

A Program Evaluation of ESP Education at MS/A and Ph.D Levels at Science and Research Campus, Islamic Azad University

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Abstract

This study was a program evaluation of ESP courses offered at MS/A and Ph.D. levels at 10 faculties of Science and Research Campus, Islamic Azad University. A total of 309 respondents comprising 275 students, 18 instructors and 16 heads of departments participated in this study, which incorporated four data gathering techniques, i.e. questionnaires, interviews, observations, and tests. A questionnaire was administered to 275 students to analyze their English language needs. Another questionnaire was administered among the instructors and heads of departments, and interviews were conducted with instructors, to seek their evaluations of the ESP courses and what they felt the students' English language needs were. In addition, the researcher observed different ESP classes to see closely the actual classroom practices, and a general English proficiency test, constructed and validated by the researcher, was also administered among the students to determine their approximate level of general English language knowledge. The results of the study demonstrated that there are mismatches between the students' perceived English language needs and the ESP courses they attend. Furthermore, both MS/A and Ph.D. students generally scored low on the English proficiency test, which requires the implementation of certain measures to address this deficiency.

Keywords: ESP, Program Evaluation, Needs Analysis, General English Proficiency

ارزیابی برنامه آموزشی انگلیسی تخصصی در سطوح کارشناسی ارشد و دکتری در واحد علوم و تحقیقات دانشگاه آزاد اسلامی

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چکیده

این تحقیق به بررسی واحدهای درسی انگلیسی تخصصی در سطوح کارشناسی ارشد و دکتری در واحد علوم و تحقیقات دانشگاه آزاد اسلامی پرداخته است. مجموع 309 پاسخ دهنده، متشکل از 275 دانشجوی کارشناسی ارشد و دکتری، 18 مدرس درس انگلیسی تخصصی، و 16 مدیر گروه در دانشگاه علوم و تحقیقات در این تحقیق شرکت کردند. 4 روش گردآوری اطلاعات مورد استفاده قرار گرفت، که عبارتند از: پرسشنامه، مشاهده، و آزمون. پرسشنامه دانشجویان جهت بررسی نیازهای زبانی آنان تهیه و توزیع شد. پرسشنامه‌های دیگری جهت سنجش نظر مدرسان و مدیران گروه درباره نیازهای زبانی دانشجویان و ارزیابی واحدهای درسی انگلیسی تخصصی در میان آنان توزیع گردید. به منظور مشاهده روش‌های معمول تدریس، هریک از کلاس‌های انگلیسی تخصصی در این تحقیق مورد مشاهده قرار گرفت. به منظور سنجش سطح دانش زبانی دانشجویان، یک آزمون انگلیسی عمومی که توسط محقق ساخته و اعتبارسنجی شد، در میان دانشجویان کارشناسی ارشد و دکتری به اجرا گذاشته شد. نتایج این تحقیق نشان داد که میان نیازهای زبانی دانشجویان و آنچه عملاً در کلاس‌های انگلیسی تخصصی انجام می‌شود عدم تطابق وجود دارد، که پیشنهاد می‌شود برای توفیق بیشتر در برنامه‌های درسی انگلیسی تخصصی نیازهای زبانی دانشجویان هدف آموزش قرار گیرند. علاوه بر آن، نشان داده شد که سطح دانش زبانی دانشجویان در هر دو مقطع ضعیف است که رفع این نقیصه مستلزم اتخاذ و اجرای تصمیماتی از سوی دانشگاه است.

کلیدواژه‌ها: انگلیسی با اهداف ویژه، ارزشیابی برنامه‌های آموزشی، تحلیل نیازها، توانایی عمومی زبانی

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Introduction

English courses are widely offered as obligatory ones in Iranian universities serving both special purposes and general English learning purposes for students majoring in fields other than English itself. Hours are spent on classroom instruction which merit a close scrutiny as to: how much of it is based on the real needs of the learners; what are the actual outcomes thereof; what aims are pursued by the administrators in including these courses in the whole program; are the needs and purposes of the superintendents and those of the learners congruent? Is the program a success? These and other similar questions characterize the essence of program evaluation which is, as Rea-Dickins and Germain (1992) state, an intrinsic part of teaching and learning. It is highly needed in educational settings for whatever modifications and innovations that are to be implemented to improve the quality and effectiveness of the program.

The purpose of the study, which was the first in its kind, was to determine the success of the ESP courses in the light of their meeting the students' English language needs. Put another way, the researcher attempted to see if ESP programs at Ph.D. and MS/A levels at Science and Research Campus proceed in line with the stated needs of students or not. To this end, MS/A and Ph.D. students majoring in non-English fields, their instructors, and heads of departments at Science and Research campus were asked to fill out questionnaires to collect their viewpoints concerning the students' English language needs and the ESP courses offered at both educational levels. Different ESP classes were also observed to see what was practiced and given prominence in them with regard to English language education. Also, an English test was administered to the students under investigation to measure their general English proficiency levels. The following research questions were addressed in this study:

1. *What are specific English language needs of MS/A and Ph.D. students at Science and Research Campus?*
2. *Is the ESP program at MS/A level at Science and Research Campus successful?*
3. *Is the ESP program at Ph.D. level at Science and Research Campus successful?*
4. *What is the MS/A and Ph.D. students' level of General English proficiency?*

Review of Literature

Needs Analysis

Brindley (2004) defines needs analysis as the process of gathering and interpreting information on the uses to which language learners will put the target language following instruction; and what the learners need to do in the learning situation in order to learn the target language.

Hutchinson and Waters (1987) maintain that any course should be based on an analysis of learner need. First, they touch the question: what do we mean by "need"? Second, what kind of information should a needs- analysis tell us? They make a distinction between *target needs* and *learning needs*, the former

referring to what the learner needs to do in the target situation, and the latter to what the learner needs to do in order to learn.

Another classification of needs, namely *subjective* versus *objective* needs, is explicated by Brindley (1998, cited in Graves 2001). He defines objective needs as "derivable from different kinds of factual information about learners, their use of language in real-life communication situations as well as their current language proficiency and language difficulties", and subjective needs as "the cognitive and affective needs of the learners in the learning situation, derivable from information about affective and cognitive factors such as personality, confidence, attitudes, wants and expectations with regard to the learning of English and their individual cognitive style and learning strategies.

English for Specific Purposes

Aiming at defining ESP, Dudley-Evans (2001) maintains that the key definition feature of ESP is that its teaching and materials are founded on the results of needs analysis. He further notes that apart from the primacy of needs analysis, defining features of ESP can be difficult to identify.

Dudley-Evans and St John (1998) believe that a definition of ESP should reflect the fact that much ESP teaching, especially where it is linked with a particular discipline, uses a methodology different from that which is used in General Purpose English teaching. By methodology they mean the nature of the interaction between the ESP teacher and the learners. In more general ESP classes, the interaction may be similar to that in a General Purpose English class; in the more specific ESP classes, however, the teacher sometimes becomes more like a language consultant, enjoying equal status with the learners who have their own expertise in the subject matter.

Johns and Price-Machado (2001: 43) define ESP as a movement based on the proposition that all language teaching should be tailored to the specific learning and language use needs of identified groups of students- and also sensitive to the socio-cultural contexts in which these students will be using English. They also add that, "most of the movement's practitioners are teachers of adults, those students whose needs are more readily identified within academic, occupational, or professional settings".

