Intercultural Communication through Hypermedia

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Abstract

The objective of interculturally-oriented language teaching is intercultural competence. The theory of perspective transformation (Taylor 1994) provides a model for the learning of intercultural communication. When practicing, the cognitive, affective, and behavioral components of competence as well as students' stage of intercultural sensitivity must be paid attention to.

The Culture General Assimilator (Brislin et al. 1986; 1996) is a programmed learning approach based on simulation and consisting of critical incidents with alternative explanations and their rationales. When analyzing reasons for the problems and misunderstandings, students begin to learn about culturally influenced behavior.

The Same but Different hypercourseware developed for Finnish polytechnic students contains 25 modified critical incidents. The incidents have hotwords linked to display further information about the word. The program was implemented using the Asymetrix Multimedia ToolBook 4.0-CBT Edition authoring system. To develop The Same but Different further, the program has been tested with information technology students (n 78).

Keywords: Theory of Perspective Transformation, learning of intercultural competence,Culture General Assimilator, critical incidents, Same but Different, hypercourseware.

Introduction

A professional successful in the home environment will not necessarily be equally successful when working in a new environment with a different culture. Organizations often emphasize expatriates' technical competence and experience, and ignore the nontechnical knowledge and skills. According to Kealey (1996: 84), there is, however, "a substantial consensus" on the nontechnical criteria required for intercultural competence and professional success in another culture (see also Dinges & Baldwin 1996: 107-112; Paige 1996: 155; Schneider & Barsoux 1997: 163-170), the concept of intercultural competence referring to a mixture of cognitive, affective, and behavioral components (Cui & Awa 1992: 311-314; 316; 324-325). In addition to linguistic skills, intercultural competence integrates a wide range of human relations' skills.

To develop intercultural competence intercultural training is required: Intercultural training provides a method of change. According to Pruegger and Rogers (1994: 370), intercultural training is "concerned with increasing our ability to communicate with culturally diverse people and monitoring and adjusting our behavior to deal effectively with those of different cultures" (see also Brislin and Yoshida 1994: 2-3). Taylor (1994: 389; 391; 394-395; 397; 399-400) argues that becoming a competent intercultural communicator is a slow, gradual transformative learning process (see also Paige & Martin 1996: 45). According to Gudykunst et al. (1996: 65), intercultural training is "aimed at improving trainees' performance in specific intercultural situations", and "involves some form of change in three areas: cognition, affect, and behavior".

Intercultural training must be based on theory that is supported by research. (Byram 1989: 136; Gudykunst 1991: 4) Besides theory, practical applications and hands-on experiences are needed. Ideally, an intercultural training program should incorporate a variety of training techniques. Different objectives

require different training techniques, and different people learn best through different techniques. (Gudykunst et al. 1996: 78)

Attribution Training and Culture Assimilators

While observing other people's behavior we make attributions, i.e., based on our cultural background and past experiences we give meaning to these behaviors. Because we all have a unique background and set of experiences, meaning is relative: The same behavior can be given different meanings by different people, and sometimes we may attribute a wrong meaning to the behavior we have observed. Consequently, we do not always make isomorphic attributions, isomorphic implying being similar. (Porter & Samovar 1991: 7-8; Cushner & Brislin 1996: 22) Cushner and Brislin (1996: 22) argue that if we know why, when, and how certain attributions are made, misinterpretations and misunderstandings will be reduced. A method used in attribution training is the culture assimilator, also called the intercultural sensitizer (Triandis 1994: 278).

The culture assimilator is a programmed training and learning method consisting of short case studies called critical incidents with intercultural interaction and potential misunderstandings on the part of the expatriates and host nationals. The descriptions of critical incidents can be finished or, based on their previous experiences, trainees can produce descriptions of their own. Each incident has a plot line involving some difficulty experienced by an expatriate, a host national, or both. The incidents are analyzed, i.e., they are discussed and evaluated from two viewpoints: the source culture and the target culture. The questions about the contents of the incidents can be open, or the incidents can include a set of 4 - 5 alternative explanations with rationales, i.e., feedback, among which the trainees choose the best one, eliminating the poor ones. (Cushner & Brislin 1996: 22; 24)

The incidents can be culture-specific (emic) or culture-general (etic) such as the Culture General Assimilator developed by Richard W. Brislin et al. in the early 1980s. (Cushner & Brislin 1996: 25; Brislin & Yoshida 1994: 82; 85; 120) The material in a culture general assimilator forms a self-contained learning package, either a traditional book or a computer program. The incidents can be used in cooperative learning as a basis for group discussion, or the trainees can study the incidents on their own in a traditional book or with the help of a computer program. The incidents can also form the basis of role-playing sessions (Cushner & Brislin 1996: 54).

