielenopetukseen." (More time for language training.)

"Enemmän kirjallisia harjoituksia, jotta oppii kielioppia ja uusia sanoja." (More written assignments so that you learn grammar and lexis.)

The facilitator. The BEng students found the facilitator good (n = 57; 48.7 %), professional (n = 16; 13.7 %), and clear (n = 9; 7.7 %). A few students mentioned (n = 15; 12.8) that the facilitator tried to make the students speak; a few (n = 8; 6.8 %) also mentioned that the facilitator was supportive. The frequency of other or no answer was 12, the percentage being 10.3 %.

TABLE 39 The BEng students: assessment of the face-to-face tuition period as a whole

Face-to-face tuition	Students (n = 117)	Students %
Good, successful	48	41.1
Interesting, important, useful	27	23.1
Basic information, compact	13	11.1
Versatile	7	5.9
Nice, positive, different	5	4.3
Other or no answer	17	14.5
Total	117	100.0

Assessment of the entire face-to-face tuition period. Most BEng students (85.5 %) found the face-to-face tuition period positive describing it with a number of positive adjectives (see Table 39).

Examples of positive comments:

"Hyvä! Tämä tuntui mukavalta. Ei tartuttu virheisiin. Yritettiin selittää asiat englanniksi." (Good! This was nice. Mistakes were paid no attention to. We tried to explain things in English.)

"Hyvä kurssi. Ihan mukava oli käydä tunneilla, ei ollut missään vaiheessa sellaista tunnetta, että voi vittu, taas tätä!" (A good course. It was nice to come to the lessons; I never thought, oh fuck, it's ICC again!)

"Erittäin hyvä alku asioiden oppimiselle. Kurssi esitteli sopivan teoreettisesti asioiden lähtökohdat. Tästä on jokaisen helppo edetä omien kiinnostustensa mukaisesti." (A very good start. The course introduced the basic theory. From here everybody can continue according to his/her own interests.)

Examples of less positive comments:

"Kurssi oli vähän vaikea, koska se pidettiin englanniksi." (The course was a bit difficult because it was in English.)

"Oliko tämä kulttuurienvälistä viestintää vai englantia?" (Was this intercultural communication or English?)

"Mielenkiintoinen, mutta tällaista sanastoa ei tarvitse kovinkaan paljon." (Interesting but you don't need this kind of vocabulary a lot.)

"Yhtä tyhjän kanssa." (Nonsense.)

10.5.4 Discussing the Results

To assess the *face-to-face tuition* period of the intercultural training course, most BEng students (86 %) used various positive adjectives. Most students also found the contents (74 % of the students), written training materials (67 %), as well as training techniques (75 %) positive. The students were interested in *culture-general differences* (cf. e.g. Section 5.5). An example of a single interesting topic

some students (15 %) referred to was cultural differences in non-verbal communication. The importance of non-verbal communication in the intercultural communication process seems to be a new piece of information to many students. Another example of a single interesting topic was Finnishness, especially the Finnish style of communication. This refers to the importance of self-awareness, i.e. knowing, understanding, and accepting the background of one's own as a starting point for intercultural learning and competence. Finally, the students did not have any complaints about the facilitator.

It seems that there were a few BEng students who did not know about the Content and Language Integrated Learning, or CLIL, approach applied in the experiment training. There were also a few students who did not know the emphasis applied on the training techniques, i.e. self-initiated speaking. These students had obviously missed the introduction part of the course. It also seems that those students who actively participated in group discussions and other activities were more satisfied than those who did not but seemed to expect more counseling as well as control from the facilitator.

10.5.5 Self-Study with the Web-Based Application: Feedback

The characteristics and contents of the Web-based application. (See Questionnaire 5 in Appendices.) The face-to-face tuition period was followed by the self-study period with *The Same but Different*, i.e. the Web-based application (see Sections 1.2.2 and 9.2).

TABLE 40 The BEng students: characteristics and contents of *The Same but Different* (n=117)

<i>The statements</i>	<i>The BEng students (%) who totally or partially agreed with the statements</i>
1. The introduction of the self-study period was sufficient.	64.1
2. The introduction of the application was sufficient.	67.5
3. The application is based on prior learning, i.e. the contact lessons.	65.8
4. The overall structure of the application is logical.	80.1
5. The application contains useful information.	89.7
6. The application contains interesting information.	72.7
7. English used in the application is not too difficult.	67.5
8. Hotwords make understanding easier.	76.9
9. The number of the critical incidents is sufficient.	76.1
10. The questions preceding the alternative explanations are easy to understand.	76.1
11. The alternative explanations are easy to understand.	72.7
12. The rationales for the alternative explanations are easy to understand.	65.0
13. Self-study with the application is more motivating than face-to-face learning.	60.7
14. While studying with the application, guidance and feedback from the facilitator is needed.	40.2
15. Self-study with the application is too time consuming.	17.1
16. You can learn the same things better and faster in the contact lessons.	18.0

Approximately two thirds of the BEng students thought that the introduction of the self-study period (64.1 % of the students) including the Web-based application (67.5 %) was sufficient. Two thirds of the students (65.8 %) also thought that the contents of the Web-based application, i.e. the critical incidents, are based on prior learning during the face-to-face lessons. Most students (80.1 %) found the structure of the application logical, and its contents both useful (89.7 %) and interesting (72.7 %).

Two thirds of the BEng students (67.5 %) thought that the English language used in the Web-based application was not difficult. Most students (76.9 %) found the hotwords with the English-Finnish vocabulary and some definitions of the theoretical concepts helpful.

Most BEng students (76.1 %) found the total number of the critical incidents sufficient ($n = 25$). They also found both the questions (E.g., How would you interpret the reason for Kimmo's [the Finn] difficulty?) preceding the alternative explanations (76.1 % of the students) and the explanations themselves (72.7 %) easy enough to understand. Two thirds of the students (65.0 %) thought that the language used in the rationales was not too difficult either.

Almost two thirds of the BEng students (60.7 %) found studying with the Web-based application more motivating than the face-to-face tuition. They (59.8 %) also thought that no counseling or feedback from the facilitator is needed during the self-study. Most students (82.9 %) thought that self-study does not take too much time. When asked how much time each student had actually spent on self-study, the time varied a lot between individual students from one hour to 12 hours. The average time was 2.3 hours.

Comparing the effectiveness of face-to-face tuition and self-study with the Web-based application was not necessarily easy to the BEng students. When argued that the critical incidents can be learned more effectively in the contact lessons, less than one fifth ($n = 21$; 18 %) of the students partially or totally agreed, more than one third of the students ($n = 46$; 39.3 %) answered "cannot say", less than one third ($n = 32$; 29.1 %) partially disagreed, and a few ($n = 18$; 13.6 %) totally disagreed. Thus, less than half of the students ($n = 50$; 42.7 %) found self-study partially or totally superior to face-to-face tuition. (See Table 40.)

TABLE 41 The BEng students: *The Same but Different* vs. a conventional study book ($n=117$)

<i>The statements</i>	<i>The BEng students (%) who totally or partially agreed with the statements</i>
<i>When compared to a conventional study book, the Web-based application is</i>	
1. like playing a computer game, not serious studying.	6.8
2. more versatile.	58.1
3. more difficult to read.	28.2
4. more illustrative.	66.7
5. fragmental.	16.2
6. easier to browse.	68.4
7. more flexible to modify and update.	85.6
8. more suitable for self-study.	81.2

The Web-based application compared to a conventional study book. Most BEng students (93.2 %) thought that studying with the Web-based application is serious studying, not edutainment [i.e. *education and entertainment*]. When compared to a conventional study book, most students found the application more suitable for self-study (81.2 % of the students) and easier to modify and update (85.6 %). Two thirds of the students (66.7 %) found the application more illustrative, and more than half of them (58.1 %) found it more versatile as well. More than one quarter of the students (28.2 %) thought that an electronic book is more difficult to read than a conventional one, especially if the font is small and there is a lot of text to be read. (See table 41.)

TABLE 42 The BEng students: the user interface of *The Same but Different* (n= 117)

<i>The statements</i>	<i>The BEng students (%) who totally or partially agreed with the statements</i>
1. The user interface is sufficiently logical.	87.2
2. The colors are visually pleasant.	70.9
3. The functions run smoothly.	85.5
4. Navigation is easy.	83.0
5. Help is easy to understand.	51.3

The user interface of the Web-based application. Most BEng students thought that the user interface is logical enough (87.2 % of the students), the functions run smoothly (85.5 %), and navigation within the application is easy (83 %). The colors of the application were made softer during the first development project. More than two thirds of the students (70.9 %) thought that they are now sufficiently soft. Half of the students (51.3 %) were satisfied with the Help function. (See Table 42.)

Altogether 49 BEng students (41.9 %) provided additional comments on the Web-based application. Examples of the additional comments are as follows:

- "Mukavaa vaihtelua perinteiseen opiskeluun." (Nice change to conventional studying.)
- "Sovellus kertasi hyvin tunnilla opetettua aineistoa." (The application reviewed what we had learned in the contact lessons.)
- "Sovellus oli looginen." (The application was logical.)
- "Sovellusta oli helppo käyttää." (The application was easy to use.)
- "Tekoon oli nähty vaivaa kaikkien Javascriptien yms. kanssa." (When implementing the application, a real effort had been made using Javascripts etc.)
- "Värit voisivat olla laimeammat." (The colors could be softer.)
- "Tietokoneen ruudulta lukeminen on vaikeampaa kuin paperilta lukeminen." (It's more difficult to read on the screen than on the paper.)
- "Lipun liehuminen häiritsee lukemista." (The waving flag disturbs reading.)
- "Pitäisi olla hakemisto, josta voi erikseen valita tilanteen." (There should be an index where each incident could be chosen from.)
- "Hotwordejä voisi olla enemmän." (There could be more hotwords.)
- "Olisi hyvä, jos sovelluksessa olisi äänet." (It would be nice if the application had sound effects.)
- "Vastausten tulisi tallentua." (It should be possible to save the choices.)
- "Liian vähän aikaa sovellukselle." (Too little time to study the application.)
- "Sovelluksen pitäisi olla Internetissä. Kotona voisi keskittyä paremmin." (The

application should be on the Internet. It would be easier to concentrate at home.)

"Sovellus oli yllättävän hyvä. Kirjan korvikkeena OK." (The application was surprisingly good. A good substitute to a book.)

"Hienoa, että halutaan tukea opiskelijoitten itseohjautuvuutta. Samaa pitäisi saada muihinkin aineisiin." (It's great that students' self-directedness is supported. More applications like this to other subjects as well.)

10.5.6 Discussing the Results

Almost two thirds of the BEng students (64 %) were satisfied with the *introduction* to the self-study period, one third (36 %) expecting more accurate information and perhaps a demonstration as well. It seems that even if the BEng students are in general used to working with computers, in the future more attention must be paid to their orientation, especially to those with satisfactory or poor English skills, whose percentage was 58 % (cf. Table 27).

One third of the BEng students (34 %) thought that the Web-based application is not totally based on *prior learning*. This is true, the objective of the application being to both support and supplement what is or was learned during the face-to-face tuition period. On the other hand, the application can also be used independently of face-to-face tuition.

One third of the BEng students (33 %) also thought that the English *language* used in the Web-based application is too difficult. Almost equal percentages were found when considering Statements 10-12, i.e. statements connected with the language of the critical incidents including their questions (24 %), alternative explanations (27 %), and rationales (35 %). In addition, the percentages are in accordance with those describing the students' self-reported English skills (see Table 27). (See Table 40.)

According to Triandis (1995: 184), a Culture[-General] Assimilator, consisting of 150 critical incidents can be worked through by a trainee in approximately six hours, i.e. 2.4 minutes per incident. According to Albert (1995), the sufficient *number of critical incidents* per Culture[-General] Assimilator is approximately 20. The Intranet version of *The Same but Different* consists of 25 critical incidents modified for engineering and business students. The *average time* the BEng students spent on working with *The Same but Different* was 2.3 hours, i.e. 6 minutes per incident. It can be asked whether 2.4 or 6 minutes per incident is a sufficiently long time for deep learning.

Most BEng students (93 %) found studying with the Web-based application *serious studying*, not edutainment. Almost two thirds of the students (61 %) found the self-study with the Web-based application motivating as well. The students had, however, difficulties in deciding which is more effective: studying critical incidents in the contact lessons or self-study with the Web-based application. Eventually, less than one fifth of the students (18 %) preferred contact lessons, while less than half (43 %) preferred self-study. More than one third of the students (39 %) could not decide. (See Table 41.)

The BEng students participating in the training experiment seemed to be open to training and learning techniques based on new technology at least to some extent. This is important considering experiential learning, learning by doing, and life-long learning, i.e. intercultural learning. Face-to-face tuition is, however, important especially when studying the basics of intercultural

communication. It is also needed for interaction between trainees to develop their social skills. An interesting issue is, whether there is any relationship between the end results of the present study and the background of the students: Most students (90 %) were male studying in the degree program of information technology (89 %) (see Table 3).

According to the BEng students, the major *benefits* of the Web-based application include its suitability for self-study (81 % of the students), and easiness of modification and update (86 %). (See Table 41.) As to the other characteristics of the Web-based application, most students (87 %) found the user interface logical. They were also satisfied with the running of the functions (86 %) and navigation (83 %). Half of the students (49 %) found the English language used in the Help function difficult to understand. As mentioned above (see Table 27), the percentage of the students with satisfactory or poor English skills is rather high due mainly to their vocational background. (See Table 42.)

When *producing* hypermedia-based programs and/or Web-based applications, elements such as backgrounds, colors, fonts, still-pictures, video, animation, and sound need special attention. Elements other than text should be used as much as possible. On the other hand, tested information on the use and psychological effects of the various elements of multimedia is still scarce [e.g. the effects of colors on the computer screen]. It often seems that if a specific element pleases one user, it irritates another. Furthermore, producing programs and applications is too demanding a challenge for just one individual: In addition to ample financial resources, a *team* of specialists is needed from scriptwriters to programmers. A practical problem is the incompatibility of computer hardware and software, i.e. in practice the hardware available in various educational institutions often lags behind the software the programmers like to apply.

To finish with, the feedback on *The Same but Different* provided by the BEng students during the training experiment is consistent with the feedback collected during the years 1997 (n = 30) and 1998 (n = 48) from other BEng students (see Section 9.2; Korhonen 1999; 2000; 2001a; 2001b).

10.6 The BEng Students: How to Further Develop the Intercultural Training Course

At the end of the experiment the BEng students were asked to make suggestions as to the further development of the intercultural training course (formative assessment) by using Questionnaires 3 (the face-to-face tuition period) and 5 (the self-study period).

10.6.1 Suggestions

When asked for suggestions on how to develop the intercultural training course further (see Table 43), almost half of the BEng students (43.6 %) provided the

answer "cannot say", "nothing special", or they provided no answer at all. More than half of the students (56.4 %) provided an answer, however. A few students emphasized the need for more oral exercises and the facilitator's responsibility to make the students speak (12.8 %). A few students needed more exercises in general (10.3 %), foreign visitors to the contact lessons (10.3 %), and more videos (6.8 %). A few students (8.5 %) also needed more contact lessons.

TABLE 43 The BEng students: suggestions for how to improve the intercultural training course

Suggestions	Students (n = 117)	Students %
Cannot say	51	43.6
More speaking	15	12.8
More exercises	12	10.3
Foreign visitors	12	10.3
More contact lessons	10	8.5
More videos	8	6.8
More information	4	3.4
More English with grammar and word tests	3	2.6
More fun	2	1.7
Total	117	100.0

10.6.2 Discussing the Results

Almost half of the BEng students (44 %) provided no answer when asked how to develop the intercultural training course further. The other half of the students (56 %) did not make any "radical" suggestions to remodify the objectives, contents, and techniques of the training. It is difficult to say whether this is an indication of passiveness or satisfaction. (See Table 43.)

A few BEng students (10 %) thought that there should have been more exercises in general, while a few (13 %) referred to more spoken exercises in particular. According to the objectives set on the training course (see Sections 9.2 and 8.3), there were many spoken exercises available and the students were encouraged to speak as much as possible. It is a fact that the students could have made better use of the opportunities to speak. A few students pointed out in their feedback that "everyone waited for someone else to speak". There were also a few students who thought that the facilitator should have made them speak. This is an interesting point of view, rather common also in the other engineering English courses at Kajaani Polytechnic (see Figure 18).

A few students (10 %) also missed foreign visitors. Foreign visitors were not invited because there are other engineering English courses, especially the one called Going Abroad (see Figure 18), during which the students have opportunities to meet foreigners. A few students (9 %) thought that the number of contact lessons should be higher.

It seems that during the entire intercultural training course there were a couple of BEng students (3 %) who were not quite sure, whether the course was about intercultural communication or English, or both. For an unknown reason, they missed the initial introduction of the course, and obviously expected a conventional teacher- or trainer-driven English course with lessons focusing on teaching and testing grammar and lexis. Because of this, the orientation

phase at the beginning of a course like the present one is of major importance. Besides telling the trainees about the course, the trainees can, for example, be asked to brainstorm reasons for content and language integrated learning. After brainstorming, the reasons could be analyzed and discussed together. In the present author's opinion, integrating intercultural training and English studies makes the learning experience more realistic considering interaction in another culture and adaptation to it. A trainee not present when providing the introduction is, of course, a different kind of problem.

A couple of BEng students (2 %) thought that the contact lessons should be fun. Criterion-referenced learning is hard work: In the present author's opinion it does not need to be fun. However, when the topic in question, i.e. intercultural communication, is considered, there are many opportunities for fun.

10.7 Validity of the Questionnaires

To assess the development of the BEng students' intercultural competence during the training experiment, a series of five questionnaires with both structured and open-ended questions and declarative statements, as well as a Culture-General Assimilator consisting of 25 critical incidents, i.e. measuring instruments, were constructed. When assessing, or measuring, a phenomenon, validity must be paid attention to (see Subsection 7.5.1). *Validity* refers to how appropriate the interpretation of each research result is (Linn & Gronlund 2000), or roughly speaking, that there is no *systematic error* in the measurement, and the results of the measurement are correct on average. In addition to systematic error, there may be *chance error*. (Seelye 1994: 209)

When constructing the *questions* and *declarative statements*, i.e. variables, for the questionnaires, attention was paid to their validation. It was not possible to pre-test the questions and statements with representatives of the target cultures because there were neither economic resources nor such people, i.e. foreigners, available. Validation had to be based on a *pre-test* with nine BEng students (cf. the research sample $n = 117$), an expert opinion (i.e. Seelye 1994), and the present author's experience. An attempt was made to avoid stereotyping in particular. Attention was also paid to the contents of the questions and statements so that each of them would contain and measure one cultural element at a time.

Due to the modifications in the contents of the *critical incidents*, i.e. variables, their original validity tested by Brislin and Cushner (1986; 1996) may have suffered. Pretesting the validity of the modified and new incidents was not possible because there were neither economic resources nor representatives of the target cultures available. Considering especially the "best" alternative explanations and the most obvious criteria connected with the rationales, the validity was, however, tested by the BEng students during the training experiment. Most students were able to choose both the alternative explanation that was meant to be the "best" one for the context in question, and to provide the most obvious criterion (see Tables 17-18).

Considering both systematic and chance error, it is possible that there

were individual BEng students who did not always provide truthful answers, who were not able to concentrate, or who had problems in remembering. It is also possible that some mistakes were made when feeding the research data into the computer. Because the end results of the intercultural training experiment were analyzed with an emphasis on the group of students, not individual students, the results are, however, correct at least on average.

The *statistical conclusion validity*, or *conclusion validity*, refers to the relationship between the intercultural training course and the development of the BEng students' intercultural competence. The size of the research sample was 117 students. Because the test and the control group consisted of the same students and the end results of the training experiment were analyzed at the group level, the sample was big enough.

The circumstances were, in general, stable during the intercultural training experiment. After the face-to-face tuition period the physical setting of the training was, however, changed from the language laboratory to the computer and/or tutor classrooms with computers available for self-study. Because the *The Same but Different*, i.e. the Web-based application used in self-study, was installed on the Intranet of Kajaani Polytechnic, the BEng students had to study the application at school. If the students wanted to study the incidents at home, they had to print out the pages in question. This may have had a negative impact on the amount of time they spent on studying at school making use of the hypertext with hotwords (cf. 2.3 h, i.e. the average time spent on self-study by the students). Consequently, the conclusion validity of Questionnaires 4 and 5, which were filled in after the self-study period, may have decreased. When filling in any of the questionnaires, the weekday (in this case Monday after the weekend and/or Thursday after the Wednesday evening, which is the party night) as well as the time of day (early Monday and Thursday morning and/or late afternoon in general) may have had a negative impact on some students' motivation to fill in the questionnaires and on the conclusion validity, respectively.

The *internal validity* refers to potential other causal factors that, in addition to the intercultural training course, may have had an impact on the development of the BEng students' intercultural competence. There is no knowledge of such changes between the time of Test 1 (Pre-test; Questionnaire 1), Tests 2 and 3 (Post-tests; Questionnaires 2 and 4), and feedback (Questionnaires 3 and 5) in the world outside Kajaani Polytechnic that might have had an impact on the internal validity. It is, on the other hand, likely that during the face-to-face tuition period the BEng students became, consciously or unconsciously, more sensitive to the topic of intercultural communication in general, and they started paying more attention to intercultural issues on various media, for example. This kind of increased sensitivity may have had an impact on their post-test responses, feedback, and consequently, the internal validity. It is, however, quite impossible to specify this kind of impact so as to be included in the analysis of the research data.

The time interval between Test 1 before the face-to-face tuition period (Pre-test; Questionnaire 1) and Test 2 after it (Post-test; Questionnaire 2) being two months, it is not very likely that the BEng students would have been able to remember in Test 2 what the exact contents of Test 1 were, and what kind of responses they provided. The contents of Questionnaire 4 being different from

those of Questionnaires 1 and 2, there was no danger of the students remembering answers. (See Appendices.)

The contents of the questionnaires were not changed during the training experiment. Because the test and the control group were the same, the groups were not too different from each other, too big a difference representing a threat to internal validity. On the other hand, the BEng students had opportunities to discuss all the tests as well as feedback connected with face-to-face tuition and self-study with each other. Students dropping out of the training experiment did not present a problem because the students filled in the questionnaires during the contact lessons using their own names. This guaranteed a complete set of 117 questionnaires. [When analyzing the research data, the names were changed into numerical codes, e.g. 001M, M standing for male.] Also there was no evidence of the students' need to please the facilitator, i.e. the present author, with their responses either.

The *construct validity* refers to the measuring instruments, i.e. the questions, declarative statements, and critical incidents, and their ability to measure what they were supposed to measure. In the field of intercultural communication there is a wide range of abstract concepts the definitions of which tend to be loose. This caused a few problems when constructing the test items and interpreting the BEng students' responses. When constructing the statements, i.e. variables to measure the students' affect and cognition, it was not possible to avoid stereotyping totally. Furthermore, there were a few statements measuring simultaneously more than one cultural element [e.g. Culture consists of layers or levels. Customs represent the outer layer.]. There were also a few statements that were truisms [e.g. All intercultural communication is not problematic.] and, thus, familiar to most students before the face-to-face training period. There were also a few variables that were supposed to measure affect but actually measured cognition in affect [e.g. There are cultural differences in the values of working life.].

The main *limitation* of the training experiment was that it was not possible to assess the development of the BEng students' behavior and skills as part of their intercultural competence in real-life intercultural encounters among host nationals, but simulated intercultural encounters, i.e. a Culture-General Assimilator with critical incidents, had to be used. On the other hand, critical incidents have proven their effectiveness in developing intercultural competence, including cognition, affect, and behavior (e.g. Albert 1995; Triandis 1995; Brislin & Cushner 1996; Cushner & Landis 1996). The incidents also proved effective in the present study, considering the BEng students' cognition and problem solving skills in particular.

It is a fact that the data on the BEng students' intercultural competence and its potential development, i.e. perspective transformation, was only gathered with the help of questionnaires. Within the questionnaires different kinds of test items were, however, used including both structured and open-ended questions, declarative statements, and critical incidents. Assessing the students' motivation and competence was not only based on the students' self-reporting, but there was also peer appraisal involved. On the other hand, self-reported data has been found to relate to successful adaptation to host cultures (e.g. Blake et al. 1996). Besides their peers, the students could also assess the

facilitator, i.e. the present author, and vice versa. Furthermore, facilitator observation was used.