Program Evaluation

Educational programs are in constant need of decisions to be made as to the effectiveness of the program. To be useful and effective, evaluation requires planning. Alderson (1992) touches upon the planning stage in the conduct of an evaluation as comprised of some main questions: Purpose (why), Audience (who for), The evaluator (who), Content (what), Method (how), and Timing (when to evaluate). Evaluations are requested for a variety of reasons, and the most important question is: why is this evaluation required? The aim might be to convince a special language teaching profession that a particular method

works, and should be introduced more widely. The aim might be to investigate whether a project has produced 'value for money'. The aim might be to contribute to instructional decisions on whether to discard or continue a program/ methodology, etc.

Genesee and Upshur (1996) maintain that the result of assessment can be used by different people for different purposes. Teachers are the main users of this information, primarily to make decisions about ongoing instruction- about students' current learning needs, instructional activities and so on.

Alderson and Scott (1992) believe that both insiders and outsiders should be involved at all stages in the process. However, as Alderson (1992) clarifies, there are situations where it is acceptable that an outsider be asked to evaluate a program. He believes that the content of any evaluation must relate to its purpose. There is a wide range of content that an evaluation can focus on, like the learning outcomes of the program, or attitudes to the language, its speakers and culture, etc.

Alderson (1992) asserts that how one is to evaluate will depend upon what is to be evaluated. There is no one-to-one relationship between the content and the method of evaluation.

Method

Participants

In order to evaluate ESP programs at both MS/A and Ph.D. levels at the faculties of Science and Research Campus, two ESP classes, one at MS/A and one at Ph.D. level, from each faculty were selected. Instructors of the ESP classes were asked to fill a questionnaire to express their standpoints regarding English language needs of students, their evaluations of the ESP courses, and their suggestions for the betterment of the program. Also, heads of the departments that offered ESP courses took part in this study by answering questionnaires.

Altogether, a total number of 309 respondents comprising 275 students in the ESP classes, 18 instructors and 16 heads of departments participated in this study.

Instrumentation

Four types of instruments were utilized to meet the objectives of the study. Firstly, three sets of questionnaires were devised to be responded by three groups of subjects: students, instructors, and heads of departments. The questionnaires were all prepared in Farsi, so that respondents would feel more comfortable in expressing their ideas freely. Secondly, interviews were carried out with instructors to gather their ideas regarding ESP programs.

Thirdly, the researcher constructed and validated an English test battery which consisted of three sections: reading comprehension, grammar, and a composition writing section for which three topics, of general interest, were offered to the subjects to choose one and write a 250- word essay about. TOEFL scoring scale, a 6-point rubric, was used to rate the writings, and two raters scored the writing papers.

In a pilot attempt, the GETB was administered to 30 MS/A and Ph.D. students similar to the main subjects of the study. Based on the results thereof, item analysis was carried out, and the poor items with respect to difficulty level were deleted. Time allocation for the component sections was also ascertained. The revised version was administered to 26 graduates in the second piloting attempt, only after which the final draft was prepared to be administered to the main subjects. The constructed test had to be checked for reliability and validity too. To estimate the concurrent validity of the reading and writing sections of the test, the researcher administered an IELTS test and the GETB to 26 graduate students. The IELTS test consisted of 3 reading passages and two writing tasks. Then, the correlation coefficient of the IELTS scores with those of the constructed GETB was calculated, which turned out to be 0.97. This high correlation coefficient convinced the researcher that the constructed test is satisfactorily valid, as far as its correlation with a standard test is concern. The reliability coefficient of the scores obtained from the standard IELTS test was estimated using the KR-21 formula, which turned out to be 0.79. Comparing the reliability coefficient of the scores obtained from the GETB, which turned out to be 0.76, with that of the IELTS test, the researcher decided that the coefficient was high enough for a researcher-constructed test to be considered reliable. Fourthly, the selected classes under this study were observed once to see closely what was actually practiced in ESP classes.

Procedure

The students' questionnaires were firstly administered, in the pilot study, to 30 students. The respondents were asked to comment on the clarity, relevance and appropriateness of the component items, as a technique for validating questionnaires proposed by Alderson and Crawshaw (1990). The results of the piloting phase provided the feedback for doing the needed alterations to prepare the final drafts.

At the main phase of the study, the questionnaires were administered to the students and instructors, and short structured interviews were performed with the instructors to gather their views concerning the ESP courses that they were teaching. Heads of departments were also requested to respond to a questionnaire after a few-minute talk expounding the orientations of the study.

To see closely what was practiced in ESP classes, the selected classes were observed. In order to make sure that the observer's presence did not affect the teaching practice and class activities immensely, the students were asked after the class if the session was a typical and routine one. The answers were positive in all cases. The General English Proficiency Test, after undergoing the standardization procedures, was administered to the subjects of the study too.

Data Analysis

The researcher succeeded to obtain the following information:

Students and Instructors

The first item of the students' questionnaire asked the subjects if they used the English language in their jobs. From the 275 students to which the questionnaires were administered, only 189 students (141 graduates and 48 postgraduates) responded to this question. 90 MS/A students (63.82 %) and 30 Ph.D. students (62.50 %) indicated that they did use the English language in their jobs, and 51 MS/A students (36.17%) and 18 Ph.D. students (37.50 %) stated that they did not. So, the majority of both groups needed the English language in their professions.

The next question was devised in an attempt to know with whom they use the language, hoping to arrive at an idea of what language areas they are practically in need of. The question asked them to indicate whether they use language to communicate with native speakers (NS), non-native speakers (NNS), both, or neither of them. 146 students (111 graduates and 35 postgraduates) responded to this question. 54 MS/A students (48.64 %) and 16 Ph.D. students (45.71 %) answered 'neither'; 28 MS/A students (25.22 %) and 6 Ph.D. students (17.14 %) said 'both'; 17 MS/A (15.31) and 8 Ph.D. (22.85 %) students mentioned 'NNS'; and, 12 MS/A (10.81 %) and 5 Ph.D. (14.28 %) students stated that they communicate with native speakers. Therefore, 30.03 percent of the MS/A students and 31.42 percent of the Ph.D. students were somehow in contact with the native speakers of English. Those respondents who indicated neither NS nor NNS mentioned that they had to read or translate field-specific articles, or to extract relevant texts from the internet.

Another question in the students' questionnaire dealt with the students' opinion about what language abilities are required in their field and level of education.

Table 1: MS/A Students' Views Concerning the Need for Language Areas (N=216)

Skills	Yes		NO		fr. = frequency v.p. = valid percent
	fr	v.p	fr	v.p	
a. Listening	105	48.61	111	51.38	
b. Speaking	111	51.38	105	48.61	
c. Reading	196	90.74	20	9.25	
d. General vocabulary	70	32.40	146	67.59	
f. Translation from English to Persian	194	89.81	22	10.18	
g. Translation from Persian to English	104	48.14	112	51.85	
h. Grammar	75	34.72	141	65.27	
i. Writing	87	40.27	129	59.72	
j. Field-specific vocabulary	167	77.31	49	22.68	
Mean		57.04		42.94	

As Table 1 depicts, the majority of MS/A students deemed speaking, reading, translation from English to Persian and Field-specific vocabulary important skills and areas for MS/A students to master, while they mostly regarded the other suggested areas not needed to be practiced and developed by MS/A students.

