Feasibility of Adopting English-Medium Instruction at Iranian Universities

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This study was an attempt to explore the potential possibilities of implementing English as the medium of instruction (EMI) at Iranian universities. The sequential exploratory mixed methods design was used to collect the perspectives of both students and content-area lecturers at the state University of Bojnord through e-mail interviews and survey questionnaires developed by the researcher. The reliability of the survey questionnaire was 0.76 using Cronbach's alpha. Six undergraduate students and six lecturers were purposively selected for the interviews. As for the survey questionnaire, stratified random sampling was used to proportionately select 344 students (320 undergraduate students and 24 postgraduate students) and 36 lecturers from the accessible population. The qualitative data from the interviews were content-analyzed based on the suggestions and guidelines by Creswell (2005), Krueger (2002), and Morgan and Krueger (1998). The quantitative data from the survey questionnaires were analyzed using Statistical Package for Social Sciences (SPSS). The results revealed that most of the students and lecturers approved and supported the potential implementation of EMI at Iranian universities. The findings of this study will assist higher education authorities in policy making.

Keywords: English as the medium of instruction, university education, internationalization

In spite of a growing awareness that the first language medium of instruction is more effective than a second one (Heugh, 2002), the inexorable increase in the use of English-Medium Instruction (EMI), particularly in higher education, has become a worldwide trend (Chang, 2010*;* Wong, 2009; Manakul, 2007; Coleman, 2006; Kirkgöz, 2005; Coetzee, 2004; Crystal, 2004; Kurtán, 2004; Graddol, 1997). The number of university students who use English as a Second Language (ESL) or English as a Foreign Language (EFL) to study their subject courses is increasing (Evans & Green, 2007; Coleman, 2006; Fortanet & Bellés, 2005; Crawford Camiciottoli, 2004). By joining this trend, many universities around the world are becoming more and more internationalized.

According to Brumfit (2004) and Gardt and Hüppauf (2004), EMI in higher education cannot be separated from globalization. Coleman (2006) mentions academic internationalization, student exchanges, teaching and research materials' access, staff mobility, graduate employability, the market in international students, and European content and language integrated learning as the main reasons for using EMI in Europe.

According to Ashcraft (2006), the rationale for using EMI in higher education in non-native contexts is that textbooks and journals in most fields are published in English. Furthermore, EMI enables students to compete in the global job market which, in turn, helps the economy of the country. As noted by Vinke et al. (1998), the

adoption of English as the medium of instruction at the university level is a way to internationalize the educational system and a strategy used to attract international students. As Chang (2010) suggests, EMI subject courses can be regarded as extra opportunities to improve the English language proficiency of undergraduate students.

The Iranian daily Shargh Newspaper (2012) published the results of a recent study about the phenomenon of brain drain among Iranian students who have won medals in science Olympiads (in physics, chemistry, math, and computer science). According to the study, 62 percent of medal winners in the years 1993-2007 have moved to the developed countries, particularly to the United States and Canada. The data show that about five million Iranian expatriates live in 32 countries around the world. Over 500 Iranian professors teach in the United States, and over 70 percent of PhD holders from the University of Tehran are considering leaving the country. The International Monetary Fund report in 2009 shows that Iran is ranked first out of 91 countries studied in the extent of the brain drain phenomenon, and 150 to 180 thousand Iranians move from the country every year for different reasons.

According to the Iranian daily Khorasan Newspaper (2012), Dr Moslemi Naini, the deputy of Science, Research and Technology Minister for scholarship and Iranian students abroad, said in an interview that 20000 Iranian students abroad took $200000000 to the countries where they study. Iranian students have had 400 patents for Malaysian universities. He believes that the capacity of universities especially at the graduate level should be expanded to prevent such problems. Although it has already been expanded especially in private Iranian international universities, students who fail to pass the entrance exam for free of charge public universities prefer to go to foreign universities which use EMI. Shah abadi et al. (2008) mentioned that the process of Iranian students' movement to abroad increased excessively in 1980s.

According to University Portal (2012), there are seven international universities in Iran including Imam Khomeini International University (IKIU) in Qazvin, Chabahar University, University of Tehran (Kish Branch), Sharif University (Kish Branch), Iran University, Aras University in Tabriz, and Imam Reza University in Mashad. The instruction in these so-called universities is in Persian. Therefore, the applicants who receive final admission must attend and successfully pass courses in Persian Language Center. University of Tehran (Kish International Campus), which was established to facilitate the enrolment of foreign students at the University of Tehran, offers EMI for some majors.

Many universities around the world have joined this Englishization as a way to modernize, globalize and internationalize the country's educational system. This trend is assumed to have led to more international student attraction. In the face of a growing popularity of English-medium universities, very little research has been carried out about the possibilities of EMI at Iranian universities in general and at newly established Iranian international universities (IIUs) in particular. The main purpose of this study is to explore the lecturers' and students' potential perceptions of adopting EMI. The findings of this study will hopefully lead to important suggestions for the successful recruitment of national and international students.

