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### Nursing students' information-seeking behavior in English for specific purpose (ESP) courses: Do quality of education and reflective practice matter?

**Background:** Quality of education plays a key role in the development of education. Having this perspective in mind, the researchers explored the quality of English for specific purpose (ESP) courses from ESP instructors' point of views and investigated the role of quality of education of ESP courses in information-seeking behavior of the students. They also probed the possible relationship between ESP instructors' reflective practice and quality of ESP courses.

**Methods:** Seventy-nine ESP instructors were given the researcher-made quality of education in ESP and the English language teaching reflection inventories. At the end of the term, 317 nursing students received an information-seeking behavior questionnaire. To consolidate the findings of the students' questionnaire, 15 volunteer students were interviewed.

**Results:** Based on the findings, the quality of ESP courses as reported by ESP instructors was poor. As the responses to the questionnaire of quality of education in ESP revealed, the instructors reported that they do not have sufficient information on subject matters, as well as the content of the lessons is neither updated nor motivating. It was also reported that not all language skills are included in the course content and at the same time the teacher-centered courses are not communicative. It was also found that there was a significant correlation between TEFL instructors' reflective practice and the quality of ESP courses. In addition, a significant correlation was seen between quality of education of ESP courses and information-seeking behavior of the students.

**Conclusion:** Based on the findings, the instructors' reflective practice was poor and the quality of the ESP courses was not satisfactory either. Perhaps, such conditions have led the instructors not to encourage their students to use other available ESP or English language teaching resources other than their course books. The findings have implications for ESP curriculum development and ESP teachers.

**Keywords:** Quality of education, English for specific purpose courses, Information-seeking behavior, Reflective practice, Nursing students

### رفتار اطلاع یابی دانشجویان پرستاری در دوره های زبان انگلیسی تخصصی: آیا کیفیت آموزش و تفکر تأملی مدرسین تأثیر گذار هستند؟

**زمینه و هدف:** کیفیت آموزش نقش اساسی در توسعه آموزش دارد. با در نظر گرفتن این دیدگاه، پژوهشگران این اثر، کیفیت دوره های زبان انگلیسی تخصصی (ESP) را از دیدگاه مدرسان این دوره ها مورد بررسی قرار داده و نقش کیفیت آموزش دوره های زبان تخصصی در رفتار اطلاع یابی دانشجویان رشته پرستاری را بررسی کردند. همچنین رابطه بین تفکر تأملی مدرسین دروس زبان تخصصی و کیفیت دوره های ESP را مورد بررسی قرار دادند.

**روش:** به ۷۹ مدرس ESP، پرسشنامه های کیفیت آموزش در زبان تخصصی و تفکر تأملی در تدریس داده شد. در پایان ترم، ۳۱۷ دانشجوی پرستاری به پرسشنامه رفتار اطلاع یابی پاسخ دادند. برای اطمینان از این یافته ها، با ۱۵ دانشجوی داوطلب مصاحبه ای صورت گرفت. **یافته ها:** براساس یافته ها، کیفیت دوره ها ESP مطابق گزارش اساتید این دوره ها ضعیف بود. همانطور که پاسخ های پرسشنامه کیفیت آموزش در ESP نشان داد، مدرسین گزارش دادند که اطلاعات کافی در مورد موضوعات ندرند، محتوای دروس به روز نیست و انگیزه بخش نیستند. همچنین گزارش شد که تمام مهارت های زبانی در این دوره گنجانده نشده است و در عین حال این دوره های معلم محور اهداف ارتباطی ندارند. تفکر تأملی اساتید نیز زیر حد انتظار (میانگین ۳) بود. همچنین مشخص شد که بین تفکر تأملی مدرسین و کیفیت دوره های ESP رابطه معناداری وجود دارد. همچنین بین کیفیت آموزش دوره های ESP و رفتار اطلاع یابی دانشجویان رابطه معناداری مشاهده شد.

**نتیجه گیری:** براساس یافته ها، تفکر تأملی مدرسین ضعیف بوده و کیفیت دوره های ESP نیز رضایت بخش نیست. شاید چنین شرایطی مربیان را ترغیب کند که دانش آموزان خود را به استفاده از سایر منابع آموزشی ESP یا زبان انگلیسی غیر از کتاب های درسی خود تشویق نکنند. این یافته ها به برنامه ریزی درسی دوره های ESP و معلمان ESP کمک می کند.

