

The Importance of Intercultural and Communicative Skills Acquisition in ESP Context: Master Two Petroleum Engineering Students at Kasdi Merbah University, Ouargla as a Case Study

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Abstract:

As oil and gas field involves interacting with people from diverse cultures, it is important for petroleum engineering students to acquire and master the English language basic skills as well as the communicative and intercultural ones. In this context, the present study aimed to explore the importance of developing communicative and intercultural skills among Master two students of Drilling and Production at Kasdi Merbah University, Ouargla. To attain this objective, a qualitative approach was adopted, a questionnaire was submitted to forty (40) students, and a semi-structured interview was held with seven (7) teachers of petroleum engineering to elicit their attitudes towards the significance of communicative and intercultural skills acquisition and mastery in ESP classes. The findings demonstrated that 70 percent of students lack communication and intercultural skills. They also revealed that the university short-term internships were inadequate to improve those skills. Therefore, programs of internship should be extended to first-year students and special courses need to be designed to teach these two skills.

Keywords: Communicative skills, Drilling and Production departments, Intercultural skills, Petroleum Engineering Students.

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1- Introduction

Due to the increased demands for global communication and the needs to prepare a competent employee in his workplace, the worldwide educational systems have shifted their focus from the linguistic competence to further include the communicative and intercultural skills. As a result, EFL/ESL teachers in general and ESP practitioners specifically evolved their teaching objectives beyond this language fluency to develop their learners' socio-cultural background, engage in real-life interaction communication and become interculturally competent.

The concept of communicative competence (CC) was firstly suggested by Hymes in 1972 as a reaction to the linguistic competence. He emphasized the importance of social context in language mastery rather than the knowledge of grammatical rules. Based on Canale's and Swain's (1980) and Van Ek's (1986) models, communicative competence consists of a set of components: linguistic competence, discourse competence, strategic competence, sociolinguistic competence, socio-cultural competence, and social competence (Lázár et al., 2007). Therefore, communicative competence requires knowledge, skills and attitudes for each of these elements. In brief, (CC) simply means to know the language and to be able to use it efficiently.

Being an interculturally competent speaker requires the mastery of communication skills in a multicultural environment. This involves having the appropriate communicative behaviors that enable him to handle effective conversations with people from different cultures, identities and social norms as well as achieve their goals (Byram, 2021; Chen & Starsota, 1999). Thus, intercultural communicative competence is the ability to successfully interact with foreigners, respectfully adhere to cultural aspects and rapidly adapt to cultural differences.

Intercultural communication is an important aspect in target language classrooms. It has three dimensions, including knowledge, skills and motivation, or attitudes (Byram, Gribkova & Starkey, 2002; Wiseman, 2001). Evidently, this skill involves cultural knowledge of values, traditions and communication style; the ability to interpret behaviours and easily adapt to new cultural settings; and willingness to accept, understand and respect others' culture. Consequently, raising foreign language students' awareness of their own and others culture is essential to understand language conversations using their cultural backgrounds (Cortazzi & Jin, 1996).

As English has become the language of communication, science, technology, business, economy and engineering, it is recently noticed that all the Algerian universities have oriented towards using it as a means of instruction. However, the problem that has been raised is whether teaching courses in English is really considered sufficient to prepare a competent employee who can interact appropriately and effectively with foreigners from various cultural backgrounds. In this scope, the current study seeks to find out the importance of developing the communicative and intercultural skills for petroleum engineering students at Kasdi Merbah University, Ouargla.

To reach this objective, the study attempts to answer the following questions: What are students' and teachers' attitudes towards teaching and learning communication and intercultural skills? To what extent does teaching communication and intercultural skills help petroleum engineering students use the language correctly and appropriately? As a consequence, it is hypothesized that teaching these skills for petroleum engineering students is very important to compete and cope with the international markets requirements.

1.1 Literature Review

Since the Intercultural communication has been considered the core objective of teaching the target language in today's classrooms, many studies have widely addressed this issue among EFL learners. Nevertheless, there is a scarcity of publications among ESP engineers.

To begin with a study carried out by Barebzi, El-Ajraoui and Yachoulti in (2023) and entitled 'Moroccan Engineering Students' Intercultural Communicative Competence and their Attitudes towards Intercultural Competence Learning: Ensam, Rabat as a Case Study'. It aimed to explore students' opinions about ICC learning and find out the link between their opinions and their ICC level. To realize this aim, they adopted a questionnaire developed by Zhou (2011) and submitted it online to 68 students from the Graduate School of Arts and Crafts (ENSAM), Rabat. The findings showed that students' attitudes towards ICC learning were positive and have a moderately positive relationship with their level of ICC.