New Learning Environments and Hypermedia

To supplement traditional learning environments, new learning environments are being developed. 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 continuous and individual learning: It is open and flexible as to the time, place, form, and right of study. In a new learning environment, trainees are expected to be autonomous, self-directed, and able to take responsibility for their own learning while trainers are facilitators supporting the learning process. A new learning environment has many new elements that are still under experiment. (Auer & Pohjonen 1995: 14-15)

A new learning environment can make use of multimedia. Multimedia is primarily about communication, not technology: The term 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. The exact meaning of the word multimedia is vague. Often when speaking about multimedia people actually refer to hypermedia. Hypermedia refers to computer-based materials linked by non-linear structures of information (Woodhead 1991: 205). It is to make data management easier and more natural, making use of association, a characteristic of human thinking (Koski & Oesch 1993: 24; Paananen & Lallukka 1994: 12; 52).

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

In many fields of application, such as intercultural communication, it is possible to create real-world problems to be solved and practised with a computer program based on hypermedia. In the present paper, the term hypermedia-based learning environment refers to a form of training and learning in which a computer program based on hypermedia is used for self-study to support and supplement face-to-face learning.

The Same but Different Hypercourseware

The Same but Different hypercourseware is a culture general assimilator based on the original idea of Richard Brislin (1986; 1996) and consisting of 25 critical incidents. The program was implemented in cooperation with a programmer in Kajaani Polytechnic, Finland in 1996. The Same but Different provides the engineering students with self-study learning material to be used along with and after a one-credit-course (24 lessons; each 45 min) in intercultural communication (ICC) which is held in English.

The goal of the ICC course is to help the students develop their intercultural competence from the perspective of the increasingly international and multicultural world of study and work. The course contains both basic theory of intercultural communication (the cognitive component) and practical applications (the affective and behavioral component) with a special emphasis on spoken communication skills and some of the weaknesses of the Finnish style of communication. The name The Same but Different refers to cultural differences but simultaneously reminds of the importance of being able to see cultural similarities as well.

The Same but Different was made with the Asymetrix Multimedia ToolBook 4.0-CBT Edition authoring system, and ToolBook's programming language called Openscript was used for programming. The program runs in the Windows environment.

When designing and implementing The Same but Different, a lot of thought was given to the contents of the critical incidents, the amount of text to be read on the computer screen, the size of fonts, the choice of colors, and the ease of navigation. The contents of the 25, originally very American, incidents were modified and shortened to be more suitable for Finnish polytechnic students and the computer screen. The incidents were renamed, and many of the names of both people and target cultures were changed. Factual information about the target cultures as well as examples of nonverbal behavior were added. Cultural differences in nonverbal communication is a topic that the students find especially interesting.

Due to the modifications in the contents, the original validity of the incidents may have suffered. The incidents may also contain pitfalls that the students must be warned against before they start using The Same but Different: First of all, we must avoid stereotyping: Many so called cultural facts are based on samples of human behavior and can therefore only point out tendencies. Secondly, although culture is a dominant force shaping us, there are also other factors that make us behave and communicate in a specific way. Thirdly, culture and communication are not something static but in a continuous state of flux. To finish with, misinterpretations and misunderstandings are common in intercultural communication; all intercultural communication is not, however, problematic.

The Same but Different contains ToolBook's objects such as fields, buttons, graphics, and pages. The animations were also made with ToolBook. The user can move freely in the program. Each incident has hotwords that are linked to display further information about the word, either text or graphics. When implementing the program, it was not possible to make use of video or sound because there was no appropriate equipment available at the polytechnic. This may be a shortcoming, but it can also be asked whether it is necessary to include every possible gimmick in one single hypermedia program.

The Same but Different consists of a single book with several pages. There are six main topics each of which contains a general description of the topic and a number of critical incidents. The main topics are as follows:

1) All Business Is Local emphasizing the need to know local habits and customs;

2) Interacting with People focusing on the importance of interpersonal skills;

3) Making Adjustments illustrating the cultural adaptation process and potential problems;

4) Tourist Experiences providing information on some common cultural collisions;

5) At Work dealing with intercultural encounters in the workplace;

6) Returning Home discussing the re-entry process.

The four 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).

Each critical incident is displayed on its own page. Below the incident, there is a question asking the user to help the people in the incident solve their problem(s), and a set of alternative explanations from 1 to 4 or 5. Based on his/her previous and current learning, the user chooses the so-called best alternative by clicking its number with the mouse. The program provides feedback whether the choice was the best one, and displays a rationale in a separate window.

