The Experience of Students from a Technical University with Foreign Language Courses:

Case study: The University of Copenhagen’s courses in English for technical university students, and a note on "Only One Earth" (Ward and Dubos) as study material for the language course.

The importance of linguistic skills for scientists and technologists is widely recognised. Huge piles of books and reports are written - and even occasionally read - in the international society of universities and major enterprises. The writing of reports calls for training in the appropriate LSP’s, obviously. But the specific terminology will not do alone: report writing, negotiation and seminar discussions all demand advanced general language training.

For the last year and a half the Technical University of Denmark has offered three-month courses in English, French and German. We, the undersigned, are a group of students who have followed the English course this spring. We have discussed the need for language training among technical university students.

The bulk of university textbooks on scientific subjects are written in foreign languages. In order to get the most out of our professional education, it will almost certainly prove of great value for students to receive goal-oriented training in language for scientific, technical and academic purposes early on in the course of the undergraduate’s career at a technical university. Later in the programme more training in language for general purposes will also be needed. The specific terminology of the subject chosen will soon be acquired, but the general linguistic context is often neglected; this is evident in many textbooks and reports, which although containing correct uses of terminology, are practically unreadable because the students’ general linguistic framework is inadequate. While in the course of his professional career, language specialists may well be available to the scientist, to assist by revising the language of reports and papers before publication, nevertheless, if they hope to participate in international seminars and negotiations, scientists also need oral training in language for general purposes. We find this a most urgent imperative in University education for technical and science students.

The components of such a language course should be a mixture of oral and written exercises. We find it important that students become able to participate in a relatively sophisticated dialogue in the foreign language in question as equal partners, as little hampered as possible by the language barrier. Training for this activity requires input at an advanced level, but we do not find it necessary to study technical language exclusively or even specifically - special terminologies are frequently translatable on a one-to-one basis and may ideally be looked up in a technical dictionary or searched on-line for the ever-increasing group of
privileged language pairs. Good novels of general interest and appeal, as well as topical newspaper articles, constitute welcome ingredients in the course materials.

It is a bad idea to do translations during the lessons; translation work should be done during preparation, and the lessons be dedicated to discussions. Grammar and pronunciation exercises should be a part of the training too. Small numbers are desirable in classes which are concerned with improving communication performance rather than promoting the acquisition of communicational skills alone. The smaller class permits more intensive work and the peer pressure, relevant at least as much for adult learners as for juveniles, is reduced to manageable levels so that oral output and individual performance are improved.

We conclude with a note on one work our group studied in the course of our English for Technical Students course:


This work was adopted as reading matter by University teachers offering English courses to technical undergraduates.

The book "Only One Earth" was compiled on the basis of the UN Conference held in Stockholm, 1972, on the human environment. Although the book was published 15 years ago, the subject is still "hot" and the world has not changed that much. "Only One Earth" puts into words things you already knew but which you had not taken to their logical conclusion: for example, the possible effect of the CO2 pollution of the atmosphere - the "greenhouse effect" - on the rhythm of the glaciation periods. At other times, a tendency towards verbosity and flowery turns of phrase detract from the impact of the text, and although the arguments are sound, it is not always possible for modern technical students to share the authors' optimism. Certainly there have been some positive developments in the decade and a half since this book went to press, and to this development this work, and others like it, have made a considerable contribution, although it is too easy to read the book and pat oneself on the back for sharing these right-minded opinions, notions of universal co-operation and concern, without the need to identify offenders and place responsibility, or take concrete action. The only concrete proposal is a philosophical appeal for international unity. No attempt is made to deal with the political, economic and social structures that have formed the basis for the development described in the book.

Man's interference with nature causes a division of the world into a "biosphere" and a "technosphere" - and despite the continued damage, the technosphere is here to stay, and the technocrats of the future will have their own role to play and decisions to make.
Most of us felt this subject important and relevant enough for us—embryo technocrats—to discuss, and although we were not well-disposed at first, because of the long-windedness and rather holier-than-thou attitude some of us resented in the text, we found ample material to discuss both orally and in written essays. More models and graphs would have improved the value of the book's presentation, and a more varied style could have been achieved by having each chapter written by a different subject expert, the "authors" providing "connective tissue" in the form of summaries and commentaries or prefaces, to produce the more stimulating effect of a debate and less that of a one-sided exposé.

But we found food for thought, in many cases, in our work with "Only One Earth"; we acquired a working knowledge of several types of vocabulary, and the fact that the subject was important, as well as the presence of factors and deficiencies in the presentation which we felt called upon to criticise, is by no means to be regretted in the language class for technical students, as it promotes debate.

Gitte Keidser
Birgitte Hye
Anne-Helene Hornhaver
Mads Bo Bojesen
Dov Goldstein
Jens Hauge
Hanne Jørgensen
Camilla Rump

Pernille Dorph
Bente Jeppesen
Niels Frederiksen
Knud Henrik Strømming
Jan Buciek
Henrik Nielsen
Søren Voss Albrechtsen
Charlotte Bjerregaard