Another study conducted by Chengyuan and Kaidong (2024) about the effect of an intercultural management course on students' intercultural communicative competence development, a classroom-based study. In more details, it examined the impact of simulated group project, self-assessments, and reflective essays on developing Business Administration Master Students' intercultural communicative competence. The findings showed that the knowledge dimension marked a higher improvement compared to the skill and meta-cognitive ones. They also revealed that students raise awareness and motivation for intercultural communication.

Jaiswal, Sapkota, and Acheson (2024) studied the impact of semester-long study abroad programs on intercultural competence development in undergraduate engineering students. They used a mixed methods approach to assess the students' intercultural learning outcomes. The post-test results unveiled that students develop their Intercultural competence. The results of the thematic analysis revealed that students with high intercultural learning outcomes were open-minded and understanding of the cultural differences.

The present study dealt with the importance of developing communication and intercultural skills among petroleum engineering students at Ouargla University. It is considered a new study since it tackles this sample for the first time, so it is worthy to be conducted.

2- Method and Tools:

This research section focuses on the main elements of the research process which are research method, sampling, and data gathering tools used for carrying out the investigation.

2.1- Research Method

The main purpose of this study was to explore both ESP teachers' and students' perceptions of to what extent the mastery of communication and intercultural skills is important for the future petroleum engineering workplaces. For this aim, a qualitative research method was used. This type of methods depends on asking questions related to the way people produce meaning out of the living world (McBurney & White, 2009). It also relies on specific techniques like observation, focus group, interviews and others to collect a valid and in-depth data about the topic being studied.

2.2- Sample of the Study

The target population that the researcher wants to investigate was master two petroleum engineering students, specialized in Drilling and Production, at Kasdi Merbah University, Ouargla. A sample of 40 students who enrolled in the academic year 2024-2025 was randomly selected. They were 32 males and 8 females between the ages of 24-27 years old. In addition, 7 teachers from the same university and specialty were purposefully chosen to gather their views regarding the importance of improving students' communicative and intercultural competence.

2.3- Data Gathering Techniques

In this study, we used two different data collection methods. A students' questionnaire distributed to have an insight into their level, opinions and strategies they employed to develop their communicative and intercultural skills. It includes fifteen questions ranging between yes or no questions, MCQ questions and open-ended questions. Moreover, a semi-structured interview that encompasses nine open and close-ended questions was conducted with teachers to have an idea about their perspectives and ways of teaching and improving students' communication and intercultural skills.

3- Results and Discussion

3.1- Students' Questionnaire

Item1: What is your perception towards cultural differences?

Table (1): Students' Perceptions towards Cultural Differences

Options	Frequencies	Percentages (%)
Positive	10	25
Negative	30	75
Total	40	100

The first item in this questionnaire explores students' perceptions towards cultural differences. The following table shows that nearly the whole of population has a negative attitude (75%), whereas (25%) reflects a positive one. This means that students may face barriers because they are not open to the idea of engaging with different cultures.

Item 2: Do you find difficulties while communicating with people from different cultures?

Table (2): Students' Difficulties in Communicating with Foreigners

Options	Frequencies	Percentages (%)
Yes	28	70
No	12	30
Total	40	100

Source: Prepared by the researchers

The next item in this questionnaire seeks to know whether or not master two petroleum engineering students encounter obstacles in terms of communication and intercultural skills. According to the results displayed in the table, the majority of the participants (70%) have low level in these skills, while just (30%) of them are good at them. This makes them unable to conduct clear and effective conversations.

Item3: If yes, is it because of

Table (3): Reasons behind Students' Difficulties

Options	Frequencies	Percentages (%)
Lack of academic training	17	60.71
Lack of intercultural awareness	3	10.71
Language barriers	5	17.86
Different communication styles	2	7.14
Fear of making mistakes	1	3.58
Total	28	100

Source: Prepared by the researchers

This item aims to determine the causes behind students' difficulties in communicating with foreigners. As shown in the table above, most respondents (60.71%) view that the lack of academic training is the major reason for their problems, (17.86%) of them think that

language barriers cause these difficulties, (10.71%) of them believe that the lack of intercultural awareness affects their communication knowledge, skills and attitudes, (7.14%) of them consider that having different communication styles with foreigners is the direct cause leading to those hurdles, whilst only one informant regards that fear of committing mistakes made them anxious and avoid engaging in both verbal and nonverbal communication. In short, university curriculum designers should reconsider the way of teaching and training students on these skills.

Item4: Which of the following strategies can help you overcome these problems and develop your communication and intercultural skills?