**واژه های کلیدی:** کیفیت دوره های زبان تخصصی انگلیسی، تفکر تأملی، رفتار اطلاع یابی، دانشجویان پرستاری

سلوک طلاب التمریز طلب المعلومات في دورات ESP؛ هل جودة التعليم و الممارسة الانعكاسية مهمة و فعالة؟

خلفية: لاشك في ان جودة التعليم تلعب دوراً رئيسياً في تطويره. اعتباراً لهذا، استكشف الباحثون جودة تعليم اللغة الإنجليزية لدورات المحدد (ESP) من وجهة نظر معلمها و درسوا دور جودة تعليم دورات ESP في سلوك الطلاب للحصول على المعلومات. كما بحثوا في العلاقة المحتملة بين الممارسة الانعكاسية للمدرسين و جودة دورات ESP.

الطريقة: أكمل تسعة و سبعون مدرساً استبيانات جودة التعليم في ESP و قوائم انعكاسات تدريس اللغة الإنجليزية. في نهاية الفصل الدراسي، تلقى ۳۱۷ من طلاب التمريض استبياناً عن سلوك البحث عن المعلومات. لتعزيز نتائج استبيان الطلاب، تمت مقابلة ۱۵ طالباً متطوعاً.

النتائج: بناءً على النتائج، كانت جودة دورات ESP كما ذكرت من قبل معلمي ESP رديئة. كما كشفت الردود على استبيان جودة التعليم في ESP، أفاد المعلمون أنه ليس لديهم معلومات كافية حول الموضوعات، و أن محتوى الدروس لا يتم تحديثه أو تحفيزه. و أفيد أيضاً أنه لا يتم تضمين جميع المهارات اللغوية في الدورة و في نفس الوقت فإن الدورات التي تركز على المعلم ليست تواصلية. و قد وجد أيضاً أن هناك ارتباطاً كبيراً بين الممارسة الانعكاسية لمعلمي TEFL و جودة دورات ESP. بالإضافة إلى ذلك، لوحظ وجود ارتباط كبير بين جودة التعليم في دورات ESP و سلوك البحث عن المعلومات للطلاب.

الخلاصة: بناءً على النتائج، كانت الممارسة التأملية للمعلمين ضعيفة و لم تكن جودة دورات ESP مرضية أيضاً. ربما، مثل هذه الحالة دفعت المعلمين إلى عدم تشجيع طلابهم على استخدام موارد تعليم اللغة الإنجليزية (ESP) الأخرى المتاحة أو مصادر تعليم اللغة الإنجليزية غير كتب الدورات. النتائج لها آثار على تطوير مناهج ESP و دور معلمي ESP.

الكلمات المفتاحية: جودة التعليم، اللغة الإنجليزية لدورات الغرض المحدد، سلوك البحث عن المعلومات، الممارسة التأملية، طلاب التمريض

ای ایس پی کورس میں نرسنگ اسٹوڈنٹس کی علم حاصل کرنے کی کوششیں۔ کیا تعلیم کا اچھا معیار اور تجربے پر مبنی مدرسین کی کوششیں بار آور ثابت ہوتی ہیں؟ ایک تحقیق۔

**بیک گراؤنڈ:** اچھی طرح سے تعلیم دینا تعلیم کو وسعت دینے میں موثر ثابت ہوتی ہے۔ اسی نظریہ کے پیش نظر محققین نے ESP (English for specific purpose) کے کورس کی تعلیم کا جائزہ لیا ہے۔ اس کے علاوہ انہوں نے نرسنگ کے اسٹوڈنٹس کے حصول علم کی کوششوں پر اس کورس کے اثرات کا بھی جائزہ لیا۔ اسی کے ساتھ ساتھ انہوں نے مذکورہ انگریزی کورس کو پڑھانے میں تجربوں پر مبنی مدرسین کی کارکردگی سے پڑنے والے اثرات کا بھی جائزہ لیا ہے۔

**روش:** ای ایس پی کے اناسی (۷۹) مدرسین کو تجربوں پر مبنی ٹیچنگ اور طلبا کے حصول علم کی کوششوں پر مبنی اس کورس کے تعلق سے سوالنامہ دیا گیا، ترم کے اختتام پر نرسنگ کے تین سو سترہ اسٹوڈنٹس نے سوالنامے کے جواب دئے، ان جوابوں پر اطمینان حاصل کرنے کے لئے پندرہ طلباء کے انٹرویو لئے گئے۔