As to the *external validity*, there is no knowledge as to it being threatened: There were no other intercultural training courses available to the BEng students at the time of the training experiment, nor was there anything on the media to arouse their special attention.

When considering whether the end results of the present study can be generalized to other settings, there are at least a few limitations that need to be paid attention to. It is, first of all, possible that the BEng students' gender [90 % of the students were male] and field of study [89 % of the students studied information technology] had an impact when the students assessed their English and communication skills as well as their self-study with the Web-based application. That is, the male students may have underestimated their English and communication skills, and the information technology students may have been more interested in Web-based learning than students of other degree programs.

A second limitation may have been geography [76 % of the students were from the province of Kainuu]. Kainuu people have the least interest in Finland to travel abroad [on holiday] (Tilastokeskuksen kuluttajabarometri 2001). In the training experiment the BEng students said that they are interested in studying (63 % of the students) and working (85 %) abroad. In practice an overwhelming majority of Kajaani Polytechnic BEng students have stayed in Finland so far. Finally, most students had no real intercultural experiences of their own. Therefore, at least part of the students' answers is based on their assumptions of themselves: How they perhaps would think, feel, and behave in a specific situation.

10.8 Reliability of the Assessment

To improve the reliability of the assessment (see Subsection 7.5.2), the contents of the questionnaires were *pretested* with nine BEng students (cf. the research sample $n = 117$) before commencing the training experiment. On the basis of this pre-test the questionnaires were modified, the biggest modification being the change of the language from English into Finnish. The one-credit (24 lessons; 45 min each) course in intercultural communication is part of the students' compulsory English studies. In the training experiment Finnish was, however, used in the questionnaires to eliminate potential language problems and their impact on the reliability of the end results in advance. In Questionnaire 4, used after the self-study period with the Web-based application, the critical incidents and their alternative explanations were, however, in English, and the students also provided their rationales in English.

The *measuring instruments*, i.e. open-ended and structured questions, declarative statements, and critical incidents in the questionnaires, were constructed to assess the development of the BEng students' intercultural competence as a whole, including the cognitive, affective, and behavioral components of intercultural competence (see Sections 3.2-3.5). Assessing cognition

was, of course, easier than assessing affect and behavior.

To assess the BEng students' motivation to study intercultural communication and the development of their intercultural competence, self-report, peer appraisal, and facilitator observation were also used. According to Linn and Gronlund (2000: 315; 317), *self-reporting* provides a "fuller understanding" of students' interests, attitudes, needs and problems, for example. *Peer judgments* or *ratings* are "especially useful" in assessing personality characteristics, social skills, and other forms of behavior. Linn and Gronlund admit that self-report inventories, peer appraisals and *observation*, with potential anecdotal records, are "more subjective than we would like", but, on the other hand, they are "the best means available for assessing a variety of important behaviors".

To find out what the BEng students really think about intercultural communication and training, there were many *open-ended questions* in the questionnaires. Therefore, when interpreting the students' responses, the present author had to make a number of subjective decisions, e.g. Is "okay" the same as "good"? and Does "could be better" refer to "satisfactory" or "poor"? According to Linn and Gronlund (2000), assessment is never totally objective.

When constructing the *declarative statements*, i.e. variables to measure the BEng students' affect and cognition, it was thought that a five-point Likert scale from "I agree totally" to "I disagree totally" would not be needed. Instead, the variables were scored either "agree" or "disagree". A common criticism of the alternative-response test items is that trainees may be able to recognize a false statement as incorrect but still not know what is correct, i.e. best in the context. To offset this disadvantage at least partially, the neutral alternative response "cannot say" was added. Another fact that may limit the usefulness of alternative-response test items is that trainees have a fifty-fifty chance of guessing the correct answer. This disadvantage was at least partially offset by using a large number of test items. (Linn & Gronlund 2000: 180-182) To avoid systematic error, a number of control questions and statements were inserted.

The *critical incidents* in *The Same but Different*, i.e. the Web-based application, were modified and adapted for the Finnish BEng students in particular, and cultural patterns from the perspectives of both engineers and businesspeople were included. It is possible that some of the incidents were either too self-evident or too abstract for some of the students their prior knowledge and experiences in English, intercultural issues, and life in general varying at least to some extent, [The same applies to the questions and declarative statements.] Every student had, however, an equal opportunity to study the handout as well as the Web-based application, and in that way to make up the potential gap.

To assess the BEng students' ability to analyze and solve critical incidents a *scoring system* was developed (see Subsection 9.3.3; Section 10.2.5). Whether the alternative explanation chosen by the students was the "best" one, or whether the criterion mentioned by the students was one of the four pre-determined ones, was based on the present author's reasoning and subjective decision. According to Linn and Gronlund (2000: 241), the most commonly cited limitation of the essay-type assessment [i.e. critical incidents -type] is the unreliability of scoring. To improve the reliability of the scoring, the "best" alternative explanations and the four criteria to assess each critical incident

were determined in advance. When constructing the criteria for the assessment of the students' rationales, the criteria were to be found in the training material, i.e. the handout and the Web-based application. (Cf. holistic and criterion-referenced assessment; see Section 7.2.)

When assessing the potential behavioral development of the BEng students' intercultural competence, a score, i.e. a single statistic, was used. Because the extent of behavior changes in the research discussing the effectiveness of intercultural training has not been clear (cf. Cushner & Landis 1996), the objective of the present study was to obtain a quantitative end result. The result was reached the students' behavioural component, i.e. ability to analyze and solve intercultural problems and conflicts, developing from poor to satisfactory during the training. Progression from one criterion to another need not, however, be defined as increasing, quantifiable acquisition of competence on a linear scale. Progression should involve a qualitative change, or perspective transformation, rather than a quantitative one. To document qualitative progression a portfolio can be used. The portfolio allows the reader(s) to see the *biographical development* in trainees' intercultural competence. (See Section 7.2; cf. Baxter & Ramsey 1996.)

10.9 Usability of the Questionnaires

The assessment process was both economical and easy to administer (see Subsection 7.5.3). There were many alternative-response test items that were fast to respond, score, and feed into the computer. On the basis of the pre-determined criteria the scoring of the critical incidents was also rather fast. Because the BEng students filled in the questionnaires during the contact lessons manually, no special arrangements were required. On the other hand, the manually written responses of the students had to be read, analyzed, and fed into the computer, which was time-consuming. If the students had word-processed their responses, a lot of time would have been saved. This would, on the other hand, have required special arrangements. The interpretation of the alternative-response test items caused no problems, whereas the interpretation of some of the responses to the open-ended questions did. So did the identification of the four criteria in the rationales written by the students.

11 FINAL DISCUSSION

The present study was a *training experiment* in intercultural communication. The reasons for the experiment included the need to develop polytechnic education and especially that of foreign languages to meet the requirements set by the increasing internationalization and globalization of working life, the increasing ethnicity within Finland, and Finns' intercultural style [of communication], which in some respects differs from other styles of communication. It was hypothesized that due to cultural pluralism today's employees, such as Bachelors of Engineering, or BEng engineers, need intercultural competence to be able to study, work, and communicate effectively and efficiently both inside and outside Finland.

The training experiment was aimed at Finnish Bachelor of Engineering, or BEng, students (n = 117). The one-credit (24 h; each lesson 45 min) course was part of the students' compulsory English studies. In the training experiment, content, i.e. intercultural communication, and language, i.e. English as the *lingua franca*, studies were integrated (cf. Content and Language Integrated Learning, or CLIL). Furthermore, the etic, i.e. culture-general, and didactic-experiential approaches were applied. The transformation-orientedness of intercultural training and learning was also emphasized.

Both the effectiveness of the training course in developing the cognitive, affective, and behavioral components of the BEng students' intercultural competence as a whole at the group level (*summative assessment*) and the training itself (*formative assessment*) were assessed. In addition, the students' attitudes toward intercultural competence and their motivation to develop it (*self- and peer assessment*) were mapped out.

The BEng students were pre- and post-tested by means of a series of five questionnaires and *The Same but Different*, a Culture-General Assimilator implemented as a Web-based application. Taken cautiously, pre- and post-test comparisons are helpful in giving the facilitator a general idea of the direction of any change in trainees' performance including cognition, affect, and/or behavior and skills, i.e. the interrelated components of intercultural competence. Tests also provide ideas on how to improve training. In the present study, because of the validity and reliability concerns, the usefulness of

the tests was limited to measuring group characteristics rather than what an individual BEng student knew or felt about a specific topic included in the experiment.

Finally, the training experiment provided empirical evidence for the further development of intercultural training at Kajaani Polytechnic and in the Finnish polytechnic sector in general. (See Section 1.3.)

11.1 End Results of the Assessments

Summative assessment: affect. On the basis of the percentage scores, there was not much change, i.e. perspective transformation (Taylor 1994), in the affective component of the BEng students' intercultural competence during the training experiment. The variables, in which positive perspective transformation, or slightly increased world-mindedness, occurred included "foreign neighbors are nice", "I would like to have more foreign contacts", "neighbors' nationality is not important", and "it is ethnocentrism, not real racism". *World-mindedness* refers to an interest in and concern about life and people in various countries.

It can be concluded that even if there was not much positive development in the BEng students' affect, the students' attitudes toward foreigners were in some cases more positive than those of Finns in Jaakkola's study (1999), for example. To be able to explain these differences, further research would, however, be needed. It can also be concluded that the students' affect needs further development.

Summative assessment: cognition. On the basis of the percentage scores, there was considerable change, i.e. perspective transformation, in the cognitive component of the BEng students' intercultural competence during the training experiment. The variables, in which positive perspective transformation occurred, included the students' knowledge of Finnishness, i.e. *self-awareness*, the concept of culture, the intercultural communication process, cultural differences in verbal and especially in non-verbal communication, tools, i.e. concepts and dimensions, used to compare cultures, and the cultural adaptation process, especially repatriation.

It can be concluded that the BEng students had much more knowledge of cultural diversity after the training experiment than before it, and consequently, their *complex thinking* developed. It can also be concluded that the students' cognition needs further development.

Summative assessment: behavior. Behavioral measures provide the most convincing evidence of the effectiveness of intercultural training, i.e. when evidence can be presented that trainees have changed their behavior in desirable directions. A training experiment based on behavior modification not being possible for economical and other practical reasons, a simulation, i.e. a Culture-General Assimilator called *The Same but Different* consisting of 25 critical incidents, was used. *The Same but Different* was implemented as a Web-based application suitable for self-study. The Culture-General Assimilator method has been found to produce changes in trainees' affect, cognition, and behavior, even if the extent of the changes has been problematic (e.g. Cushner & Landis 1996).

In the present study, on the basis of the Wilcoxon test, the BEng students experienced a statistically significant change, i.e. perspective transformation, in the behavioral component of their intercultural competence. On the basis of the scoring system used in the training experiment, there was a quantitative change of less than one grade [in each of the five critical incidents]. In other words, the students' ability to analyze and solve intercultural problems and conflicts occurring in the critical incidents developed from poor to satisfactory. Rather than a quantitative change, the present author would prefer to speak about a qualitative change, that is, about a small positive leap that took place in the students' insight. Besides the self-study period, on the basis of the students' self-report, the students' behavior also developed during the face-to-face tuition period.

The BEng students reported after the face-to-face tuition period that their cognition (76 % of the students), behavior (67 %), and affect (31 %) had developed. They also reported that the biggest benefits provided by the training course were also in cognition (29 %), behavior (20 %), and affect (12%). It can be concluded that the students had better problem solving skills after the training experiment than before it. Consequently, they may perform better in a job situation. To develop behavior, in particular, hands-on experiences in other cultures are usually needed. [It must, however, be remembered that criteria people use to evaluate and assess competence vary from one culture to another and change with time.] To be able to conclude whether the students' behavior in terms of actual interaction and cultural adaptation, changed, longitudinal measures of their subsequent performance on-the-job would be needed. These measures should include facilitator, peer, and host national assessments of the impacts of intercultural training and learning. (Cf. Kealey & Protheroe 1996: 148; 157.)

According to Taylor (1994), a culture shock is a necessary precondition to change and growth in the transformative learning process. Referring to the end results of the present study, the present author argues that at least some change is possible without the experience of entering a new culture and culture shock. The change may be more prominent if it involves a culture shock but, as Seelye (1994) points out, school, i.e. intercultural training and learning, can [also] be a catalyst for change. This was proven in the present study. Kealey and Protheroe (1996) point out that intercultural training does not aim at changing trainees' basic character but at developing some existing competences and adding some new ones.

Formative assessment. Most BEng students found the face-to-face tuition period of the intercultural training course positive, including the contents, written materials, and training techniques. The students were interested in etc, i.e. culture-general, differences, in particular. Most students found the self-study period, i.e. studying with the Web-based application, serious studying, not edutainment [i.e. *education* and *entertainment*]. Almost two thirds of the students found the self-study period motivating as well. Approximately two thirds of the students thought that the English language used in the Web-based application is not too difficult, while the remaining third, with a vocational background and less prior English studies, found the language difficult. The major benefits of the Web-based application included its suitability for self-

study and easiness of modification and update.

In general, the BEng students had a positive attitude toward intercultural training and learning. In spite of this, half of the students only prepared a little for the contact lessons while more than one third never did. Two thirds of the students were passive during the contact lessons, i.e. they lacked initiativeness and they did not participate in the group discussions and other activities without being asked to. In other words, the facilitator had to activate the students to speak by asking them questions connected with the topic in hand. The reasons for the students' lack of initiativeness mainly included insufficient knowledge of English and a kind of communication reticence (cf. Sallinen-Kuparinen 1986). Half of the students sometimes reflected on their learning experience after the contact lessons at home while one third never did.

In the present study, many BEng students, the average age of whom was 23.3 years, were not autonomous, *self-directed* adult learners. That is, they were not sufficiently mature and independent adults able to take proactive responsibility for their own learning. As Koro (1993: 34) points out, self-directedness as a characteristic common to all adults is a myth. Instead, self-directedness is cumulative, increasing with age and education. It seems that at least the first- and second-year BEng students need more counseling and control in their learning than was provided during the training experiment.

The relationship of formative and summative assessment. According to Brislin and Yoshida (1994a, 148-151), the results of formative and summative assessment are often different. Trainees may enjoy the intercultural training course and report that it was worthwhile, but they may not change anything in their affect, cognition, and/or behavior. Or, trainees may report that they disliked the training but later integrate much of what the trainers, or facilitators, recommended into their actual behavior in various intercultural encounters. In the present study, the end results of formative and summative assessment support each other. In other words, the BEng students, first, found intercultural competence and the intercultural training course positive and, secondly, expressed some positive learning outcomes.

Self- and peer assessment. Most BEng students found *intercultural competence* an integral and equal part of BEng engineers' professional qualifications. Two thirds of the students found their *English* skills either good or satisfactory, the remaining third finding them poor. It is likely that the remaining third consists of the students with a vocational background and minimal prior studies in English.

Two thirds of the students found *Content and Language Integrated Learning, or CLIL*, a new and positively different way of studying and developing their intercultural competence. CLIL being rather a recent phenomenon in Finnish polytechnic education, there is not yet much empirical data available on it. (Cf. VIEKO 1999.) In CLIL, in addition to trainees' proficiency in English as well as their motivation to further develop it and study in it, attention has to be paid to trainers' proficiency in English as well as their motivation to further develop it and provide training in it. Attention also has to be paid to interdisciplinary cooperation. When teaching in a foreign language, content and language have to be of equal importance. This means that both content and language are set their own learning objectives. Furthermore, pedagogic practices need attention,

i.e. trainees have to possess the learning skills required in CLIL. In the present study, surprisingly many BEng students referred to a kind of communication reticence during the contact lessons. In addition, all students were not self-directed enough.

Most BEng students informed that, in general, they have no *communication* problems. On the other hand, most students thought that they are not able to solve potential communication problems with foreigners, and found interpreting foreigners' emotions especially difficult. More than half of the students thought that the main reason for potential communication problems with foreigners is their insufficient knowledge of foreign languages, especially that of English, and not shyness, for example. The ideal communicator of the students is clear and fluent, able to communicate interactively with different kinds of people.

11.2 How to Provide Intercultural Training?

When considering how to provide intercultural training in a polytechnic, there are a few questions to be answered. Should the training be in Finnish or in a foreign language? Should the training be independent or dependent of foreign language studies? Should foreign language education be conventional focusing on grammar, lexis, and perhaps some background, or area, studies? Should new approaches be introduced and experimented?

Orientation. According to the present study, most BEng students were unprejudiced as to the training contents, materials, and techniques, and welcome unconventional ways of doing things. The importance of the orientation phase must, however, be emphasized.

Heterogeneous students. It must also be emphasized that when designing and implementing a training course like the one discussed in the present study, the linguistically heterogeneous background of the students must be paid special attention to.

Science-based and etic. To be effective intercultural training must be based on scientific research, not on anecdotage. On the basis of the present study, intercultural training should not, at least in the beginning, be limited to very specific cultures and types of interaction, but it should start from etic, or general, competences, and then, when necessary, move on to more emic, or specific, ones, including factual knowledge of the target culture(s). The English-speaking-world consisting of a wide variety of cultures, the English language can be used to study culture-general differences.

The relationship of transformative learning and the development of intercultural competence. On the basis of the present study, there is a link between intercultural competence and the theory of transformative learning. During the intercultural training experiment, many BEng students made meaning of new intercultural experiences and simultaneously integrated the new learning into a somewhat broader world view. In an ideal case, understanding guided the students toward functional, beneficial, and enjoyable communication with and adaptation to members of other cultures. (Cf. Taylor 1994.)

There seems to be general agreement that intercultural training is beneficial, but there is no consensus as to what training approaches are most appropriate or effective for delivering this kind of training (Gannon & Poon 1997: 430). In the present study, when facilitating the transformative learning process, besides the BEng students' self-directedness, emphasis was put on the *experiential* and *participative* training techniques, such as discussions in small groups, cooperative learning, videos with follow-up tasks, and a simulation, i.e. the Culture-General Assimilator. Transformative learning was found to be an appropriate approach to enhance the students' skills in solving problems and overcoming obstacles.

Additional cultural immersion techniques include projects, workshops, role-plays [based on critical incidents], and small presentations [e.g. based on information from the Internet]. In working life, discussions with repatriates, i.e. people who have worked in the target culture(s), and predeparture visits are of major importance. Furthermore, because developing intercultural competence is a life-long process and the cultures of the world are many, trainees need *learning to learn skills* to be able to develop their intercultural competence further.

Considering cultural differences in *non-verbal communication* [which are often very culture-specific], training can only be introductory focusing on major aspects of non-verbal practices. There is no need to start imitating the practices, but trainees should acquire skills which allow them to observe these practices and relate them to their own ones (Byram 1997: 47).

Gannon and Poon (1997: 441; 432) argue that the more rigorous the training, the more effectively trainees will be able to reproduce any learned behaviors. This is because training rigor increases trainees' level of attention and retention. In a study by Gannon and Poon (Ibid), experientially-trained trainees were more satisfied with the training and also perceived the training to be more useful and relevant. The present author points out that because intercultural training includes foreign language studies with grammar and lexis, the didactic approach is also needed. In other words, a mix of didactic and experiential training techniques can be recommended.

The Same but Different. The Culture-General Assimilator, called *The Same but Different* and implemented as a Web-based application, aimed at providing the BEng students with a theoretical and experiential framework on intercultural communication as well as at supplementing and supporting the face-to-face tuition period. It also aimed at helping the students understand the processes of intercultural communication and cultural adaptation to gradually become competent intercultural communicators.

The design and implementation of *The Same but Different* was not without problems. The main problems were insufficient knowledge of hypermedia technology and the training and learning processes based on it, including the contents and validity of the critical incidents; the choice of backgrounds, colors, and fonts; the readability of hypertext; navigation within the application; limitations in the computer infrastructure, i.e. the availability of multimedia-equipped workstations with soundcards, loudspeakers, microphones, and headphones; and the incompatibility of hardware and software, the user interfaces and browsers having caused the main problems. A surprisingly big problem was to find copyright-free still-picture material. Furthermore, software

production is team work in which multiple expertise in both the contents and technology is an absolute prerequisite. The more media-intensive the software is, the more expensive its production.

The focus in the research of educational technology has often been on its effectiveness in training and learning. Most of the end results have been "success stories". The effectiveness and success of short-term experiences is, however, not sufficient to assess the role of technology in education. Instead of emphasizing the technological solutions and end products, the objectives set on training should first be defined and only then the role given to technology. In the present study, the role of technology was to supplement and support the face-to-face tuition period and thus to provide added value. In addition to the effectiveness and support approaches, the research of educational technology can concentrate on the technology itself, computer ergonomics, and communication.

The high level of interaction is often considered the main benefit of hypermedia. This interaction is, however, between man and machine, not face-to-face between two individuals. People also need a *social context* in which to learn. On the basis of the present study, self-study with a Web-based application, for example, must be preceded by a face-to-face tuition period during which the basics of the topic in question are discussed and practiced, i.e. the orientation basis must be established first. Considering intercultural communication, critical incidents can, of course, be used as source material in the discussions, or trainees can construct critical incidents of their own. During the self-study period *guidance* must be provided for when necessary, i.e. when asked for by trainees. The self-study period must be completed with a *follow-up discussion* in which both the facilitator and trainees participate, and in which the critical incidents with their alternative explanations and rationales are discussed to avoid potential misinterpretations and misunderstandings. It is essential to remember that there are no correct or wrong solutions, but considering the context, there are better and worse solutions.

While hypermedia opens up new horizons for training, technology is just a tool to be used when it is more effective than the tool it is replacing: It is know-how that matters, not technology. Besides, many of the elements of new learning environments are still under experiment and need testing and further development. In Finnish foreign language education, the introduction of language software has been surprisingly slow even if there is material available. One of the main problems has been the lack of easy access to hardware.

Interculturalists and facilitators of intercultural communication. How well equipped and qualified are Finnish foreign language teachers, or trainers, in various educational institutions to provide intercultural training? Is it too easy and safe to concentrate on the traditional national culture, i.e. background or area studies? It is of major importance that foreign language teachers grasp the significance of culture in today's foreign language education, that they are *cultural mediators*. They also need to consider their potential change of professional identity from being a traditional foreign language teacher to being a *facilitator of intercultural communication*. Besides the cognitive and behavioral aspects of intercultural competence, facilitators of intercultural communication must be able to address affect, i.e. issues of attitudes and emotional responses to otherness as well. (Cf. Byram & Risager 1999: 76; 105.) It is likely that many

teachers first need to enhance their own intercultural competence. Training the teachers can be even more complex and challenging than that of trainees.

Because the overall goal of intercultural training and foreign language education, i.e. intercultural competence, concerns both intercultural communication and foreign languages, both interculturalists and foreign language teachers are needed to help trainees expand and develop their native skills into intercultural competence (Fantini 1995: 143). *Interculturalists* are people who have training in the theory of intercultural communication. Interculturalists may overlook the task of developing language skills, while foreign language teachers may concentrate on developing language skills.

On the basis of the present study, the gap between the overall goal and objectives of professionally-integrated and especially interculturally-oriented foreign language education and the reality seems to be rather wide. Especially BEng students with a vocational background need more face-to-face tuition in small safe groups. More professionally-integrated and interculturally-oriented learning materials are also needed. The students must be provided with better self-study facilities by making better use of new technology and language software.

Furthermore, the BEng students must be encouraged to make full use of the international network of contacts Kajaani Polytechnic offers. Student, trainee, and lecturer exchange must be intensified. Intercultural training, including foreign language education, must be supplemented and supported by providing education at least in English in other subjects as well (cf. Content and Language Integrated Learning, or CLIL). Here new technology can also be made better use of.

Intercultural competence must be included in the *assessment* of foreign language education. To assess the development of the BEng students' intercultural competence, the students can collect a *biographical portfolio* containing documents of their language skills and intercultural experiences to be presented when applying for a scholarship or job, for instance. In addition to the portfolio, critical incidents can be used, i.e. the students solve new incidents with predefined assessment criteria. To develop intercultural training, qualified academic staff with practical, domestic, and international experiences in working life is an essential prerequisite.

11.3 Excellence through Intercultural Communication

During the past few years, mobility, both real and virtual, from and to Finland has been growing. There has been an increasing number of expatriates, self-initiated international employees, "frequent fliers", those who work with foreigners from the home base, those who use data networks to contact people in other countries, and those who meet immigrants and other foreigners in Finland.

Sharing the same professional values, e.g. all team members are engineers, is not always sufficient in various contexts of working life. Cultural diversity being more a norm than an exception, cultural differences do matter. Besides being aware of their own cultural identity, people should know that both the

parties, i.e. interlocutors, must be taken into account.