A major problem connected with The Same but Different lies here: Culture is relative, there is no cultural absolute, one culture is not superior or inferior to another. (Hofstede 1994: 7) So, what is the correct response and what are the wrong ones? This problem has been tried to solve by asking the user to choose the best alternative, not the correct one. The students must be warned against this restriction in the program before they start working with it.

The program keeps track of the number of the incidents that the user has read during one session. The user can also compete: If s/he provides the best response at the first attempt, three points are awarded. If the response is the best one at the second attempt, two points are given. The third attempt provides one point. Game-like elements in a learning program may increase students' motivation but, on the other hand, there may be the danger of edutainment.

The Same but Different: Student Feedback

When developing learning software, testing and evaluation are essential elements of it. To get some initial user feedback, the first version of The Same but Different was tested and evaluated both in spring 1997 (n 30) and 1998 (n 48) with engineering students (n 78) who were interviewed by using a questionnaire with a number of statements about the characteristics, contents, and functions of the program. The scale used in evaluation was from 5 to 1 (5 "I totally agree", 4 "I partly agree", 3 "I cannot say", 2 "I partly disagree", and 1 "I totally disagree"; see Tables 1-3).

•About the Characteristics and Contents of The Same but Different

The Statements

The percentage of the students who totally or partly agreed with the statements 1) The introduction of the self-study course was sufficient.60 2) The introduction of the program was sufficient.62

3) The program is based on previous learning.65

4) The overall structure of the program is clear.66

5) The program contains useful information.85

6) The program contains interesting information.71

7) English used in the program is not too difficult. 80

8) Hotwords make understanding easier.91

9) The number of the incidents is sufficient. 72

10) The questions preceding the alternatives are easy to understand. 80

11) The alternatives are easy to understand. 83

12) The rationales are easy to understand. 72

13) Self-study with the program is more motivating than traditional learning.56

14) While studying with the program guidance and feedback from the trainer are needed. 34

15) Self-study with the program is too time-consuming. 27

16) You can learn the same things better and faster in traditional lessons.17

According to the students' feedback (approx. 40 % of the students), more attention than so far must be paid to the introduction of the self-study course as well as the background and contents of The Same but Different. More than half of the students (65 %) thought that the program is based on previous learning. Because the program is not just to support face-to-face learning but also to supplement it, it contains some new information as well. According to 66 % of the students, the overall structure of the program is clear enough.

Most of the students found information in the program useful (85 %) and interesting (71 %). They also thought that the English language used in the program is not too difficult (82 %), and hotwords with further information make understanding easier (91 %). According to 72 % of the students, the number of the incidents (25) is sufficient. When asked about motivation toward face-to-face learning vs hypermedia-based self-study, the students' opinions were divided almost equally: 56 % preferred hypermedia-based self-study and 44% face-to-face learning. More than half of the students (66 %) think that the trainer's presence is not necessary when they are working with the program. If this is an indication of learner autonomy or self-directedness is not certain. According to 73 % of the students, studying with the program is not too time-consuming. How much time each student actually spent with the program was not, however, asked.

Only 17 % of the students thought that traditional face-to-face learning is more effective than self-study with a computer program. This piece of information is not sufficient to draw any conclusions about the effectiveness of hypermedia-based learning. It must also be remembered that a social context in which to learn is very important. A self-study period should be completed by a follow-up discussion with peers and the trainer during which it is possible to ask questions and correct potential misunderstandings.

•The Same but Different Compared to a Traditional Study Book

The Statements

The percentages of the students who totally or partly agreed with the statements. Compared to a traditional book, an electronic book

1) is like playing a computer game, not serious studying.13

2) is more versatile. 59

3) is more difficult to read. 32

4) is more illustrative. 75

5) is fragmental. 37

6) is easier to browse. 51

7) is more flexible to modify and update. 76

8) is more suitable for self-study.78

When compared with a traditional study book, most of the students found The Same but Different more suitable for self-study (78 %), easier to modify and update (76 %), and more illustrative (75 %). More than half (59 %) of the students found the electronic book more versatile. According to 68 % of the students, an electronic book is not more difficult to read than a traditional one. Reading on computer screen is, however, often slow and eye fatigue may occur. Only 13 % of the students thought that studying with The Same but Different is not serious studying but like playing a computer game.