نتیجے: اس تحقیق کے مطابق ای ایس پی کے کورس کی تعلیم ضعیف تھی، مدرسین کے مطابق انہیں موضوعات کے بارے میں کافی معلومات نہیں تھیں، دروس اپ ٹوڈیٹ نہیں تھے اور طلباء نے ان میں دلچسپی نہیں دکھائی، مدرسین کی رپورٹ کے مطابق اس کورس میں زبان کی مہارتوں میں کمی تھی۔

**سفرارش:** نتائج کے مطابق مدرسین کے تجربوں پر مبنی تعلیمی طریقہ کار ناقص تھا۔ اسی وجہ سے مدرسین نے طلباء کو درسی کتب کے علاوہ دیگر کتابوں کی طرف رجوع کرنے کی ترغیب نہیں دلائی تھی۔ تحقیق کے نتائج سے ای ایس پی پروگراموں پر عمل درآمد اور اس کورس کے مدرسین کی مدد ہوتی ہے۔

**کلیدی الفاظ:** ای ایس پی، مدرسین، معلوماتی، نرسنگ

## INTRODUCTION

Today, the quality of education plays a key role in the development of any country and the importance of improving the educational quality is unanimously agreed upon. Improving the quality of education can not only be effective in empowering students in their future careers but it increases their attendance and dropout rates. Undoubtedly, increasing the quality of education at university may extend to other parts of society as well and can contribute to the flourishing of the country.

There is not a unanimous agreement on the precise definition of quality. Quality is regarded as a relative term that meets the needs of various groups of beneficiaries (1). Griffith (2008) defines the quality of education as "the extent to which the delivery of the school curriculum is realizing the learning outcomes established in the educational standards" (2). Quality of education is (3) considered as a complex, dynamic, and multidimensional concept whose definition is subjected to a set of factors and conditions. In particular, it is social, economic, cultural, and political. Two definitions of higher education quality have been suggested. First, quality is as a comparing higher education status with predetermined standards. Second, quality is matching the status of higher education with the mission, purpose, and expectations of all stakeholders including faculty members, academics, students, legislators, and the like. In such a context, an education system is expected to keep pace with economic and social change, technological change, and other changing paradigms such as creative learning (4). In this regard, EFL curriculum in general and ESP courses, in particular, are no exceptions.

Due to the eminence of English as an international language and its key role in the advancement of technology and industry, demand for the development of ESP courses has increased worldwide (5). Since the 1970s, ESP has been on the agenda of the Ministry of Culture and Higher Education. Based on the guidelines, non-English-speaking students need to take the course while studying for higher education courses. The main purpose of these courses, as Moattarian and Tahririan demonstrated, was to enable students "to use English in academic and occupational settings" (5); however, the courses have been limited to helping students with reading and comprehending the content material related to their course of study (6). By focusing solely on reading comprehension, these courses have neglected to consider other language skills (7). What has fueled discontent with these courses is the neglect of students' needs and the overemphasis on vocabulary and grammar (8) which overlooks teaching necessary language skills. Therefore, this leaves students with little motivation, overcrowd heterogeneous classes (9), and limit resources which alleviate the problem.

Because of the need to communicate with patients from other countries, ESP courses are necessary for medical sciences, especially, for nursing students. Nursing graduates also need a great deal of English language skills to enhance their career opportunities (10); accordingly, the students are required to take a 3-unit general language and a 2-unit

specialized language course.

It seems that one of the most-needed ingredients of any ESP course is reflective practice. Nowadays, reflective practice has drawn a considerable attention to itself. Reflection, as higher-order thinking, is an essential teacher quality and an important part of the teaching process. This is because "teachers are active, thinking decision-makers who make instructional choices by drawing on complex, practically-oriented, personalized, and context-sensitive networks of knowledge, thoughts, and beliefs" (11). A reflective teacher reflects on his experiences in relation to himself and others. This is because he wants to deeply understand himself and others (12). As it is defined "reflective teaching is an approach to teaching, learning and problem solving that uses reflection as the main tool... It involves them in analyzing, discussing, evaluating, changing and developing their practice, by adopting an analytical approach to their work" (13).

Additionally, it seems that information-seeking behavior is of great importance for ESP courses. With the spread of technology and the sheer volume of information in various forms on web pages, CDs, e-books, etc., the development of students' information-seeking behavior has turned to be of great importance, so in universities, the information-seeking behavior of the academic community has been emphasized (14). Therefore, this behavior has been one of the areas of interest for researchers. It has been stated that the purpose of studying information-seeking behavior is to find the following questions: What does one do to find his information needs? How does he select and search for information sources? How does he find access to these resources? What factors influence his behavior? (15). To be more specific, information-seeking behavior is a purposeful search for information in order to satisfy a specific purpose (16).