Literature Review
University Education and Internationalization

According to Manakul (2007), the most comprehensive definition of internationalization of higher education is the one used in the UNESCO Internationalization of Higher Education 2003 IAU Survey Report which includes mobility and exchanges of students and teachers, teaching and research collaboration, academic standards and quality, research projects, cooperation and developmental assistance, curriculum development, international and intercultural understanding, promotion of the profile of the institution, diversified sources of faculty and students, regional issues and integration, international student recruitment and diversified income generation. (p. 107)

According to Verbik et al. (2007), international students have predominantly enrolled in institutions of higher education in the US, the UK and Australia for the past decade. These three key players in the international student market attract approximately 45% of the total amount of all foreign students. In 2006, approximately 565,000 international students registered in the US, 330,000 enrolled in the UK and 280,000 enrolled in Australia (See Appendix A). This means that these countries attract about 1.2 million of the 2.7 million students studying abroad.

As pointed out by Vinke et al. (2007), there are several reasons why the US, the UK and Australia rank first among the most popular destination countries for overseas studies. Firstly, all of these English-speaking countries have consistently sourced tens of thousands of students from a wide variety of countries throughout the world for many years. Secondly, they have high numbers of students from India and China. Thirdly, their universities have developed impressive marketing strategies to attract prospective international students. So, these three countries seem to be aware of the contribution that foreign students make to their economies. They have already internationalized their higher education systems and are currently facilitating the arrival and integration of overseas students by including amendments to immigration requirements and procedures. That is why they are more likely to remain the most popular destination for overseas students in an increasingly competitive market.

With approximately 20% of international students (515,000 out of the 2.7 million foreign students), Germany and France rank second among the most popular destination countries for overseas studies. These two middle powers attracted an average of 257,000 foreign students in 2006 (See Appendix A). Due to an increase in demand for using English-medium instruction in higher education in non-native contexts and in an attempt to attract more international students, some universities have begun to introduce EMI in these countries (about 300 postgraduate programs in Germany and more than 100 in France). For now, Germany and France are regional rather than world powers in the international student market (Verbik et al., 2007).

According to Verbik et al. (2007), Japan, Canada and New Zealand attract nearly 13% of the international students. So, approximately 327,000 of the 2.7 million international students are attracted to these evolving destinations (See Appendix A). Recently, these countries have experienced declining international enrollments because they rely only on few markets focused on Asia. Although these international student market evolving destinations are still attracting many foreign students, they are less popular destinations among overseas students.

As pointed out by Verbik et al., (2007), Malaysia, Singapore and China attract approximately 12% of international students (between 250,000 and 300,000 students) in 2005-6 (See Appendix A). These emerging contenders have set ambitious targets and have taken active measures to become major exporters of higher education and recruit more foreign students in the coming years. There are some reasons why they are becoming contenders in the competitive international student market. Firstly, they have allocated substantial financial and human resources to the development of their higher education systems. Secondly, they are increasingly using English as a medium of instruction which has contributed to their growing popularity as overseas student destinations. Thirdly, since tuition fees and living costs in these countries are much lower than those in the US, the UK and Australia, they may eventually succeed in their ambitions to a large number of international students beyond Asia.

However, these emerging powers face many challenges regarding infrastructural capacity and immigration procedures which make it difficult to seriously compete with the established English-language destinations. Visa schemes, immigration procedures and migration opportunities for overseas students are more likely to motivate them to apply for study to particular destinations. The ease of arrival and integration of overseas students through employment and immigration initiatives has been a motivating factor in the competitive market (Verbik et al., 2007).

European universities are trying to increase their income base by attracting foreign students as a result of the above trend. Therefore, it is also necessary for IIUs to do so as it happened in Malaysia. Since Malaysian public universities are authorized to take in only 5% of overseas students for the science and technology streams and 25% for the social sciences and humanities, the government allowed more private universities to be set up and attract international students who would contribute to the nation both economically and culturally (Gill, 2005).

It is commonly assumed that international students choose countries like Malaysia just for the cheaper tuition fees, lower cost of living, the ease of entry, and research facilities. Malaysian English-medium universities have expanded quantitatively in terms of international student population. Their success in attracting international students is an educational miracle. However, as pointed out by Verbik et al. (1998), the adoption of English as the medium of instruction at the university level is a strategy used to attract international students. There are many cheap and even free of charge universities around the world which are willing to attract international students but they have had less success in pulling students due to their non-English medium of instruction.

English as the Medium of Instruction

As pointed out by Graddol (1997), the instruction of courses in universities through the medium of English has become a worldwide educational trend. Ashcraft (2006) argues that the traditional rationale for using English-medium instruction in higher education in non-native contexts is that textbooks and journals in most fields are published in English. EMI enables students to compete in the global job market which, in turn, helps the economy of the country. Paseka (2000) and Verbik et al. (1998) contend that the adoption of English as the medium of instruction at the university level is a way to internationalize the educational system and a strategy to attract international students. This study focuses on this aspect of offering EMI in non-English speaking countries on which little research has been conducted.