•The User Interface of The Same but Different

The Statements

The percentages of the students who totally or partly agreed with the statements. The percentages of the students who totally or partly agreed with the statements

1) The user interface is sufficiently logical. 75

2) The colors are visually pleasant.63

3) The functions of the program run smoothly.87

4) Navigation is easy. 71

5) Because the incidents and questions are in separate text fields answering is easier.92

6) Because the alternatives already studied are marked (x) answering is clearer.89

7) Help is easy to understand. 61

8) The scoring system is easy to understand.61

When asked about the user interface of The Same but Different, most of the students thought that the user interface is logical enough (75 %), the functions run smoothly (87 %), and navigation is easy (71 %). They also thought that the separate text fields (92 %), and marking (x) the alternatives already studied (92 %) make answering easier. Approximately 40 % of the students thought that the colors are not visually pleasant, and Help and the scoring system should be easier to understand.

Based on the engineering students' feedback (n 78), The Same but Different was developed further in 1998. Navigation was made easier, and some bright shades of colors were changed into softer ones. In addition, the page containing information about the program (About the Program) was supplemented with a warning against the dangers of stereotyping. Help was also updated.

To make The Same but Different really a new learning environment - open and flexible - next steps in its development will include modifying the contents of the incidents, enhancing graphics and animation, and inserting some video clips. To make access easier the program will be developed into a network version. This will make the printing out of the incidents possible.

The Effectiveness of Intercultural Training

Evaluation provides information on how good, effective, and helpful training has been. Information should be gathered before the training and after it. Both formative and summative evaluation can be used. (Brislin & Yoshida 1994: 143; 145-147)

Based on evaluations of the effectiveness of intercultural training, Triandis (1994: 280) argues that people

- learn to make isomorphic attributions;

- expand the range of explanations they give for specific behaviors;

- become less ethnocentric;

- develop more accurate expectations concerning appropriate behavior;

- are better able to analyze new problematic intercultural encounters (see also Cushner & Brislin 1996: 50).

According to Cushner and Brislin (1996: 50), trained students have scored higher on a factor concerned with intercultural sensitivity and acceptance of cultural relativity, as measured by such statements as the following:

- It is important to consider people's feelings before making a decision.

- There is usually more than one good way to get things done.

- I may defend the viewpoint of others.

- I think people are basically alike.

- Certain prejudices I have hinder the way I interact with people. (negatively scored)

Cushner and Brislin (1996: 50-51) argue that culture general assimilator training improves knowledge about factors connected with intercultural communication and adjustment. They also argue that trained individuals are more confident in unfamiliar situations and are better able to achieve their goals.

According to Triandis (1994: 280-281), assimilator training increases cognitive competence which makes it possible to consider another cultural group as "valid" and thus lessen prejudice. Just knowing how the other group thinks does not, however, change emotions but liking depends on the number of pleasant experiences one has shared with the other group. Triandis (1994: 282) continues by arguing that assimilator training does not change behavior either: It is one thing to know how one is supposed to behave and quite another to behave correctly.

According to Landis and Bhagat (1996: 8), culture assimilator training may increase intercultural anxiety and stress as prior attributions are shown to be inappropriate and new ones have to be formed. Alternatively, curiosity may increase particularly if the international assignment is viewed as central to the individual's personal goals. Landis and Bhakat also argue that culture assimilator training studies have shown some behavioral effects.

The Effectiveness of The Same but Different

When evaluating a computer program, attention can be paid to the type of knowledge the program promotes, its links to previous learning, how motivating it is, and how interactive it is (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. Consequently, hypermedia supports knowledge acquisition, remembering, understanding as well as problem solving. Being flexible, adaptable, and easy to enhance, hypermedia provides an environment for active learning. The high level of interaction is often considered the main advantage of hypermedia. On the other hand, interaction is between man and machine, not between two individuals.

The effectiveness of The Same but Different in developing intercultural competence needs to be empirically tested. The program may be useful in developing cognitive competence which seems to be the starting point with Finnish polytechnic students most of whom have only had occasional contacts with foreigners.

Many of the elements of new learning environments are still under experiment. Kajaani Polytechnic has today a digital media laboratory with equipment for hypermedia software production. There are, however, two practical restrictions: One is money and the other is time. Software production is teamwork in which multiple know-how is a prerequisite. While hypermedia opens up new horizons for training, we must remember that technology is just a tool, which is to be used when it is more effective than the tool which it is replacing: It is know-how that matters, not technology.

References

Auer, Antti & Pohjonen, Juha. 1995. Kohti uusia oppimisymp‰rist^j‰. In: Pohjonen, Juha, Collan, Seppo, Kari, Jouko & Karjalainen, Markku (Eds.). Teknologia koulutuksessa. Juva: WSOY. 13-21.