ESP instructors in the country often limit themselves to using books. They also seem reluctant to introducing diverse information sources to their students. Unassisted to get help from diverse sources of teaching English, ESP students suffice to studying the only source which is often their course books (17). Perhaps, quality of education has a great influence on ESP students' information-seeking behavior. In addition, this study was undertaken to understand more about the role that reflective practice plays in the quality of education. This was done since studies show a link between reflective practice, teachers' professional development, and quality of education (18, 19) which may subsequently affect students' information-seeking behavior.

Based on the researchers' best knowledge, although information-seeking behavior of nursing students has been extensively probed (20, 21), no study has invested the ESP course quality. The possible relationship between ESP instructors' reflective practice and the quality of ESP courses has not been investigated either. In addition, it seems necessary to study the relationship between the quality of ESP courses and information-seeking behavior of the students. Given the importance of understanding the factors influencing ESP students' information seeking behavior, the present study formulated the following research questions:

1. What is the quality of ESP courses from ESP instructors' points of view?
2. What is the relationship between ESP instructors' reflective practice and the quality of ESP courses?
3. What is the relationship between the quality of ESP courses and information-seeking behavior of the students?

**METHODS**

**Participants**

Based on convenient sampling, 79 ESP instructors and 317 nursing students from medical science universities of west of Iran were recruited for the study. These universities included both state and Islamic Azad universities. The instructors were either TEFL (teaching English as a foreign language) professors or instructors from nursing departments. It should be stated that they had 3 to 18 years' experience in teaching ESP. It should be mentioned that the inclusion and exclusion criteria for both instructors and students of the present study were applied. The exclusions were: any missing data in the questionnaires and lack of consent to participate. The inclusion criteria for the students were: student of ESP or having passed the course and being a nursing student. The criteria for the instructors were: EFL teacher having taught ESP one term or more, instructor of nursing department having taught ESP one term or more.

**Instruments**

Three questionnaires were employed in the present study:

**Quality of education in ESP questionnaire**

After developing the first drafts of the scale which was compiled based on the related literature (6, 9, 22, 23, 24) 25 items were given to five experts in ESP to pass their judgment on the items. After investigation, 7 items were removed and 3 were revised. The scale was piloted on 4 ESP instructors. The Cronbach's alpha was calculated to be .633 showing that the questionnaire is of a high acceptable reliability. Then, the questionnaire was subjected to factor analysis by omitting items with negative correlation less than 0.50. The Varimax rotation resulted in Table 1.

The final version of the scale included 17 items entirely designed on a five-point Likert scale including 1 "not at all", 2 "to a small scale", 3 "to some extent", 4 "to a moderate extent, and 5 "to a great extent.

**The English language teaching reflection inventory**

To assess the ESP instructors' reflective practice, the English language teaching reflection inventory developed by Akbari, Behzadpoor and Dadvand (25) was employed in the present study. There were 29 items with five subscales in a five-point Likert scale. The subscales were, practical reflection (six items), cognitive reflection (six items), affective reflection (three items), metacognitive reflection (seven items), and the last subscale, critical reflection (seven items).

**Information-seeking behavior questionnaire**

To compile the questionnaire, 20 items were written based on the related literature (14, 22, 26, 27, 28). To ensure face and content validity, the first draft was revised by 4 university professors and 4 items were removed. the remaining 16

Table 1. Rotated component matrix of factor analysis on the items				
factors	questions	1	2	3
Organizational	q6	0.936		
	q4	0.912		
	q1	0.845		
	q3	0.820		
	q5	0.819		
	q2	0.696		
	q7	0.536		
Educational	q10		0.954	
	q8		0.890	
	q9		0.785	
	q12		0.688	
	q11		0.580	
Personal	q14			0.879
	q13			0.835
	q15			0.792
	q16			0.680

items were piloted on 10 nursing students. The reliability of this questionnaire was estimated through Cronbach's alpha coefficient to be .745. The scale included 5-point Likert scale.

**A semi-structured interview**

To consolidate the findings, a semi-structured interview was held with 15 volunteer nursing students. The students were asked to freely express their ideas about their information-seeking behavior and mention the challenges they encountered to seek the information they need for the ESP course.

Each interview which was conducted over the phone lasted for 25 minutes. Then, the responses were recorded, and transcribed. The researchers employed Strauss and Corbin's model (29) to analyze the data. It is noteworthy to mention that there are three types of coding techniques in the model, namely, open, axial, and selective. Based on the coding strategies, the interviewees' comments were first transcribed and finally, the transcribed data were codified.