Table 2: *Ph.D. Students' Views Concerning the Need for Language Areas (N=59)*

Skills	Yes		No	
	fr	v.p	fr	v.p
a. Listening	39	66.10	20	33.89
b. Speaking	39	66.10	20	33.89
c. Reading	54	91.52	5	8.47
d. General vocabulary	24	40.67	35	59.32
f. Translation from English to Persian	56	94.91	3	5.08
g. Translation from Persian to English	32	54.23	27	45.76
h. Grammar	28	47.45	31	52.54
i. Writing	37	62.71	22	37.28
j. Field-specific vocabulary	51	86.44	8	13.55
Mean		67.79		32.19

As shown above, the majority of Ph.D. students considered all of the suggested areas as important except for general vocabulary, and grammar.

In order to see whether the instructors believed the same or not, hence illuminating to what extent the ESP aims conceived and practiced by the instructors match the needs and expectations of the students, a similar item was included in the instructors' questionnaire.

Table 3: *MS/A Instructors' Views on the Need for Language Areas (N=11)*

Areas	Yes		No	
	Fr	v.p	Fr	v.p
a. Listening	7	63.63	4	36.36
b. Speaking	8	72.72	3	27.27
c. Reading	10	90.90	1	9.09
d. Writing	8	72.72	3	27.27
e. Field-specific vocabulary	10	90.90	1	9.09
f. General vocabulary	2	18.18	9	81.81
g. Grammar	5	45.45	6	54.54
h. Translation from English to Persian	9	81.81	2	18.18
i. Translation from Persian to English	5	45.45	6	54.54
Mean		64.64		35.35

As the above figures reveal, only three language areas were regarded as not necessary by most of the MS/A instructors, i.e. general vocabulary, grammar, and translation from Persian to English. They generally deemed the other areas important for MS/A students to learn.

Table 4: *Ph.D. Instructors' Views on the Need for Language Areas (N=7)*

Areas	Yes		No	
	Fr	v.p	Fr	v.p
a. Listening	4	57.14	3	42.85
b. Speaking	4	57.14	3	22.85
c. Reading	6	85.71	1	14.28
d. Writing	6	85.71	1	14.28
e. Field-specific vocabulary	6	85.71	1	14.28
f. General vocabulary	2	28.57	5	71.42
g. Grammar	2	28.57	5	71.42
h. Translation from English to Persian	5	71.42	2	28.57
i. Translation from Persian to English	2	28.57	5	71.42
Mean		58.72		41.26

As depicted above, most of the Ph.D. instructors believed that general vocabulary, grammar, and translation from Persian to English are not among the important skills for the Ph.D. students to learn.

Another item in both instructors' and students' questionnaires asks the respondents to prioritize three of the language areas that they had selected as important. The highest first priority was given to reading comprehension ability by MS/A students. They generally chose translation from English to Persian as the second important skill (31.46 %), and field-specific vocabulary as the third important skill (30.89%). For most of the Ph.D. students, translation from English to Persian was the first priority (33.33%), reading comprehension was the second (22.22 %), and speaking as well as field-specific vocabulary as the third (16.66%) priority. The same question was asked from instructors. Most of the MS/A instructors chose reading comprehension as the first important skill (63.63%), field-specific vocabulary as the second (36.36%), and speaking and field-specific vocabulary as the third important skills for MS/A students to learn. Ph.D. instructors generally gave the first priority to field-specific vocabulary (28.57%), chose reading comprehension and translation from English to Persian as their second priority (28.57%), and marked translation from English to Persian as their third priority (28.57%).

Another question in the students' and instructors' questionnaires was designed to determine the extent of the importance of English language knowledge in various general-academic activities in the students' field and level of education. The answers are put in the following table:

Table 5: Students' Views Regarding Their General-Academic Language Needs

Statements	Weak		Moderate		Strong		No. of Resp.
	Fr.	v.p	Fr.	v.p	Fr.	v.p	
a. Studying new sources in the field	26	9.45	68	24.72	181	65.81	275
b. Summarizing English texts in English	51	18.54	74	26.90	150	54.54	275
c. Finding new information from internet	19	7.60	40	16	191	76.40	250
d. Studying international filed- specific journals	45	16.42	67	24.45	162	59.12	274
e. Doing research for a thesis topic	35	12.72	69	25.09	170	61.81	275
f. Doing research for writing thesis	38	13.81	69	25.09	168	61.09	275
g. Writing abstract of thesis in English	47	17.09	56	20.36	172	62.54	275
h. Writing or translating for international field- specific journals	53	19.27	46	16.72	176	64	275
i. Attending international seminars	50	18.18	46	16.72	179	65.09	275
Mean		14.78		21.78		63.38	

The majority of the respondents favored the 'strong' option for all of the activities. This standpoint is in congruence with the instructors' stance.

To investigate whether the textbooks used in the ESP classes under study enjoyed an acceptable efficiency in terms of the students' needs and wants, a question was included in the students' questionnaire, as well as in the instructors', that explored the respondents' evaluation of their textbooks in various aspects. It has to be mentioned that textbooks were not used in all of the ESP classes, and only those students who did use textbooks responded to the question.

Table 6: Students' Evaluation of Their Textbooks

Suggested aspects of textbooks	Weak		Moderate		Acceptable		Excellent		No. of Resp.
	Fr.	v.p	Fr.	v.p	Fr.	v.p	Fr.	v.p	
a. Emphasis on reading comprehension comp.	15	8.82	63	37.05	75	44.11	17	10.00	170
b. Emphasis on writing ability	94	56.96	51	30.90	16	9.69	4	2.42	165
c. Emphasis on field-specific vocabulary	13	7.55	31	18.02	90	52.32	38	22.09	172
d. Emphasis on general vocabulary	21	12.13	72	41.61	68	39.30	12	6.93	173
e. Translation from English to Persian	14	8.00	41	23.42	82	46.85	38	21.71	175
f. Translation from Persian to English	108	63.90	36	21.30	18	10.65	7	4.14	169
g. Emphasis on Grammar	108	63.90	52	30.76	5	2.95	4	2.36	169
h. Relevance of reading texts to students' major	7	4.09	22	12.86	80	46.78	62	36.25	171
i. Difficulty level of reading texts	12	7.01	31	18.12	97	56.72	31	18.12	171
j. Passages being exciting	22	12.86	60	35.08	67	39.18	23	13.45	171
k. Amount of exercises	18	10.90	81	49.09	59	35.75	7	4.24	165
l. Gradation of lessons on difficulty level basis	41	24.69	81	48.79	41	24.69	3	1.80	166
m. Gradation of lessons on subject basis	24	14.54	77	46.66	54	32.72	10	6.06	165
n. Passages being up-to-date	38	22.61	58	34.52	58	34.52	14	8.33	168
o. Proportionality of each lesson with class time	45	26.47	59	34.70	50	29.41	16	9.41	170
Mean		22.96		30.63		33.70		11.15	

As Table 6 shows, students generally evaluated their textbooks as acceptable (33.70 %), far away from excellent though. However, there were aspects in their textbooks that received the highest percentage of votes for 'weak'; namely, emphasis on writing ability, translation from English to Persian, and grammar explanations. Also, there are aspects that are judged by the majority to be moderate; namely, emphasis on general English vocabulary, the amount of exercises in each lesson, gradation of the lessons based on difficulty, gradation of lessons based on subject, and modernity of the passages.