Since a high-level of language proficiency is required to study their academic subjects in English, students are usually affected by EMI. Cummins (1979) distinguished between Basic Interpersonal Communicative Skills (BICS), which refer to the ability to converse and carry out daily activities in the second language, and Cognitive Academic Language Proficiency (CALP), which means the ability to learn in the second language and do academic work. This distinction drew educators' attention to the different time periods required by students to acquire conversational fluency as compared to academic proficiency in the second language. The former is often acquired to a functional level within about two years whereas the latter needs at least five to seven years (Gopaul-McNicol & Thomas-Presswood, 1998;

Hoffmann, 1991).

According to Cummins (1984), failure to distinguish between the BICS and CALP (conversational/academic) has led to psychologically-biased assessment of bilingual students as well as their premature exit from language support programs into mainstream classes. Educators should be cognizant that students' social interaction in English doesn't guarantee the development of their cognitive academic language proficiency.

According to Ashcraft (2006), to make sure that students have the CALP necessary to successfully undertake university studies, universities can make either a high-level of English proficiency a requirement for admission or have a strong language support program that is able to prepare students for their academic studies through English. At IIUs, there seems to be a gap between the English language requirements and the language proficiency needed for academic study. Recently, some of the IIUs in Kish have made the International English Language Testing System (IELTS) exam or Test of English as a Foreign Language (TOEFL) a requirement for admission.

As pointed out by Ashcraft (2006), content-area lecturers in all disciplines are affected by English-medium instruction because they face the challenge of teaching their subject area courses in English to students who are not proficient enough to follow lectures. Some of these lecturers may feel frustrated because in addition to their academic fields, they have to cope with language issues in their classrooms, which demands extra knowledge and skills regarding second language acquisition processes. Others may just feel that they are, say, biology or chemistry lecturers and have nothing to do with language problems.

Some researchers (Hellekjaer & Westergaard, 2003; Tella et al., 1999) suggest that EMI in non-English speaking countries constrains content-area lecturers' teaching methods. Since English is a second language for the lecturers, some of them- especially those who have not conducted their studies in English-speaking countries- may not be confident or qualified enough to teach in English. Administrative staff is also affected by the English-medium instruction because some of them may not have a good command of English to carry out their jobs (Ashcraft, 2006). If the staff has problem to communicate in English, it is difficult for the university to create an ideal inclusive campus climate.

In light of these challenges, this study was an attempt to explore the content-area lecturers' and undergraduate students' potential perceptions of adopting EMI. The following general questions were asked from 12 informants at the UB to gather the qualitative data in the first phase of the study.

1. What are the potential advantages and disadvantages of adopting EMI at Iranian universities?
2. To what extent do you agree with adopting EMI at Iranian Universities?

Also, the following question was developed to compare the lecturers' and students' perceptions based on their response to the survey questionnaire items in the second phase of the study.

1. Is there any difference between the lecturers' and students' perceptions regarding the potential adoption of EMI at Iranian universities?

Furthermore, the following null hypothesis was formulated to answer the above-mentioned question.

1. There is no significant difference between the lecturers' and students' perceptions regarding the potential adoption of EMI at Iranian universities.

Methodology

Research Design

The sequential exploratory mixed methods design was used in this study. A mixed methods design is "a procedure for collecting, analyzing and linking both quantitative and qualitative data in a single study or in a multiphase series of studies" (Creswell, 2005, p. 53). He asserts that the combination of quantitative and qualitative data will lead to a better understanding of the research problem. Neither of the single approaches would seem to be sufficient to answer the research questions of this study because they are mutually dependent (Brannen, 1992). According to Creswell (2005), in this design the researcher places a priority on qualitative data collection and analysis which "leads to detailed generalizable results through the second quantitative phase" (p. 516). He states that

> The purpose of an exploratory mixed methods design is the procedure of first gathering qualitative data to explore a phenomenon, and then collecting quantitative data to explain relationships found in the qualitative data. A popular application of this design is to explore a phenomenon, identify themes, design an instrument, and subsequently test it. Researchers use this design when existing instruments, variables, and measures may not be known or available for the population under study. (Creswell, 2005, p. 516)

As pointed out by Holland et al. (1998), in this design the qualitative phase provides the basis for the development of a grounded theoretical framework which can be subjected to empirical testing. This study was conducted in two phases consecutively, that is, e-mail interviews and electronic survey questionnaires. They are

Table 1
Demographic characteristics of the informants

Characteristics	Number
Lecturers	6
Students	6
Total	12
Male	7
Female	5
Total	12
Female Undergraduate Students	3
Male Undergraduate Students	3
Female Lecturers (PhD)	1
Male Lecturers (PhD)	3
Female Lecturers (MA)	1
Male Lecturers (MS)	1
Total	12

explained as follows.

