



085

Training Engineers on Communication Skills in English

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Engineers are trained on solving problems and converting numbers into constructions, but rarely are they taught on how to communicate these. Moreover, research shows that when engineers get into the job market, communication is highly valued by them because they believe that it contributes to a successful career [9]. Similarly employers seek for people able to communicate [8].

To address this demand, two seminars taught in English, have been initiated at the Faculty of Engineering of the Aristotle University of Thessaloniki in Greece focusing mainly on senior students, i.e. students in their final year of studies as well as postgraduate or Ph.D. students. Both seminars aimed at teaching the principles of technical communication, the English language structures used in written and oral forms of technical communication as well as the presentation techniques required in order to structure and deliver an effective technical proposal and presentation. In particular, the seminars were intensive and addressed two topics: “Writing and presenting technical documents in English” 30hs long and “Presentation skills and techniques” 12hs long.

Seminars were designed on the tenet of learning outcome based curricula [2] while the humanistic approach in education [7] was considered when designing content and implementing the teaching approach. Additionally authentic tasks and communicative events to be faced by engineers in professional contexts formed part of homework since material of this type is included in English for Specific Purposes (ESP) courses [3].

Students evaluated seminars through a 23 close ended item questionnaire which included an open ended question requesting comments and remarks. Thus apart from quantitative data, qualitative data



were elicited as well. Results indicated that students were satisfied with the seminars, that the ESP orientation embedded was valued by them since they practiced their English and learnt new knowledge related to their discipline while they commented positively on the humanistic teaching approach. In fact the latter triggered personal growth and transferable skills development. Qualitative data were also extracted from graduate engineers who after they had been exposed to situations requiring ability to communicate technical knowledge they appreciated the importance of the seminars. They also commented that technical communication had been learnt through experience so far therefore these seminars offer an alternative to this.

Findings may be discussed in relation to two perspectives: a) the student perspective and b) the university perspective. Regarding students, the benefits are focused on the development of transferable skills via English. In other words, through professionally focused instruction of English, they practice skills which will be of use throughout their careers.

Regarding university, findings show how a seminar taught in English with ESP focus, can achieve a lot more than simply teaching the language. It can be outcome based, job oriented and as results show, interesting for students. ■

REFERENCES

- [1] Azami Zaharim, Yuzainee, Md Yusoff, Mohd, Zaidi Omar, Azah, Mohamed, Norhamidi, Muhamad (2009), Employers perceptions and expectation toward engineering graduates: A case study. *Proceedings of the 6th WSEAS International Conference on Engineering Education*, pp. 23-29.
- [2] Cedefop, (2011), When Defining Learning Outcomes in Curricula, Every Learner Matters. *Briefing Note*, March/April.
- [3] Dudley-Evans, T., St John, M.J., (1998), *Developments in ESP: A multi-disciplinary approach*. Cambridge: Cambridge University Press.
- [4] Ezihaslinda Ngah, Noor Raha Mohd Radzuan, Wan Jumani Fauzi, Noor Azlinda Zaina Abidin (2011), The need for competent work ready English language learners, *Procedia- Social and Behavioral Sciences*, Vol. 29, pp 1490-1499.
- [5] Kassim, H., Ali, F. (2010), English communicative events and skills needed at the workplace: Feedback from the industry, *English for Specific Purposes*, Vol. 29, pp. 168-182.
- [6] Martin, R., Maytham, B., Case, J., Fraser, D., (2005), Engineering graduates' perceptions of how well they were prepared for work in industry. *European Journal of Engineering Education*, Vol. 30 (2) pp. 167-180.
- [7] Moskowitz, G. (1978), *Caring and Sharing in the Foreign Language Class*. Boston: Heinle & Heinle. pp 5-22
- [8] Norshima Zainal Shah, (2008), Are graduates to be blamed? Unemployment of computer science graduates in Malaysia. *E-journal of the American Association of Behavioral and Social Sciences*, 18.
- [9] Sageev, P., Romanowski, C.J., (2001), A message from recent engineering graduates: results of a survey on technical communication skills. *Journal of Engineering Education*, pp. 685-692.
- [10] Seidlhofer, B. (2010), *Lingua franca English - The European Context*. In Kirkpatrick, Andy (ed.). *The Routledge Handbook of World Englishes*. Oxon: Routledge, pp. 355-371.