**Data collection procedures**

The study was carried out in the first semester of 2018 in some Medical Science universities. It should be mentioned that a concurrent mixed-method approach was employed in this study. As the first step, the participants' consent was obtained and they were told that their participation was voluntary. They were also ensured that their responses would not be disclosed to third parties. Next, the quality of education in ESP and the English language teaching reflection inventories were handed to the ESP instructors in their office or tea break and were completed anonymously. The Information-seeking behavior questionnaire was given to the students in the last week of the course and one of the

researchers was responsible for distributing the scale among the participants. Finally, the volunteer students took part in a semi-structured interview.

**RESULTS**

Since the result of the Sig. value in the Kolmogorov-Smirnov was lower than 0.05, the distribution of the scores for all three questionnaires was not normal. So, non-parametric

tests were used to interpret the data.

The first research question investigated the quality of ESP courses from ESP instructors' points of view. To answer the question, the percentage of the answers to each item is shown in Table 2. Moreover, a sign test was employed (see Tables 3 and 4).

As to the first item, the majority of the instructors (70.9%) believed that ESP instructors do not have sufficient

Table 2. Questionnaire of quality of education in ESP								
Factors	Question		Not at all	To a small scale	To some extent	To a moderate extent	To a great extent	Mean
Organizational	1. To what extent do ESP instructors have sufficient information on subject-specific matters?	F %	13 (16.5)	43 (54.4)	23 (29.1)	-	-	2.35
	2. To what extent are ESP instructors expert in English language teaching?	F %	19 (24.1)	38 (48.1)	22 (27.8)	-	-	
	3. To what extent does the course have specific objectives?	F %	9 (11.4)	42 (53.2)	28 (35.4)	-	-	
	4. Are the content of the lessons updated?	F %	3 (3.8)	49 (62)	27 (34.2)	-	-	
	5. Is the content of the lessons motivating?	F %	6 (7.6)	36 (45.6)	32 (40.5)	5 (6.3)	-	
	6. To what extent do students use language labs?	F %	7 (8.9)	42 (53.2)	30 (38)	-	-	
	7. Is there sufficient variety in the subject and content of the course book?	F %	-	24 (30.4)	32 (40.5)	19 (24.1)	4 (5.1)	
Educational	8. To what extent does the course include all writing, listening, speaking, and reading skills?	F %	43 (54.4)	21 (26.6)	8 (10.1)	7 (8.9)	-	2.79
	9. Does the course book include adequate specialized vocabulary?	F %	5 (6.3)	-	29 (36.7)	45 (57)	-	
	10. To what extent are pair and group work activities encouraged in the course?	F %	21 (26.6)	49 (62)	5 (6.3)	4 (5.1)	-	
	11. To what extent is the course learner-centered?	F %	10 (12.6)	48 (60.8)	-	21 (26.6)	-	
	12. To what extent are students encouraged to use resources other than their course book?	F %	12 (15.2)	50 (63.3)	17 (21.5)	-	-	
Personal	13. To what extent are needs of students in the course taken care of?	F %	35 (44.3)	9 (11.4)	7 (8.9)	28 (35.4)	-	2.18
	14. Do student participate in classroom activities?	F %	30 (38)	36 (45.6)	13 (16.5)	-	-	
	15. To what extent are students' interests taken into account in the course?	F %	16 (20.3)	41 (51.9)	22 (27.8)	-	-	
	16. To what extent are students' individual differences taken into account in the course?	F %	29 (36.7)	35 (44.3)	15 (19)	-	-	

Table 3. Sign test to investigate the quality of ESP courses from ESP instructors points of views							
Variable	Descriptive statistics		Mean: 3			Inferential statistics	
	Mean	Std. Deviation	Positive Differences	Negative Differences	Ties	Z	Sig.
Quality of education	2.44	0.32259	76	3	0	-8.101	0.000