As often stressed in literature, intercultural encounters are charged with communication difficulties. On the other hand, these encounters also seem to offer an *a priori* basis for community and, therefore, for communication. There is no need to overemphasize the *misunderstandings* connected with intercultural encounters, but, when necessary, people should be able to confront those misunderstandings and problems, and preferably to avoid them in advance. Intercultural communication should be seen as a meeting place where boundaries, identities, and meanings are continuously negotiated. As Gudykunst (1991) points out, all people have a responsibility to *try* to communicate effectively with all kinds of others.

Instead of short environmental briefings, both organizations and institutions of higher education should make better use of what the theory of intercultural communication suggests and sponsor more comprehensive transformation-oriented training courses. Training must be self-directed, didactic-experiential, diverse, and long-term. Intercultural competence should be understood as a *tool of strategic thinking* and *planning* as well as a source of *competitive advantage* and *added value*. Developing intercultural competence is about developing the ability to be effective in life and career in general. In other words, the potential effects of intercultural training include creating more interculturally educated citizens to society.

Marx (1999), for example, argues that companies do not usually include intercultural competence when recruiting employees. In the small job ad review included in the present study, even the term intercultural competence was unfamiliar to employers. Intercultural competence is, however, needed at all levels of the organization. Consequently, intercultural training is not the privilege of the top management but all employees should be able to participate in it.

Intercultural communication is also a *political* term and field. Blommaert (1995) points out that intercultural communication must be a *critical* discipline. In other words, the relationship between intercultural training and learning vs. the real world must be paid attention to. Culture being highly political, whose culture is and should be taught? Lehtonen (1995: 43) refers to the *ethics* of intercultural communication and asks, "Do we bear responsibility for teaching people how to persuade, how to make others change their opinions, how to make them behave in the hoped-for manner or how to convert people to a new faith, ideology, value, or life-style?"

The function of intercultural training is to create *realistic expectations* about what is foreign. When people are aware of potential problems connected with interaction and cultural adaptation, they are more likely able to cope with these obstacles than if they are naive about them. Many people experienced in intercultural encounters agree that there is tolerance and forgiveness extended to culturally different others during initial interactions. A few mistakes will not usually sabotage future relationships, as long as people gain understanding through their mistakes and become increasingly sensitive to cultural diversity. Furthermore, global *conflict resolution* being mainly a communication activity, an application of intercultural communication skills could provide great benefits. So far there has been little effort in this respect.

11.4 Main Conclusions Summed up

The main conclusions drawn up in the present study can be summarized as follows:

In working life

- intercultural competence should be understood as part of knowledge management which is to increase the use of tacit knowledge based on employees' experiences, interpretations, visions, and models of thinking
- intercultural competence should also be understood as a tool of strategic thinking and planning, as a source of competitive advantage and added value
- because failures, e.g. on international assignments, cost a lot of money, sometimes also reputation, intercultural competence should be paid more attention to when recruiting employees

The Bachelor of Engineering, or BEng, students

- accept the approach of integrating intercultural communication and English studies (Content and Language Integrated Learning, or CLIL)
- find intercultural competence an integral and equal part of BEng engineers' professional qualifications
- find insufficient knowledge of foreign languages, especially that of English, as the main reason for communication problems with foreigners
- find solving communication problems with foreigners difficult and interpreting foreigners' emotions especially difficult
- are motivated to study intercultural communication
- are interested especially in etic, i.e. culture-general, differences
- are not active speakers in the contact lessons (i.e. do not speak without being asked to), the reasons for passiveness being insufficient knowledge of English and a kind of communication reticence, e.g. fear of making mistakes
- are not very self-directed but need counseling and guidance
- accept Web-based learning suitable for self-study, in particular
- want to develop their nontechnical competence when/if abroad

Considering intercultural training,

- the students with vocational background need special attention
- training is effective to develop the interrelated components of intercultural competence, i.e. cognition, affect, and behavior
- training must be based on scientific research and the didactic-experiential approach; it must also be sufficiently long-term
- the students should collect a portfolio in which their long-term biographical development can be seen (cf. assessment of the learning process)
- foreign language teachers should become cultural mediators and facilitators of intercultural communication; for this, many teachers need further training

Intercultural communication today and in the future

- intercultural communication is a highly political term and field
- besides in globalizing working life, intercultural communication might hold the key when solving global political conflicts
- as a complementary approach to intercultural communication, understanding can be emphasized instead of misunderstanding
- new and different theoretical perspectives and functional tools are needed, e.g. when considering how to teach intercultural communication

Topics of potential *further research* might include, as mentioned in Section 1.3, learning strategies applied by BEng students when studying intercultural

communication and the relationship between the students' foreign language and intercultural studies. A third topic might be the development of *The Same but Different* and its Internet version in particular, both the contents and technology. In addition, there are several subtopics included in the present study that could be researched in more detail, one of them being the position of incultural competence in Finnish companies.

YHTEENVETO

Kulttuurienvälinen kompetenssi ammattitaidon osatekijänä. Koulutuskokeilu amk-insinööriopiskelijoiden kanssa

Tämä tutkimus oli työelämän tarpeista lähtevä *koulutuskokeilu*, jossa toteutettiin kulttuurienvälisen viestinnän kurssi Kajaanin ammattikorkeakoulun (amk) insinööriopiskelijoille (n=117). Ensisijainen syy koulutuskokeiluun oli työelämän lisääntyvä kansainvälistyminen ja globalisoituminen. Toissijaisia syitä olivat monikulttuurisuuden lisääntyminen myös Suomessa sekä suomalaisten kulttuurienvälinen viestintätyyli, joka joissakin suhteissa, esimerkiksi tapa puhua vain silloin, kun on tärkeää sanottavaa ja välttelysuuntautunut kohteliaisuus, poikkeaa muiden kulttuureiden viestintätyyleistä.

Ulkomaiset työkontaktit. Sekä pitkäkestoiset ulkomaan komennukset että lyhytkestoiset työmatkat ulkomaille ovat lisääntyneet viime vuosina. Myös Suomeen muuttaneiden ulkomaalaisten määrä on lisääntynyt. Periaatteessa kuka tahansa suomalainen voi saada jonakin päivänä ulkomaisen työtoverin. Ulkomaalaisten kanssa pidetään yhteyttä myös virtuaalisesti. Lisääntyneet kohtaamiset ulkomaalaisten kanssa asettavat uudenlaisia vaatimuksia työelämässä tarvittavalle kielitaidolle. Työelämän kielitaitotarpeet tulee ottaa huomioon ammatillisesti integroituneessa kieltenopetuksessa, jonka tavoitteena tulee olla kulttuurienvälisen kompetenssin kehittyminen.

Kulttuurienvälinen kompetenssi. Syvällisen ja monipuolisen *kielitaidon* lisäksi kulttuurienväliseen kompetenssiin kuuluu joukko *henkilökohtaisia ominaisuuksia* kuten hyvä itsetunto, motivaatio ja taito viestiä kontekstin vaatimalla tavalla, empatia, kyky sietää monimerkityksisyyttä, kuuntelutaito, erilaisuuden kunnioittaminen, kärsivällisyys ja huumorintaju. Kulttuuritausta vaikuttaa siihen, miten viestit koodataan ja tulkitaan. Väärinkäsitysten välttämiseksi viestijöiden on osattava neuvotella yhteisistä tulkinnoista, toisin sanoen merkityksistä. Heidän tulee pyrkiä muodostamaan *isomorfisia attribuutioita* eli tulkitsemaan viesti mahdollisimman yksiselitteisellä tavalla. Henkilökohtaisten ominaisuuksien lisäksi kulttuurienväliseen kompetenssiin kuuluu *sosiaalisia taitoja* kuten esiintymistaito, tiimi- ja projektityöskentelytaito, kokous- ja neuvottelutaito sekä päätöksentekotaito. Lisääntyvän globalisoitumisen myötä on kiinnitettävä aikaisempaa enemmän huomiota siihen, millaista on sosiaalisesti ja eettisesti hyväksyttävä käyttäytyminen ja viestintä.

Tutkimuksen tavoitteet. Tutkimuksen tavoitteena oli arvioida kulttuurienvälisen koulutuksen vaikuttavuutta eli miten koulutus kehittää insinööriopiskelijaryhmän kulttuurienvälistä kompetenssia kokonaisuutena, johon kuuluu *kognitiivisia* (tiedot), *afektiivisia* (asenteet, tunteet) ja *behavioristisia* (käyttäytyminen, taidot) komponentteja (summatiivinen arviointi). Tutkimuksen tavoitteena oli myös kartoittaa, miten opiskelijat suhtautuvat kulttuurienväliseen koulutukseen sekä kulttuurienväliseen kompetenssiin amk-insinöörin ammattitaidon osana (formaatiivinen arviointi), millaisia viestijöitä opiskelijat ovat ja millaisia viestijöitä he haluaisivat olla sekä miten motivoituneita he ovat kehittämään omaa kompetens-

siaan (itse- ja vertaisarviointi). Lopuksi tutkimuksen tavoitteena oli tuottaa empiiristä tietoa kulttuurienvälisen koulutuksen oppisisältöjen, materiaalien ja menetelmien jatkokehittämistä varten sekä Kajaanin ammattikorkeakoulussa että Suomen ammattikorkeakouluissa yleensä.

Koulutuksen viitekehys. Yhden opintoviikon [24 oppituntia: yksi oppitunti 45 min] laajuinen kurssi oli osa opiskelijoiden pakollisia vieraan kielen [englanti] opintoja. Kurssilla sovellettiin asiasisällön [kulttuurienvälinen viestintä] ja vieraan kielen [englanti] opetuksen integroivaa lähestymistapaa (*Content and Language Integrated Learning* [CLIL]). Englannin kieltä lähestyttiin *lingua francana* eli nykyajan tärkeimpänä kansainvälisenä yhteydenpitokielenä. Kurssilla sovellettiin myös eettistä lähestymistapaa eli asioita tarkasteltiin mahdollisimman monen kulttuurin näkökulmasta [*etic or culture-general approach*] sen sijaan, että olisi sovellettu eemistä eli johonkin tiettyyn kulttuuriin tai kulttuurialueeseen keskittyvää lähestymistapaa [*emic or culture-specific approach*]. Pedagogisena viitekehyksenä käytettiin *transformatiivisen oppimisen* mallia (Mezirow 1991; Taylor 1994), jossa painottuu koulutuksen kokemuksellisuus ja muutossuuntautuneisuus sekä opiskelijoiden itseohjautuvuus.

Tutkimusmetodi. Jotta saatiin selville kulttuurienvälisen koulutuksen vaikutavuus ja opiskelijoiden suhtautuminen koulutukseen, opiskelijat testattiin sekä ennen koulutusta että sen jälkeen. Mittareina käytettiin *kyselylomakkeita*. Kyselylomakkeissa oli sekä strukturoituja että avoimia kysymyksiä ja väittämiä, jotka liittyivät opiskelijoiden *asenteisiin* ja *tietoihin*. Koska opiskelijoiden *käyttäytymisen* ja *taitojen* kehittymistä ei voitu käytännön syistä tarkkailla kohdekulttuureissa, käytettiin tietokonesimulointia. Simulointia varten suunniteltiin ja toteutettiin yhteistyössä tietokoneohjelmoijan kanssa niin sanottu *Culture-General Assimilator* (Brislin & Cushner 1986; 1996). Kysymyksessä on ohjelmoitu itseopiskelumateriaali, hypertekstiin perustuva verkkosovellus, joka koostuu 25 viestinnällisesti kriittisestä tilanteesta [*critical incident*]. Tilanteissa suomalaiset tekniikan ja kaupan opiskelijat ja ammattilaiset kohtaavat sellaisia sekä verbaaliin että ei-verbaaliin viestintään liittyviä ongelmia, joihin kuka tahansa ulkomailla opiskeleva tai työskentelevä voi joutua eli tilanteet ovat siinä mielessä yleisiä. Kohdekulttuureiksi valittiin maita, joissa suomalaiset yritykset käyvät ulkomaankauppaa ja joissa monet suomalaiset opiskelevat, työskentelevät ja lomailevat. Jokaiseen tilanteeseen liittyy 4-5 vastausvaihtoehtoa, joista verkkosovelluksen käyttäjä valitsee kontekstin kannalta parhaan. Vastausvaihtoehtoihin liittyy välitön palaute. Käyttäytymisen ja taitojen kehittymisen arviointia varten vastausvaihtoehtoihin laadittiin sanalliset arviointikriteerit.

Kulttuurienvälinen koulutus sisälsi noin kahden kuukauden aikana pidetyn 24 kontaktioppitunnin lisäksi kriittisten tilanteiden itseopiskelua joko yksin tai pareittain verkkosovelluksen avulla. Parityöskentely voi lisätä menetelmän interaktiivisuutta. Itseopiskeluun oli aikaa noin kolme viikkoa. *Tutkimustulosten analysoinnissa* käytettiin sekä kvantitatiivisia että kvalitatiivisia menetelmiä.

Summatiivinen arviointi. Tutkimuksen tulosten perusteella kulttuurienvälinen koulutus ja kulttuurienvälisen kompetenssin eri komponenttien kehittyminen korreloivat keskenään. Koulutuksen aikana opiskelijoiden *asenteissa* tapahtui pie-

niä muutoksia eli opiskelijoiden asenteet ja niin sanottu *world-mindedness* Suomessa asuvia ja muita ulkomaalaisia kohtaan muuttuivat hieman suvaitsevaisempaan suuntaan. Yllättävää oli, että jo ennen koulutusta opiskelijoiden asenteet ulkomaalaisia kohtaan olivat joidenkin muuttujien osalta hieman myönteisempiä kuin suomalaisten yleensä (vrt. Jaakkola 1999). Opiskelijoiden *itsetuntemus* sekä *tiedot* kulttuurienvälisen viestinnän perusteorioista ja -käsitteistä lisääntyivät huomattavasti. Myös opiskelijoiden kompleksinen ajattelutaito ja sen myötä *kyky analysoida* ja *ratkoa* kriittisiä tilanteita ja niissä esiintyviä kulttuurienvälisiä ongelmia kehittyi kvantitatiivisesti arvioiden arvosanasta 1 (heikko) arvosanaan 2 (tyytyttävä). Arvioinnissa ei kuitenkaan tule tyytyä vain pääteikäyttämisen arviointiin, vaan arvioinnin kohteena tulee olla koko oppimisprosessi. Näin ollen muutos taitojen kehittymisen osalta on todellisuudessa suurempi, koska taidot kehittyivät myös kontaktiopetuksen aikana. Kvalitatiivisesti arvioiden taitojen kehittymisessä tapahtui pieni positiivinen hypähdys. Koska opiskelijoita ei voitu tarkkailla kohde-kulttuureissa, ei voi sanoa, muuttuiko opiskelijoiden todellinen käyttäytyminen.

Formatiivinen arviointi. Opiskelijat hyväksyivät asiasisällön [kulttuurienvälisen viestintä] ja vieraan kielen [englanti] integroivan opetuksen uutena ja erilaisena oppimistapana. Ammatillisen taustan omaavilla opiskelijoilla oli tosin jonkin verran vaikeuksia osallistua opetukseen lukion käyneitä heikomman peruskielitaidon takia. Opiskelijoiden mielestä kulttuurienvälisen kompetenssi on amk-insinöörien ammattitaidon olennainen ja tasa-arvoinen osatekijä. Mahdollisella ulkomaankomennuksella opiskelijat odottavat pystyvänsä kehittämään ennen kaikkea kieli- ja ihmissuhdetaitojaan, ei niinkään teknistä osaamistaan.

Vaikka opiskelijat suhtautuivat myönteisesti kulttuurienvälisen kompetenssinsa kehittämiseen, he - joitakin poikkeuksia lukuun ottamatta - eivät valmentautuneet ennakkoon kontaktitunneille, eivät oma-aloitteisesti ilman opettajan puhuttamista osallistuneet keskusteluihin tuntien aikana eivätkä myöskään reflektoineet oppimistaan tuntien jälkeen. Syyt passiivisuuteen olivat kielitaidon puute ja viestintäarkuus (vrt. Sallinen-Kuparinen 1986). Joskus syynä saattoi olla käsiteltävän aiheen teoreettisuus. Opiskelijat toivoivat itselleen enemmän puhumisrohkeutta. Viittauksia virheiden ja itsensä naurettavaksi tekemisen pelkoon esiintyi myös. Joidenkin opiskelijoiden mielestä opettajan tulee pakottaa heidät puhumaan. Puhumisrohkeuden kehittämisen tarve oli siis voimakas.

Itse- ja vertaisarviointi. Omasta mielestään opiskelijoilla ei yleensä ole viestintäongelmia. Opiskelijat uskoivat osaavansa mukauttaa viestintätyyliänsä kontekstin vaatimalla tavalla. Ulkomaalaisten kanssa viestintäongelmia sen sijaan esiintyy. Suurin syy ongelmiin on puutteellinen englannin kielen taito. Tämän tutkimuksen perusteella ei voi sanoa, onko kysymyksessä todellinen kielitaidon puute vai viestintäarkuus. Opiskelijat kokivat ulkomaalaisten tunneilmaisujen tulkitsemisen vaikeaksi. Opiskelijoiden viestinnällinen tavoite on selkeä ja sujuva: henkilö, joka pystyy viestimään interaktiivisesti eri kulttuureiden edustajien kanssa. Kontaktitunneilla opiskelijat pitivät vertaisiaan jokseenkin passiivisina viestijöinä. Opiskelijoiden itsearviointin perusteella heidän kulttuurienvälisen kompetenssinsa kehittyi myönteisesti. Muutosta tapahtui eniten tiedoissa, sitten käyttäytymisessä ja taidoissa ja vähiten asenteissa.

Kulttuurienvälisen kompetenssin kehittymisen arviointi. Kulttuurienvälisen kompetenssin kehittyminen on yksilöllinen, hidaskäynninen ja vaiheittain etenevä *transformatiivinen oppimisprosessi*, joka monikulttuurisen työelämän tarpeiden näkökulmasta kannattaa käynnistää mahdollisimman varhain. Kulttuurienvälisessä oppimisprosessissa korostuu itseohjautuvuus, kokemuksellisuus, osallistuminen ja oppimaan oppimisen taidot. Tavoitteena ei ole syvästi persoonallisuuden muutos vaan kulttuurienvälisen kompetenssin kehittyminen niin, että tehokkuus ja herkkyyks lisääntyvät ja sen myötä kulttuurienväliset kohtaamiset helpottuvat.

Jos kulttuurienvälinen kompetenssi on ammatillisesti integroituneen kieltenopetuksen tavoite, kompetenssin kehittymistä on seurattava ja arvioitava. Kompetenssin kehittyminen tulee sisällyttää myös kieltenopetuksen arviointiaspektojen sanallisiin kuvauksiin. Arviointia varten opiskelijat voivat koota kompetenssinsa kehittymistä kuvaavan omaelämäkerrallisen *portfolion*. Tämän portfolion he voivat esittää hakiessaan työpaikkaa. Kompetenssin kehittymisen arvioinnissa voidaan käyttää myös kriittisiä tilanteita. Tällöin opiskelijat analysoivat ja ratkovat uusia ongelmia, joihin liittyy ennalta määritellyt arviointikriteerit. Tämä voi tapahtua joko suullisesti tai kirjallisesti. Koska se, onko jollakin kompetenssia vai ei, on viime kädessä jonkun ulkopuolisen, esimerkiksi työnantajan, arvio, ihanteellisinta on, jos koulutuksen vaikuttavuutta ja kompetenssin kehittymistä voidaan tarkkailla kohdekulttuurissa ja tarkkailuun osallistuu myös kohdekulttuurin edustajia.

Kulttuurienvälinen kompetenssi työelämässä. Kulttuurienvälisestä kompetenssista tarvitaan yhä useammassa ammateissa ja työtehtävissä. Eri organisaatioissa sen tulisi olla osa *tietojohdantamista* ja organisaatiokohtaista niin sanottua *hiljaista tietoa* eli tietoa, jota ei ole systemaattisesti kerätty ja tallennettu, vaan joka perustuu henkilökunnan kokemuksiin ja tulkintoihin ja jota erilaisuus vahvistaa. Vaikka kulttuurienvälisestä kompetenssista voidaan käyttää työelämässä *kilpailuvalttina*, tekijänä, joka tuo *lisäarvoa*, vaikuttaa siltä, että kompetenssia ei rekrytointivaiheessa vielä kovinkaan usein edellytetä eikä sen kehittäminen kuulu, joitakin poikkeuksia lukuunottamatta, organisaatioiden *strategiseen ajatteluun* ja *suunnitteluun*. Työpaikkailmoituksissa esiintyy lähinnä satunnaisia viittauksia joko matkustushalukkuuteen, vuorovaikutustaitoihin tai kykyyn työskennellä kansainvälisissä projekteissa. Näin ollen proaktiiviset ammattikorkeakoulut voivat täyttää olemassa olevan markkinaraon tarjoamalla opiskelijoilleen ammatillisesti integroitunutta ja kulttuurienvälisen viestinnän tarpeet huomioon ottavaa kielten ja mahdollisesti myös muiden aineiden opetusta.

Lopuksi. Jotta opiskelijoille voidaan tarjota kulttuurienvälisiä kokemuksia, sekä opetusta että käytäntöä, kulttuurienvälisen opetuksen, oppimisen ja näiden arvioinnin kehittämiseen tarvitaan poikkitieteellistä yhteistyötä ja lisäresursseja. Myös koulutusteknologia on saatava nykyistä tehokkaampaan käyttöön.

Avainsanat: insinööriopinnot, kulttuurienvälinen kompetenssi, kulttuurienvälinen koulutus, asiasisällön ja kielen oppimisen yhdistävä opetus, kriittiset tilanteet, verkkoavusteinen oppiminen, arviointi

REFERENCES

- Adler, N. J. 1992. *International Dimensions of Organizational Behavior*. Belmont: Wadsworth Publishing Company.
- Adler, N. 1997. *International Dimensions of Organizational Behavior*. (3rd ed.) Cincinnati, Ohio: South-Western College Publishing.
- Albert, R. D. 1995. The Intercultural Sensitizer/Culture Assimilator as a Cross-Cultural Training Method. In Fowler, S. M. & Mumford, M. G. (Eds.) *Intercultural Sourcebook: Cross-Cultural Training Methods*, Vol. 1. Yarmouth, Maine: Intercultural Press, 157-167.
- Archer, C. 1986. Culture Bump and Beyond. In Merrill V. J. (Ed.) *Culture Bound*. New York: Cambridge University Press, 170-178.
- Auer, A. & Pohjonen, J. 1995. Kohti uusia oppimisympäristöjä. In Pohjonen, J., Collan, S., Kari, J. & Karjalainen, M. (Eds.) *Teknologia koulutuksessa*. Juva: WSOY, 13-21.
- Barna, L. M. 1998. Stumbling Blocks in Intercultural Communication. In Bennett, M. J. (Ed.) *Basic Concepts of Intercultural Communication. Selected Readings*. Yarmouth, Maine: Intercultural Press, 173-189.
- Barnlund, D. 1998. Communication in a Global Village. In Bennett, M. J. (Ed.) *Basic Concepts of Communication. Selected Readings*. Yarmouth, Maine: Intercultural Press, 35-51.
- Baxter, J. & Ramsey, S. 1996. Improvising Critical Incidents. In Seelye, N. H. (Ed.) *Experiential Activities for Intercultural Learning*, Vol. 1. Yarmouth, Maine: Intercultural Press, 211-218.
- Bennett, M. J. 1993. A Developmental Approach to Training for Intercultural Sensitivity. In Ramsey, S. & Sorrells, K. (Comp.) *Methods of Intercultural Training*. Portland, OR: SIIC, 179-195.
- Bennett, M. J. 1995. Critical Incidents in an Intercultural Conflict-Resolution Exercise. In Fowler, S. M. & Mumford, M. G. (Eds.) *Intercultural Sourcebook: Cross-Cultural Training Methods*, Vol. 1. Yarmouth, Maine: Intercultural Press, 147-156.
- Bennett, M. J. 1997. How Not to Be a Fluent Fool: Understanding the Cultural Dimension of Language. In Fantini, A. E. (Ed.) *New Ways in Teaching Culture. TESOL Series II*. Illinois: Pantagraph Printing, 16-21.
- Bennett, M. J. 1998. Intercultural Communication: A Current Perspective. In Bennett, M. J. (Ed.) *Basic Concepts of Intercultural Communication. Selected Readings*. Yarmouth, Maine: Intercultural Press, 1-34.
- Berggren, O. 1985. Vieraiden kielten käyttö ja tarve teollisuuden insinööritehtävissä teknillisten korkeakoulujen kieltenopetuksen tavoitteiden ohjaamana. Lappeenrannan teknillinen korkeakoulu. Kielikeskuksen julkaisuja 3.
- Bhawuk, D. P. S. & Triandis, H. S. 1996. The Role of Culture Theory in the Study of Culture and Intercultural Training. In Landis, D. & Bhakat, R. S. (Eds.) *Handbook of Intercultural Training*. (2nd ed.) Thousand Oaks, CA: Sage Publications, 17-33.
- Blake, B. F., Heslin, R. & Curtis, S. C. 1996. Measuring Impacts of Cross-Cultural Training. In Landis, D. & Bhakat, R. (Eds.) *Handbook of Intercultural Training*. (2nd ed.) Thousand Oaks, CA: Sage Publications, 165-182.