Table (4): Strategies to Overcome and Develop the Cultural Aspects

Options	Frequencies	Percentages (%)
Offer cultural exchange programs	6	21.43
Integrate communication and intercultural skills in the curriculum	15	53.57
Use authentic materials	2	7.14
Chat with foreigners	5	17.86
Total	28	100

The purpose behind asking this question was to identify the strategies used by petroleum engineering students to overcome and develop their intercultural communication. Based on the obtained results, more than half of the informants (53.57%) suggest that the integration of communication and intercultural skills in the curriculum is the suitable solution to this problem, (21.43%) of them propose cultural exchange programs as a key to both get rid of the problems and enhance these skills, (17.86%) of them expressed that chatting with people from different cultures can help them be interculturally effective language speakers, while only two participants recommend that using authentic materials may be an efficient method to acquire these competences. All in all, teaching and learning communication and intercultural skills remain the convenient strategy to prepare a culturally proficient engineer.

Item5: What are the benefits from learning and developing these skills?

Table (5): The Benefits from Learning and Developing these Skills

Options	Frequencies	Percentages (%)
Increasing job opportunities	15	37.5
Adaptability in work environments	12	30
Improving teamwork skills	5	12.5
Building self-confidence	8	20
Total	40	100

The goal of this question was to outline the benefits from learning and developing the students' communication and intercultural skills. As presented in the table, a considerable number of subjects (37.5%) think that mastery of these skills increase their job opportunities, (30%) of them perceive that they need them to adapt in workplaces, (20%) of them consider that these skills help them in building self-confidence, yet (12.5%) of them regard that they are useful for improving teamwork skills. In sum, we can say that having better communication and intercultural skills opens the doors for job opportunities at national and international levels.

3.2- Teachers' Interview

Question One: What is your perception towards teaching communication and intercultural skills?

This question aims to find out teachers' attitudes towards teaching communication and intercultural skills for master two petroleum engineering students. The findings revealed that six teachers have a negative perception while only one teacher shows a positive one. This overall negative perception is a clear indication that teachers' lack of awareness about the English culture is because they use the language as a means of instruction.

Question Two: Do you think that university is sufficient to prepare an interculturally competent learner? If no, why?

In this item, we try to know if university training is sufficient to prepare an interculturally competent learner. According to the interviewees' responses, two teachers answer by 'yes'. However, five of them reported that the training is insufficient. The latter justified their answers as follows. There is no course designed for teaching communication and intercultural skills, the limited number of provided scholarships, the lack of exchange programs and authentic materials.

Question Three: According to your opinion, in what ways do communication and intercultural skills affect students' academic and professional carrier?

All the questioned interviewees agreed that communication and intercultural skills are important for students' academic and professional carrier. Academically, the mastery of these skills allows students to write proficient emails, reports and articles and appropriately interact with foreign peers. Professionally, these skills prepare them to be ready for real-life communication, including negotiating with clients, easily engaging in workshops and properly presenting their projects in front of foreign companies.

Question Four: As a teacher, what could you do to develop your students' communication and intercultural skills?

Regarding this question, teachers provide a set of techniques that are used to promote students' communication and intercultural skills. These include integrating ICTS in the classroom, using authentic materials, and proposing to the university opening a cultural exchange programs as well as clubs for students to express themselves. They also contact the ministry to officially add classes for teaching these skills. Moreover, teachers asked for more seminars, conferences and workshops opportunities.

3.3 Discussion of Results

The findings obtained from the questionnaire showcase that most master two petroleum engineering students at Ouargla University have a negative attitude towards others' culture. This answers the first research question (What are students' and teachers' attitudes towards teaching and learning communication and intercultural skills?). In the same line, the results of the interview indicate that Drilling and Production specialty teachers possess a negative perception concerning these skills. This provides us with an answer to the already mentioned question. In addition, teachers declared that teaching communication and intercultural skills has a significant value on students' academic and occupational carrier. The latter helps to answer the second question (To what extent does teaching communication and intercultural skills help petroleum engineering students use the language correctly and appropriately?).

4- Conclusion

The objective of this study is to delve into the importance of communicative and intercultural skills acquisition in petroleum engineering setting. The results of the students' questionnaire and the teachers' interview unveil that both of them have negative perceptions towards cultural differences. They also demonstrate that teaching and learning these skills is vital for students' academic and future life. Therefore, our hypothesis (it is hypothesized that teaching these skills for petroleum engineering students is very important to compete and cope with the international markets requirements) is confirmed. In the light of these findings, university teachers, researchers, ESP practitioners, and curriculum developers should consider the following recommendations:

- Developing learners' Intercultural communication skills should be the core objective of target language teachers.

- University administration should provide the teaching materials needed to support the acquisition of ICC as well as the cultural exchange programs.

- Higher education institutions should integrate the concept of intercultural competence into the engineering curriculum.

- Teachers should be provided with more opportunities (workshops, seminars, conferences, professional development training...) to explore cultural differences.

- Universities should establish effective clubs that offer a variety of activities capable of enhancing students' cultural competences.

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