Instructors' assessment of textbooks was also sought via a similar question. Similar to the students' major standpoint, the instructors mostly regarded their textbooks as acceptable. However, their diverging opinions with the students are worth noticing. Instructors, in the majority, did not have a high opinion about the amount of exercises on the field-specific vocabulary; while, students deemed it acceptable. Instructors considered emphasis on general vocabulary as acceptable, but students regarded it moderate. Emphasis on translation from English to Persian was regarded as moderate by instructors, while acceptable by students. The difference of opinions was even sharper concerning translation from Persian to English, which instructors evaluated as acceptable, while students believed it to be a weakness. Another difference was between the instructors' stance about the amount of exercises after each lesson and that of the students, the former turning to be acceptable, and the latter moderate. Gradation of the lessons on subject basis was viewed as acceptable by most of the instructors; whereas, students generally regarded it to be moderate. Students' viewpoint concerning the modernity of the reading passages is half moderate, half acceptable; while instructors in majority deemed it acceptable. The aspects that the majority of the students and instructors thoroughly agreed upon were: emphasis on reading comprehension exercises (acceptable), emphasis on grammatical rule exercises (weak), relevance of the reading passages to the students' specialist field (acceptable), understandability of the reading passages (acceptable), gradation of the lessons on the basis of difficulty (moderate), and proportionality of each lesson size with the class time (moderate).

The students and the instructors' opinions regarding the needed out-of-class activities were addressed in their questionnaires. The questions asked the respondents what activities they believe to be necessary to be carried out outside the class by the students.

Table 7: MS/A Students' Ideas about Out-of-Class Activities (N= 216)

Suggested Activities	Yes		No	
	Fr.	v.p	Fr.	v.p
a. Reading other English field-specific texts.	200	92.59	16	7.40
b. Studying specialist journals to give class reports	157	72.47	59	27.52
c. Summarizing reading passages	92	42.69	124	57.30
d. Writing on a topic using available sources	49	27.52	157	72.47
e. Doing the textbook exercises	67	30.89	149	69.10
f. Translating passages relevant to the lesson	163	75.28	53	24.71
g. Studying the lessons prior to the class	144	66.85	72	33.14
Mean		58.32		41.66

The only activities that most of the MS/A students believed as unnecessary were summarizing reading passages, working out textbook exercises, and writing on a topic using available sources.

Table 8: *Ph.D. Students' Ideas about Out-of-Class Activities (N= 59)*

Suggested Activities	Yes		No	
	Fr.	v.p	Fr.	v.p
a. Reading other English field-specific texts	49	90.74	5	9.25
b. Studying specialist journals to give class reports	47	79.62	12	20.37
c. Summarizing reading passages	20	33.33	39	66.66
d. Writing on a topic using available sources	13	22.03	46	77.96
e. Doing the textbook exercises	26	44.06	33	55.93
f. Translating passages relevant to the lesson	40	68.51	19	31.48
g. Studying the lessons prior to the class	42	70.37	17	29.62
Mean		58.38		41.61

Likewise, the only activities that most of the Ph.D. students believed to be not needed were summarizing reading passages, working out textbook exercises, and writing on a topic using available sources. The rest, however, were needed in most of the students' opinions. Overall, the 'yes' option obtained the greater mean score.

The next item in the students' questionnaire sought to reveal what learning activities students accomplished outside the class. Students' responses are put in Table 9.

Table 9: *Out-of-class Activities that MS/A Students Do (N= 216)*

Suggested Activities	Yes		No	
	Fr.	v.p	Fr.	v.p
a. Reading other English field-specific texts	115	53.37	101	46.62
b. Studying specialist journals to give class reports	44	20.22	172	79.77
c. Summarizing reading passages	36	16.85	180	83.14
d. Writing on a topic using available sources	22	10.11	194	89.88
e. Doing the textbook exercises	67	30.89	149	69.10
f. Translating passages relevant to the lesson	107	49.43	109	50.56
g. Studying the lessons prior to the class	106	48.87	110	51.12
Mean		32.82		67.17

As Tables 7 and 9 depict, the MS/A students mostly did not carry out all of the activities that they deemed necessary; namely, studying specialist journals to give class reports, translating other passages relevant to the lesson, and studying lessons prior to the class.

Table 10: *Out-of-Class Activities that Ph.D. Students Do (N= 59)*

Suggested Activities	Yes		No	
	Fr.	v.p	Fr.	v.p
a. Reading other English field-specific texts	33	55.55	26	44.44
b. Studying specialist journals to give class reports	12	26.37	47	79.62
c. Summarizing reading passages	5	9.25	54	90.74
d. Writing on a topic using available sources	1	1.69	58	98.30
e. Doing the textbook exercises	22	37.03	37	2.96
f. Translating passages relevant to the lesson	31	51.85	28	8.14
g. Studying the lessons prior to the class	22	37.03	37	62.96
Mean		31.25		8.73

The figures in Tables 8 and 10 reveal that the only mismatch between what the Ph.D. students regarded as important and what they actually performed was in studying specialist journals. That is, they generally regarded the activity as necessary, but they mostly did not perform it as an out-of-class activity.

Students and instructors were required to evaluate their ESP courses in various aspects. Tables 11 and 12 show the students' responses.

Table 11: *MS/A Students' Evaluation of Their ESP Courses (N=216)*

Suggested Aspects	Weak		Moderate		Acceptable		Excellent	
	Fr.	v.p	Fr.	v.p	Fr.	v.p	Fr.	v.p
a. Class hour	61	28.08	68	1.46	75	4.83	12	5.61
b. Classroom environment	25	11.79	64	9.62	94	43.51	33	5.16
c. Teaching/learning aids	30	60.11	52	24.15	28	12.92	6	2.80
d. Instructor's command of the materials	1	.56	24	1.23	87	0.27	104	8.31
e. Instructor's relations with students	6	2.80	28	2.92	92	2.69	90	1.57
f. Class activities	17	7.86	70	2.58	06	8.87	23	10.67
g. Out-of-class activities	67	30.89	56	5.84	56	5.84	37	7.12
Mean		0.29		3.97		35.56		0.17

As illustrated above, all of the suggested aspects of ESP courses were conceived by the MS/A students, in the majority, to be acceptable, except for the teaching/learning aids and out-of-class activities which were considered as weak.

Table 12: Ph.D. Students' Evaluation of Their ESP Courses (N=59)

Suggested Aspects	Weak		Moderate		Acceptable		Excellent	
	Fr.	v.p	Fr.	v.p	Fr.	v.p	Fr.	v.p
a. Class hour	9	14.81	11	18.51	34	59.25	4	7.40
b. Classroom	4	7.40	16	27.77	21	35.18	17	29.62
c. Teaching/learning	42	70.37	12	20.37	3	5.55	2	3.70
d. Instructor's command of the materials	0	0.00	8	12.96	21	35.18	31	51.85
e. Instructor's relations with students	0	0.00	11	18.51	17	29.62	31	51.85
f. Class activities	5	9.25	15	25.92	29	50.00	9	14.81
g. Out-of-class activities	14	24.07	26	44.44	11	18.51	8	12.96
Mean		17.98		24.06		33.32		24.59

Likewise, all of the suggested aspects of ESP courses were conceived by most of the Ph.D. students to be acceptable, except for the teaching/learning aids and out-of-class activities which were judged to be weak. Students who passed the 'excellent' judgment on the instructors' command over the teaching materials and the instructors' relations with students were in the majority.