E-mail interviews

According to Meho (2006), the use of e-mail interviewing in qualitative research is rapidly increasing because it costs less to administer than other forms of interviewing. As suggested by Kim et al. (2003) and Karchmer (2001), e-mail interviewing enables shy people who cannot express themselves orally to do it in writing, especially when a second language is used in communicating with interviewees. It also allows interviewees to answer questions and express themselves where and when they feel more relaxed and comfortable (Lehu, 2004; Kennedy, 2000).

E-mail survey questionnaires

E-mail questionnaires are cost-effective and allow respondents to answer questions at their own convenience. According to Creswell (2005, p. 361), "In this approach, the participant in a study logs onto a computer, uses the Internet or a website to locate and download a questionnaire, completes the questionnaire, and sends the completed questionnaire back to the researcher". As pointed out by Ary et al. (2002), this approach is becoming more popular and has "been used most successfully on college campuses with faculty and students, with companies and their employee, or with other populations having universal e-mail access" (p. 385).

Population and Sampling

In this study, the target population was undergraduate students and their content-area lecturers at Iranian universities. But the accessible population was undergraduate students and their content-area lecturers at

the University of Bojnord (UB), where this research was carried out.

In the first phase of the study, six students and six lecturers from the four faculties at the UB were purposively selected for e-mail interviews. Table 1 presents the descriptive data related to the interviewed participants' characteristics.

The profile of each interviewee is given below in detail using pseudo initials to be ethical and maintain their privacy and confidentiality (Creswell, 2005).

H. E. was a male lecturer at UB with Ph. D. degree in curriculum development. He has taught for 5 years at the university. A. Y. was a male lecturer at UB with Ph. D. degree in Industrial engineering. He has taught for 3 years in the university. O.D. was a male lecturer at UB with Ph. D. degree in Mathematics. He has taught for 4 years in the university. F. A. was a female lecturer at UB with Ph. D. degree in psychology. She has taught for 6 years in the university.

M. M. was a male lecturer at UB with M. S. degree in Industrial engineering. He has taught for 5 years in the university. S. D. was a female lecturer at UB with M. A. degree in Accounting. She has taught for 7 years in the university.

M. S. was an undergraduate male student. His major was Mathematics. He was in the 5th semester. M. N. was an undergraduate male student. His major was counseling. He was in the 7th semester. J. K. was an undergraduate male student. His major was Physical Education. He was in the 3rd semester. A.T. was an undergraduate female student. Her major was Architecture. She was in 5th semester. Z. G. was an

undergraduate female student. Her major was counseling. She was in 3th semester. F. N. was an undergraduate female student. His major was Computer engineering. She was in 5th semester.

In the second phase of the study, the stratified sample for the survey questionnaire was proportionately and randomly selected from the accessible population -the UB students and lecturers. According to the UB website, the number of undergraduate students, postgraduate students, and their content-area lecturers was 1,926, 25 and 40 respectively as of March 2012. Based on the consideration of statistical power, the sample size formula and table developed by Krejcie and Morgan (1970), the appropriate sample size for this study was 320 undergraduate students, 24 postgraduate students and 36 content-area lecturers.

Stratified random sampling was used to select 184 female undergraduate students, 136 male undergraduate students, 13 female postgraduate students, 11 male postgraduate students, 14 female content-area lecturers, and 22 male content-area lecturers. proportionately. Then, the questionnaires were sent to all of the randomly selected subjects at the UB. In order to assure the participants that their personal information was confidential, a code was put on each questionnaire. In this research, the subjects' perception of the potential adoption of EMI was pre-existing event which could not be manipulated and controlled by the researcher.

Instrumentation

First, the interview questions were developed by the researcher based on the objectives of the study. To employ practical strategies based on the suggestions for qualitative interviewing made by Patton (1990), the researcher took the following guidelines into account in writing the questions to help the participants disclose their perspectives willingly.

1. Questions were short and explicit.
2. Just one question was asked at a time.
3. Questions with implicit answers were avoided.
4. Easy and comprehensible language was used for the participants.
5. Why questions were strictly avoided because they seem to be threatening and need justification.

Second, the survey questionnaire was developed by the researcher based on the objectives, the related literature, and the findings of the first phase of the study. Some items were taken from the related questionnaires (Kirkgöz, 2005; Tarhan, 2003) with modifications. The following basic guidelines recommended by Ary et al. (2002) and Creswell (2005) were followed with some modifications for writing good items:

1. Items are short, simple, clear, and direct.
2. Items are comprehensible by every respondent.

3. To avoid bias, items which may predetermine a respondent's answer should be avoided.
4. Leading items which imply a desired response should be avoided.
5. Double-barreled items, which attempt to ask two questions in one, should be avoided.
6. The questionnaire is as brief as possible so that it requires a minimum of the respondents' time.
7. The items are positively worded. "If the question contains one or more negatives, such as should not, the meaning becomes unclear. Restate the question in a positive way" (Creswell, 2005, p. 366).