- Blommaert, J. 1995. Ideologies in Intercultural Communication. In Dahl, O. (Ed.) *Intercultural Communication and Contact*. Stavanger: Misjonsheogskolens Forlag, 9-27.
- Brislin, R. W. 1995. The Culture-General Assimilator. In Fowler, S. M. & Mumford, M. G. (Eds.) *Intercultural Sourcebook: Cross-Cultural Training Methods*, Vol. 1. Yarmouth, Maine: Intercultural Press, 169-177.
- Brislin, R. W., Cushner, K., Cherrie, C. & Yong, M. 1986. *Intercultural Interactions. A Practical Guide*. Newbury Park: Sage Publications.
- Brislin, R. W. & Yoshida, T. 1994a. *Intercultural Communication Training: An Introduction*. Thousand Oaks, CA: Sage Publications.
- Brislin, R. W. & Yoshida, T. 1994b. The Content of Cross-Cultural Training: An Introduction. In Brislin, R. W. & Yoshida, T. (Eds.) *Improving Intercultural Interactions. Modules for Cross-Cultural Training Programs*. Multicultural Aspects of Counseling Series 3. Thousand Oaks, CA: Sage Publications, 1-14.
- Brown, P. & Levinson, S. C. 1987. *Politeness. Some universals in language usage*. Cambridge University Press.
- Byram, M. 1989. A Model for Language and Culture Teaching. In *Cultural Studies in Foreign Language Education*. Clevedon: Multicultural Matters, 136-147.
- Byram, M. 1997. *Teaching and Assessing Intercultural Communicative Competence*. Clevedon: Multilingual Matters.
- Byram, M. & Risager, K. 1999. *Language Teachers, Politics and Cultures*. Clevedon: Multilingual Matters.
- Carbaugh, D. 1995. Are Americans Really Superficial? Notes on Finnish and American Cultures in Linguistic Action. In Salo-Lee, L. (Ed.) *Kieli & kulttuuri oppimisessa ja opettamisessa*. University of Jyväskylä. Publications of the Department of Communication, 51-60.
- Castles, S. 1997. Multicultural Citizenship: a response to the dilemma of globalization and national identity. *Journal of Intercultural Studies*, Vol. 18, No. 1. Oxfordshire: Carfax Publishing Company, 5-22.
- Chaney, L. H. & Martin, J. S. 1995. *Intercultural Business Communication*. Prentice Hall.
- Cui, G. & Awa, N. E. 1992. Measuring Intercultural Effectiveness: An Integrative Approach. *International Journal of Intercultural Relations*, Vol. 16, No 3. New York: Pergamon Press, 311-328.
- Cushner, K. & Brislin, R. W. 1996. *Intercultural Interactions. A Practical Guide*. (2nd ed.) Thousand Oaks, CA: Sage Publications.
- Cushner, K. & Landis, D. 1996. The Intercultural Sensitizer. In Landis, D. & Bhakat, R. S. (Eds.) *Handbook of Intercultural Training*. (2nd ed.) Thousand Oaks, CA: Sage Publications, 185-202.
- Dant, W. 1995. Using Critical Incidents as a Tool for Reflection. In Fowler, S. M. & Mumford, M. G. (Eds.) *Intercultural Sourcebook: Cross-Cultural Training Methods*, Vol. 1. Yarmouth, Maine: Intercultural Press, 141-146.
- Dinges, N. G. & Baldwin, K. 1996. Intercultural Competence. A Research Perspective. In Landis, D. & Bhakat, R. S. (Eds.) *Handbook of Intercultural Training*. (2nd ed.) Thousand Oaks, CA: Sage Publications, 107-123.
- Discover Finland. Studying in Finland. Education System. 2001. <<http://finland.cimo.fi>> May 2, 2001.

- Dunn, R. & Dunn, K. 1978. Teaching Students through Their Individual Learning Styles. A Practical Approach. New York: Prentice Hall.
- (EFIL) The European Federation for Intercultural Learning. 2001. <wysiwyg://9/http://afsefil.thebiz.net/> November 26, 2001.
- (ERT) European Round Table of Industrialists. 1995. Education for Europeans - Towards the Learning Society. A Report. Brussels ERT: Addison-Wesley Publishing Company.
- (EUMC) The European Monitoring Centre on Racism and Xenophobia Diversity and Equality for Europe. Annual Report. 1999. <http://eumc.eu.int/> May 2, 2001.
- (EVA) Elinkeinoelämän valtuuskunta. 1998. Globalization in Finland. <http://www.eva.fi/english/julkaisut/global/preface.htm> July 27, 2001.
- (EVA) Elinkeinoelämän valtuuskunta. 2001. Ulkomaisen työvoiman tarve kasvaa lähitulevaisuudessa. Kaaja, Susanna. Helsingin Sanomat. June 12, 2001, A8.
- Fantini, A. E. 1995. Introduction - Language, Culture and World View: Exploring the Nexus. International Journal of Intercultural Relations, Vol. 19, No 2. USA: Elsevier Science, 143-153.
- Fantini, A. E. 1997. Language: Its Cultural and Intercultural Dimensions. In Fantini, A. E. (Ed.) New Ways in Teaching Culture. TESOL Series II. Illinois: Pantagraph Printing, 3-15.
- Ferdman, B. M. & Brody, S. E. 1996. Models of Diversity Training. In Landis, D. & Bhakat, R. S. (Eds.) Handbook of Intercultural Training. (2nd ed.) Thousand Oaks, CA: Sage Publications, 282-303.
- Ferraro, G. 1994. The Cultural Dimension of International Business. New Jersey: Prentice Hall.
- Flanagan, J. C. 1954. The Critical Incident Technique. Psychological Bulletin 51, No 4, 327-358.
- Francesco, A. M. & Gold, B. A. 1998. International Organizational Behavior, Text, Readings, Cases, and Skills. New Jersey: Prentice Hall.
- Gannon, M. J. & Poon, J. M. 1997. Effects of Alternative Instructional Approaches on Cross-Cultural Training Outcomes. International Journal of Intercultural Relations, Vol. 21, No 4. Elsevier Science, 429-446.
- Goleman, D. 1997. Tunneäly. Lahjakkuuden koko kuva. Keuruu: Otava.
- Goodman, N. R. 1994. Cross-Cultural Training for the Global Executive. In Brislin, R. W. & Yoshida, T. (Eds.) Improving Intercultural Interactions. Modules for Cross-Cultural Training Programs. Multicultural Aspects of Counseling Series 3. Thousand Oaks, CA: Sage Publications, 34-54.
- Gudykunst, W. B. 1991. Bridging Differences. Effective Intergroup Communication. NewburyPark CA: Sage Publications.
- Gudykunst, W. B. 1995. Anxiety/Uncertainty Management (AUM) Theory. Current Status. In Wiseman, R. L. (Ed.) Intercultural Communication Theory. International and Intercultural Communication Annual, Vol. XIX. Thousand Oaks: Sage Publications, 8-58.
- Gudykunst, W. B., Guzley, R. M. & Hammer, M. R. 1996. Designing Intercultural Training. In Landis, D. & Bhakat, R. S. (Eds.) Handbook of Intercultural Training. (2nd ed.) Thousand Oaks, CA: Sage Publications, 61-79.
- Gudykunst, W. B. & Kim, Y. Y. 1997. Communicating with Strangers. An Approach to Intercultural Communication. (3rd ed.) Boston,

- Massachusetts: McGraw-Hill.
- Gumperz, J. J. 1987. *Discourse strategies*. Studies in interactional sociolinguistics. Cambridge University Press.
- Hall, E. T. 1970. *The Silent Language*. New York: Fawcett World Library.
- Hall, E. T. 1984. *The Dance of Life. The Other Dimension of Time*. New York: Anchor Press Doubleday.
- Hall, E. T. 1989. *Beyond Culture*. New York: Anchor Books, Doubleday.
- Hall, E. T. 1998. The Power of Hidden Differences. In Bennett, M. J. (Ed.) *Basic Concepts of Intercultural Communication. Selected Readings*. Yarmouth, Maine: Intercultural Press, 53-67.
- Hiltrop, J. M. & Janssens, M. 1995. Expatriation: challenges and recommendations. In Jackson, T. (Ed.) *Cross-Cultural Management*. Oxford: Butterford-Heinemann, 355-367.
- Hiltunen, J., Lindfors, J. & Suomela, L. 1995. Hypermedia. In Pohjonen, J., Collan, S., Kari, J. & Karjalainen, M. (Eds.) *Teknologia koulutuksessa*. Juva: WSOY, 143-164.
- Hoecklin, L. 1995. *Managing Cultural Differences: Strategies for Competitive Advantage*. Addison-Wesley Publishers.
- Hofstede, G. 1994. *Cultures and Organizations. Software of the Mind. Intercultural Cooperation and Its Importance for Survival*. London: HarperCollinsPublishers.
- Holden, N. J. 2002. *Cross-Cultural Management. A Knowledge Management Perspective*. Prentice Hall.
- Hoopes, D. S. 1981. Intercultural Communication Concepts and the Psychology of Intercultural Experience. In Pusch, M. D. (Ed.) *Multicultural Education*. Intercultural Press, 10-38.
- Hughes-Wiener, G. 1995. The "learning how to learn" approach to cross-cultural orientation. In Jackson, T. (Ed.) *Cross-Cultural Management*. Oxford: Butterworth-Heinemann, 380-397.
- Huhta, M. 1994. Yritysten kielitaitovaranto ja sen kehittäminen. (Language resources and their development in Finnish businesses). Helsinki: Fintra.
- Huhta, M. 1999. *Language/Communication Skills in Industry and Business*. Report for Prolang/Finland. National Board of Education. Helsinki: Hakapaino Oy.
- Insinööriliitto. 2000. Vuonna 1999 valmistuneiden insinöörien sijoittumistutkimus. Tutkimusosasto.
- Jaakkola, M. 1999. Immigration and the Ethnic Attitudes. Finns' Attitudes towards Immigrants in 1987-1999. *Studies in Labour Policy* 213. Ministry of Labour. Helsinki: Edita.
- Kaikkonen, P. 1994. *Kulttuuri ja vieraan kielen oppiminen*. Juva: WSOY.
- Kealey, D. 1996. The Challenge of International Personnel Selection. In Landis, D. & Bhakat, R. S. (Eds.) *Handbook of Intercultural Training*. (2nd ed.) Thousand Oaks, CA: Sage Publications, 81-105.
- Kealey, D. J. & Protheroe, D. R. 1996. The Effectiveness of Cross-Cultural Training for Expatriates: An Assessment of the Literature of the Issue. *International Journal of Intercultural Relations*, Vol. 20, No 2. Elsevier Science, 141-165.
- Keltikangas-Järvinen, L. 2000. *Tunne itsesi, suomalainen*. Juva: WS Bookwell.
- Kolb, D. A. 1984. *Experiential Learning. Experience as the Source of Learning*

- and Development. New Jersey: Prentice Hall.
- Kolbe, L. 1995. Kansallinen kulttuuri ja uusi eliitti. Kanava No 6, 331-336.
- Korhonen, K. 1997. Intercultural Communication through Hypermedia. University of Jyväskylä. Department of Communication. A Licentiate Thesis in Organizational Communication and PR.
- Korhonen, K. 1999. Intercultural Communication through Hypermedia. Intercultural Communication. Issue 1, August 1999. <<http://www.immigrant.org/intercultural/>>.
- Korhonen, K. 2000. It Is about Communication between People. The Rest Is Technology. In Isaksson, M. & Andrews Roekaas, F. (Eds.) *Conflicting Values: An Intercultural Challenge*. Selected papers from the 1999 NIC Symposium in Oslo, Norway. Nordberg Hurtigtrykk, 195-206.
- Korhonen, K. 2001a. Intercultural Communication through Hypermedia. In Allwood, J. & Dorriots, B. (Eds.) *Intercultural Communication - Business and The Internet*. Papers from the Fifth Nordic Symposium on Intercultural Communication in 1998. Göteborg University, Sweden. Department of Linguistics. *Papers in Anthropological Linguistics* 27, 99-113.
- Korhonen, K. 2001b. The Same but Different. A paper presented at the 2001 NIC Symposium at the Copenhagen Business School, Denmark. November 23-24, 2001.
- Koro, J. 1993. Aikuinen oman oppimisensa ohjaajana. Itseohjautuvuus, sen kehittyminen ja yhteys oppimistuloksiin kasvatustieteen avoimen korkeakouluopetuksen monimuotokokeilussa. Jyväskylän yliopisto. *Jyväskylä Studies in Education, Psychology and Social Research* 98.
- Korva, H. 2002. Isoissa kaupungeissa ulkomaalaisia kohta enemmän kuin ruotsinkielisiä. *Helsingin Sanomat*, March 30, 2002, A6.
- Koski, A. & Oesch, K. 1993. PC-multimedia. Keuruu: Otava.
- Koskinen, M-L. 1994. Pienten ja keskisuurten yritysten kielitaito. (Language skills of small and medium-sized businesses). Helsinki: Fintra.
- Laine-Sveiby, K. 1987. Nationell kultur som strategi - en fallstudie Sverige - Finland. Helsingfors: EVA.
- Landis, D. & Bhakat, R. S. (Eds.) 1996. *Handbook of Intercultural Training* (2nd ed.) Thousand Oaks, CA: Sage Publications.
- Larpes, A. 1999. Expatriate Training: A Study of SEFE's Members Abroad. Svenska Handelshögskolan i Helsingfors. Avhandling i företagsledning och organisation för ekonomexamen.
- Lehtonen, J. 1994. Omakuva ja vieraskuva - suomalainen tutkimusten valossa. In Alho, O., Lehtonen, J., Raunio, A. & Virtanen, M. *Ihminen ja kulttuuri. Suomalainen kansainvälistyvässä maailmassa*. Fintra-julkaisu nro 72. Helsinki: Yliopistopaino, 41-65.
- Lehtonen, J. 1995. Freedom and Responsibility: Global Village and the Power of Communication. In Lehtonen, J. (Ed.) *Critical Perspectives on Communication Research and Pedagogy*. St. Ingbert: Röhrig Universitätsverlag, 31-45.
- Lehtonen J. 1998a. Kansainvälinen viestintä. Monikulttuurisen dialogin mahdollisuus. In Kivikuru, U-M & Kunelius, R. (Ed.) *Viestinnän jäljillä*. 301-318.
- Lehtonen, J. 1998b. Tietoyhteiskunta ja kommunikatiivinen kompetenssi. In

- Varis, T. (Ed.) *Avautuminen tietoyhteiskuntaan. Yliopistojen välinen Studia Generalia -luentosarja. 6.11.1997-2.4.1998.* Tampereen yliopiston täydennyskoulutuskeskus. Julkaisusarja A 1/98, 58-66.
- Lehtonen, J. 2000. Keynote Address at the NIC 2000 Conference. Åbo Akademi. Turku. November 25, 2000.
- Lehtonen, J. & Sajavaara, K. 1985. The silent Finn. In Tannen, D. & Saville-Troike, M. (Eds.) *Perspectives on silence.* Norwood, N.J.: Ablex, 193-201.
- Libben, G. & Lindner, O. 1996. Second Culture Acquisition and Second Language Acquisition: Faux Amis? <<http://www.ualberta.ca/~german/ejournal/archive/libben2.htm>> October 1, 2001.
- Linn, R. L. & Gronlund, N. E. 2000. *Measurement and Assessment in Teaching.* (8th ed.) New Jersey: Prentice Hall.
- Lovejoy, E. 1996. Negative Red Flags. In Seelye, N. H. (Ed.) *Experiential Activities for Intercultural Learning, Vol. 1.* Yarmouth, Maine: Intercultural Press, 191-197.
- Martin, J. N. & Nakayama, T. K. 2000. *Intercultural Communication in Contexts.* (2nd ed.) Arizona State University. Mountain View California: Mayfield Publishing Company.
- Marx, E. 1999. *Breaking Through Culture Shock. What you need to succeed in international business.* London : Nicholas Brealey Publishing.
- Mendenhall, M. & Oddou, G. 1995. The dimensions of expatriate acculturation: a review. In Jackson, T. (Ed.) *Cross-Cultural Management.* Oxford: Butterworth-Heinemann, 342-354.
- Mezirow, J. 1991. *Transformative Dimensions of Adult Learning.* San Francisco, CA: Jossey-Bass Publishers.
- Niitamo, P. 1996. Stresses and Job Problems of Development Workers. Outlining the Research Carried out by Using Diary Techniques. A lecture. Building Intercultural Competence. Interpersonal Skills and Crosscultural Adjustment. A seminar at the Helsinki University of Technology, May 27, arranged by the Continuing Education Centre of Jyväskylä University.
- Nurminen, M. 1996. *Ekonomit maailmalla – ulkomaille lähtemiseen ja jäämiseen esitetyt motiivit. Organisaatiot ja johtaminen.* Helsingin kauppakorkeakoulu. Pro gradu.
- O'Hair, D., Friedrich, G. W. & Dixon Shaver, L. 1995. *Strategic Communication in Business and the Professions.* Boston: Houghton Mifflin Company.
- O'Malley, J. M. & Chamot, A. U. 1990. *Learning Strategies in Second Language Acquisition.* Cambridge University Press.
- Oxford, R. L. 1990. *Language Learning Strategies.* Boston, Massachusetts: Heinle & Heinle.
- Paakkola, E. 1992. *Johdatus monimuoto-opetukseen.* Helsinki: Valtion painatuskeskus.
- Paananen, V-M & Lallukka, L. 1994. *Multimedia. Kohti hypermediaa.* Jyväskylä: Gummerus.
- Paige, M. R. 1996. Intercultural Trainer Competencies. In Landis, D. & Bhakat, R. S. (Eds.) *Handbook of Intercultural Training.* (2nd ed.) Thousand Oaks, CA: Sage Publications, 148-163.
- Paige, M. R. & Martin, J. N. 1996. Ethics in Intercultural Training. In Landis, D. & Bhakat, R. S. (Eds.) *Handbook of Intercultural Training.* (2nd ed.) Thousand Oaks, CA: Sage Publications, 35-59.

- Parker, B. & McEvoy, G. M. 1993. Initial Examination of a Model of Intercultural Adjustment. *International Journal of Intercultural Relations*, Vol. 17, No 3. Pergamon Press, 355-379.
- Penttilä, T. 2002. Intercultural Education Using ICT in a Foreign Language Class. *Yours Truly. The Association of Teachers of English in Finland*. Ylivieska: KL-Paino, 8-9.
- Porter, R. E. & Samovar, L. A. 1991. Basic Principles of Intercultural Communication. In Samovar, L. A. & Porter, R. E. *Intercultural Communication. A Reader*. Belmont: Wadsworth, 5-22.
- Prolang (Components for the development of a European system of recognition and/or validation of language acquisitions in work contexts). 2000. National Board of Education Finland.
- Pruegger, V. J. & Rogers, T. B. 1994. Cross-cultural Sensitivity Training: Methods and Assessment. *International Journal of Intercultural Relations*, Vol. 18, No 3. Elsevier Science, 369-387.
- Ptak, C. L., Cooper, J. & Brislin, R. 1995. Cross-Cultural Training Programs: Advice and Insights from Experienced Trainers. *International Journal of Intercultural Relations*. Vol. 19, No 3. Elsevier Science, 425-453.
- Pusch, M. D. 1996. Framework for Using Critical Incidents. In Seelye, N. H. (Ed.) *Experiential Activities for Intercultural Learning*, Vol. 1. Yarmouth, Maine: Intercultural Press, 207-209.
- Rauste-von Wright, M. 1994. Opetussuunnitelma ja oppimiskäsitys. In Kajanto, A. & Tuomisto, J. (Eds.) *Elinikäinen oppiminen. Vapaan sivistystyön 35. vuosikirja*. Helsinki: Kirjastopalvelu, 115-141.
- Riusala, K. & Suutari, V. 2000. Expatriation and Careers: Perspectives of Expatriates and Spouses. *Career Development International*, 5:2, 81-90.
- Ryffel, C. 1995. Review of Damen, L., *Culture Learning: The Fifth Dimension in the Language Classroom*. *International Journal of Intercultural Relations*, Vol. 19, No 2. Elsevier Science, 322-326.
- Ryffel, C. 1997. From Culture "Teaching" to Culture "Learning": Structures and Strategies for Increased Effectiveness. In Fantini, A. E. (Ed.) *New Ways in Teaching Culture. TESOL Series II*. Illinois: Pantagraph Printing, 28-35.
- Sajavaara, K. & Lehtonen, J. 1997. The silent Finn revisited. In Jaworski, A. (Ed.). *Silence. Interdisciplinary Perspectives. Studies in Anthropological Linguistics*. Mouton de Gruyter, 263-283.
- Sallinen-Kuparinen, A. 1986. Finnish Communication Reticence. Perceptions and Self-Reported Behaviour. University of Jyväskylä. *Studia Philologica Jyväskyläensia* 19.
- Salo-Lee, L. 1996. Me ja muut. Kulttuurienvälinen viestintä. YLE-opetuspalvelut. Jyväskylä: Gummerus.
- Samovar, L. A. & Porter, R. E. 1991. *Communication between Cultures*. Belmont, California: Wadsworth Publishing Company.
- Sawyer, M. & Smith, L. E. 1994. Approaching Cultural Crossover in Language Learning. In Brislin, R. W. & Yoshida, T. (Eds.) *Improving Intercultural Interactions. Modules for Cross-Cultural Training Programs. Multicultural Aspects of Counseling, Series 3*. Thousand Oaks, CA: Sage Publications, 295-312.
- Schein, E. H. 1986. *Organizational Culture and Leadership*. San Francisco: Jossey-Bass Publishers.

- Schneider, S. C. & Barsoux, J. L. 1997. *Managing across cultures*. London: Prentice Hall.
- Schuetz, R. 2001. Stephen Krashen's Theory of Second Language Acquisition. <<http://www.sk.combr/sk-krash.html>> October 1, 2001.
- Schnitzer, E. 1995. English as an International Language: Implications for Interculturalists and Language Educators. *International Journal of Intercultural Relations*, Vol. 19, No 2. Elsevier Science, 227-236.
- Scollon, R. & Wong Scollon, S. 1995. *Intercultural Communication. A Discourse Approach*. Cambridge: Blackwell Publishers.
- Seelye, H. N. 1994. *Teaching Culture. Strategies for Intercultural Communication*. Illinois: National Textbook Company.
- Seelye, H. N. (Ed.) 1996. *Experiential Activities for Intercultural Learning*, Vol. 1. Yarmouth, Maine: Intercultural Press.
- Seelye, H. N. 1997. Cultural Goals for Achieving Intercultural Communicative Competence. In Fantini, A. E. (Ed.) *New Ways in Teaching Culture*. TESOL Series II. Illinois: Pantagraph Printing, 22-27.
- Singelis, T. 1994. Nonverbal Communication in Intercultural Interactions. In Brislin, R. W. & Yoshida, T. (Eds.) *Improving Intercultural Interactions. Modules for Cross-Cultural Training Programs*. Multicultural Aspects of Counseling Series 3. Thousand Oaks, CA: Sage Publications, 268-294.
- Suutari, V. & Brewster, C. 2000. Making Your Own Way: Self-Initiated Foreign Assignments in Contrast to Organisational Expatriation. *Journal of Business Economics*. 49:4, 517-539.
- Suutari, V. & Tornikoski C. 2001. The Challenge of Expatriate Compensation: The Sources of Satisfaction and Dissatisfaction among Expatriates. *International Journal of Human Resource Management*, 12:3, 1-16.
- Suutari, V. & Välimaa, K. 2000. Takaisin Suomeen: Vuonna 1996 ulkomaankomennuksella olleiden SEFE:n jäsenten seurantatutkimus. Vaasan yliopisto. Johtamisen laitos.
- Suutarinen, S. 2001. Suomen peruskoulun päättövaiheessa olevien nuorten yhteiskunnalliset tiedot, taidot, käsitykset, asenteet ja toiminta 28 maan kansainvälisessä vertailussa. Jyväskylän yliopisto. Koulutuksen tutkimuslaitos. <http://www.jyu.fi/ktl/civicsIII/SaSuUp2.htm>> May 9, 2001.
- Tahvanainen, M. 1998. *Expatriate Performance Management: The Case of Nokia Telecommunications*. Helsinki School of Economics and Business Administration. A-134. HeSE print.
- Taylor, E. W. 1994. A Learning Model for Becoming Interculturally Competent. *International Journal of Intercultural Relations*, Vol. 18, No 3. Elsevier Science, 389-408.
- Taylor, E. W. 1997. Building upon the theoretical debate: A critical review of the empirical studies of Mezirow's transformative learning theory. *Adult Education Quarterly*, Vol. 48, Issue 1, 32-57.
- The Council of Europe. 2001. *The European Language Portfolio*. <<http://culture.coe.fr/lang/eng/eedu2.5.html>> May 9, 2001.
- The Education System of Finland. 1999. <<http://www.edu.fi>> May 2, 2001.
- Tilastokeskus. 2001. Kuluttajabarometri maakunnittain, 1. neljännes. <<http://www.stat.fi>> May 11, 2001.
- Triandis, H. C. 1994. *Culture and Social Behavior*. McGraw-Hill.

