Embedding Intercultural Awareness Raising Elements in the Design and Teaching of a Scientific and Technical Communication in English - STCE Course

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Abstract
Among the skills required to answer employability - communication in a foreign language is a priority today. Engineering students must be provided with instructional material that should contribute to increasing their awareness of intercultural differences, in a world characterized by fierce competition and a highly selective workforce market. Avoiding miscommunication, taking into consideration a multicultural audience, participating in meetings and observing the DOs and DON’Ts, as well as cultural specific elements of non-verbal communication come under focus in the Scientific and Technical Communication in English - STCE course proposed by the author of the study.

Key words
intercultural awareness raising tasks, scientific and technical communication course, course design, communication in a foreign language, intercultural competence

Communication in a foreign language is a must today among the essential abilities required to answer employability and further career development stages in the life of a university graduate. Engineering students should develop their scientific and technical communication skills, both oral and written. They must be provided with instruction that should contribute to increasing their awareness of intercultural differences, in a world dominated by competition and a very selective workforce market, marked by intercultural differences. Avoiding miscommunication, taking into consideration a multicultural audience, participating in meetings and observing the DOs and DON’Ts, as well as elements of verbal and non-verbal communication that are cultural specific come in turn under focus in the Scientific And Technical Communication In English - STCE course proposed by the author of the study in the concrete educational context taken into consideration in this study. The course applications/tasks follow the same lines. The experience acquired in
designing and then delivering the course is briefly discussed, with emphasis on the identification of the most appropriate ways of embedding intercultural awareness raising information in the STCE course. Feedback from trainees in a multinational context – e.g. students coming from eight different countries and taking the course within the framework of a doctoral program in the Bucharest Polytechnic – has been collected, with a view to further improve/amend the initial course material in accordance with the features of each concrete educational context in which the course is to be taught. As remarked by authors, such as Amant [1], in recent times many articles analyze the connections between oral modes of communicating scientific and technological information, besides the older interest in the written forms of communication. This is due to the fact that, in our postmodern globalized world, encounters of individuals from various cultural backgrounds in the arena of business and economic activities do happen. When these people try to share or exchange views, opinions or ideas, their different cultural expectations and values can affect their interactions on common grounds. Some of the most important questions that appear in a recurrent manner in various pieces of research in the field refer to the differences in understanding and defining culture, cultural negotiation, as well as the role of verbal and nonverbal communication, as they are marked by the culture of each participant. Moreover, it is interesting that, with the emergence and rapid development of the new modern Information Communications Technology (ICT), cultural differences have appeared in cyberspace, as shown by [5]. Disregarding them would be a mistake, as it could be conducive to increasing the chances of miscommunication, mainly due to the lack the aspects inherent to face-to-face communication; this should be seen as a challenge for teachers of various forms of communication, such as that specific to the scientific and technical domain. It is, therefore, important to expand our knowledge of the process of intercultural communication in the virtual environment as well.

In what follows, we will emphasize the main themes that can be found in the literature on intercultural technical communication. Thus, Daisy [6] points out that, starting with the 1990s, there has been an increasingly high awareness of specialists of the impact of globalization upon communication in the workplace. The beginning of the 21st century already witnesses, as shown in [4], besides the already much referred to phenomenon of economic globalization, that of ‘cultural globalization’, understood as the ‘transnational migration of people, information and consumer culture’. They both have an impact on the workplace, challenging technical communication trainers in two directions: (i) the trainees come from different cultural, linguistic and national backgrounds, and (ii) the technical documentation handled in written or oral form is intended for a variety of audiences. Hence, as shown in [7], starting the early 1990s, textbooks meant for business and technical students have incorporated intercultural communication issues. The topic has been tackled in various ways, on a continuum ranging from theoretical discussions to practical communication situations. It is then important that sound pedagogies for the integration of intercultural competence development and/or awareness raising should be produced. One such approach was articulated
by Kent [9], who claims that paralogic hermeneutics deserves the attention of technical communicators who wish to give their courses an interculturality focused component.

Among the main reasons for teaching cultural awareness in technical communication courses – as maintained in [8] – are that readers in other countries/cultures can thus use the documents created; moreover, workers from various cultures could work and relate with co-workers from other parts of the world, which is particularly important, as [13] points out, in the case of English speaking employees. The readability of a technical document/specification accompanying a technical product for people in other cultures may sometimes even make the difference in success in selling that particular product on the international market, as emphasized by [1]. If we discuss visual documents, then, as underlined by Heitzman [8], these tend to be more adaptable to the internationalization approach, i.e. implementation of a standard applicable to a variety of communities. However, as remarked in the literature [8; 10], as visuals still carry cultural connotations to a quite large extent, cultural gaps should be removed, in order to create a ‘culture-free design’. Heitzman [8] concludes that technical documents should reflect the author’s concern for the relationships between the communicator’s and the audience’s cultures.

There are numerous authors, among them [3], who are interested in providing concrete examples of ways of embedding intercultural communication awareness raising elements in technical communication courses. They present case studies, discussing the possible cultural influences and providing instances of a cross-cultural approach in teaching international technical communication. International communication competence (ICC) has become, as claimed in [2], an area of study of relevance in the increasingly multicultural communities that we live in. However, it is shown that a satisfactory model of ICC and a ‘scale that translates well into different cultures is yet to be developed’. So far, the importance of the following elements has been demonstrated in the literature: knowledge, motivation, listening skills, prior cultural experiences, having a global outlook – as opposed to an ethnocentric one, as well as ‘an other-centered style of communication’. Author of a dissertation on the aspects of teaching intercultural communication in a technical writing course, Matveeva [11] creates an alternative method, focused on the dialogic/paralogic approach, seeing intercultural communication as interpersonal communication, stressing the dialogic nature of communication and focusing on developing the learners’ better understanding of culture by means of discussions of their own culture. The dialogic pedagogical perspective relies on principles provided by ‘philosophy (pragmatism), sociology (symbolic interactionism), applied linguistics (communicative teaching), rhetoric (paralogic hermeneutics), technical communication … and intercultural training (experiential learning)’, leading to a complex thoughtful form of ‘ethical intercultural teaching’, meant to develop the students’ better understanding of culture as a concept,
experiencing other cultures, ‘treating intercultural communication as interpersonal communication, and avoiding stereotyping’.

In our own educational context, viz. the teaching of scientific and technical communication in English, the focus, as far as the intercultural awareness raising elements is concerned, has been mainly on aspects such as the following: identifying barriers in communication; means of doing away with such barriers; awareness of, and avoiding bias of any type; identifying the audience’s profile and specific cultural features; differences in terms of style and register imposed by cultural differences; sensitizing students with respect to standard vs culture marked text types; taking into consideration the implications of differences in terms of nonverbal communication when communicating orally; expectations connected with humour, beliefs, perception of time, religion, politeness, taboos a.s.o. in generating pieces of written and/or oral communication.

Feedback from our master and doctoral students in multicultural groups has been conducive to reinforcing the idea that today, more than ever, focus on developing the engineering students’ awareness of intercultural differences can help them to perform successfully as engineers working in multinational and multicultural contexts.

**BIBLIOGRAPHY**