All of the questionnaire items were measured on a six-point continuum Likert-type scale. To score the scale, the response categories were weighted. On the scale, following the recommendations by Ary et al. (2002), the favorable and positive items were coded as 1 = Strongly Disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Slightly Agree, 5 = Agree, and 6 = Strongly Agree.

Validity and reliability

In this study, content and face validity of the survey questionnaire and interview questions were estimated. "Researchers evaluate content validity by examining the plan and the procedures used in constructing the instrument. Typically researchers go to a panel of judges or experts and have them identify whether the questions are valid" (Creswell, 2005, p. 164-165).

According to Gregory (1992), the instrument will have content validity if its items are a representative sample which accurately reflects the theoretical domain of the construct it claims to measure. But, face validity is not an index of validity at all. It is a non-statistical assessment regarding the appearance of a measure. Anyway, "the survey should have face validity. It should appear valid for its intended purpose" (Ary et al., 2002, p. 409).

Three experts reviewed and assessed the instruments to determine their content and face validity. In an expert analysis, annotations are given about potential problems in a questionnaire (Brannen, 1992). One of them was an assistant professor in English as a Foreign Language (EFL), the second one was an assistant professor in Education Philosophy, and the third one an assistant professor in Counseling. All of them had enough experience in measurement and evaluation as well as qualitative and quantitative research.

For the field test, three students and two content area lecturers reviewed the items. They helped the researcher to clarify the items and improve the overall instrument quality. For the pilot test, thirty undergraduate students responded to the items and helped the researcher establish the reliability of the survey questionnaire. Cronbach's alpha (set at 0.05) was implemented to establish a coefficient of internal consistency.

Data Collection

First, qualitative data were collected through e-mail interviews and then, the survey questionnaires were used to gather quantitative data. The procedure for each phase of data collection is explained below.

In the first phase of the study, six students and six lecturers from the four faculties at the UB were purposively selected for e-mail interviews. They were asked to take part in the study after obtaining their consent. They had the right to withdraw from the study at any time.

The researcher promised to take adequate provisions to protect the privacy of participants and to maintain the confidentiality of data. He e-mailed the questions only after securing permission from participants. Since direct probing was not possible in e-mail interviews, the researcher did it in follow-up e-mails during the data collection and analysis periods where necessary.

To establish trustworthy results, Meho (2006, pp. 1291-93) offers several suggestions for conducting effective e-mail interviews which were followed with some minor modifications in this study. The guidelines are as follows:

1. **Invitations:** Solicit people for participation individually if possible rather than via a mailing list or message board.
2. **Subject line:** Use an effective subject line for the first contact with the interviewees, such as Research Interview. This will avoid or reduce the likelihood of a request being deleted before it is read.
3. **Self-disclosure:** Introduce yourself and provide brief information about your professional status/credentials. This will help to establish trust.
4. **Interview request:** State your request succinctly and professionally, as in "May I interview you for an article I am writing?"
5. **Be open about the research:** One way to establish trust that creates rapport is to be as open as possible about the purposes and processes of the research
6. **Incentives:** Consider providing nontraditional incentives for people who will be willing to participate in a study.
7. **Research ethics and informed consent:** Emphasize the anonymity of the participants.
8. **Interview questions:** Keep in mind that participants are not being interviewed face-to-face. So make sure that the questions to be asked are clear enough both to avoid misinterpretations and to motivate participants to delve deeper into the topic at hand.

9. **Instructions:** Along with the initial interview questions, include instructions to the participants on completing the interview.
10. **Deadlines and reminders:** Indicate the due dates when inviting individuals to participate, but make them reasonable for the participants so that they have ample time to respond. Send reminders one week before the deadline, in case of no reply, to increase the response rate.
11. **Follow-up questions:** Be timely with follow-up questions, especially when clarifications, illustrations, explanations, or elaborations are needed.
12. **Participants and data quality:** Be very discriminating as to the sample interviewed. A highly committed or motivated participant can be very helpful, providing detailed and in-depth interviews.

In the second phase of the study, a survey questionnaire was developed based on the objectives, the related literature, and the findings from the interviews. Some items were taken from the related questionnaires (Kirkgöoz, 2005; Tarhan, 2003) with modifications. Survey research designs, with their many applications, are procedures in quantitative research in which researchers administer a questionnaire to a sample to identify trends in the attitudes, opinions, behaviors, or characteristics of the population. Survey researchers collect quantitative, numbered data via questionnaires or interviews. Then, they statistically analyze the data to test research questions and hypotheses (Creswell, 2005). The data collection procedures recommended by Dillman (1978) and modified by Chen (2002, p. 64) were used with some minor modifications as follows:

1. An e-mail will be sent to the randomly selected subjects informing them of the forthcoming questionnaires.
2. A week later, the survey questionnaires will be e-mailed to them along with a cover letter which will deal with a) the purpose of the study and its social utility, b) the institution in which the research is conducted, c) the respondent importance, d) confidentiality and explanation of identification, e) the discussion of code number on the questionnaire, f) what to do if questions arise, g) appreciation, and h) deadline date.
3. A week later after the deadline to return the questionnaire, the first follow-up will be conducted by e-mail to remind the subjects who have not returned the questionnaires.
4. Another week after the first follow-up, another follow-up will be conducted by e-mail.