- Triandis, H. C. 1995. Culture-Specific Assimilators. In Fowler, S. M. & Mumford, M. G. (Eds.) *Intercultural Sourcebook: Cross-Cultural Training Methods*, Vol. 1. Yarmouth, Maine: Intercultural Press, 179-186.
- Trompenaars, F. 2000. Cultural Differences in International Marketing. *Market Leader. The Journal of the Marketing Society*. <<http://www.warc.com/print/14210p.asp>> October 3, 2001.
- Trompenaars, F. & Hampden-Turner, C. 1998. *Riding the Waves of Culture. Understanding Cultural Diversity in Business*. London: Nicholas Brealey Publishing.
- Trompenaars, F. & Hampden-Turner, C. 2001. Reconciling Cultural Differences. <<http://www.7d-culture.nl/cont32.htm>> October 3, 2001.
- (VIEKO) Vieraskielisen opetuksen arviointiprojektin loppuraportti. 1999. *Vieraskielinen opetus korkeakouluissamme - miksi ja minkäläistä? Teaching Through a Foreign Language - From Tool to Empowering Mediator*. <<http://www.minedu.fi/tytiedotteet1999/vieras.htm>> July 27, 2001.
- Viljanen, M. 2000. Perustietoa akavalaisista. *Toolilainen (Tekniikan opettajien järjestölehti)*, 2/2000, 12-13.
- Virrankoski, O. 2001. Nuoret ovat isänmaallisia ja suvaitsevaisia. *Turun yliopisto*. <<http://oso3.oso.oamk.fi/~telaine/nuoret.htm>> May 9, 2001.
- Yli-Renko, K. 1993. *Intercultural Communication in Foreign Language Education*. University of Turku. Faculty of Education. Research Reports A:168.
- Yli-Renko, K. 1994. Kielenopettaja oman työnsä tutkijana. *Turun yliopiston kasvatustieteiden tiedekunta. Julkaisusarja B:45*.
- Ward, C. & Kennedy, A. 1994. Acculturation Strategies, Psychological Adjustment, and Sociocultural Competence during Cross-Cultural Transitions. *International Journal of Intercultural Relations*, Vol. 18, No 3. Elsevier Science, 329-343.
- White Paper on education and training. *Teaching and learning - Towards the learning society*. 1996. European Commission. Luxembourg: Office for Official Publications of the European Communities.
- Wight, A. R. 1995. The Critical Incident as a Training Tool. In Fowler, S. M. & Mumford, M. G. (Eds.) *Intercultural Sourcebook: Cross-Cultural Training Methods*, Vol. 1. Yarmouth, Maine: Intercultural Press, 127-140.
- Woodhead, N. 1991. *Hypertext & Hypermedia. Theory and Applications*. Addison-Wesley Publishing Company.
- Polytechnic Act 1995. L255/95.
- Polytechnic Decree 1995. A256/95.
- Law called Language proficiency required of civil servants, including changes 1922. L149/22.

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APPENDICES

APPENDIX 1; SCREEN PRINTS 1-4



SCREEN PRINT 1 Index of *The Same but Different*



SCREEN PRINT 2 Introduction to the theme called *At Work* and the incidents in it

The screenshot shows a Netscape browser window with the address bar displaying 'http://www.kaski.fi/opa/kuoli/kuoli/kuoli.htm'. The page title is 'Presenting an item'. In the center, there is a graphic of the Japanese flag. Below the flag, the text reads: "Adjustment to Japan has been much easier than I thought", Kimmo told his wife about a year after their move from Finland. Kimmo had been sent to Yokohama and the surroundings of Tokyo by a Finnish telecommunications company to do some field research considering data networks. Having been told that business negotiations take a long time in Japan, Kimmo was not disappointed to set up a meeting with the key Japanese counterparts, Neuvottelu, and the proposal and were ready to discuss it.

At the meeting people discussed the written proposal that had been circulated beforehand. Suddenly it occurred to Kimmo that there was an aspect of quality control that he had left out of the proposal. The Japanese should know of this concern since it was important to the success of the project.

Kimmo asked the senior Japanese person if he could speak, apologized for not having already introduced the quality control concern he was about to raise, and then went into his addition to the proposal. His presentation was met with silence, and the meeting was later adjourned. Since Kimmo had thought that a decision would be made that day, he was puzzled.

SCREEN PRINT 3 An example of a hotword with a link to the vocabulary (negotiation; neuvottelu)

The screenshot shows a Netscape browser window with the address bar displaying 'http://www.kaski.fi/opa/kuoli/kuoli/kuoli.htm'. The page title is 'Japan'. In the center, there is a map of Japan with labels for 'CHINA', 'SEA OF JAPAN', 'KURIL ISLANDS', 'JAPAN', 'Sea of Okhotsk', 'Sea of Japan', 'East China Sea', 'Korea', 'Philippines', 'South Pacific Ocean', and 'ASIA'. Below the map, the text reads: "Map of country of www.thefoodora.com/kuoli used with permission".

Kimmo asked the senior Japanese person if he could speak, apologized for not having already introduced the quality control concern he was about to raise, and then went into his addition to the proposal. His presentation was met with silence, and the meeting was later adjourned. Since Kimmo had thought that a decision would be made that day, he was puzzled.

SCREEN PRINT 4 An example of a hotword with a link to graphics

APPENDIX 2: QUESTIONNAIRE 1 (10 p.)**KAJAANIN AMMATTIKORKEAKOULU****Tekniikka / Kaisu Korhonen****Tammikuu 2000****Kulttuurienväläinen viestintä osana amk-insinöörin ammattitaitoa****Kulttuurienvälisen koulutuksen tehokkuuden arviointi****1. Kysely; tilanne ennen koulutusta****KYSELY ON LUOTTAMUKSELLINEN EIKÄ TIETOJA KÄYTETÄ MUIHIN TARKOITUKSIIN. VASTAA REHELLISESTI NIIN KUIN TODELLA AJATTELET.****Kerro itsestäsi (= täydennä tai alleviivaa) seuraavat tiedot:**

Nimi _____

Sukupuoli mies / nainen

Ikä _____ vuotta

Kotipaikka**Aikaisempi koulutus** peruskoulu / lukio / ammattioppilaitos / teknillinen oppilaitos / kauppaoppilaitos / muu, mikä?**Koulutusohjelma** tietotekniikka / elektroniikan tuotantotekniikka / kiinteistötalous**Minkä vuoden opiskelija** ensimmäisen / toisen / kolmannen / neljännen**Kielitaito** ruotsi / englanti / saksa / muu(t), mi(t)kä?**Lomamatkat ulkomaille** yhteensä _____ viikkoa / kuukautta**Opiskelu ulkomailla** yhteensä _____ viikkoa / kuukautta**Työskentely ulkomailla** yhteensä _____ viikkoa / kuukautta**Maat, joissa olet ollut****Oletko kohdannut matkoillasi ulkomaisia tapoja, jotka ovat sinusta yllättäviä tai erilaisia verrattuna suomalaisiin tapoihin?**

Oletko motivoitunut opiskelemaan ulkomailla, jos mahdollista? kyllä / en**Oletko motivoitunut työskentelemään ulkomailla, jos mahdollista?** kyllä / en**Jos olet opiskellut/työskennellyt ulkomailla tai olet motivoitunut tekemään niin, millaisia kokemuksia sait/odotat saavasi?**

1. Kulttuurienvälisen osaamisen arviointi: Asenteet

Merkitse, oletko seuraavista väittämistä samaa mieltä (= S) vai eri mieltä (= E).

Jos et tiedä, merkitse viiva (-). Vastaa niin kuin todella ajattelet.

1.1 Maailmankuva ja erilaisuuden hyväksyminen

S / E / -

1. Ns. valikoivan havaitsemisen takia ihmiset voivat nähdä maailman eri tavoin, ts. heidän maailmankuvansa voi olla erilainen. _____
2. Sen, mitä nähdään, tulkintaan vaikuttaa oppiminen, ts. kulttuuritausta. _____
3. Sille, mitä nähdään, ei ole yhtä ainoa oikeaa tai väärää tulkintaa eli merkitystä. _____
4. Tulkintaeroista johtuvat väärinkäsitykset ovat kulttuurienvälisen viestinnän perusongelma. _____
5. Jotta menestyy kansainvälisissä ja monikulttuurisissa työtehtävissä, on osattava neuvotella merkityksiä, ts. löytää merkitys, jonka osapuolet ymmärtävät mahdollisimman samalla tavalla. _____
6. Mahdollisista väärinkäsityksistä huolimatta kaikki kulttuurienvälinen viestintä ei ole ongelmallista. _____
7. Jotta menestyy kansainvälisissä ja monikulttuurisissa työtehtävissä, erilaisuuteen on osattava suhtautua avoimesti ja ennakkoluulottomasti. _____
8. Lisääntyvä kansainvälistyminen Suomessa, maiden rajat ylittävät yritysfuusiot, kansainväliset työkomennukset, lyhytkestoiset työmatkat ulkomaille, työskentely monikulttuurisissa tiimeissä ja projekteissa jne. lisäävät kulttuurienvälisen osaamisen ja koulutuksen tarvetta. _____
9. Kulttuurienvälisen koulutuksen keskeisiä tavoitteita on oppia toimimaan oman maailmankuvansa rajojen ulkopuolella. _____
10. Kulttuurienvälisen koulutuksen keskeisiä tavoitteita on oppia hyväksymään erilaisuutta ilman liiallista ahdistusta ja stressiä. _____

1.2 Läheisyys- ja etäisyysuuntautuneisuus yleensä

S / E / -

1. Minua ei häiritse, jos ihmisillä on kontakteja ulkomaalaisten kanssa. _____
2. Itselläni on kontakteja ulkomaalaisten kanssa. _____
3. Tavoitteeni on koko ajan lisätä kontaktejani ulkomaalaisten kanssa. _____
4. Minusta on mukavaa, jos naapurissa asuu ulkomaalaisia. _____
5. On samantekevää, mistä maasta naapurit ovat. _____
6. En vastusta, jos perheeni jäsen menee naimisiin ulkomaalaisen kanssa. _____
7. Voisin itsekkin mennä naimisiin ulkomaalaisen kanssa (, jos en olisi jo sitoutunut.) _____
8. On samantekevää, mistä maasta mahdollinen aviopuoliso on. _____
9. Mitä erilaisemmasta kulttuurista toinen henkilö on verrattuna suomalaiseseen kulttuuriin, sitä vaikeampi minun on hyväksyä hänet. _____
10. En halua olla missään tekemisissä ulkomaalaisten kanssa. _____

1.3 Ennakkoluulot maahanmuuttajia (= vierastyöläiset, pakolaiset ja turvapaikan hakijat) kohtaan

S / E / -

1. Suomessa esiintyy rasismia eli rotuvihaa ja rotuennakkoluuloja. _____
2. Kysymyksessä ei ole todellinen rasismi vaan etnosentrismi (= "sisäänpäinlämpiävyys", omaryhmäkeskeisyys). _____
3. Maahanmuuttajien syrjintä ei ole ongelma nyky-Suomessa. _____
4. Suomalainen media kiinnittää liian paljon huomiota maahanmuuttajien elämään. _____
5. Suomessa asuvien maahanmuuttajien tasa-arvoa koskevat vaatimukset ovat _____

liioiteltuja.

6. Maahanmuuttajat vievät työpaikat suomalaisilta.
7. Monet maahanmuuttajat ovat laiskoja eivätkä tee työtä.
8. Monet maahanmuuttajat myyvät huumeita.
9. Monet maahanmuuttajat tuovat mukanaan rikollisuutta.
10. Monet maahanmuuttajat levittävät aidsia ja muita tauteja.

1.4 Etnosentrisyys (= ”sisäänpäinlämpiävyys”) ja etnorelativismi (= ”ulospäinsuuntautuneisuus”) työelämässä

S / E / -

1. Ulkomaalaisten ei pitäisi tulla Suomeen, missä heitä ei tarvita.
2. Arvioin kaikkia ulkomaalaisia omien suomalaisten arvojeni perusteella.
3. Työskentelen mieluiten Suomessa vain suomalaisten kanssa.
4. Työskentelen Suomessa mielelläni myös ulkomaalaisten kanssa.
5. Työskentelen mielelläni myös ulkomailla ulkomaalaisten kanssa.
6. Työskentelen mieluummin ruotsalaisten kuin venäläisten kanssa.
7. Työskentelen mieluummin venäläisten kuin somalien kanssa.
8. En ymmärrä, miksi Suomeen muuttavat ulkomaalaiset eivät pitäisi suomalaisista.
9. Ulkomaalaisten arvot ovat yhtä järkeviä kuin suomalaisten arvot.
10. Työelämän arvoissa (esim. työ, vapaa-aika, palkka, työpaikan pysyvyys ja uralla eteneminen) on kulttuurieroja.
11. On samantekevää, mistä maasta ulkomaiset työtoverit ovat.
12. Ulkomaisilla työtovereilla on paljon annettavaa minulle.

2. Kulttuurienvälisen osaamisen arviointi: Tiedot

**Merkitse, oletko seuraavista väittämistä samaa mieltä (= S) vai eri mieltä (= E).
 Jos et tiedä, merkitse viiva (-). Vastaa niin kuin todella ajattelet.**

2.1 Työelämä ja kulttuurin käsite

S / E / -

1. Kulttuurin käsite voidaan määritellä lukuisilla eri tavoilla. Tunnen keskeisiä määritelmiä työelämän näkökulmasta.
2. Kulttuuri koostuu erilaisista tasoista, joita tavat ja tottumukset heijastavat.
3. Kulttuurin syvempien tasojen, kuten normien ja arvojen, tuntemus on välttämätöntä, jos aikoo menestyä kansainvälisissä ja monikulttuurisissa työtehtävissä.
4. Kulttuurin lisäksi on muitakin tekijöitä (esim. ikä, sukupuoli, koulutus, varallisuus ja status eli arvovalta), jotka vaikuttavat ihmisen käyttäytymiseen.
5. Yksilö voi samanaikaisesti kuulua useisiin erilaisiin kansallisiin, alueellisiin, etnisiin, uskonnollisiin, kielellisiin, miesten, naisten, sukupolvien, ammatillisiin, organisatorisiin ym. ryhmiin tai osakulttuureihin.
6. Jotta voi ymmärtää muita kulttuureita, on tunnettava ensin omansa.

2.2 Viestintäprosessi ja low ja high context -viestintä

S / E / -

1. Tunnen interaktiivisen eli vuorovaikutteisen viestintäprosessin ja siihen liittyviä ongelmia.
2. Tunnen kulttuurienvälisen viestintäprosessin ja siihen liittyviä ongelmia.
3. Kielitaidon lisäksi kulttuurienväliseen osaamiseen kuuluu joukko ihmishuuhdetaitoja.
4. Tunnen ns. low ja high context -viestinnän keskeiset erot.
5. Tiedän, että low ja high context -viestinnän erot tulevat esille esim.

johtamistyyliissä, tiimi- ja projektityöskentelyssä, kokouksissa, neuvotte-
luissa, sopimuksissa, sähköpostiviesteissä ja fakseissa.

6. Ulkomaankomennusten onnistumista ei ratkaise tekninen osaaminen.

7. Ulkomaankomennusten ennenaikaisen keskeytymisen yleisimmät syyt
ovat vuorovaikutustaitojen puute ja perheen sisäiset ihmissuhdeongelmat.

2.3. Työelämä ja sanallinen viestintä

S / E / -

1. Small talk on osa positiivista kohteliaisuutta. Sen määrä ja aiheet vaih-
televat tilanteiden mukaan.

2. Aktiiviseen, vuorovaikutteiseen kuunteluun liikeneuvottelussa amerikka-
laisten kanssa kuuluu ei-sanallisen viestinnän lisäksi esim. kysymysten
esittämistä ja ns. tilkeilmausten (esim. I see, really?, right jne.)
käyttöä.

3. Pohjoismaiden ulkopuolella sinuttelu ei ole työtovereiden ja liikekumppa-
neiden ensisijainen puhuttelutapa.

4. Aasiassa liikekumppanin nimi kannattaa mainita mahdollisimman usein
keskustelun aikana.

5. Kun neuvotellaan arabien kanssa tietoliikennelaitteiden toimituksista on
kohteliasta mennä suoraan asiaan, jotta säästää heidän aikaansa.

6. Jotta kiinalaisen yritysvieraan ei tarvitse yrittää ns. lukea rivien
välistä, kielteiset vastaukset tulee ilmaista kiertelemättä.

7. Kun keskustellaan espanjalaisen tavarantoimittajan kanssa, omaa puheenvuo-
roa ei voi odottaa loputtomiin, vaan on osattava keskeyttää toinen puhuja.

8. Kohteliaisuuksien esittäminen on ajan tuhlausta kansainvälisessä työ-
elämässä.

9. Jos itse saa kohteliaisuuden esim. ranskalaiselta asiakkaalta, siihen ei
tarvitse reagoida millään tavalla.

10. Jos saksalaisen myyjän sanallinen ja ei-sanallinen viestintä ovat risti-
riidassa, on viisainta luottaa sanalliseen viestintään.

11. Jos minulla suomalaisena ei ole mitään tärkeää sanottavaa, voin aivan
hyvin olla puhumatta, vaikka saman neuvottelupöydän ääressä istuu joukko
hollantilaisia ostajia.

12. Jos joutuu viestinnässä ristiriitatilanteeseen latinalais-amerikkalaisen
tuotantojohtajan kanssa, voi luottaa siihen, että tämä osaa pitää erillään
tunteet ja tosiasiat.

2.4 Työelämä ja ei-sanallinen viestintä

S / E / -

1. Mielikuva vastapuolesta, esim. työnhakijasta tai liikekumppanista, syntyy
ensitapaamisessa jo ensimmäisten minuuttien aikana. Myönteisen ensivaiku-
telman voi tehdä yleensä vain yhden kerran.

2. Ulkoisella olemuksella (= pukeutuminen) ei ole merkitystä, kun hoidetaan
ulkomaisia asiakaskontakteja.

3. Luja kädenpuristus on asianmukainen tapa tervehtiä käyttökoulutukseen saa-
puvia thaimaalaisia insinöörejä.

4. Koska eri kulttuureissa käytetään samoja kasvojen ilmeitä tunteiden
ilmaisemiseen, näiden ilmeiden tulkitseminen ei aiheuta ongelmia.

5. Esim. hymyileminen ilmaisee aina, että kyseinen henkilö on onnellinen.

6. Kun neuvotellaan automaatiojärjestelmien toimituksista aasialaisten kanssa,
ei pitäisi ilmaista voimakkaita tunteita.

7. Japanissa esimestä on katsottava suoraan silmiin, kun hän puhuttelee.
Se ilmaisee, että kunnioittaa häntä ja kiinnittää huomiota siihen, mitä
hän sanoo.

8. Koska eleiden merkitykset ovat usein kulttuurisidonnaisia, on viisainta

välttää sellaisten eleiden käyttöä, joiden merkitystä ei tiedä. _____

9. Jotta arabimaissa saa viestinsä perille, kannattaa puhua kovalla äänellä. _____

10. Työelämän tilanteissa miellyttäväksi koetussa keskusteluetäisyydessä ei ole mainittavia kulttuurieroja. _____

11. Se, että myöhästyy Afrikassa sovitusta tapaamisesta 15 minuuttia, osoittaa huonoja käytöstapoja. _____

12. Kasvojen (= arvon, maineen) säilyttäminen on erittäin tärkeää aasialaisissa kulttuureissa. _____

13. Keski- ja eteläeurooppalaiset eivät siedä keskustelun aikana sellaista hiljaisuutta tai pitkiä taukoja, joita Pohjoismaissa ei koeta ongelmaksi. _____

2.5 Käsitteitä, joita käytetään, kun vertaillaan kulttuureita; myös organisaatiokulttuureita

S / E / -

1. Taloudellisen globalisaation lisääntymisen myötä *ettisiin* kulttuurieroihin (esim. miten suhtaudutaan korruptioon, lahjontaan, patenttioikeuksiin, ympäristöongelmiin, ei-hyväksyttäviin kuten huijaukseen ja petkutukseen perustuviin neuvottelutaktiikoihin jne.) joudutaan kiinnittämään entistä enemmän huomiota. _____

2. *Normit* ilmaisevat, mikä on oikein ja mikä väärin jossakin kulttuurissa. _____

3. *Arvot* ovat perittyjä ja kertovat, mitkä asiat ovat ihmisille tärkeitä. _____

4. *Asenteet*, kuten ennakkoluulot ja etnosentrismi (= ”sisäänpäinlämpiävyys”, omaryhmäkeskeisyys) ovat opittuja ja niitä on vaikea muuttaa. _____

5. *Tavat* edustavat kulttuurin ulointa tasoa, jäävuoren huippua tai sipulin ulointa kerrosta; ne perustuvat mm. normeihin ja arvoihin. _____

2.6 Hofsteden kansallisen kulttuurin dimensiot eli ulottuvuudet, joita käytetään, kun vertaillaan kulttuureita; myös organisaatiokulttuureita

S / E / -

1. *Individualismi* korostaa yksilön merkitystä kulttuurissa; *kollektivismi* sen sijaan ryhmän ja erilaisiin lähiryhmiin (esim. perhe, ystävät, työtoverit ja naapurit) kuulumisen merkitystä kulttuurissa. _____

2. *Valtaetäisyys* eli eriarvoisuus esimiesten ja alaisten välillä ja sen hyväksyminen vaihtelee kulttuurista toiseen. _____

3. On kulttuureita, joissa ihmiset *epävarmuuden välttämiseksi* suosivat kirjallisia ohjeita ja pitkäaikaisia työsuhteita; toisaalta on kulttuureita, joissa epävarmuutta ei koeta uhkana ja esim. työpaikkaa vaihdetaan usein. _____

4. *Maskuliinisuus* kuvaa kulttuuria, jossa korostetaan eriytyviä sukupuolirooleja (esim. on miesten töitä ja naisten töitä), suorittamista ja aineellista hyvinvointia; *feminiinisyys* kuvaa kulttuuria, jossa elämän laatu ja ihmissuhteet ovat tärkeämpiä. _____

5. Hofsteden kansallisen kulttuurin dimensiot voivat olla hyödyllistä ensitietoa esim., kun suunnitellaan liiketoimintaa johonkin uuteen maahan. _____

6. Kun Hofsteden dimensioiden perusteella tehdään johtopäätöksiä siitä, millainen jokin kulttuuri on, on varottava liiallista yleistämistä. Eroja esiintyy yhdenkin maan ja myös muiden osakulttuureiden, esim. organisaation, sisällä. _____

2.7 Uuteen kulttuuriin sopeutumisprosessi

S / E / -

1. Oma kulttuuri opitaan elinikäisen ns. sosiaalistumisprosessin aikana. _____
2. Jotta voi oppia toisen, uuden, kulttuurin, on pystyttävä poisoppimaan jotakin alkuperäisestä kulttuuristaan. _____
3. Sopeutuminen on eri vaiheista koostuva yksilöllinen oppimisprosessi. _____
4. Ns. kulttuurishokki aiheutuu siirtymisestä uuteen kulttuuriin; siihen voi liittyä sekä fyysisiä että psyykkisiä oireita ja sairauksia. _____
5. Kulttuurishokki viittaa ahdistukseen ja stressiin. _____
6. Erittäin etnosentrinen eli ”sisäänpäinlämpiävä”, omaryhmäkeskeinen henkilö ei todennäköisesti koe sopeutumisstressiä. _____
7. Sopeutumisstressi on ilmaus siitä, että osaa tunnistaa kulttuurieroja. _____
8. Paras tapa selvittää mahdollisesta sopeutumisstressistä on opetella paikallinen kieli ja mennä mukaan paikalliseen elämään: hankkia paikallisia ystäviä ja seurustella heidän kanssaan. _____
9. Sisäänpääsy paikallisiin lähiryhmiin sekä työpaikalla että sen ulkopuolella vaatii usein yllättävän pitkän ajan. _____
10. Kotiinpaluuprosessi voi olla vaikeampi kuin uuteen kulttuuriin sopeutuminen. _____
11. Monet palaajat vaihtavat työpaikkaa melko pian kotiinpaluun jälkeen. _____
12. Kulttuurienvälisen koulutuksen keskeisiä tavoitteita on helpottaa sopeutumista ja vähentää mahdollista sopeutumisstressiä. _____

3. Kulttuurienvälisen osaamisen arviointi: Taidot

3.1 Kriittiset tilanteet

3.1.1 Maassa maan tavalla: "Passipoliisi"

Lue tilanne ja pohdi sitä.