**Table 4. Spearman correlation coefficient between instructors education quality and reflective thinking**

Variable		
<i>Quality of education and EFL</i>	Correlation Coefficient	0.802**
	Sig. (2-tailed)	0.000
	N	79

information on subject- specific matters. Surprisingly, as to the second item, 72.2% of the participants reported that ESP instructors are not experts in English language teaching. While 35.4% believed that ESP courses have specific objectives, about 64 percent hold that the course does not have specific objectives. In response to the question which asked if the content of the lessons is updated, only 34.2% agreed and the rest did not find the content of the lessons updated. At the same time, 53 percent of the instructors saw the content of lessons as giving less motivation while the rest (47%) felt that they were motivating. The numbers of respondents who thought students use language labs were quite small (38%). The total number of instructors who believed that variety can be found in the subject and content of the course book was 69.7%. A clear majority (81%) of the instructors stated that all language skills are not included in the course; however, nearly all 93.7% agreed that the course book includes adequate specialized vocabulary. About 88% did not find the course communicative and reported that pair and group activities are not encouraged in the course. Responses to item 11 showed that 73.4 % of the participants found the course teacher-centered while the rest (26.6%) found it as learner-centered. Regarding item 12, only 21.5% chose 'to some extent' and the majority (78.5%) did not believe that students are encouraged to use resources other than their course book. As the answers to item 13 indicate, nearly half of the respondents (55.7%) believed that the needs of students are not taken care of. Interestingly, 83.6% mentioned that students do not participate in the activities. About 72% of the instructors believed that students' interests are not taken into account. Finally, 81% of the instructors reported that the course has no or little attention to students' individual differences.

According to Table 3, the average quality of education was 2.44. A comparison of the quality of education with the mean index (3) showed that it is significant. The z-score of the quality of education variable was -8.101 which indicated that the difference between the means is statistically significant, considering the significance level ( $\text{sig.} = 0.000 < 0.05$ ). In other words, there is a significant difference between the mean score of quality of education and mean score (3), which means that the level of quality of education is lower than the mean score, indicating that students are not in a good position in terms of quality of education.

Regarding the second research question which inquires whether there is a significant relationship between quality of ESP courses and ESP instructors' reflective thinking in the classroom, a Spearman correlation coefficient was used. The

results of this test are shown in Table 4.

According to Table 3, through 99% confidence and an error rate less than 0.01% and considering the significant level ( $P=0.000$ ) which is less than 0.01%, it can be concluded that there is a significant relationship between quality of ESP course and ESP instructors' reflective thinking. On the other hand, the correlation value of this correlation was found to be ( $r=0.802$ ), indicating a positive and rather a strong correlation.

To answer the third research question which sought a significant relationship between the quality of ESP courses and students' information-seeking behavior, a Spearman correlation coefficient was used. The results of the test are shown in Table 4.

According to Table 5, through 99% confidence and error rate less than 0.01% and considering the significant level ( $P=0.000$ ) which is less than 0.01%. it can be concluded that there is a significant relationship between the quality of ESP courses and students' information-seeking behavior. On the other hand, the correlation value of this correlation was equal to ( $r=0.695$ ), which indicates a positive and moderate value.

The result of the interview with the students can be found in Table 6. As the Table shows, the first challenge was that ESP instructors limit the course to course books and do not introduce other useful resources. The next challenge the interviewees referred to was that all language skills are not practiced in the course. The participants acknowledged that the instructors do not introduce helpful resources except textbooks to their students. They also reported that they were not familiar with web resources. Web resources can provide useful resources for English as foreign language students to learn English. The interviewees mentioned that the way they were taught ESP was based on traditional approaches of reading and translation. Finally, it was stated that the priority for them was getting a high grade for the course and that discouraged them from using resources other than their course books.

**Table 5. Spearman correlation coefficient between teacher education quality and student information-seeking behavior**

Variable		
<i>Quality of education and Information seeking behavior</i>	Correlation Coefficient	0.695**
	Sig. (2-tailed)	0.000
	N	79

## DISCUSSION

What we see and experience in the education system in Iran is information transfer from instructors and textbooks to learners. What is expected of learners is remembering the information and transferring it to test sheets. Based on the results of the present study, the quality of ESP courses as reported by ESP instructors is poor and it has negatively affected the nursing students' information-seeking behavior.

**Table 6. Challenges to nursing students' information-seeking behavior**

Challenges	Response percentage
ESP instructors limit the course to course books	66%
Not all language skills are practiced	60%
Lack of support and guidance from teachers	46.6%
lack of familiarity with web resources	33.3%
Prevalent traditional methods of English teaching	32.15%
Students' lack of motivation	20%

It was also revealed that there was a significant correlation between TEFL instructors reflective practice and the quality of ESP courses. Furthermore, a significant correlation was seen between quality of education of ESP courses and information-seeking behavior of the students.