Data Analysis

As pointed out by Creswell (2005, p. 519), "one

of the most difficult challenges for the mixed methods researcher is how to analyze data collected from qualitative and quantitative research". Procedures for data analysis in this study consisted of a) analyzing and interpreting the qualitative data obtained from the e-mail interviews and b) analyzing the quantitative data collected from the survey questionnaire.

As Patton (1990, p. 278) pointed out, the only aim of a qualitative interview is "to access the perspective of the person being interviewed." The following guidelines by Morgan and Krueger (1998) were used in this study for reporting the results:

1. report the number of participants;
2. present the key themes in the data;
3. use direct quotations to illustrate the main views which were identified during the data analysis; and
4. Do not report the percentage of participants who gave one answer or another because the aim of interview is to reach different viewpoints about the topic which is under investigation.

After purposive selection of 12 interviewees (see Table 1) from the UB in the first phase of the study, they were sent the same research questions by e-mail. The informants were assured that their participation in the research was confidential and only the researcher would have access to their identity. After receiving all the informants' reply, the content of their answers to each question was analyzed to look for trends and patterns that reappeared in it. The results were compared and contrasted. The emerging themes were highlighted. The findings were described and important quotes were used to illustrate them. Finally, the report was revised and finalized.

In the second phase of the study, the raw scores taken from the survey questionnaires were submitted to the computer software Statistical Package of Social Sciences (SPSS version 18), using t-test. Independent samples t-test was conducted to compare the possible differences between the means of the two groups to whom the questionnaire were sent.

Results

The researcher followed Creswell's (2005) recommendation to organize, analyze, and explore the qualitative data by hand. He suggests the hand analysis of qualitative data when analyzing a small database (<500 pages of transcript or field notes). After exploring the data, they were coded to form broad themes. Then, they were narrowed into smaller, more manageable number of themes. The results are summarized in the following tables.

Table 2 presents the main themes which the interviewees mentioned in their response to the first question, that is, what are the potential advantages and disadvantages of adopting EMI at Iranian universities? They are reported as follows.

Table 2
Main themes regarding the first question

Themes	Frequency
Advantages:	
-promoting students' English skills	3
-Providing a mean for scientific communication and contact	8
-developing scientific vocabulary and expressions	3
-providing the chance for Iranian people to introduce their cultural and religious attitudes to the scientific world	1
- increasing the number of ISI articles written in the country	5
-helping the lecturers and students in presenting their papers in conferences	2
-providing the means of investigating other cultures	3
- helping to use other countries' cultural, scientific and artistic productions	4
-helping the lecturers and students in using English scientific resources and books	3
-facilitating the use of internet and computer software	8
- decreasing students' expenses of translating English texts to Persian in order to comprehend them	5
-facilitating educating in MA. And Ph. D. levels abroad	2
-lowering the expenses of learning English for Iranian students studying abroad	1
-forcing the students to learn English before entering the university	1
-encouraging the families to support their children to learn English	2
-increasing the number of foreign students studying in Iran universities	1
-providing the students with motivation and interest	3
-helping the students in having a job abroad due to their English proficiency	2
-enhancing students' self-esteem	2
-helping students to find a job easily in Iran	1

-encouraging the students to continue their education in higher levels	2
-internationalizing Iran's universities.	1
Disadvantages:	
-Weakening Persian as a scientific tool in the university	3
-decreasing the development of Persian scientific vocabulary and expressions	2
-facilitating brain drain	1
-causing more borrowing from English into Persian	2
-deceasing the publication of Persian books	2
-causing Persian culture being affected by English one	1
- bothering the lecturers in teaching the scientific concepts to students	2
-bothering the students in comprehending the material	5

Table 3
Main themes regarding the second question

Themes	Frequency
- not to use EMI in teaching all majors of the university	2
-not to use EMI in teaching all courses	2
-use EMI in a limited and controlled way	2
- have a longitudinal plan for implementing EMI	3
-use EMI in cases which the students are proficient in English	1
-change the teaching method of English through school years first	4
-not to use EMI due to lack of English proficiency in lecturers	1
-not to use EMI due to lack of English proficiency in students	1
-use EMI in higher levels of educations, M.A. & Ph. D.	2
-use EMI just in specific universities	1
- apply EMI gradually during different levels of education	1
-promote students' English skills before entering to the university, then apply EMI	4

Table 3 presents the main themes which the interviewees mentioned in their response to the second question, that is, to what extent do you agree with adopting EMI at Iranian universities? They are reported above.