Otto oli innoissaan mahdollisuudesta osallistua kansainväliseen systeemisuunnittelijoiden konferenssiin Los Angelesissa Yhdysvalloissa. Maahan saavuttuaan Oton täytyi kulkea passintarkastuksen ja tullin läpi. Passintarkastuksessa amerikanafrikkalainen virkailija esitti hänelle rennon ystävälliseen tyyliin joukon kysymyksiä: kuinka kauan hän aikoo viipyä Yhdysvalloissa, tunteeo hän viisumimääräykset, missä hän asuu, kuinka paljon rahaa hänellä on jne.

Virkailijan kysymykset alkoivat ärsyttää Ottoa ja lopulta hän kieltäytyi vastaamasta niihin. Virkailija kutsui paikalle esimiehensä, joka johdatti Oton työhuoneeseensa ja varmisti Oton kaikkien papereiden aitouden. Lopulta hän antoi Oton jatkaa matkaansa. Otto onnistui tukahduttamaan ärtymyksensä, mutta vannoi itsekseen, ettei aivan heti tule uudelleen tähän ”ääripatrioottiseen” maahan.

Lue ja pohdi vaihtoehtoisia selityksiä tilanteelle. Rengasta vaihtoehto, joka mielestäsi parhaiten selittää tilanteen sekä Oton että muiden ihmisten käyttäytymisen.

1. Otto on yksinkertaisesti väsynyt ja ärtynyt pitkän lentomatkan ja aikaeron takia.
2. Otosta tuntuu, että häntä pidetään jotenkin epäilyttävänä henkilönä. Hän on loukkaantunut, koska ei ole tottunut tällaiseen.
3. Virkailijan kysymykset ovat Otosta tunkeilevia eikä hän halua paljastaa itsestään niin henkilökohtaisia tietoja.
4. Oton odotuksia liittyen hänen statukseensa (suomalainen, valkoihoinen, koulutettu, hyvän työpaikan omaava) ja kohteluunsa Yhdysvalloissa on pahasti loukattu, etenkin kun toisena osapuolena on amerikanafrikkalainen maahanmuuttovirkailija. Otolla, kuten monilla suomalaisilla, on negatiivisia etnisiä asenteita.

Kirjoita perustelu valinnallesi.

3.1.2 Vuorovaikutustaidot: Kiinalainen työtoveri**Lue tilanne ja pohdi sitä.**

Mika työskenteli Beijingissä Kiinassa suomalaisen tietoliikennekonsernin palveluksessa. Hän halusi hankkia hyviä henkilösuhteita (ns. *guanxi*), jotka ovat Kiinassa ratkaisevia sekä työelämässä että erilaisten henkilökohtaisten asioiden hoitamisessa. Paikallinen nuori mies nimeltään Chen Li-men työskenteli Mikan kanssa samassa projektissa.

Suurkaupunkilaisena Chen Li-men oli innokas tutustumaan ulkomaalaisiin ja kokeilemaan englannin kielen taitojaan; hän oli ylpeä siitä, että selvisi ilman tulkkia. Kerran työpäivän päätteeksi Chen Li-men käynnisti keskustelun tervehtimällä Mikaa kiinalaiseen tapaan kysymyksellä ”Oletko jo syönyt?”. Keskustelu jatkui työ- ja perheasioiden merkeissä. Chen Li-men sai Mikan hieman hämilleen kyselemällä ”Paljonko ansaitset?”, ”Miksi et ole naimisissa?” jne. Chen Li-men ihmetteli, miten vasta 25-vuotias Mika saattoi toimia vastuullisessa tehtävässä projektipäällikkönä.

Keskustelun edetessä Mika mainitsi, että hän on kiinnostunut *tai-chista* eli kiinalaisesta aamuvoimistelusta. Chen Li-men ehdotti, että he menisivät yhdessä voimistelemaan seuraavana aamuna. Kun Mika saapui puistoon, häntä tervehti Chen Li-men'in lisäksi kymmenkunta tämän ystävää. Monet heistä kertoivat innoissaan Mikalle *tai-chin* hyvistä puolista. Mika oli silminnähden pettynyt, koska Chen Li-men ei ollutkaan kiinnostunut vain hänen seurastaan.

Chen Li-men huomasi Mikan pettymyksen ja eristäytymisen, mutta ei ymmärtänyt, miksi Mika oli tyytymätön; hän kun oli nähnyt niin paljon vaivaa kutsuessaan ystävänsä, jotta Mikakin voisi tutustua heihin.

Lue ja pohdi vaihtoehtoisia selityksiä tilanteelle. Rengasta vaihtoehto, joka mielestäsi parhaiten selittää tilanteen sekä Mikan että muiden ihmisten käyttäytymisen.

1. Kiinalainen Chen Li-men ajattelee asioita kollektiivisen yhteiskunnan näkökulmasta, jossa ihmiset ovat voimakkaiden, yhteenkuuluvien lähiryhmien jäseniä. Suomalainen Mika on enemmän individualistinen eli yhteiskunnasta, jossa ryhmiin kuuluminen ei ole niin tärkeää.
2. Puisto, jonka Chen Li-men oli valinnut *tai-chia* varten, ei ollut Mikan mielestä erityisen viihtyisä ja hän halusi lähteä pois niin pian kuin mahdollista ehtiäkseen ajoissa töihin.
3. Mika oli pelkästään itsekäs, kun hän oletti, että saa osakseen Chen Li-menin kaiken huomion.
4. Mika oli liian ujo tutustuakseen Chen Li-menin ystäviin, jotka kertoivat Mikalle englanniksi *tai-chista*, mutta puhuivat keskenään mandariini-kiinaa.

Kirjoita perustelu valinnallesi.

3.1.3 Työpaikalla: Henkilökemiaa

Lue tilanne ja pohdi sitä.

Saku, kunnianhimoinen nuori myynti-insinööri, lähetettiin vastaamaan konealan yrityksen tytäryhtiön toiminnasta São Paulossa Brasiliassa. Saku perehtyi uuteen työhönsä muutaman viikon ajan edeltäjänsä Dr Ricardon opastuksella; hän opiskeli myös portugalilain kieltä. Sakua häiritsi vapaamuotoinen brasilialainen johtamistyyli. Vaikutti siltä, että myyntiedustajat käyttivät paljon aikaa keskinäiseen seurusteluun; keskustelujen aiheet liittyivät enemmän urheiluun, rantaelämään ja karnevaaleihin kuin työhön eikä kukaan näyttänyt välittävän täsmällisyydestä eikä sovitusta määräajoista. Sakun mielestä työ- ja vapaa-aika sekoittuivat.

Dr Ricardon lähdettyä Saku päätti, että vallitsevan sekasorron on loputtava ja hän kutsui koko henkilökunnan palaveriin. Hän kertoi kiertelemättä, että työskentelyn tehokkuutta on lisättävä ja että hän toivoo asiallisempaa työskentelyilmapiiriä.

Seuraavien kuukausien aikana Saku palkitsi niitä, jotka työskentelivät ahkerasti ja antoi muille kahden kesken varoituksia. Hänestä tuntui, että tilanne oli nyt huomattavasti parempi. Niinpä Saku oli aikanaan jokseenkin yllättynyt saadessaan tietää, että myyntiluvut olivatkin laskeneet.

Lue ja pohdi vaihtoehtoisia selityksiä tilanteelle. Rengasta vaihtoehto, joka mielestäsi parhaiten selittää tilanteen sekä Sakun että muiden ihmisten käyttäytymisen.

1. Myyntiedustajat vastustivat Sakun suomalaista johtamis- ja viestintätyyliä ja tekemällä tahallaan huonoa tulosta yrittivät saada hänet näyttämään epäonnistuneelta johtajalta.
2. Sakun toimenpiteillä oli myyntiedustajien työmoraaalia huonontava vaikutus. Myyntiedustajien mielestä mahdollinen taloudellinen hyöty ei korvannut riittävästi sosiaalisen vuorovaikutuksen menetystä: Ihmissuhteet ovat tärkeämpiä kuin työ.
3. Myyntiedustajat olisivat arvostaneet, jos Saku olisi laittanut itsensä todella likoon ja olisi henkilökohtaisesti osallistunut enemmän ongelmien ratkaisemiseen.
4. Parhaat "myyntitykit" menettivät kasvonsa (= arvonsa, maineensa) Sakun tehokkuusvaatimusten myötä.

Kirjoita perustelu valinnallesi.

3.1.4 Uuteen kulttuuriin sopeutuminen: "Kuherruskuukausi" päättyy

Lue tilanne ja pohdi sitä.

Katriina oli työskennellyt kansainvälisessä rakennusalan yhteishankkeessa Beirutissa Libanonissa noin kolmen kuukauden ajan, kun hän tuli tietoiseksi lisääntyvästä levottomuudesta.

Sopeutuminen oli aluksi sujunut hyvin. Uteliaat kasvot, kun Katriina muutti uuteen kotiinsa, kiinnostus työpaikalla ja se, miten vapaasti ihmiset tulivat vierailulle... Katriina oppi arabian kieltäkin. Hän hämmästeli, miten nopeasti hän tottui uuteen elämänrytmiin, uusiin ruokiin, turkkilaiseen kahviin jne. Kaikki tämä vieraanvaraisuus ja tuttavallisuus...

Vaikka asiat näyttivät olevan kunnossa, Katriinan ahdistus lisääntyi ja alkoi vaikuttaa hänen työskentelytehoonsa. Koska Katriinalla ei ollut mitään aikomusta palata Libanonista Suomeen ennen aikaisesti, hän päätti taistella: Huumorin ja kärsivällisyyden avulla tästä selvitään.

Lue ja pohdi vaihtoehtoisia selityksiä tilanteelle. Rengasta vaihtoehto, joka mielestäsi parhaiten selittää tilanteen sekä Katriinan että muiden ihmisten käyttäytymisen.

1. Katriina oli pettynyt, koska hän ei kokenut voimakasta kulttuurishokkia. Hänestä tuntui, että sopeutumisprosessi ei sujunutkaan niin kuin sen piti.
2. Katriina oli kyllästynyt tiimityöskentelyyn. Työssä ei ollut myöskään riittävästi haasteita.
3. Kaiken sosiaalisuuden keskellä Katriina reagoi yksityisyyden puutteeseen. Vaikka suopea suhtautuminen ja sosiaalisuus olivat merkki siitä, että hänet hyväksyttiin, se johti myös sellaiseen oman rauhan puutteeseen, johon Katriina ei ole tottunut.
4. Katriinalta puuttui ystäväverkosto. Hänen pitäisi osallistua enemmän ”kissanristiäisiin”.

Kirjoita perustelu valinnallesi.

3.1.5 Kotiinpaluu: Meriittiä vai ei?

Lue tilanne ja pohdi sitä.

Esan päätöksessä lähteä töihin ulkomaille painoivat halu nähdä uutta, kielitaidon kohentaminen, raha ja urakehitys. Ulkomaankomennusprosessi eteni nopeasti: Työsopimus, palkkaus, verotus ja sosiaaliturva kuntoon ja lyhyt kielikurssi päälle. Sopeutumisvalmennuksesta ja kotiinpaluusta ei puhuttu mitään. Esa työskenteli viiden vuoden ajan suomalaisen paperitehtaan palveluksessa Britanniassa. Esa nautti näistä vuosista. Pahoilta turhautumilta ja perheongelmilta vältyttiin.

Esa oli omasta mielestään saanut paljon uusia näkemyksiä ja kielitaito oli sujuva. Etäisyys opetti myös näkemään suomalaisten hyviä ja huonoja puolia, kuten ”sitkeys ja sisu” ja toisaalta ”väärä ylimielisyys ja kritiikitön ihailu tai vastustus”. Kotiinpaluu oli kuitenkin kulttuurishokki. Esa koki, ettei saanut tehtaalla asemaa, jossa hän olisi voinut hyödyntää maailmalla oppimaansa. Kokemukset ja ehdotukset uusista toimintatavoista eivät saaneet vastakaikua työnantajalta ja työtovereilta. Työnantaja edellytti myös paikkakunnan vaihtoa. Esa sai tarpeekseen puolessa vuodessa ja päätti perustaa oman yrityksen. Urakehitys oli Esalle suuri pettymys. Hän totesi usein, että ”Suomessa olisin päässyt pitemmälle”.

Lue ja pohdi vaihtoehtoisia selityksiä tilanteelle. Rengasta vaihtoehto, joka mielestäsi parhaiten selittää tilanteen sekä Esan että muiden ihmisten käyttäytymisen.

1. Työtoverit kadehtivat Esan ulkomaankomennusta ja hänen sujuvaa kielitaitoaan.
2. Työnantaja ei aliarvioinut Esan ulkomaankomennuksen merkitystä. Ulkomaankomennuksen hyödyntäminen ei kuitenkaan ole aina helppoa eikä Esan paluuseen oltu valmistauduttu ajoissa.
3. Työtoverit olivat loukkaantuneita tavasta, jolla Esa arvosteli suomalaisia.
4. Työnantajan mielestä Esa oli viipynyt Britanniassa liian pitkään - kolme vuotta olisi riittänyt. Nyt Esa oli liian brittiläistynyt eikä häneen voinut enää luottaa.

Kirjoita perustelu valinnallesi.

Merkitse, oletko seuraavista väittämistä samaa mieltä (= S) vai eri mieltä (= E). Jos et tiedä, merkitse viiva (-). Vastaa niin kuin todella ajattelet.

3.2 Taito viestiä asianmukaisella ja sopivalla tavalla

Kun viestin ulkomaalaisten kanssa,

S / E / -

1. etsin ja löydän samankaltaisuuksia itseni ja heidän väliltä. _____
2. hyväksyn heidät sellaisina kuin he ovat. _____
3. vältän negatiivisten stereotyyppien eli yleistysten muodostamista. _____
4. ilmaisen tunteitani. _____
5. sopeutan viestintäni heidän viestintätyyliinsä. _____

3.3 Taito ilmaista empatiaa ja ottaa toiset ihmiset huomioon

Kun viestin ulkomaalaisten kanssa,

S / E / -

1. pyrin ymmärtämään heidän elämäkokemuksiaan heidän näkökulmastaan. _____
2. osaan virittäytyä heidän tunnetiloihinsa. _____
3. kiinnitän huomiota tilanteeseen. _____
4. viestin eri tavalla esim. työtovereiden kuin hyvien ystävien kanssa. _____
5. etsin järkeviä syitä, jos he käyttäytyvät mielestäni negatiivisella tavalla. _____

3.4 Taito sietää moniselitteisiä tilanteita ja epävarmuutta

Kun viestin ulkomaalaisten kanssa,

S / E / -

1. tunnen oloni miellyttäväksi. _____
2. pystyn ratkaisemaan odottamattomat ongelmat vaikeuksista. _____
3. tunnen oloni rentoutuneeksi. _____
4. koen oloni vain vähän epämukavaksi. _____
5. en turhaidu, vaikka asiat eivät sujukaan odottamallani tavalla. _____

3.5 Viestintätyytyväisyys

3.5.1 Arvioi itse omaa kulttuurienvälisistä osaamistasi. Pystytkö viestimään haluamallasi tavalla a) suomalaisten kanssa b) ulkomaalaisten kanssa? Jos et pysty, kerro mikä estää.

3.5.2 Kuvaile itseäsi: Oletko seurallinen vai ujo? Vaikuttaako asiaan se, onko puhekeskustelu a) suomalainen b) ulkomaalainen?

Kuvaile, millainen on viestinnällinen tavoitteesi: millainen viestijä haluat olla.

APPENDIX 3: QUESTIONNAIRE 2 (11 p.)**KAJAANIN AMMATTIKORKEAKOULU****Tekniikka****Kaisu Korhonen****Helmi-huhtikuu 2000****Kulttuurienvälinen viestintä osana amk-insinöörin ammattitaitoa****Kulttuurienvälisen koulutuksen tehokkuuden arviointi****2. Kysely; tilanne koulutuksen jälkeen****Nimi** _____

Kysely on luottamuksellinen. Nimi kysytään, jotta yhdeltä opiskelijalta saadaan varmasti koko haastattelusarja. Nimiä ei käytetä tietojen jatkokäsittelyssä.

VASTAA REHELLISESTI NIIN KUIN TODELLA AJATTELET.**1. Kulttuurienvälisen osaamisen arviointi: Asenteet****Merkitse, oletko seuraavista väittämistä samaa mieltä (= S) vai eri mieltä (= E).****Jos et tiedä, merkitse viiva (-). Vastaa niin kuin todella ajattelet.****1.1 Maailmankuva ja erilaisuuden hyväksyminen****S / E / -**

1. Ns. valikoivan havaitsemisen takia ihmiset voivat nähdä maailman eri tavoin, ts. heidän maailmankuvansa voi olla erilainen. _____
2. Sen, mitä nähdään, tulkintaan vaikuttaa oppiminen, ts. kulttuuritausta. _____
3. Sille, mitä nähdään, ei ole yhtä ainoaa oikeaa tai väärää tulkintaa eli merkitystä. _____
4. Tulkintaeroista johtuvat väärinkäsitykset ovat kulttuurienvälisen viestinnän perusongelma. _____
5. Jotta menestyy kansainvälisissä ja monikulttuurisissa työtehtävissä, on osattava neuvotella merkityksiä, ts. löytää merkitys, jonka osapuolet ymmärtävät mahdollisimman samalla tavalla. _____
6. Mahdollisista väärinkäsityksistä huolimatta kaikki kulttuurienvälinen viestintä ei ole ongelmallista. _____
7. Jotta menestyy kansainvälisissä ja monikulttuurisissa työtehtävissä, erilaisuuteen on osattava suhtautua avoimesti ja ennakkoluulottomasti. _____
8. Lisääntyvä kansainvälistyminen Suomessa, maiden rajat ylittävät yritysfuusiot, kansainväliset työkomennukset, lyhytkestoiset työmatkat ulkomaille, työskentely monikulttuurisissa tiimeissä ja projekteissa jne. lisäävät kulttuurienvälisen osaamisen ja koulutuksen tarvetta. _____
9. Kulttuurienvälisen koulutuksen keskeisiä tavoitteita on oppia toimimaan oman maailmankuvansa rajojen ulkopuolella. _____
10. Kulttuurienvälisen koulutuksen keskeisiä tavoitteita on oppia hyväksymään erilaisuutta ilman liiallista ahdistusta ja stressiä. _____

1.2 Läheisyys- ja etäisyysuuntautuneisuus yleensä**S / E / -**

1. Minua ei häiritse, jos ihmisillä on kontakteja ulkomaalaisten kanssa. _____
2. Itsellenikin on kontakteja ulkomaalaisten kanssa. _____
3. Tavoitteeni on koko ajan lisätä kontaktejani ulkomaalaisten kanssa. _____
4. Minusta on mukavaa, jos naapurissa asuu ulkomaalaisia. _____
5. On samantekevää, mistä maasta naapurit ovat. _____

6. En vastusta, jos perheeni jäsen menee naimisiin ulkomaalaisen kanssa. _____
7. Voisin itsekin mennä naimisiin ulkomaalaisen kanssa (, jos en olisi jo sitoutunut.) _____
8. On samantekevää, mistä maasta mahdollinen aviopuoliso on. _____
9. Mitä erilaisemmasta kulttuurista toinen henkilö on verrattuna suomalaiseseen kulttuuriin, sitä vaikeampi minun on hyväksyä hänet. _____
10. En halua olla missään tekemisissä ulkomaalaisten kanssa. _____

1.3 Ennakkoluulot maahanmuuttajia (= vierastyöläiset, pakolaiset ja turvapaikan hakijat) kohtaan

S / E / -

1. Suomessa esiintyy rasismia eli rotuvihaa ja rotuennakkoluuloja. _____
2. Kysymyksessä ei ole todellinen rasismi vaan etnosentrismi eli "sisäänpäinlämpiävyys", omaryhmäkeskeisyys. _____
3. Maahanmuuttajien syrjintä ei ole ongelma nyky-Suomessa. _____
4. Suomalainen media kiinnittää liian paljon huomiota maahanmuuttajien elämään. _____
5. Suomessa asuvien maahanmuuttajien tasa-arvoa koskevat vaatimukset ovat liioiteltuja. _____
6. Maahanmuuttajat vievät työpaikat suomalaisilta. _____
7. Monet maahanmuuttajat ovat laiskoja eivätkä tee työtä. _____
8. Monet maahanmuuttajat myyvät huumeita. _____
9. Monet maahanmuuttajat tuovat mukanaan rikollisuutta. _____
10. Monet maahanmuuttajat levittävät aidsia ja muita tauteja. _____

1.4 Etnosentrisyys (= "sisäänpäinlämpiävyys") ja etnorelativismi (= "ulospäinsuuntautuneisuus") työelämässä

S / E / -

1. Ulkomaalaisten ei pitäisi tulla Suomeen, missä heitä ei tarvita. _____
2. Arvioin kaikkia ulkomaalaisia omien suomalaisten arvojeni perusteella. _____
3. Työskentelen mieluiten Suomessa vain suomalaisten kanssa. _____
4. Työskentelen Suomessa mielelläni myös ulkomaalaisten kanssa. _____
5. Työskentelen mielelläni myös ulkomailla ulkomaalaisten kanssa. _____
6. Työskentelen mieluummin ruotsalaisten kuin venäläisten kanssa. _____
7. Työskentelen mieluummin venäläisten kuin somalien kanssa. _____
8. En ymmärrä, miksi Suomeen muuttavat ulkomaalaiset eivät pitäisi suomalaisista. _____
9. Ulkomaalaisten arvot ovat yhtä järkeviä kuin suomalaisten arvot. _____
10. Työelämän arvoissa (esim. työ, vapaa-aika, palkka, työpaikan pysyvyys ja uralla eteneminen) on kulttuurieroja. _____
11. On samantekevää, mistä maasta ulkomaiset työtoverit ovat. _____
12. Ulkomaisilla työtovereilla on paljon annettavaa minulle. _____

2. Kulttuurienvälisen osaamisen arviointi: Tiedot

Merkitse, oletko seuraavista väittämistä samaa mieltä (= S) vai eri mieltä (= E). Jos et tiedä, merkitse viiva (-). Vastaa niin kuin todella ajattelet.

2.1 Työelämä ja kulttuurin käsite

S / E / -

1. Kulttuurin käsite voidaan määritellä lukuisilla eri tavoilla. Tunnen keskeisiä määritelmiä työelämän näkökulmasta. _____
2. Kulttuuri koostuu erilaisista tasoista, joita tavat ja tottumukset heijastavat. _____
3. Kulttuurin syvempien tasojen, kuten normien ja arvojen, tuntemus on _____

välttämätöntä, jos aikoo menestyä kansainvälisissä ja monikulttuurisissa työtehtävissä.