In this regard, Akbari (2016) investigated the English language needs of Isfahan University of Medical Sciences and reported that students need more English language courses during their studies and need not only to improve their vocabulary and grammar knowledge of the foreign language but to develop their communicative skills (10). Another study explored ESP courses (30). With regard to the findings, the textbook developer and the lecturer prioritized reading and comprehension among other skills as the most important one; however, for the students and the graduates, the most important skills were reading comprehension and speaking. Regarding the general and ESP courses, the participants believed that the curriculum should be revised in order to meet the needs of their students. In a study, (31) medical students' problems in ESP courses was examined. As reported, the classes were crowded and the students were sitting in the class in the traditional way, which is teacher-fronted. The class activities were limited to reading text, vocabulary, and translation, and the class was largely controlled by the instructors. Students were thus less motivated and less interested in participating in activities. The students believed that among other factors, the biggest problem was that the courses were boring and the texts were outdated.

Research on information-seeking behavior of medical students shows that they are not capable of seeking for information and neither do they have enough information about the available databases. In this regard, a study explored the information-seeking behavior of postgraduate students of Qazvin University of Medical Sciences, stating that many participants in the study have not heard names of specialized

video databases, and they have not ever used them (32). In addition, it has been revealed that (14) nursing students' information-seeking skills needs to be improved.

In general, this study examined the quality of ESP courses from ESP instructors' point of views and investigated the role of quality of education of ESP courses in information-seeking behavior of the students. It also probed the possible relationship between ESP instructors' reflective practice and quality of ESP courses. As the findings showed, the quality of ESP courses is not satisfactory. Furthermore, the only source used in ESP courses is course books. In addition, quality of education has a correlation with ESP students' information-seeking behavior and reflective practice plays a role in the quality of education. Therefore, there should be a link between reflective practice and quality of education which in turn may affect ESP students' information-seeking behavior. The present study, like other studies, had some limitations. First, the participants were selected non-randomly and the sample size was small. In addition, further research in validating the researcher-made questionnaires of the study should include ESP instructors and students from medical students of more diverse universities of the country.

Despite the limitations, the main significance of the present research is the point that language education curriculum needs to be modified and revised. Other studies have also indicated such a necessity (33). The revision may also affect students' information-seeking behavior, so that they may be encouraged to seek for information from various available data bases. Another implication of the study is raising ESP teachers' awareness regarding their role as reflective practitioners towards the importance of reflection in the course and the possible relationship between the quality of the course and their reflection.

**Ethical considerations:** Ethical issues (Including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, redundancy, etc.) have been completely observed by the authors.

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#### REFERENCES

- Haseena VA, Ajims PM. Aspects of Quality in Education for the Improvement of Educational Scenario. *Journal of Education and Practice* 2015; 6 (4): 100-106.
- Griffith SA. A Proposed Model for Assessing Quality of Education. *Int Rev Educ.* 2008; 54 (1):99-111.
- Baremani A, Salehi M, Sadeghi M. Factors affecting quality of higher education from the perspective of students at this stage. *Scientific Journal of Education Research* 2015; 6 (26): 19-42. Persian.
- Abdoli A, Pourshafi H, Zayn al-Dini Meymand F. Investigating the quality of teacher education in higher education: the need for interactive teaching (case study: undergraduate students of south Khorasan university of applied science). *Journal of Khorasan Cultural and Social Studies* 2017; 11 (3): 47-76. Persian.
- Moattarian A, Tahririan MH. Language