In general, eight participants supported the use of EMI. However, they believed that before conducting EMI, there must be some compensatory steps and modifications in school educational system. The following quotation from one of the interviewees reflects his remarks concerning the recent school educational system:

Nowadays, students pass English as a course during primary school, junior high school and high school. But rarely are they proficient in English after graduation. Some changes must be applied in the school education system in order to prepare students to receive EMI in the university.

Three participants explained the need of a longitudinal plan for implementing EMI. The following quotation clarifies it:

After revising the educational plan for teaching English in school curriculum, it is a good idea to apply EMI gradually in teaching university courses. By using this method gradually, students are being able to comprehend the subject matter taught through EMI in their last semesters, without losing their interest in this method.

Two of the participants mentioned that it was a good idea to conduct EMI in specific, not all of, the majors at the university. A quotation clarifies it:

Some of the majors are understood better if they are taught in Persian because their contents are more related to Iranian culture and attitude. Among these majors is Islamic Ethics.

Another participant believed that it was a good

Table 4

The Independent Samples t-test for the lecturers' and students' perceptions

Group	N	Mean	Std Dev	df	t	Sig.
Lecturers	36	118.33	13.01	378	-.101	0.920
Students	344	118.06	15.25			

idea to use EMI just in certain universities which are higher in rank and their students are more skillful in English. According to him, students in lower rank universities are not capable of understanding the subject matter explained through EMI.

Two of the participants believed that in higher level of education (M.A. & Ph. D) teaching through EMI is more profitable because the students at these levels are more motivated and skillful. Two other interviewees opposed the application of EMI at the university. One of them mentioned some lecturers' lack of English proficiency, and the other mentioned students' lack of English proficiency as the reason.

In the second phase of the study, SPSS was used to analyze the quantitative data from the survey questionnaires. Descriptive statistics helped the researcher to describe the basic features of the data and present quantitative descriptions in a manageable form. After organizing and summarizing the collected data in a sensible way, independent samples t-test analyses were applied to analyze them. The research hypothesis in this phase was as follows:

There is no significant difference between the lecturers' and students' perceptions regarding the potential adoption of EMI at Iranian universities. Table 4 indicates the summary of the t-tests.

An independent samples t-test was conducted to compare the lecturers' and students' scores regarding their perceptions of the potential adoption of EMI at Iranian universities. First, the Levene's Test for Equality of Variances was checked. If the Levene's Test is significant (p. < .05), the two variances are significantly different. If it is not significant (p. > .05), the two variances are approximately equal. In this case, since the Levene's test was not significant (p. = .099 > .05), it was assumed that the variances were approximately equal. Next, the results of the t-test were checked. If the variances are approximately equal, the top line is read. If the variances are not equal, the bottom line is read. Based on the results of the Levene's test, it was known that the two groups had approximately equal variances, so the top line was read.

As indicated in Table 4, there was no significant difference between the lecturers' perception *(M* = 118.33*, SD* = 13.01*)* and the students' perception *[M* = 118.06*, SD* = 15.25*; t (65) = 0.55, p. > .05]*. Since there is no significant difference between the means of the two groups, the null hypothesis (There is no significant difference between the lecturers' and students' perceptions regarding the potential adoption of EMI at Iranian universities) fails to be rejected.

Discussion and Conclusion

The results of the survey questionnaire show that there is no difference between the students' and lecturers' attitudes regarding teaching through EMI at Iranian universities. As indicated in Table 3, most of the participants consent to the application of EMI at Iran universities. As it is evident in Table 2, the interviewees in the present study also mentioned some more motives for conducting EMI at Iranian universities, such as providing the chance for Iranian people to introduce their cultural and religious attitudes to the scientific world, increasing the number of international articles written in the country, encouraging families to support their children to learn English, enhancing students' self-esteem, motivation and interest, decreasing students' expenses of translating English texts to Persian in order to comprehend them, facilitating the use of internet and computer software, and providing the means of investigating other cultures.

Some of the interviewees mentioned the importance of having a longitudinal plan in educational curriculum for implementing EMI. As Cummins (1979) distinguished between Basic Interpersonal Communicative Skills (BICS) and Cognitive Academic Language Proficiency (CALP) and emphasized on the difference in the aim and the use of English in these different contexts, students should be prepared for using and understanding English in academic context before entering the university. Lack of English knowledge hinders the students' success in education. So, by the help of gained high-level of language proficiency prior to being accepted in the university, the students would be ready to study their academic subjects through English

medium instruction in the university.

The result of this study is consistent with that of Coleman (2006), who mentioned academic internationalization, student exchanges, teaching and research materials access, staff mobility, graduate employability, the market in international students, and European content and language integrated learning as the main reasons for using EMI in Europe. In the present study, most of the interviewed proponents of using EMI at the universities believe that it will help the lecturers and students in using English scientific resources and books and surfing the net. This is in line with Ashcraft (2006), who supports this view and mentions that the rationale for using EMI in higher education in non-native contexts is that textbooks and journals in most fields are published in English.