4. Kulttuurin lisäksi on muitakin tekijöitä (esim. ikä, sukupuoli, koulutus, varallisuus ja status eli arvovalta), jotka vaikuttavat ihmisen käyttäytymiseen.
5. Yksilö voi samanaikaisesti kuulua useisiin erilaisiin kansallisiin, alueellisiin, etnisiin, uskonnollisiin, kielellisiin, miesten, naisten, sukupolvien, ammatillisiin, organisatorisiin ym. ryhmiin tai osakulttuureihin.
6. Jotta voi ymmärtää muita kulttuureita, on tunnettava ensin omansa.

2.2 Viestintäprosessi ja low ja high context -viestintä

S / E / -

1. Tunnen interaktiivisen eli vuorovaikutteisen viestintäprosessin ja siihen liittyviä ongelmia.
2. Tunnen kulttuurienvälisen viestintäprosessin ja siihen liittyviä ongelmia.
3. Kielitaidon lisäksi kulttuurienväliseen osaamiseen kuuluu joukko ihmishuhdetaitoja.
4. Tunnen ns. low ja high context -viestinnän keskeiset erot.
5. Tiedän, että low ja high context -viestinnän erot tulevat esille esim. johtamistyyliessä, tiimi- ja projektityöskentelyssä, kokouksissa, neuvotteluissa, sopimuksissa, sähköpostiviesteissä ja fakseissa.
6. Ulkomaankomennusten onnistumista ei ratkaise tekninen osaaminen.
7. Ulkomaankomennusten ennenaikaisen keskeytymisen yleisimmät syyt ovat vuorovaikutustaitojen puute ja perheen sisäiset ihmissuhdeongelmat.

2.3 Työelämä ja sanallinen viestintä

S / E / -

1. Small talk on osa positiivista kohteliaisuutta. Sen määrä ja aiheet vaihtelevat tilanteiden mukaan.
2. Aktiiviseen, vuorovaikutteiseen kuunteluun liikeneuvottelussa amerikkalaisten kanssa kuuluu ei-sanallisen viestinnän lisäksi esim. kysymysten esittämistä ja ns. tilkeilmausten (esim. I see, really?, right jne.) käyttöä.
3. Pohjoismaiden ulkopuolella sinuttelu ei ole työtovereiden ja liikekumppaneiden ensisijainen puhuttelutapa.
4. Aasiassa liikekumppanin nimi kannattaa mainita mahdollisimman usein keskustelun aikana.
5. Kun neuvotellaan arabien kanssa tietoliikennelaitteiden toimituksista on kohteliasta mennä suoraan asiaan, jotta säästää heidän aikaansa.
6. Jotta kiinalaisen yritysvieraan ei tarvitse yrittää ns. lukea rivien välistä, kielteiset vastaukset tulee ilmaista kiertelemättä.
7. Kun keskustellaan espanjalaisen tavarantoimittajan kanssa, omaa puheenvuoroa ei voi odottaa loputtomiin, vaan on osattava keskeyttää toinen puhuja.
8. Kohteliaisuuksien esittäminen on ajan tuhlausta kansainvälisessä työelämässä.
9. Jos itse saa kohteliaisuuden esim. ranskalaiselta asiakkaalta, siihen ei tarvitse reagoida millään tavalla.
10. Jos saksalaisen myyjän sanallinen ja ei-sanallinen viestintä ovat ristiriidassa, on viisainta luottaa sanalliseen viestintään.
11. Jos minulla suomalaisena ei ole mitään tärkeää sanottavaa, voin aivan hyvin olla puhumatta, vaikka saman neuvottelupöydän ääressä istuu joukko hollantilaisia ostajia.
12. Jos joutuu viestinnässä ristiriitatilanteeseen latinalais-amerikkalaisen tuotantojohtajan kanssa, voi luottaa siihen, että tämä osaa pitää erillään tunteet ja tosiasiat.

2.4 Työelämä ja ei-sanallinen viestintä

S / E / -

1. Mielikuva vastapuolesta, esim. työnhakijasta tai liikekumppanista, syntyy ensitapaamisessa jo ensimmäisten minuuttien aikana. Myönteisen ensivaikutelman voi tehdä yleensä vain yhden kerran. _____
2. Ulkoisella olemuksella (= pukeutuminen) ei ole merkitystä, kun hoidetaan ulkomaisia asiakaskontakteja. _____
3. Luja kädenpuristus on asianmukainen tapa tervehtiä käyttökoulutukseen saapuvia thaimaalaisia insinöörejä. _____
4. Koska eri kulttuureissa käytetään samoja kasvojen ilmeitä tunteiden ilmaisemiseen, näiden ilmeiden tulkitseminen ei aiheuta ongelmia. _____
5. Esim. hymyileminen ilmaisee aina, että kyseinen henkilö on onnellinen. _____
6. Kun neuvotellaan automaatiojärjestelmien toimituksista aasialaisten kanssa, ei pitäisi ilmaista voimakkaita tunteita. _____
7. Japanissa esimestä on katsottava suoraan silmiin, kun hän puhuttelee. Se ilmaisee, että kunnioittaa häntä ja kiinnittää huomiota siihen, mitä hän sanoo. _____
8. Koska eleiden merkitykset ovat usein kulttuurisidonnaisia, on viisainta välttää sellaisten eleiden käyttöä, joiden merkitystä ei tiedä. _____
9. Jotta arabimaissa saa viestinsä perille, kannattaa puhua kovalla äänellä. _____
10. Työelämän tilanteissa miellyttäväksi koetussa keskusteluetäisyydessä ei ole mainittavia kulttuurieroja. _____
11. Se, että myöhästyy Afrikassa sovitusta tapaamisesta 15 minuuttia, osoittaa huonoja käytöstapoja. _____
12. Kasvojen (= arvon, maineen) säilyttäminen on erittäin tärkeää aasialaisissa kulttuureissa. _____
13. Keski- ja eteläeurooppalaiset eivät siedä keskustelun aikana sellaista hiljaisuutta tai pitkiä taukoja, joita Pohjoismaissa ei koeta ongelmaksiksi. _____

2.5 Käsitteitä, joita käytetään, kun vertaillaan kulttuureita; myös organisaatiokulttuureita

S / E / -

1. Taloudellisen globalisaation lisääntymisen myötä *ettisiin* kulttuurieroihin (esim. miten suhtaudutaan korruptioon, lahjontaan, patenttioikeuksiin, ympäristöongelmiin, ei-hyväksyttäviin kuten huijaukseen ja petkutukseen perustuviin neuvottelutaktiikoihin jne.) joudutaan kiinnittämään entistä enemmän huomiota. _____
2. *Normit* ilmaisevat, mikä on oikein ja mikä väärin jossakin kulttuurissa. _____
3. *Arvot* ovat perittyjä ja kertovat, mitkä asiat ovat ihmisille tärkeitä. _____
4. *Asenteet*, kuten ennakkoluulot ja etnosentrismi (= ”sisäänpäinlämpiävyys”, omaryhmäkeskeisyys) ovat opittuja ja niitä on vaikea muuttaa. _____
5. *Tavat* edustavat kulttuurin ulointa tasoa, jäävuoren huippua tai sipulin ulointa kerrosta; ne perustuvat mm. normeihin ja arvoihin. _____

2.6 Hofsteden kansallisen kulttuurin dimensiot eli ulottuvuudet, joita käytetään, kun vertaillaan kulttuureita; myös organisaatiokulttuureita

S / E / -

1. *Individualismi* korostaa yksilön merkitystä kulttuurissa; *kollektivismi* sen sijaan ryhmän ja erilaisiin lähiryhmiin (esim. perhe, ystävät, työtoverit ja naapurit) kuulumisen merkitystä kulttuurissa. _____
2. *Valtaetäisyys* eli eriarvoisuus esimiesten ja alaisten välillä ja sen hyväksyminen vaihtelee kulttuurista toiseen. _____
3. On kulttuureita, joissa ihmiset *epävarmuuden välttämiseksi* suosivat kirjallisia ohjeita ja pitkäaikaisia työsuhteita; toisaalta on kulttuureita, joissa epävarmuutta ei koeta uhkana ja esim. työpaikkaa vaihdetaan usein. _____

4. *Maskuliinisuus* kuvaa kulttuuria, jossa korostetaan eriytyviä sukupuoli-rooleja (esim. on miesten töitä ja naisten töitä), suorittamista ja aineellista hyvinvointia; *feminiinisyys* kuvaa kulttuuria, jossa elämän laatu ja ihmissuhteet ovat tärkeämpiä.

5. Hofsteden kansallisen kulttuurin dimensiot voivat olla hyödyllistä ensitietoa esim., kun suunnitellaan liiketoimintaa johonkin uuteen maahan.

6. Kun Hofsteden dimensioiden perusteella tehdään johtopäätöksiä siitä, millainen jokin kulttuuri on, on varottava liiallista yleistämistä. Eroja esiintyy yhdenkin maan ja myös muiden osakulttuureiden, esim. organisaation, sisällä.

2.7 Uuteen kulttuuriin sopeutumisprosessi

S / E / -

1. Oma kulttuuri opitaan elinikäisen ns. sosiaalistumisprosessin aikana.

2. Jotta voi oppia toisen, uuden, kulttuurin, on pystyttävä poisoppimaan jotakin alkuperäisestä kulttuuristaan.

3. Sopeutuminen on eri vaiheista koostuva yksilöllinen oppimisprosessi.

4. Ns. kulttuurishokki aiheutuu siirtymisestä uuteen kulttuuriin; siihen voi liittyä sekä fyysisiä että psyykkisiä oireita ja sairauksia.

5. Kulttuurishokki viittaa ahdistukseen ja stressiin.

6. Erittäin etnosentrinen eli "sisäänpäinlämpiävä", omaryhmäkeskeinen henkilö ei todennäköisesti koe sopeutumisstressiä.

7. Sopeutumisstressi on ilmaus siitä, että osaa tunnistaa kulttuurieroja.

8. Paras tapa selvittää mahdollisesta sopeutumisstressistä on opetella paikallinen kieli ja mennä mukaan paikalliseen elämään: hankkia paikallisia ystäviä ja seurustella heidän kanssaan.

9. Sisäänpääsy paikallisiin lähiryhmiin sekä työpaikalla että sen ulkopuolella vaatii usein yllättävän pitkän ajan.

10. Kotiinpaluuprosessi voi olla vaikeampi kuin uuteen kulttuuriin sopeutuminen.

11. Monet palaajat vaihtavat työpaikkaa melko pian kotiinpaluun jälkeen.

12. Kulttuurienvälisen koulutuksen keskeisiä tavoitteita on helpottaa sopeutumista ja vähentää mahdollista sopeutumisstressiä.

3. Kulttuurienvälisen osaamisen arviointi: Taidot / Kriittiset tilanteet

3.1 Maassa maan tavalla: "Passipoliisi"

Lue tilanne ja pohdi sitä.

Otto oli innoissaan mahdollisuudesta osallistua kansainväliseen systeemisuunnittelijoiden konferenssiin Los Angelesissa Yhdysvalloissa. Maahan saavuttuaan Oton täytyi kulkea passintarkastuksen ja tullin läpi. Passintarkastuksessa amerikanafrikkalainen virkailija esitti hänelle rennon ystävälliseen tyyliin joukon kysymyksiä: kuinka kauan hän aikoo viipyä Yhdysvalloissa, tunteeke hän viisumimääräykset, missä hän asuu, kuinka paljon rahaa hänellä on jne.

Virkailijan kysymykset alkoivat ärsyttää Ottoa ja lopulta hän kieltäytyi vastaamasta niihin. Virkailija kutsui paikalle esimiehensä, joka johdatti Oton työhuoneeseensa ja varmisti Oton kaikkien papereiden aitouden. Lopulta hän antoi Oton jatkaa matkaansa. Otto onnistui tukahduttamaan ärtymyksensä, mutta vannoi itsekseen, ettei aivan heti tule uudelleen tähän "ääripatriottiseen" maahan.

Lue ja pohdi vaihtoehtoisia selityksiä tilanteelle. Rengasta vaihtoehto, joka mielestäsi parhaiten selittää tilanteen sekä Oton että muiden ihmisten käyttäytymisen.

1. Otto on yksinkertaisesti väsynyt ja ärtynyt pitkän lentomatkan ja aikaeron takia.

2. Otosta tuntuu, että häntä pidetään jotenkin epäilyttävänä henkilönä. Hän on loukkaantunut, koska ei ole tottunut tällaiseen.
3. Virkailijan kysymykset ovat Otosta tunkeileviä eikä hän halua paljastaa itsestään niin henkilökohtaisia tietoja.
4. Oton odotuksia liittyen hänen statukseensa (suomalainen, valkoihoinen, koulutettu, hyvän työpaikan omaava) ja kohteluunsa Yhdysvalloissa on pahasti loukattu, etenkin kun toisena osapuolena on amerikanafrikkalainen maahanmuuttovirkailija. Otolla, kuten monilla suomalaisilla, on negatiivisia etnisiä asenteita.

Kirjoita perustelu valinnallesi.

3.2 Vuorovaikutustaidot: Kiinalainen työtoveri

Lue tilanne ja pohdi sitä.

Mika työskenteli Beijingissä Kiinassa suomalaisen tietoliikennekonsernin palveluksessa. Hän halusi hankkia hyviä henkilösuhteita (ns. *guanxi*), jotka ovat Kiinassa ratkaisevia sekä työelämässä että erilaisten henkilökohtaisten asioiden hoitamisessa. Paikallinen nuori mies nimeltään Chen Li-men työskenteli Mikan kanssa samassa projektissa.

Suurkaupunkilaisena Chen Li-men oli innokas tutustumaan ulkomaalaisiin ja kokeilemaan englannin kielen taitojaan; hän oli ylpeä siitä, että selvisi ilman tulkkia. Kerran työpäivän päätteeksi Chen Li-men käynnisti keskustelun tervehtimällä Mikaa kiinalaiseen tapaan kysymyksellä "Oletko jo syönyt?". Keskustelu jatkui työ- ja perheasioiden merkeissä. Chen Li-men sai Mikan hieman hämilleen kyselemällä "Paljonko ansaitset?", "Miksi et ole naimisissa?" jne. Chen Li-men ihmetteli, miten vasta 25-vuotias Mika saattoi toimia vastuullisessa tehtävässä projektipäällikkönä.

Keskustelun edetessä Mika mainitsi, että hän on kiinnostunut *tai-chi'sta* eli kiinalaisesta aamuvoimistelusta. Chen Li-men ehdotti, että he menisivät yhdessä voimistelemaan seuraavana aamuna. Kun Mika saapui puistoon, häntä tervehti Chen Li-menin lisäksi kymmenkunta tämän ystävää. Monet heistä kertoivat innoissaan Mikalle *tai-chi'n* hyvistä puolista. Mika oli silminnähden pettynyt, koska Chen Li-men ei ollutkaan kiinnostunut vain hänen seurastaan.

Chen Li-men huomasi Mikan pettymyksen ja eristäytymisen, mutta ei ymmärtänyt, miksi Mika oli tyytymätön; hän kun oli nähnyt niin paljon vaivaa kutsuessaan ystävänsä, jotta Mikakin voisi tutustua heihin.

Lue ja pohdi vaihtoehtoisia selityksiä tilanteelle. Rengasta vaihtoehto, joka mielestäsi parhaiten selittää tilanteen sekä Mikan että muiden ihmisten käyttäytymisen.

1. Kiinalainen Chen Li-men ajattelee asioita kollektiivisen yhteiskunnan näkökulmasta, jossa ihmiset ovat voimakkaiden, yhteenkuuluvien lähiryhmien jäseniä. Suomalainen Mika on enemmän individualistinen eli yhteiskunnasta, jossa ryhmiin kuuluminen ei ole niin tärkeää.
2. Puisto, jonka Chen Li-men oli valinnut *tai-chi'a* varten, ei ollut Mikan mielestä erityisen viihtyisä ja hän halusi lähteä pois niin pian kuin mahdollista ehtiäkseen ajoissa töihin.
3. Mika oli pelkästään itsekäs, kun hän oletti, että saa osakseen Chen Li-men'in kaiken huomion.
4. Mika oli liian ujo tutustuakseen Chen Li-menin ystäviin, jotka kertoivat Mikalle englanniksi *tai-chi'sta*, mutta puhuivat keskenään mandariini-kiinaa.

Kirjoita perustelu valinnallesi.

3.3 Työpaikalla: Henkilökemiaa**Lue tilanne ja pohdi sitä.**

Saku, kunnianhimoinen nuori myynti-insinööri, lähetettiin vastaamaan konealan yrityksen tytäryhtiön toiminnasta São Paulossa Brasiliassa. Saku perehtyi uuteen työhönsä muutaman viikon ajan edeltäjänsä Dr Ricardon opastuksella; hän opiskeli myös portugalin kieltä. Sakua häiritsi vapaamuotoinen brasilialainen johtamistyyli. Vaikutti siltä, että myyntiedustajat käyttivät paljon aikaa keskinäiseen seurusteluun; keskustelujen aiheet liittyivät enemmän urheiluun, rantaelämään ja karnevaaleihin kuin työhön eikä kukaan näyttänyt välittävän täsmällisyydestä eikä sovituista määräajoista. Sakun mielestä työ- ja vapaa-aika sekoittuivat.

Dr Ricardon lähdettyä Saku päätti, että vallitsevan sekasorron on loputtava ja hän kutsui koko henkilökunnan palaveriin. Hän kertoi kiertelemättä, että työskentelyn tehokkuutta on lisättävä ja että hän toivoo asiallisempaa työskentelyilmapiiriä.

Seuraavien kuukausien aikana Saku palkitsi niitä, jotka työskentelivät ahkerasti ja antoi muille kahden kesken varoituksia. Hänestä tuntui, että tilanne oli nyt huomattavasti parempi. Niinpä Saku oli aikanaan jokseenkin yllätynyt saadessaan tietää, että myyntiluvut olivatkin laskeneet.

Lue ja pohdi vaihtoehtoisia selityksiä tilanteelle. Rengasta vaihtoehto, joka mielestäsi parhaiten selittää tilanteen sekä Sakun että muiden ihmisten käyttäytymisen.

1. Myyntiedustajat vastustivat Sakun suomalaista johtamis- ja viestintätäytyä ja tekemällä tahallaan huonoa tulosta yrittivät saada hänet näyttämään epäonnistuneelta johtajalta.
2. Sakun toimenpiteillä oli myyntiedustajien työmoraaalia huonontava vaikutus. Myyntiedustajien mielestä mahdollinen taloudellinen hyöty ei korvannut riittävästi sosiaalisen vuorovaikutuksen menetystä: Ihmissuhteet ovat tärkeämpiä kuin työ.
3. Myyntiedustajat olisivat arvostaneet, jos Saku olisi laittanut itsensä todella likoon ja olisi henkilökohtaisesti osallistunut enemmän ongelmien ratkaisemiseen.
4. Parhaat ”myyntitykit” menettivät kasvonsa (= arvonsa, maineensa) Sakun tehokkuusvaatimusten myötä.

Kirjoita perustelu valinnallesi.

3.4 Uuteen kulttuuriin sopeutuminen: "Kuherruskuukausi" päättyy

Lue tilanne ja pohdi sitä.

Katriina oli työskennellyt kansainvälisessä rakennusalan yhteishankkeessa Beirutissa Libanonissa noin kolmen kuukauden ajan, kun hän tuli tietoiseksi lisääntyvästä levottomuudesta.

Sopeutuminen oli aluksi sujunut hyvin. Uteliaat kasvot, kun Katriina muutti uuteen kotiin, kiinnostus työpaikalla ja se, miten vapaasti ihmiset tulivat vierailulle... Katriina oppi arabian kieltäkin. Hän hämmästeli, miten nopeasti hän tottui uuteen elämänrytmiin, uusiin ruokiin, turkkilaiseen kahviin jne. Kaikki tämä vieraanvaraisuus ja tuttavallisuus...

Vaikka asiat näyttivät olevan kunnossa, Katriinan ahdistus lisääntyi ja alkoi vaikuttaa hänen työskentelytehoonsa. Koska Katriinalla ei ollut mitään aikomusta palata Libanonista Suomeen ennenaikaisesti, hän päätti taistella: Huumorin ja kärsivällisyyden avulla tästä selvittäään.

Lue ja pohdi vaihtoehtoisia selityksiä tilanteelle. Rengasta vaihtoehto, joka mielestäsi parhaiten selittää tilanteen sekä Katriinan että muiden ihmisten käyttäytymisen.

1. Katriina oli pettynyt, koska hän ei kokenut voimakasta kulttuurishokkia. Hänestä tuntui, että sopeutumisprosessi ei sujunutkaan niin kuin sen piti.
2. Katriina oli kyllästynyt tiimityöskentelyyn. Työssä ei ollut myöskään riittävästi haasteita.
3. Kaiken sosiaalisuuden keskellä Katriina reagoi yksityisyyden puutteeseen. Vaikka suopea suhtautuminen ja sosiaalisuus olivat merkki siitä, että hänet hyväksyttiin, se johti myös sellaiseen oman rauhan puutteeseen, johon Katriina ei ole tottunut.
4. Katriinalta puuttui ystäväverkosto. Hänen pitäisi osallistua enemmän "kissanristiäisiin".

Kirjoita perustelu valinnallesi.

3.5 Kotiinpaluu: Meriittää vai ei?

Lue tilanne ja pohdi sitä.

Esan päätöksessä lähteä töihin ulkomaille painoivat halu nähdä uutta, kielitaidon kohentaminen, raha ja urakehitys. Ulkomaankomennusprosessi eteni nopeasti: Työsopimus, palkkaus, verotus ja sosiaaliturva kuntoon ja lyhyt kielikurssi päälle. Sopeutumisvalmennuksesta ja kotiinpaluusta ei puhuttu mitään. Esa työskenteli viiden vuoden ajan suomalaisen paperitehtaan palveluksessa Britanniassa. Esa nautti näistä vuosista. Pahoilta turhautumilta ja perheongelmilta vältyttiin.

Esa oli omasta mielestään saanut paljon uusia näkemyksiä ja kielitaito oli sujuva. Etäisyys opetti myös näkemään suomalaisten hyviä ja huonoja puolia, kuten "sitkeys ja sisu" ja toisaalta "väärä ylimielisyys ja kritiikitön ihailu tai vastustus". Kotiinpaluu oli kuitenkin kulttuurishokki. Esa koki, ettei saanut tehtaalla asemaa, jossa hän olisi voinut hyödyntää maailmalla oppimaansa. Kokemukset ja ehdotukset uusista toimintatavoista eivät saaneet vastakaikua työnantajalta ja työtovereilta. Työnantaja edellytti myös paikkakunnan vaihtoa. Esa sai tarpeekseen puolessa vuodessa ja päätti perustaa oman yrityksen. Urakehitys oli Esalle suuri pettymys. Hän totesi usein, että "Suomessa olisin päässyt pitemmälle".

Lue ja pohdi vaihtoehtoisia selityksiä tilanteelle. Rengasta vaihtoehto, joka mielestäsi parhaiten selittää tilanteen sekä Esan että muiden ihmisten käyttäytymisen.

1. Työtoverit kadehtivat Esan ulkomaankomennusta ja hänen sujuvaa kielitaitoaan.
2. Työnantaja ei aliarvioinut Esan ulkomaankomennuksen merkitystä. Ulkomaan-

komennuksen hyödyntäminen ei kuitenkaan ole aina helppoa eikä Esan paluuseen oltu valmistauduttu ajoissa.

3. Työtoverit olivat loukkaantuneita tavasta, jolla Esa arvosteli suomalaisia.

4. Työnantajan mielestä Esa oli viipynyt Britanniassa liian pitkään - kolme vuotta olisi riittänyt. Nyt Esa oli liian brittiläistynyt eikä häneen voinut enää luottaa.

Kirjoita perustelu valinnallesi.

4. Uusia kriittisiä tilanteita

4.1 Vuorovaikutustaidot: Jutustelua ja sen seurauksia

Lue tilanne ja pohdi sitä.

Aleksi oli vierailulla Yhdysvalloissa new yorkilaisessa yrityksessä tehtävänä selvittää teknisen yhteishankkeen mahdollisuuksia. Aleksi oli ensimmäistä kertaa Euroopan ulkopuolella, mutta hän oli hankkinut tietoja Yhdysvalloista lukemalla opaskirjoja ennen matkaa. Aleksi sai kutsun brunssille (= myöhäinen aamiainen). Tilaisuuteen osallistui useita yrityksen johtohenkilöitä.