Brislin, R. W. & Yoshida, T. 1994. Intercultural Communication Training: An Introduction. Thousand Oaks, CA: Sage Publications, Inc.

Byram, Michael. 1989. A Model for Language and Culture Teaching. In: Cultural Studies in Foreign Language Education. Clevedon: Multicultural Matters. 136-147.

Cui, Geng & Awa, Njoku E. 1992. Measuring Intercultural Effectiveness: An Integrative Approach. In: International Journal of Intercultural Relations. Volume 16, Number 3. New York: Pergamon Press Ltd. 311-328.

Cushner, Kenneth & Brislin, Richard W. 1996. Intercultural Interactions. A Practical Guide. Second Edition. Thousands Oaks, CA: Sage Publications, Inc.

Dinges, Norman G. & Baldwin, Kathleen. 1996. Intercultural Competence. A Research Perspective. In: Landis, Dan & Bhakat, Rabi S. (Eds.). Handbook of Intercultural Training, 2nd Edition. Thousand Oaks, CA: Sage Publications, Inc. 107- 123.

Gudykunst, William B. 1991. Bridging Differences. Effective Intergroup Communication. Newbury Park CA: Sage Puclications, Inc.

Gudykunst, William B., Guzley, Ruth M. & Hammer, Mitchell R. 1996. Designing Intercultural Training. In: Landis, Dan & Bhakat, Rabi S. (Eds.). Handbook of Intercultural Training, 2nd Edition. Thousand Oaks, CA: Sage Publications, Inc. 61-79.

Hiltunen, Jukka, Lindfors, Juha & Suomela, Leo. 1995. Hypermedia. In: Pohjonen, Juha,

Collan, Seppo, Kari, Jouko & Karjalainen, Markku (Eds.). Teknologia koulutuksessa. Juva: WSOY. 143-164.

Hofstede, Geert. 1994. Cultures and Organizations. Software of the Mind. Intercultural Cooperation and Its Importance for Survival. London: HarperCollinsPublishers.

Kealey, Daniel. 1996. The Challenge of International Personnel Selection. In: Landis,

Dan & Bhakat, Rabi S. (Eds.). Handbook of Intercultural Training, 2nd Edition. Thousand Oaks, CA: Sage Publications, Inc. 81-105.

Koski, Arto & Oesch, Klaus. 1993. PC-multimedia. Keuruu: Otava.

Landis, Dan & Bhakat, Rabi S. (Eds.). 1996. A Model of Intercultural Behavior and Training. In: Handbook of Intercultural Training, 2nd Edition. Thousand Oaks, CA: Sage Publications, Inc.

Paakkola, Esko. 1992. Johdatus monimuoto-opetukseen. Helsinki: Valtion painatuskeskus.

Paananen, Vesa-Matti & Lallukka, Leena. 1994. Multimedia. Kohti hypermediaa. Jyv‰skyl‰: Gummerus.

Paige, Michael R. 1996. Intercultural Trainer Competencies. In: Landis, Dan & Bhakat, Rabi S. (Eds.). Handbook of Intercultural Training, 2nd Edition. Thousand Oaks, CA: Sage Publications, Inc. 148-163.

Paige, Michael R. & Martin, Judith N. 1996. Ethics in Intercultural Training. In: Landis, Dan & Bhakat, Rabi S. (Eds.). Handbook of Intercultural Training, 2nd Edition. Thousand Oaks, CA: Sage Publications, Inc. 35-59.

Porter, Richard E. & Samovar, Larry A. 1991. Basic Principles of Intercultural Communication. In: Samovar, Larry A. & Porter, Richard E. Intercultural Communication. A Reader. Belmont: Wadsworth. 5-22.

Pruegger, V. J. & Rogers, T. B. (1994). Crosscultural sensitivity training: methods and assessment. In: International Journal of Intercultiural relations, 18, 369-387.

Schneider, Susan C. & Barsoux, Jean Louis. 1997. Managing across cultures. London: Prentice Hall.

Taylor, Edward W. 1994. A Learning Model for Becoming Interculturally Competent. In: International Journal of Intercultural Relations. Volume 18, Number 3. USA: Elsevier Science Ltd. 389-408.

Triandis, Harry C. 1994. Culture and Social Behavior. USA: McGraw-Hill, Inc.

Woodhead, Nigel. 1991. Hypertext & Hypermedia. Theory and Applications. Wokingham: Addison-Wesley Publishing Company.

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