The other advantage mentioned by interviewed proponents of EMI implementation is the internationalization of the universities in Iran which is in keeping with Verbik et al. (2007), who mention that using EMI is one of the important factors contributing to the growing popularity of international universities. EMI would attract many students from other countries. Furthermore it would prevent brain drain mentioned in Shargh (2012) and Khorasan (2012) news papers. It would encourage native students stay in the country and continue their education.

It is hoped that the findings of this study will shed more light to this controversial issue and help the higher education officials make sound decisions in this regard. However, due to the some limitations the results should be treated cautiously. First, although the present study was to consider the feasibility of adopting EMI in Iranian universities, the data were collected from only one university, namely, the UB. Some research studies can be conducted while considering universities in different cities of Iran. Second, the present study was conducted just in a state university. Other studies can focus on private universities. Third, there were a limited number of participants. Other studies can be conducted to include more subjects.

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Appendix A

International Student Mobility 2003-2006 in Major Destination Countries according to % Market Share

Rank	Country	2003	2004	2005	2006
1	US	586,323	572,509	565,039	564,776
2	UK	275,270	300,055	318,400	330,080
3	Australia	218,654	236,142	255,925	281,633
4	Germany	227,026	246,136	246,334	248,357
5	France	221,471	244,335	255,585	265,039
6	China	77,715	110,844	141,087	162,695
7	Japan	109,508	117,302	121,812	117,927
8	Canada	46,381	41,338	42,590	39,008 (year to date)
9	New Zealand ‡	47,121	50,450	47,369	42,652
10	Singapore	Approximately 50,000	N/A	72,000	N/YA
11	Malaysia	N/A	27,731	66,000	N/YA

Source: Verbik, et al. (2007). International Student Mobility: Patterns and Trends.

N/A: Figures not available for this year
‡ Figures include the number of international students enrolled in publicly funded tertiary education only

Appendix B

Interview Questions

1. What are the potential advantages and disadvantages of adopting English Medium Instruction (EMI) at Iranian universities?
2. To what extent do you agree with adopting EMI at Iranian universities?

Appendix C

Research Survey Questionnaire

Code Number: ……..

Feasibility of Adopting English-Medium Instruction at Iranian Universities

Dear colleague/student,

The purpose of this research is to collect information concerning your perceptions on the possibilities of implementing English-Medium Instruction (EMI) at Iranian universities.

The usefulness of this questionnaire depends entirely on your honesty, candor, and care with which you respond to each of the items. All information you provide will be treated with confidentiality. The code number is used only for data analysis.

Finally, I would like to offer my sincere thanks to your participation and contribution to this study. If you have any concern about this study, please do not hesitate to contact me at mrg872@yahoo.com.

Thank you in advance for your great help.

Feasibility of Adopting English-Medium Instruction at Iranian Universities

Directions: In this questionnaire, the term **"EMI"** refers to **English-Medium Instruction**. Please read each of the following statements and write down the number that best describes your perceptions of potential EMI implementation. After completing section one, please place your response in the blank right after each item in section two.

Section 1: Background Information

1. Are you male …………   or female …………….
2. Age ………………
3. Your department in the University ………………….
4. Your degree ………………….

Section 2: Lecturers'/Students' Perceptions of English-Medium Instruction

KEY

6 = Strongly Agree   5 = Agree   4 = Slightly Agree   3 = Slightly Disagree   2 = Disagree   1 = Strongly Disagree

For example, I like to watch TV.   …**5**.... If you place **5** on this statement, it means you **agree** that you like to watch TV.

1. EMI is necessary at the university level. …….
2. EMI will help students to learn about the culture of the target language. …….
3. EMI will probably encounter problems at Iranian universities.* …….
4. EMI will increase the individual social prestige. …….
5. EMI will facilitate students' learning of the subject matter. …….
6. EMI will probably result in cultural corruption.* …….
7. EMI will contribute to students' cognitive development. …….
8. EMI will discourage the production of Farsi words.* …….
9. EMI will help students to get a well paid job. …….
10. EMI will help students to understand foreign points of view. …….
11. EMI will help students to join in discussions about their subject. …….
12. EMI will have an adverse effect on student achievement.* …….
13. EMI will let students enjoy entertainment, such as Internet games. …….
14. EMI will help students to read texts in their subject area. …….
15. EMI will let students get on well with people in English speaking countries. …….
16. EMI will let students become involved in research internationally. …….
17. EMI will let students make English speaking friends. …….
18. EMI will give students personal satisfaction. …….
19. EMI will probably have many disadvantages in the long run. *…….
20. EMI will help students to learn about English speaking cultures. …….
21. EMI will help students to become broadly educated. …….
22. EMI will help students to surf the net in English. …….
23. EMI will prevent students from using their mother tongue.* …….
24. EMI will help students to understand how English people think and behave. …….
25. EMI will help students to get to know tourists better. …….
26. EMI will help students to get involved in international affairs. …….
27. EMI will hinder creativity.* …….

Do you have any further comments?

THANK YOU FOR YOUR CO-OPERATION!

Note: Statements marked

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