Aleksi oli innokas tekemään hyvän ensivaikutelman. Hänet esiteltiin yrityksen varatoimitusjohtajalle, hra O'Neilille. Aleksi tunnisti nimen irlantilaiseksi ja ohjasi keskustelun hra O'Neilin irlantilaiseen taustaan. Hän otti esille sellaisia aiheita kuin siirtolaisuus Irlannista Yhdysvaltoihin, katolinen kirkko, avioeroa koskeva kansanäänestys, irlantilainen viski ja Pohjois-Irlannin ongelmat.

Aleksi toi esille myös yrityksensä yhteishankkeeseen liittyviä suunnitelmia. Hra O'Neil lopetti keskustelun niin pian kuin mahdollista ja alkoi keskustella T & K -henkilökuntaansa kuuluvien ihmisten kanssa. Aleksi vaistosi, että hän oli menettänyt mahdollisuutensa tehdä hyvä ensivaikutelma.

Lue ja pohdi vaihtoehtoisia selityksiä tilanteelle. Rengasta vaihtoehto, joka mielestäsi parhaiten selittää tilanteen sekä Aleksin että muiden ihmisten käyttäytymisen.

1. Aleksin olisi pitänyt ennen varatoimitusjohtaja O'Neilin tapaamista tavata yrityksen muita toimihenkilöitä, jotka ovat alempana yrityksen hierarkiassa kuin hra O'Neil.

2. Aleksin englannin kielen taito ei riittänyt ylläpitämään keskustelua.

3. Aleksi käytti stereotyyppioita valitessaan keskustelun aiheita.

4. Materiaali, jota Aleksi oli lukenut työasioiden esille ottamisesta brunssilla oli virheellistä - brunssilla ei pitäisi puhua työstä.

Kirjoita perustelu valinnallesi.

4.2 Vuorovaikutustaidot: Lähentelyä vai ei?

Lue tilanne ja pohdi sitä.

Jenniä pyydettiin edustamaan yritystään konferenssissa, joka pidettiin Santiagossa Chilessä. Koska Jenni oli vasta hiljattain aloittanut työt yrityksessä, hän ymmärrettävästi tunsi itsensä imarrelluksi. Häntä jännitti myös mahdollisuus vieraillla tässä latinalais-amerikkalaisessa maassa. Kaikki sujui hyvin, lennot Santiagoon, kirjoittautuminen hotelliin jne., aina konferenssin aluksi pidettyihin cocktail-kutsuihin asti.

Kutsuilla Jenniä lähestyi nuori chileläinen naisosanottaja, joka esitteli itsensä Mariaksi. Myös Jenni esitteli itsensä ja naiset vaihtoivat käyntikortteja. ”Sinä näytät upealta”, Maria huudahti. Jenni punastui ja vastasi Marian kohteliaisuuteen hiljaisuudella.

Maria alkoi puhua paikallisista viineistä. Naisten välinen keskusteluetäisyys lyheni koko ajan. Aina kun Jenni otti askeleen taaksepäin, Maria astui eteenpäin. Jonkin ajan kuluttua Jenni huomasi olevansa seinää vasten. Maria säilytti lyhyen välimatkan. Koettuaan tätä epämukavuutta jonkin aikaa, Jenni pyysi kohteliaasti anteeksi, palasi hotellihuoneeseensa ja kieltäytyi osallistumasta muihin konferenssiin liittyviin sosiaalisiin tilaisuuksiin.

Lue ja pohdi vaihtoehtoisia selityksiä tilanteelle. Rengasta vaihtoehto, joka mielestäsi parhaiten selittää tilanteen sekä Jennin että muiden ihmisten käyttäytymisen.

1. Miellyttäväksi koettu keskusteluetäisyys kahden latinalais-amerikkalaisen välillä on paljon lyhyempi kuin kahden suomalaisen välillä. Sekä Jenni että Maria hakivat tätä etäisyyttä.
2. Marian kohteliaisuudet ja lähestymisyritykset olivat seksuaalisesti sävyttyneitä.
3. Jenni ei todennäköisesti pitänyt Marian hengityksen valkosipulin tuoksusta.
4. Jenni olisi mieluummin seurustellut muiden suomalaisten osanottajien kanssa, jotka seisoi- vat juhlahuoneiston toisella laidalla ja hiljaisina siemailivat juomiaan.

Kirjoita perustelu valinnallesi.

4.3 Työssä: Maailma on sinun tai sitten ei

Lue tilanne ja pohdi sitä.

Juho, hardware-suunnittelija, työskentelee japanilaisen yrityksen palveluksessa Suomessa. Eräänä päivänä yrityksen pääjohtaja, hra Tanaka, pyytää Juhon luokseen keskustelemaan uudesta projektista Ruotsissa. Hän kertoo Juholle, että yritys on erittäin tyytyväinen Juhon työskentelyyn ja haluaisi hänet tähän uuteen projektiin pääsuunnittelijaksi. Työ edellyttäisi muuttoa Tukholmaan ja 2 - 3 vuotta siellä. Perhe voisi lähteä mukaan. Ja tietysti Juho tekisi arvokkaan palveluksen yritykselle. Juho kiittää hra Tanakaa luottamuksesta ja lisää, että ennen päätöksen tekemistä hänen täytyy keskustella asiasta vaimonsa kanssa.

Kaksi päivää myöhemmin Juho ilmoittaa hra Tanakalle, että hän ja hänen vaimonsa eivät halua lähteä Suomesta. Näin ollen hän ei voi ottaa tarjousta vastaan. Hra Tanaka ei sano mitään, mutta on jokseenkin poissa tolaltaan Juhon päätöksen takia.

Lue ja pohdi vaihtoehtoisia selityksiä tilanteelle. Rengasta vaihtoehto, joka mielestäsi parhaiten selittää tilanteen sekä Juhon että muiden ihmisten käyttäytymisen.

1. Hra Tanaka ei voi hyväksyä, että Juho kuulee asiassa vaimoan ja ottaa tämän mielipiteen huomioon.
2. Hra Tanaka uskoo, että Juho yrittää saada hänet tarjoamaan enemmän erilaisia lisäetuja.
3. Hra Tanakasta on käsittämätöntä, että Juho kieltäytyy kaikista työtarjoukseen liittyvistä taloudellisista eduista.

4. Hra Tanakasta ei ole sopivaa, että Juhosta hänen henkilökohtaiset mieltymyksensä ovat tärkeämpiä kuin yrityksen etu.

Kirjoita perustelu valinnallesi.

APPENDIX 4: QUESTIONNAIRE 3 (2 p.)

KAJAANIN AMMATTIKORKEAKOULU

Tekniikka / Kaisu Korhonen

Helmi-huhtikuu 2000

Kulttuurienvälinen viestintä osana amk-insinöörin ammattitaitoa

Kulttuurienvälisen koulutuksen tehokkuuden arviointi

3. Kysely; koulutuksen ja oman toiminnan arviointi

Nimi _____

Kysely on luottamuksellinen. Nimi kysytään, jotta yhdeltä opiskelijalta saadaan varmasti koko haastattelusarja. Nimiä ei käytetä tietojen jatkokäsittelyssä. Vastaa rehellisesti niin kuin todella ajattelet.

1. Arvioi kulttuurienvälisen osaamisen merkitystä osana ammattikorkeakoulu-insinöörin ammattitaitoa.

2. Arvioi kulttuurienvälistä viestintää osana ammattikorkeakoulun englannin kielen opintoja (= asiasisällön ja kieliopintojen yhdistäminen).

3. Arvioi omaa työskentelyäsi kurssin aikana:

a) Oliko asenteesi oppimiseen positiivinen?

b) Valmistauduitko tunneille ennakoon?

c) Olitko aktiivinen?

d) Puhuitko oma-aloitteisesti?

e) Kertasitko käsitellyjä asioita kotona?

f) Olitko aikuinen, itseohjautuva opiskelija eli otitko itse vastuun oppimisestasi?

g) Jos asenteesi oli negatiivinen, miksi?

h) Jos olit passiivinen, miksi?

4. Arvioi kulttuurienvälisen viestinnän kurssia kokonaisuutena.

5. Arvioi opettajan toimintaa kurssin aikana.

6. Kerro, mitä mieltä olet kurssiin liittyvästä kirjallisesta materiaalista.

7. Kerro, mitkä olivat

a) mielenkiintoisimmat / hyödyllisimmät kurssilla käsitellyt aiheet. Perustele.

b) vähiten mielenkiintoiset / hyödylliset kurssilla käsitellyt aiheet. Perustele.

8. Arvioi kurssilla käytettyjä opetus- ja oppimismenetelmiä.

9. Arvioi ryhmäsi muiden opiskelijoiden työskentelyä kurssin aikana.

10. Kerro, mitä opit kurssilla:

a) asenteet

b) tiedot

c) taidot

11. Arvioi omaa kulttuurienvälistä osaamistasi:

a) kielitaito

b) ihmissuhdetaidot

12. Arvioi, mitä hyötyä kurssista on tulevassa insinöörin työssäsi.

13. Arvioi, miten kurssi auttaa sinua tulevaisuudessa mahdollisella ulkomaan komennuksella.

14. Muita huomioita

15. Kerro, miten kurssia voisi sinun mielestäsi kehittää edelleen.

APPENDIX 5: QUESTIONNAIRE 4 (5 p.)

KAJAANIN AMMATTIKORKEAKOULU

Tekniikka

Kaisu Korhonen

Huhtikuu 2000

Kulttuurienvälinen viestintä osana amk-insinöörin ammattitaitoa

Kulttuurienvälisen koulutuksen tehokkuuden arviointi

4. Kysely; tilanne kontaktiopetuksen ja kriittisten tilanteiden itsenäisen opiskelun jälkeen

Nimi _____

Kysely on luottamuksellinen. Nimi kysytään, jotta yhdeltä opiskelijalta saadaan varmasti koko haastattelusarja. Nimiä ei käytetä tietojen jatkokäsittelyssä.

Solve the following critical incidents.

A. Read each incident carefully.

B. Then reflect the various alternative explanations, eliminate the poor explanations and choose the best one (ie, the one that best explains the situation).

C. Finally, write the rationale (ie, why you chose the particular explanation).

1. Let's Have Some Small Talk!

Aleksi was visiting a New York -based company in the United States to examine the possibility of a technical joint venture. This was Aleksi's first time out of Europe, but he had done some reading about the US. Aleksi was invited to a brunch at which many of the important figures in the organization would be present. Aleksi was anxious to make a good impression. He was introduced to Mr O'Neil, the vice-president of the company. Aleksi recognized the name as Irish and directed the conversation to Mr O'Neil's Irish heritage. He brought up matters like Irish immigration to the US, the Catholic Church, the referendum on divorce, Irish whiskey, and the problems in Northern Ireland.

Aleksi also brought up a few facts about the plans of his company considering the joint venture. Mr O'Neil kept the conversation as short as possible and started talking to his R & D people. Aleksi sensed that he had lost his chance to make a good first impression.

Choose the best alternative.

- 1) Aleksi should have met other people lower in the corporate hierarchy before meeting Mr O'Neil.
- 2) Aleksi's English was not good enough to keep up the conversation.
- 3) Aleksi used a stereotype in choosing topics for conversation.
- 4) The material Aleksi had read about business at brunches was wrong - one should not talk about business matters.

Write the rationale.

2. Amorous Advances?

Jenni was asked to represent her company at a conference that took place in Santiago, Chile. Having recently started working in the company, Jenni was understandably flattered that her boss would ask her to participate and excited that she would have the opportunity to visit this Latin American country. Everything went well, flights to Santiago, checking into the hotel, and so on, until the preconference cocktail party.

At the party Jenni was approached by a young Chilean woman participant who introduced herself as Maria. Jenni also introduced herself and business cards were exchanged. "You look gorgeous", Maria exclaimed. Jenni blushed and accepted the compliment with a silence.

Immediately upon striking up a conversation about local wines Maria appeared to be making a physical advance. It seemed that every time Jenni moved away, Maria moved forward. After some time, Jenni found herself against a wall unable to retreat any further. Maria kept her close distance. Having experienced enough discomfort, Jenni curtly excused herself, returned to her hotel room, and refused to attend any other social functions again.

Choose the best alternative.

- 1) The comfortable social distance usually kept between two Latin Americans is much closer than that for Finns. Both Jenni and Maria were seeking a comfortable distance.
- 2) Maria*s compliments and advances were sexually related.
- 3) Jenni was probably responding to the smell of garlic on Maria's breath.
- 4) Jenni would have preferred socializing with the other Finnish delegates who were standing on the opposite side of the lounge quietly sipping their drinks.

Write the rationale.

3. Beating about the Bush

Jiang from Singapore and Timo from Finland were exchange trainees working for a London-based research company. They often had lunch together at the Coach and Horses, a nearby pub. Timo enjoyed listening to Jiang's stories about Singapore - a mixture of Chinese, Indian and Malayan cultures.

One afternoon, Gordon, one of the applications engineers, asked for two volunteers to come in early the next morning to help code some research data. Timo volunteered and suggested Jiang might also be willing. Jiang replied hesitantly that her programming skills are not good enough but Timo told Gordon they would do it. The next day Jiang failed to turn up, and Timo was obliged to do all the work himself.

The next time Timo saw Jiang he asked her rather coldly what had happened to her. Jiang apologized and said that she did not really feel capable of doing the work. Timo exasperatedly asked her why she had not said so clearly at the time. Jiang just looked down and said nothing.

Choose the best alternative.

- 1) Jiang did not understand what was asked of her and did not want to show her lack of comprehension in front of her superior, ie the applications engineer.
- 2) Jiang felt it wrong to give a direct refusal to her superior.
- 3) Jiang probably forgot or confused the time but was too embarrassed to admit her silly mistake.
- 4) Jiang resented Timo publicly volunteering her without asking her.

Write the rationale.

4. Domestic Bliss?

Janne, a system specialist, was transferred to the German subsidiary of the company in Munich for a planned two-year stay. Although Janne and his wife had traveled extensively, they had never lived abroad. They were excited about the move.

The company provided Janne with two weeks' free from work to be involved in a language and intercultural training program. The company also arranged for the moving of the furniture and personal belongings, rented a suitable house, leased a car, enrolled their two children in a nearby international kindergarten, and even arranged to have the family dog taken over with them. The move went well - everything arrived intact and when expected.

After a few weeks of adjustment, events at work were running quite smoothly and Janne was, in fact, quite pleased with his accomplishments. He was also getting used to the German efficiency and formality, *Herr Doktors*, and frequent handshaking.

As time progressed, however, Janne became noticeably more short-tempered and moody. Things at home were changing and Janne seemed unable to control them. He often argued with his wife, Minna. Minna complained of missing her friends and support from home and of being bored. She was also upset that she could not seem to manage the home as she used to. The right foods were not available in the shops! The children were also missing their grandparents and friends in Finland.

Choose the best alternative.

- 1) Janne's wife probably does not have the right personality for living abroad.
- 2) The problems are merely extensions of preexisting conditions in the family.
- 3) There is a lack of attention and preparation given to Janne's wife and children.
- 1) Many of the problems in Janne's family are due to the oldest child who is just entering the negative age.

Write the rationale.

5. Business or Pleasure?

Ville, a top sales negotiator in an electronics company, was asked to present the company in Riyadh, Saudi Arabia. Together with a local agent called Ahmed bin Muhammad Ville planned his trip with extreme care. At the airport he was welcomed by Mr Hassan.

As soon as they got in the car, Ville began explaining some of his ideas to Mr Hassan. Mr Hassan, however, kept changing the subject and talked about the weather and asked questions about Ville and his family. He told Ville that instead of flashy urban life he prefers

the traditional ways of the Bedouin: camels, horses, and falconry.

When planning the trip, they had set up an appointment for the morning after Ville's arrival. Mr Hassan, however, informed Ville that the meeting would be two days later. Ville's hosts wanted him to recover from his journey first; perhaps see some sights and enjoy their hospitality. Ville said that he was quite fit and prepared to give his presentation as agreed. Mr Hassan seemed taken aback at this, but said he would discuss it with his superiors.

The Saudis agreed to meet with Ville. After some chatting and preliminaries with many people coming and going, they suggested that they could continue soon after Ville had some more time to recover. Besides, it was an hour of prayers. During the next few days, they said that they wanted to discuss the details of Ville's presentation but they seemed to spend a lot of time on inconsequential. This began to annoy Ville as he thought that the deal could have been closed several days ago. It would be *Ramadan* soon, and he just did not know what the Saudis were driving at.

Choose the best alternative.

- 1) The Saudis were trying to check on Ville and his company by finding out more information.
- 2) The Saudis are not used to working hard and just wanted to relax more.
- 3) The Saudis were not really interested in the products of Ville's company and were just putting him off.
- 4) Ville's Finnish perspective was concerned with getting the job done, whereas the Saudis had the perspective of building a relationship with Ville and his company.

Write the rationale.

Arvioi kulttuurienvälisen osaamisesi kehittymistä: Mitkä TAITOSI ovat kehittyneet, kun verrataan tilannetta ennen kulttuurienvälistä koulutusta (kontaktiopetus ja itseopiskelujakso The Same but Different -ohjelman avulla) nykytilanteeseen.

THANK YOU FOR ALL YOUR COOPERATION!!!

APPENDIX 6: QUESTIONNAIRE 5 (2p.)

**Kajaanin ammattikorkeakoulu
Tekniikan ja liikenteen ala
Kaisu Korhonen**

MENETELMÄARVIOINTI

The Same but Different

Intercultural Communication through Hypermedia

Opetusmenetelmiä kehitettäessä opiskelijoiden mielipide menetelmäkokeilusta on tärkeä.

A. Vastaa seuraaviin väittämiin (rasti ruutuun):

- 5 = täysin samaa mieltä
4 = osittain samaa mieltä
3 = en osaa sanoa
2 = osittain eri mieltä
1 = täysin eri mieltä

	1	2	3	4	5
1. Kulttuurienvälisen viestinnän itseopiskelun esittely riittävä.					
2. Sovelluksen taustan ja sisällön ennakkoesittely oli riittävä.					
3. Sovellus perustuu aikaisemmin opittuihin asioihin.					
4. Sovelluksen kokonaisrakenne on selkeä.					
5. Sovellus sisältää hyödyllistä tietoa.					
6. Sovelluksen sisältö on mielenkiintoinen.					
7. Sovelluksen kieli on vaikeusasteeltaan sopivaa.					
8. Hotwordit helpottavat ymmärtämistä.					
9. Kriittisiä tilanteita on tarpeeksi.					
10. Vaihtoehtoja edeltävät kysymykset on helppo ymmärtää.					
11. Vaihtoehdot on helppo ymmärtää.					
12. Vaihtoehtojen selitykset on helppo ymmärtää.					
13. Omassa tahdissa opiskelu sovelluksen avulla on mielekkäämpää kuin perinteinen luokkaopetus.					
14. Sovelluksen avulla opiskeltaessa tarvitaan opettajan ohjausta ja palautetta.					
15. Kriittisten tilanteiden opiskeluun sovelluksen avulla kuluu liikaa aikaa.					
16. Samat asiat oppii paremmin ja nopeammin perinteisessä luokkaopetuksessa.					

B. Vastaa seuraaviin väittämiin (rasti ruutuun):

- 5 = täysin samaa mieltä
 4 = osittain samaa mieltä
 3 = en osaa sanoa
 2 = osittain eri mieltä
 1 = täysin eri mieltä

Perinteiseen oppikirjaan verrattuna elektroninen oppikirja

	5	4	3	2	1
1. muistuttaa tietokonepeiliä eikä ole vakavasti otettavaa opiskelua.					
2. on monipuolisempi.					
3. on vaikeampi lukea.					
4. on havainnollisempi.					
5. on sirpalemainen.					
6. on helpompi selailla.					
7. on joustavampi modifioida ja päivittää.					
8. on sopivampi itseohjautuvaan opiskeluun.					

C. Vastaa seuraaviin väittämiin (rasti ruutuun):

	5	4	3	2	1
1. Käyttöliittymä on riittävän selkeä.					
2. Käyttöliittymän värit miellyttävät silmää.					
3. Sovelluksen toiminnot ovat loogisia.					
4. Sovelluksessa liikkuminen on helppoa.					
5. Opiskeluohjeet (Help) on helppo ymmärtää.					

Muuta arviointia ja toivomuksia:

- 1 MERVOLA, PEKKA, Kirja, kirjavampi, sanomalehti. Ulkoasukierre ja suomalaisten sanomalehtien ulkoasu 1771-1994. - From newsbook to newspaper. The appearance spiral and the outward appearance of Finnish newspapers from 1771 to 1994. 429 p. Summary 17 p. 1995.
- 2 PÖRHÖLÄ, MAILI, Yksin yleisön edessä. Esiintymisjännitykseen ja esiintymishalukkuuteen liittyvät kokemukset, käyttäytymispiirteet ja vireytyminen yleisöpuhetilanteessa. - Alone in front of an audience. Cognitive experiences, behavioral features and physiological arousal in speech anxiety and willingness to speak. 203 p. Summary 6 p. 1995.
- 3 KUUTTI, HEIKKI, Tutkiva journalismi. Journalistinen suuntaus ja suomalaisen journalismin tutkivuus. - Investigative reporting. The journalistic trend and the investigative nature of Finnish journalism. 325 p. Summary 8 p. 1995.
- 4 LUUKKA, MINNA-RIITTA, Puhuttua ja kirjoitettua tiedettä. Funktionaalinen ja yhteisöllinen näkökulma tieteen kielen interpersonaalisiin piirteisiin. - Spoken and written science. Functional and social perspective on the interpersonal features of scientific texts. 158 p. Summary 12 p. 1995.
- 5 ISOTALUS, PEKKA, Toimittaja kuvaruudussa. Televisioesiintymisen vuorovaikutuksen näkökulmasta. - Presenter on screen. Television performance as interaction. 208 p. Summary 10 p. 1996.
- 6 PURO, JUKKA-PEKKA, Towards a phenomenological theory of interpersonal communication. - Kohti keskinäisviestinnän fenomenologiaa. 214 p. Yhteenveto 3 p. 1996.
- 7 HURME, PERTTI, Acoustic studies of voice variation. - Puhe- ja lauluäänen akustiset piirteet. 148 p. Yhteenveto 5 p. 1996.
- 8 GARANT, MIKEL DEL, Intercultural teaching and learning. English as a foreign language education in Finland and Japan. 322 p. 1997.
- 9 KANERVA, JUKKA, Character, intimacy, and issues in a PresiTentti interview series, Finland. 123 p. 1997.
- 10 HYNINEN, ASKO, Periaatteessa julkista. Julkisuusperiaatteen käytäntö EU-Suomen päätöksenteossa ja journalismissa. - Public, in principle. Principle of openness on a practical level in the decision-making and journalism in EU-Finland. 226 p. Summary 4 p. 2000.
- 11 HUIJANEN, JAANA, Journalismin maakunnallisuus. Alueellisuuden rakentuminen maakuntalehtien teksteissä ja tekijöiden puheessa. - Regional journalism. The construction of regions and regionalism in Finnish newspaper texts and in journalists' talk. 281 p. Summary 5 p. 2000.
- 12 PIETIKÄINEN, SARI, Discourses of differentiation. Ethnic representations in newspaper texts. - Etnisen toiseuden rakentuminen uutisdiskurssissa. 330 p. Yhteenveto 3 p. 2000.
- 13 LI, ZHENYI, Cultural impact on international branding. A case of marketing Finnish mobile phones in China. 147 p. Yhteenveto 1 p. 2001.
- 14 VAAHTERIKKO-MEIJÄ, PÄIVI, Cultural differences in iberonordig communications. Perceptions about finnish and colombian negotiators. - Kansainvälistyminen, globalisaatio ja lokalisaatio vaikuttajina Suomi-Kolumbia-kaupassa. 174 p. Yhteenveto 7 p. 2001.
- 15 SUMIALA-SEPPÄNEN, JOHANNA, Nomadit rippituolissa. Mediodun uskonnon moraallisen järjestyksen dynamiikka (post)modernin television ja kulttuurin kontekstissa. - Nomads in the confessional: mediated religion in the context of (post)modern television and culture. 212 p. Summary 2 p. 2001.
- 16 SUVANTO, MARI, Images of Japan and the Japanese. The representations of the Japanese culture in the popular literature targeted at the western world in the 1980s - 1990s. 134 p. Yhteenveto 2 p. 2002.
- 17 KORHONEN, KAISU, Intercultural competence as part of professional qualifications. A training experiment with bachelor of engineering students. - Kulttuurienvälinen kompetenssi ammattitaidon osatekijänä. Koulutuskokeilu amk-insinööriopiskelijoiden kanssa. 226 p. Yhteenveto 4 p. 2002.