The aspects that most of the MS/A instructors did not approve of were provision of teaching/learning aids (54.54 %), students' English language knowledge (63.63%), number of students in the class (54.54%), and class time (45.45%). The other suggested aspects, however, were believed to be acceptable by most of them. Only two aspects, in Ph.D. instructors' ideas, were not acceptable: provision of teaching/learning aids (71.42%), and class time (57.14%). They generally considered the rest to be acceptable.

In order to know how the students generally evaluate the whole ESP program, an item in the questionnaire was included to ask them to decide whether the program is very successful, successful, moderate, unsuccessful, and very unsuccessful. From the 216 graduate students, 122 respondents (56.48 %) regarded their ESP courses as *moderate*. Sixty seven students (31.01 %) believed the courses to be *unsuccessful*, and the remaining 27 respondents (12.50 %) judged them to be *successful*. From the 59 postgraduates, 31

students (52.54%) evaluated ESP courses as *moderate*, 15 students (25.42%) as *unsuccessful*, and 13 students (22.03%) as *successful*.

Eleven instructors at MS/A level and 7 instructors at Ph.D. level were also asked to generally judge the ESP courses they were teaching. Five MS/A instructors (45.45%) chose the *moderate* option. Three instructors (27.27%) considered ESP courses to be *successful*, and 3 others (27.27%) judged the courses as *unsuccessful*. Four Ph.D. instructors (57.14%) believed that their ESP courses were *moderately* successful, 2 others (28.57%) considered them as *successful*, and 1 respondent (14.28%) regarded the course as *unsuccessful*.

Sixteen heads of departments who offered ESP courses were also asked the same question. Regarding ESP program at MS/A level, 8 of them (50 %) judged it to be *moderately* successful; 4 of them (25 %) stated that it is *successful*, and 4 others (25 %) regarded it to be *unsuccessful*. As for ESP program at Ph.D. level, 6 heads of departments (37.50%) viewed it as *moderate*, 4 respondents (25%) believed it to be *successful*, and 5 others (31.25%) judged it to be *unsuccessful*.

Two open-ended questions were added to the end of the students' questionnaires. The first, asked them to offer their suggestions for improving those aspects of their ESP programs that they did not evaluate as acceptable. The second sought their suggestions for an ideal and optimized ESP program in their field and level of education. The most frequently-cited suggestions were provision of audio-visual facilities and English language laboratories (69.09%), assigning more out-of-class activities and term research projects (26.18%), provision of more field-specific books and journals in the faculty library (13.55%), more emphasis on speaking and listening skills (18.22 %), using English language as the medium of instruction in ESP classes (22.90%), using English language as the medium of instruction in all specialist courses (10.69%), more emphasis on writing abilities in ESP classes (35.59%), increasing ESP/EFL credits: more hours per week (34.90%), using English sources for all specialist courses 13.45%), holding non-credit general English classes in the campus, including TOEFL preparation courses (40%), employing instructors with more command of the English language (16%), and improving students' English language abilities from lower levels especially in BS/A programs 26.54%).

Instructors complained of some problems in ESP courses they taught. They mostly believed that: classes are too large (17.64%), ESP courses fail to create motivation for learning English language in students (11.76%), Textbooks are inefficient (5.88%), Students' Low level of English proficiency hinders the use of English language as the medium of instruction (23.52%), ESP is not offered as a main credit course; so, it is not given its due importance either by students or by instructors (35.29%), Class time is too limited to practice all language skills (23.52%).

Instructors also offered suggestions to improve ESP courses, the most frequently cited ones of which were: provision of audio-visual aids (English laboratories) (70.58%), using the English language as the medium of instruction in ESP classes (35.29%), offering EFL courses too (23.52%), provision of classes for improving

students' general English proficiency, including speaking and writing (58.82%), provision of TOEFL preparation classes (64.70 %), increasing ESP courses (35.29%), offering ESP as the main credit course (17.64%), use of English language sources in the specialist courses instead of their translations (11.76%), giving more bonus to the English subtest of the entrance exams (17.64%), increasing class time; preferably more than one session per week (52.94%), and improving students' English proficiency from lower levels of education (35.29%).

Observations

Carrying out observations in 18 ESP classes, consisting of 11 classes at MS/A level and 7 classes at Ph.D. level, the researcher obtained the following results: In 16 classes (10 at MS/A level and 6 at Ph.D. level) reading comprehension was exercised by requiring the students to translate each and every sentence of an English passage into Persian, which took nearly all the class time. Whenever students were not quite right in their answers, field-specific explanations were vastly provided in Persian by the instructor to ensure their comprehension of the information contained in the passage. In 2 classes (1 at MS/A and 1 at Ph.D. level), however, students were assigned to read their selected English texts, and their comprehension was checked via questions and answers. Only in one class (at Ph.D. level) the medium of instruction was exclusively English.

Regarding writing ability, in 16 classes (88.88 %) it was not practiced at all, neither in the class nor as an out-of-class activity. In 2 classes (1 at MS/A and 1 at Ph.D. level), however, the instructor assigned students to write summaries of the reading passages that they had studied in the class. Corrections were passed on to the students later on. In 16 classes (10 at MS/A and 6 at Ph.D. level), translation of English passages to Persian was the main focus of instruction. Speaking in English was almost a non-practiced far-fetched activity in the majority of the observed classes. In 16 classes (88.88 %), English was neither spoken by the instructor, nor by the students (for not being required to). Only in 2 classes was speaking exercised. In one of them (at Ph.D. level) English was entirely the medium of instruction plus all other class communications; and in the other, it was rather limited to the instructor's selective English talks; that is, the instructor spoke in English for some explanations, but students were not rigidly required to talk and give their class reports in English.

The researcher paid attention to the students' questions in an attempt to envisage their wants and needs in the classroom situation. In 17 classes (11 at MS/A and 6 at Ph.D. level), the bulk of questions, raised by the students, centered on translation of words or sentences. They mostly demanded explanations for field-specific concepts, and received answers in the form of Persian translations, together with extended specialist elaborations on the topic in Persian. Apparently, what the students required depended on the language areas and skills expected from them to master. Questions concerning how to write down ideas, for instance, emerged only in those classes where practice

on writing was demanded, and problems and queries on speaking were raised only where speaking in English was put into practice.

Heads of Departments

Sixteen heads of departments were asked about the need for various English language areas for MS/A and Ph.D. students. Their responses were as follows:

Table 13: Heads of Departments' Ideas Concerning Required Language Areas for MS/A Students (N=16)

Skills	Yes		No	
	fr	v.p	fr	v.p
a. Listening	9	56.25	7	43.75
b. Speaking	6	37.50	10	62.50
c. Reading comprehension	12	75.00	4	25.00
d. Writing	9	56.25	7	43.75
e. Field-specific vocabulary	10	62.50	6	37.50
f. General vocabulary	3	18.75	13	81.25
g. Grammar	6	37.50	10	62.50
h. Translation from English to Persian	13	81.25	3	18.75
i. Translation from Persian to English	7	43.75	9	56.25
Mean		52.08		47.91

As shown above, the majority deemed learning listening, reading, writing, and translation from English to Persian skills important for MS/A students to master.