- Needs of Graduate Students and ESP Courses: The Case of Tourism Management in Iran. *RALS* 2014; 5 (2): 4-22.
6. Atai MR. ESAP Curriculum planning in Iran: An incoherent educational experience. *Special Issue of the Journal of Faculty of Letters and Humanities* 2002; 9 (3): 17- 34.
  7. Akbari Z, Tahririan MH. Vocabulary learning strategies in an ESP context: The case of Para/medical English in Iran. *The Asian EFL Journal Quarterly* 2009; 11 (1): 39-61.
  8. Amiryousefi M, Ketabi S. Anti-textbook arguments revisited: A case study from Iran. *Procedia - Social and Behavioral Sciences* 2011; 15: 215-20.
  9. Mostafaei Alaei M, Ershadi AR. ESP Program in Iran: A Stakeholder-based Evaluation of the Program's Goal, Methodology, and Textbook. *Language Teaching (ILT)* 2016; 5 (2): 279-306.
  10. Akbari Z. The study of English Educational Needs of Students Studying in Isfahan University of Medical Sciences: Students' perspective. *DSME* 2016; 3 (2):1-13. Persian.
  11. Borg S. Teacher cognition in language teaching: A review of research on what language teachers think, know, believe, and do. *Language Teaching* 2003; 36: 81-109.
  12. Priddis L, Rogers SL. Development of the reflective practice questionnaire: preliminary findings. *Reflective Practice*, 2017 DOI: 10.1080/14623943.2017.1379384
  13. Minott MA. Reflective Teaching and how it Aids in Coping with Heavy Workloads, Mandated Policies and Disagreements with Colleagues. *Current Issues in Education* 2010; 13(1): 1-27.
  14. Riahi A. Information behaviors and information seeking of nursing students of Mazandaran University of Medical Science. *The Journal of Medical Education and Development (JMED)* 2017; 12 (3):195-211. Persian.
  15. Noukarizi M, Davarpanah MR. Analysis of the models of information seeking behavior. *Quarterly library and information science* 2006; 9 (2): 119-52. Persian.
  16. Yari S, Ahmadi H. A Review on information seeking behavior literature in Iran. *Journal of Information Processing and Management (JIPM)* 2014; 30 (1):173-97. Persian.
  17. Farahian M, Parhamnia F. Information seeking behavior of students of medical sciences in general English and ESP courses. *Education Strategies in Medical Sciences*. In press. Persian.
  18. Day C. Reflection: A Necessary but Not Sufficient Condition for Professional Development. *Br Educ Res J*. 1993;19 (1): 83-93.
  19. Syslová, Z. The relation between reflection and the quality of a preschool teacher's education performance. *International Journal of Child Care and Education Policy* 2019; 13 (4): 1-21.
  20. Sarbaz M, Kimiafar K, Sheikhtaheri A, Taherzadeh Z, Eslami S. Nurses' Information Seeking Behavior for Clinical Practice: A Case Study in a Developing Country. *Stud Health Technol Inform*. 2016; 225:23-7.
  21. Ellen E. Stanley Information-seeking behavior of nursing students and clinical nurses: Implications for health sciences librarians. *J Med Libr Assoc*. 2005; 93(2):213-22.
  22. Nezakatgoo B, Behzadpoor F. Challenges in teaching ESP at medical universities of Iran from ESP stakeholders' perspectives. *Iranian Journal of Applied Language Studies* 2017; 9(2): 59-82.
  23. Hayati A.M. Teaching English for Special Purposes in Iran: Problems and suggestions. *Arts and Humanities in Higher Education* 2008; 7:149-64.
  24. Moafian F, Ostovar S, Griffiths M, Hashemi M. The Construct Validity and Reliability of the 'Characteristics of Successful EFL Teachers Questionnaire (CoSEFLT-Q)' Revisited. *Porta Linguarum* 2019; 31:53-73.
  25. Akbari R, Behzadpoor B, Dadvand B. Development of English language teaching reflection inventory. *System* 2010; 38:211-27.
  26. Borzabadi Farahaani, D. A Student - oriented study English for specific purposes. *Research in Contemporary World Literature* 2003; 8 (15): 147-59. Persian.
  27. Dobakhti L, Zohrabi M. ESP needs analysis of carpet students: the case of Tabriz Islamic Arts University. *Quarterly Foreign Language Research Journal (Pazhuesh-E-Zabanja\_Te Khareji)* 2019; 8 (2): 529-57. Persian.
  28. Naeimi J, Mohammad Esmaeil S. The Assessment of Information- Seeking Behavior of Medical Sciences University Researchers of Khorasan Razavi using Neural Network Approach. *Library and Information Science Research (LISRJ)* 2017; 6(2): 80-96. Persian.
  29. Strauss A, Corbin J. 1998. *Basics of Qualitative Research*. Thousand Oaks, CA: Sage Publications.
  30. Atai MR, Asadi SA. Assessing academic and professional English language needs of Iranian railway engineering students: A triangulated evaluation study. *ESP across Cultures* 2013; 10: 35-54.
  31. Boniadi A, Ghojazadeh M, Rahmatvand N. Problems of English for Specific Purpose course for medical students in Iran. *Khazar Journal of Humanities & Social Sciences* 2013; 16 (1): 48.
  32. Kalantari A, Jowkar A, Jahani Hashemi H. Information Seeking Behavior of Postgraduate Students of Qazvin University of Medical Sciences for Retrieval of Specialized Images and Videos. *Payavard* 2017; 11 (4): 479-89. Persian.
  33. Rahimi M, Nabilou Z. Globalization EFL curriculum reform in Iran: challenges and opportunities. *Journal of Technology and Education* 2009; 3 (2): 115-24. Persian.