Table 14: Heads of Departments' Ideas about Required Language Areas for Ph.D. Students (N=16)

Skills	Yes		No	
	fr	v.p	fr	v.p
a. Listening	9	56.25	7	43.75
b. Speaking	9	56.25	7	43.75
c. Reading comprehension	12	75.00	4	25.00
d. Writing	10	62.50	6	37.50
e. Field-specific vocabulary	11	68.75	5	31.25
f. General vocabulary	5	31.25	11	68.75
g. Grammar	6	37.50	10	62.50
h. Translation from English to Persian	13	81.25	3	18.75
i. Translation from Persian to English	7	43.75	9	56.25
Mean		56.94		43.05

As Table 14 shows, the majority of respondents regarded listening, speaking, reading, writing, translation from English to Persian and field-specific vocabulary necessary for Ph.D. students to learn.

Furthermore, the heads of departments were asked to give three priorities to the language areas that they had chosen as important.

The majority of the heads of departments stated that for MS/A students the first important language skill to learn is *reading*, the second is *field-specific vocabulary*, and the third is *writing* together with *translation* from English to Persian. They also generally believed that the first, second and third important skills for Ph.D. students are *reading*, *field-specific vocabulary*, and *speaking* and *writing* abilities respectively. The heads of departments were further asked to generally evaluate the ESP courses they offered to MS/A and Ph.D. students. From the 16 heads of departments, 8 respondents (50.00 %) evaluated the courses as *moderate*, 4 respondents (25.00%) believed them to be *successful*, and 4 others (25.00 %) judged them to be *unsuccessful* for MS/A and Ph.D. levels equally.

In an open-ended question, the heads of departments' suggestions for the betterment of the ESP programs were sought. The suggestions that were more frequently offered were: Thorough use of English sources for all specialist courses (37.50%), provisions for more access to the internet in the campus (25%), Teaching at least one specialist course in English (12.50%), provision of general English classes in the campus (37.50%), a change in the teaching method, toward more work on grammar instruction (25%), more emphasis on speaking (12.50%), teaching all specialist courses at MS/A and Ph.D. level in English language (25%), the faculty members lack enough English language proficiency especially in speaking and writing. This is a great impediment in teaching ESP effectively. English classes should be held for instructors too (25%), an increase in ESP courses; no effectiveness is achieved with just 2 credits (12.50%), giving more bonus to the English subtest of the entrance exam (25%), and passing the English subtest in the entrance exam should be taken as the prerequisite for admission in the specialist subtests (37.50%).

General English Test Battery Results

Altogether, 233 students at both MS/A and Ph.D. levels took the test. Tables 15 and 16 below show the MS/A and Ph.D. students test performances respectively:

Table 15: Test Results of MS/A Students (N= 174)

Discipline	Reading (38)	Grammar (15)	Writing (6)	Total score (59)	No. of Resp.
Physical Training	11.76	3.24	.74	15.74	25
Business Management	16.75	4.50	1.67	23.02	20
Ecological Laws	10.10	4.50	1.20	15.80	10
Fishery	16.78	3.95	1.92	21.64	23
Food Sciences	32.46	6.42	2.48	27.23	52
Philosophy of Science	17.50	6.50	1.50	25.50	8
Civil-Earthquake	18.77	6.44	1.55	26.77	9
Religions	16.50	3.80	.97	20.97	10
Technological Management	16.23	3.88	1.22	20.75	17
Mean	17.42	4.80	1.47	21.93	

As shown above, the MS/A students got 0.45 percent of the complete score (38) in the reading section, 0.32 percent of the complete score in the structure subtest (15), and 0.24 percent of the perfect score in the writing subpart (6). Altogether, their total mean score forms 0.37 percent of the complete score (59).

Table 16: Test Results of Ph.D. Students (N= 61)

Discipline	Reading (38)	Grammar (15)	Writing (6)	Total score (59)	No.of Resp.
Physical Training	22.33	8.16	2.83	33.33	6
Philosophy	18.25	4	1.43	23.86	4
Biology	14.75	5.75	2.06	25.56	4
Farming	17.40	6.60	1.50	25.50	5
Chemistry	16.33	4.00	1.50	21.88	3
Veterinary	20.25	8.75	2.12	31.12	4
Mechanics	16.00	5.40	1.42	22.82	10
International Relations	25.83	8.00	3.58	37.41	6
Economics	18.50	4.87	1.09	24.46	8
Political Sciences	16.20	5.40	1.55	23.15	5
History	17.50	3.50	1.66	22.66	6
Mean	18.48	5.85	1.88	26.50	

The Ph.D. students, as depicted above, received 0.48 percent of the total reading score, 0.39 percent of the complete structure score, and only 0.31 percent of the perfect writing score. Their total mean score is 26.50 which forms 0.44 percent of the complete total score.

Discussion

This study has been concerned with an evaluation of ESP education at MS/A and Ph.D. levels at Science and Research Campus, the results of which revealed that the MS/A and Ph.D. students have certain English language needs which are not thoroughly met in the ESP classes they attend.

As shown above, reading comprehension was a major language need of MS/A and Ph.D. students as perceived by the students, instructors, and heads of departments. The observations conducted in this study, however, revealed that this skill is practiced mostly through translating English passages into Farsi, together with elaborated Farsi explanations of technical words in the passage. The problem with this trend is twofold: Firstly, the other perceived language needs of the students are entirely ignored. This ignorance may jeopardize the success of an educational program, especially an ESP program. Secondly, reading comprehension as a macro-skill should be practiced for its own sake distinct from practice on translation. Chastain (1988) maintains that to help students achieve the objective of using the reading skill realistically as a source of information, the teacher has the responsibility of leading them to read without concentrating on structure or translating into their own language. Grabe (2002) suggests extensive reading for the problem that reading a lot is not the emphasis of most reading curricula. He argues that reading should be done extensively for pleasure, and that classroom and libraries must be supplied with reading resources that can excite students to read. He further suggests that Content-Based Instruction (CBI) is very useful for language skills development in many L2 contexts, and it has the potentials to motivate students strongly.

This investigation further demonstrated that general English proficiency of MS/A and Ph.D. students is low. ESP learning has basically to do with English language learning treated as a foundation for learning it for a technical purpose. Navvabi (1992) demonstrated that there is a significant relationship between Ph.D. students' English language proficiency and their reading comprehension of ESP texts. Further, he showed that the subtests of a proficiency test, i.e. knowledge of grammar, vocabulary, and reading highly correlates with reading comprehension of ESP texts. In a nutshell, his study strongly supports the critical interaction of English language proficiency and reading ESP texts. That is, Ph.D. students must reach a certain level of second language competence before they can effectively read ESP texts in a foreign language. Selinker and Trimble (1974, cited in Navvabi 1992: 2) have also found that student difficulties in ESP were not merely a result of technical vocabulary. They argue

that non-technical words in technical writings would sometimes give students more difficulties than technical ones. They attributed much of the difficulty in reading comprehension to the structure of the writing. Uso-Juan's (2006) finding also lends support to the importance of general English proficiency in reading ESP texts. He demonstrated that successful EAP reading is possible without discipline-related knowledge if the learners' English proficiency level is advanced or intermediate. In this study too, the ESP students and practitioners' suggestions for the betterment of ESP courses have been gathered which would be a valuable source for bringing about effectiveness and success in the ESP courses at MS/A and Ph.D. levels at Science and Research Campus.

Conclusions

The first research question was formulated to come up with a description of the MS/A and Ph.D. students' English language needs. According to the responses made by the MS/A students to the questionnaires, the majority (63.82%) did use the English language in their jobs, and 36.03 percent of them indicated that they interact with native speakers of English, and 49.33 percent of them mentioned that they had to read or translate field-specific articles or extract materials from the internet. MS/A students mostly stated that they need the language areas of speaking, reading, translation from English to Persian and field-specific vocabulary in their fields of study. As far as their priorities in language areas were concerned, the majority chose *reading* skill as their first priority, translation from English to Persian as their second, and field-specific vocabulary knowledge as their third priority. Furthermore, regarding the importance of English language knowledge in carrying out various general-academic activities, the vast majority stated that they *strongly* need English knowledge for the suggested academic activities. Therefore, MS/A students did have identifiable specific language needs.

Regarding the Ph.D. students' answers to the question asking them if they use the English language in their jobs, the majority (62.50%) stated that they did use it, 31.42 percent of them indicating that they somehow interact with native speakers of English. The majority of Ph.D. students stated that they need to develop abilities in listening, speaking, reading, translation, writing, and field-specific vocabulary in their fields of study. They further generally chose translation from English to Persian as the first important skill, reading comprehension as the second important skill, and both speaking and field-specific vocabulary as the third important language areas for Ph.D. students to master. The majority of Ph.D. students further asserted that they strongly need knowledge of English to fulfill all the suggested academic activities. Therefore, the Ph.D. students did have identifiable specific language needs too.

The second research question asks whether the ESP programs at MS/A level at Science and Research Campus can be viewed as successful or not. As shown earlier, MS/A students mostly believed that they need to master speaking,

reading, translation from English to Persian, and field-specific vocabulary. In addition, their three priorities were reading, translation from English to Persian and Field-specific vocabulary. Through observations, the researcher could find out that in the majority of the ESP classes at MS/A level, translation of English passages to Persian took all the class time, and field-specific vocabulary were practiced only by translating the English discipline-related words into Persian. That runs counter to what students and instructors generally announced to be needed for MS/A students.

Moreover, as shown earlier, the majority of MS/A students, instructors, and heads of departments evaluated their ESP courses as moderate, in terms of their success, and unsuccessful, and only the minority judged them to be successful.

Therefore, the ESP program at MS/A level at Science and Research Campus *may not be viewed as successful* on the grounds that firstly, the MS/A students' language needs, as well as the instructors and heads of departments' perceived language needs of MS/A students, were not thoroughly met in their ESP classes; secondly, the majority of the MS/A students, as well as their instructors and heads of departments, evaluated their ESP courses as unsuccessful and moderate; thirdly, the students and instructors did not consider their textbooks as thoroughly efficient; and finally, the three groups of respondents complained of problems in their ESP courses and asked for modifications and changes, as reported above.

The third research question was posed to determine whether the ESP program at Ph.D. level at Science and Research Campus is successful or not. The following data were collected to answer this research question. Most of the Ph.D. students regarded all language areas as important for Ph.D. students to master, except for general English vocabulary and grammar. They also gave priorities to translation from English to Persian, speaking and field-specific vocabulary. Similarly, their instructors gave importance to all language areas except for general vocabulary, grammar, and translation from Persian to English. Their priorities were field-specific vocabulary, reading, and translation from English to Persian. Heads of departments were mostly of the same idea regarding the importance of various English language areas for Ph.D. students. Yet, among their priorities, they mostly regarded speaking and writing as important skills for Ph.D. students to learn. Yet, in the majority of ESP classes held for Ph.D. students the only focus was on translation of English texts into Persian, and the other language areas that the respondents deemed important were not practiced at all.

Besides, the majority of the Ph.D. students, their instructors and heads of departments held that their ESP courses are moderately successful or unsuccessful, and only the minority deemed the courses successful.

Overall, because there were mismatches between the respondents' ideas regarding Ph.D. students' English language needs and the actual ESP practices, and also relying on the respondents' own evaluation of their ESP courses, and due to problems in ESP courses, as stated by the respondents, the ESP program at Ph.D. level at Science and Research Campus may not be viewed as successful.

The fourth question addressed the MS/A and Ph.D. students' English language proficiency level. To be able to describe the respondents' test performances, a criterion-referenced interpretation was adhered to in this study. Based on the results of the validation stage in which the subjects' test performances were validated against their performances on an IELTS test, the researcher decided that gaining 80 percent of the total score in each section, in addition to the overall score, should be regarded as high proficiency, 50 to 79 percent as intermediate, and below 50 percent as low proficiency. The results of the General English Test Battery revealed that MS/A students' English language proficiency is low due to their low scores in each subtest (see Table 15). Also, the Ph.D. students performed weakly in the test battery in each of the subtests (see Table 16), showing that their overall general English proficiency, as well as their reading, structure, and writing proficiency, is low. Overall, the general proficiency level of both groups of respondents is low, which requires implementation of some rigid measures to address this deficiency.

Implications

Program evaluations are basically done to serve the purpose of improving instruction and stepping up the effectiveness of education programs through revealing the weaknesses and strengths thereof. It is through a systematic study of a program that administrators and decision makers can bring about changes and innovations. The results of this study obtained through needs analysis, observations, interviews and General English tests, demonstrated that students at both educational levels do have English language needs, which are not thoroughly met in their ESP classrooms, due to factors such as lack of time, some instructors' incapability in some of the language skills, i.e. speaking and writing (as confessed by some of the instructors, students and heads of departments), the absence of required facilities (e.g. audio-visual aides), and students' weakness in general English proficiency. The researcher suggests that much more heed should be paid to students' needs. Dudley-Evans (2001) maintains that the key characteristic of ESP is that its teaching and materials are founded on the results of needs analysis. However, the precondition to tailoring ESP education to the results of needs analysis is the provision of required equipments. It is strongly suggested, therefore, that facilities should be supplied to meet students and instructors' expectations with regard to ESP education. Overall, in order to elevate the MS/A and Ph.D. students' discipline-related knowledge, and help them have more access to the up-to-date knowledge, the researcher strongly recommends that the practitioners and students' suggestions for the improvement of ESP education should be taken into practice, and that measures should be implemented to improve the MS/A and Ph.D. students' general English proficiency level, as general English proficiency is a factor, among others, that can bring about success in ESP education.

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Appendix A- A sample of Students' Questionnaire

پرسشنامه 1

دانشجوی محترم:

ارزیابی برنامه‌های درسی یکی از اهداف نظام‌های آموزشی است که به منظور بررسی کیفیت آموزش، بازنگری و ارائه راه‌حل‌های مناسب جهت بهبود بخشیدن به آن‌ها انجام می‌شود. پروژه‌ای که در دست انجام است سعی دارد به ارزیابی برنامه آموزش زبان انگلیسی در مقاطع کارشناسی ارشد و دکترا بپردازد، که پیشبرد آن به مساعدت و ابراز نظرات ارزشمند جنابعالی نیازمند است. خواهشمند است نظرات خود را در زمینه‌های ذیل با دقت بیان بفرمایید. لازم به ذکر است که در این پروژه نتایج تنها به شکل گروهی و آماری اعلام خواهد شد و نام افراد محفوظ خواهد ماند. امید است نتیجه این طرح تحقیقاتی در ارتقای کیفی و کمی آموزش زبان انگلیسی در این رشته و مقطع تحصیلی مؤثر باشد.

1. نام: رشته تحصیلی: مقطع تحصیلی:

عنوان شغل فعلی: مدت زمان اشتغال:

2. آیا در شغل خود از زبان انگلیسی استفاده می‌کنید؟ ☐ بله ☐ خیر
در صورتی که پاسخ شما مثبت است، لطفا نحوه استفاده را بیان کنید:

3. به‌طور تقریبی چند ساعت در هفته از زبان انگلیسی در محیط کار خود استفاده می‌کنید؟

4. آیا از زبان انگلیسی برای ارتباط با افراد انگلیسی زبان استفاده می‌کنید ☐، یا افراد غیرانگلیسی زبان ☐، یا هر دو ☐ یا هیچکدام ☐؟

5. به نظر شما توانمندی دانشجویان این رشته و مقطع تحصیلی در کدامیک از مهارت‌های زیر ضروری است؟

الف. مهارت شنیداری	<input type="checkbox"/>	ج. توانایی ترجمه از فارسی به انگلیسی	<input type="checkbox"/>
ب. مهارت گفتاری	<input type="checkbox"/>	چ. مهارت نوشتاری	<input type="checkbox"/>
پ. خواندن و درک مطلب	<input type="checkbox"/>	ح. دستور زبان	<input type="checkbox"/>
ت. واژگان غیرتخصصی	<input type="checkbox"/>	خ. واژگان تخصصی	<input type="checkbox"/>
ث. توانایی ترجمه از انگلیسی به فارسی	<input type="checkbox"/>		

لطفاً مواردی را که در سؤال بالا انتخاب کردید به ترتیب اولویت بیان کنید:

1.

2.

3.

Appendix B- A Sample of General English Test Battery

Section 2: Reading Comprehension

Reading Passage 1¹

You should spend about 30 minutes on the passage and questions 1-19, which are based on Reading Passage 1 below:

The Birth of Scientific English

- A. World science is dominated today by a small number of languages, including Japanese, German and French, but it is English which is probably the most popular global language of science. This is not just because of the importance of English-speaking countries such as the USA in scientific research; the scientists of many non-English-speaking countries find that they need to write their research papers in English to reach a wide international audience. Given the prominence of scientific English today, it may seem surprising that no one really knew *how* to write science in English before the 17th century. Before that, Latin was regarded as the *lingua franca*¹ for European intellectuals.
- B. The European Renaissance (14th - 16th) is sometimes called the 'revival of learning', a time of renewed interest in the 'lost knowledge' of classical times. At the same time, however, scholars also began to test and extend this knowledge. The emergent nation states of Europe developed competitive interests in world exploration and the development of trade. Such expansion, which was to take the English language west to America and east to India, was supported by scientific developments such as the discovery of magnetism (and hence the invention of the compass), improvements in cartography and -perhaps the most important scientific revolution of them all- the new theories of astronomy and the movement of the Earth in relation to the planets and stars, developed by Copernicus (1473-1543).
- C. There were several reasons why original science continued to be written in Latin. The first was simply a matter of Audience. Latin was suitable for an international audience of scholars, whereas English reached a socially wider, but more local audience. Hence, popular science was written in English.
- D. A second reason for writing in Latin may have been a concern for secrecy. Open publication had dangers in putting into the public domain preliminary ideas which had not yet been fully exploited by their 'author'. This growing concern about intellectual property rights was a feature of the period-it reflected both the humanist notion of the individual, rational scientist who

Lingua franca: a language which is used for communication between groups of people who speak different languages.

invents and discovers through private intellectual labour, and the growing connection between original science and commercial exploitation. There was something of a social distinction between 'scholars and gentlemen' who understood Latin, and men of trade who lacked a classical education. And in the mid-17th century it was common practice for mathematicians to keep their discoveries and proofs secret, by writing them in cipher, in obscure languages, or in private messages deposited in a sealed box with the Royal Society. Some scientists might have felt more comfortable with Latin because its audience, though international, was socially restricted.

- F. A third reason why the writing of original science in English was delayed may have been to do with the linguistic inadequacy of English in the early modern period. English was not well equipped to deal with scientific argument. First, it lacked the necessary technical vocabulary. Second, it lacked the grammatical resources required to represent.
- F. the world in an objective and impersonal way, and to discuss the relations, such as cause and effect, that might hold between complex and hypothetical entities.

1. Which item expresses the main idea of paragraph A?
 - a. Before the 17th century, Latin was the lingua franca for European intellectuals.
 - b. today, English is the most popular global language of science.
 - c. A number of languages dominate the world science today.
 - d. English-speaking countries, like USA are important in scientific research.
2. Which statement expresses more closely the main idea of paragraph E?
 - a. The growing concern about intellectual property rights was a feature of the period.
 - b. There was a social distinction between 'scholars and gentlemen' and 'men of trade'.
 - c. Scientists wrote in Latin to keep their discoveries secret.
 - d. Latin was used by the 17th century scientists to fully reveal their discoveries.
3. "Revival" in paragraph B, line 9, means:
 - a. building
 - b. arriving at
 - c. transmitting
 - d. bringing to life again
4. "Exploration" in paragraph B, line 12, means:
 - a. construction
 - b. explanation
 - c. searching
 - d. developing

5. "Preliminary" in paragraph E, line 23, means:
- beginning
 - private
 - developed
 - renewed

For Questions 6-13, you should read the following paragraph, and choose *one* alternative to fill in the empty spaces. Put a circle around the letter you choose as correct.

Fortunately, several members of the Royal Society possessed as interest in language and became engaged in various linguistic projects. Although a proposal in 1664 to establish a committee 6)..... improving the English language came to little, the society's 7)..... did a great deal to foster the publication of 8)..... in English and to encourage the development of a 9)..... writing style. Many members of the Royal Society also 10)..... monographs in English. One of the first was by Robert Hook, 11)..... society's first keeper of experiments, who described his experiments 12)..... microscopes in *Micrographia* (1665). This was largely narrative in 13)....., based on a transcript of oral demonstrations and lectures.

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|-----|---------------|--------------|------------------|-----------------|
| 6. | a. for | b. to | c. with | d. of |
| 7. | a. rights | b. members | c. developments | d. publications |
| 8. | a. science | b. novels | c. lingua franca | d. commerce |
| 9. | a. poor | b. best | c. similar | d. suitable |
| 10. | a. publishing | b. published | c. to publish | d. publish |
| 11. | a. a | b. some | c. the | d. many |
| 12. | a. to | b. as | c. with | d. on |
| 13. | a. work | b. place | c. manner | d. style |