Concept Building and Discussion: First Steps to Technical Writing and Presentation

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Outline
- Background – The Problem in ESP
- Overview of the English for Specific Purposes Program at CELESE
- Concept Building and Discussion
  - Learner Needs
  - Materials Development
  - Course Management
  - Teacher Training
  - Assessment
- Suggestions for ESP program developers in Japan and the rest of Asia

Background – The Problem in ESP
- World-class scientists and engineers need excellent technical writing and presentation skills
- Developing these skills is resource intensive
  - small class sizes
  - large numbers of classrooms
  - experienced instructors
  - funding
  - time

Background – The Traditional ESP Solution?
- Limit the resources required
  - give the ESP courses ‘elective’ or ‘non-credit’ status
  - introduce strict entry requirements
  - ask subject specialists to teach ESP courses (content-based teaching)
  - offer limited term programs based on external funding
  - compress courses into ‘intensive’ workshops
- Place ESP courses on the fridges of traditional English programs

Background – The Traditional ESP Solution?
- What about the rest?
  - Don’t ALL (most) science and engineers need English for Science and Engineering?
  - Where can they develop these skills?
- We propose putting ESP (ESE) at the center of university English program design
  - integrating all English courses to build ESP skills
  - working closely with subject specialists to provide real-world ESE experiences

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<p>| Student Numbers (Academic Year: 2008) |</p>
<table>
<thead>
<tr>
<th>B.Sc.</th>
<th>M.Sc.</th>
<th>Ph.D</th>
<th>Total</th>
</tr>
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<tbody>
<tr>
<td>1st year</td>
<td>1865</td>
<td>1051</td>
<td>92</td>
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<tr>
<td>All years</td>
<td>7454</td>
<td>2123</td>
<td>320</td>
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</tbody>
</table>

- Total number of students = 10,000
- Total number of undergraduate students each year = 1,800
- Students proceeding to graduate school each year = 1000 (57%)
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- Student Needs
  - English to study, research, discuss, and present content of special area of study
  - English to discuss and resolve global issues as citizens of Japan as well as of the world
  - English in the workplace

(Kensaku Yoshida, 2009)

Overview of the English for Specific Purposes Program at CELESE

Undergraduate Program (B.Sc.)

<table>
<thead>
<tr>
<th>Academic Course</th>
<th>Technical Writing 1/2</th>
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<tbody>
<tr>
<td>Communication Course</td>
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<tr>
<th>Concept Building and Discussion 1/2</th>
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<tbody>
<tr>
<td>Academic Reading 1/2</td>
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<tr>
<td>Academic Lecture Comprehension 1/2</td>
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<td>Communication Strategies 1/2</td>
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Concept Building and Discussion 2

2nd year

<table>
<thead>
<tr>
<th>Academic Reading 1/2</th>
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<tbody>
<tr>
<td>Concept Building and Discussion 1/2</td>
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</table>

Course Arms (CBO 1)

- design and complete a feasible project within a small group
- work in a group and negotiate simple problems with the assistance of the teacher
- use Internet and library resources to find information on a particular topic
- present simple findings to an audience in well-formed sentences from a prepared script
- prepare and deliver a convincing speech with comprehensive pronunciation and intonation

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Concept Building and Discussion

- Summary of Goals
  - guide students on the basic principles of scientific research
  - help students become independent learners
    - teacher-centered → group-centered → learner centered
  - provide students with the basic language to communicate concepts in science and engineering
  - provide a foundation for technical writing and presentation
- Overview of Course
  - Task-based learning (processes → results → discussion)
  - Two group projects (Internet / Survey)
  - Individual project (Experiment based)

Concept Building and Discussion

- Teacher Training
  - rigorous hiring procedure
  - part-time teacher workshops (3 times a year)
  - e-mail correspondence
  - web-page/email announcements
  - lunch-room feedback sessions
- Assessment
  - standardized grading criteria
  - in-class assessment guides
  - global proficiency test measures

Concept Building and Discussion

- Materials Development
  - In-house textbook (Anthony, Rose, Sheppard)
  - On-line materials
  - Internet resources
    - Wikipedia
    - YouTube
    - Plagiarism checking
- Course Management
  - program coordinator
  - course coordinator
  - part-time teacher liaison officer

Student Progress from 1st to 2nd year

- Writing Samples
  - ALC 1 Writing Sample
  - ALC 2 Writing Sample
  - CBD 1 Writing Sample
  - CBD 2 Writing Sample
- Global Proficiency (TOEIC-IP)

Suggestions for ESP program developers in Japan and the rest of Asia

- Establish the real needs of your learners
- Design ESP programs (not one-off, short-term courses) that aim to address these needs
  - Put ESP (ESE) at the center of university English program design
  - Ensure that your program is practical, realistic, and scalable
- Work closely with subject specialists
  - understand their ways of thinking (precise, logical, ...)
  - gain their support and understanding through a display of expertise in your own field (ESP) that matches theirs
  - capitalize on their ability to provide real-world ESP (ESE) experiences

Summary

- World-class scientists and engineers need excellent technical writing and presentation skills
- Developing these skills in ALL (most) of our students is resource intensive
  - class sizes, classrooms, instructors, funding, time
- We propose putting ESP (ESE) at the center of university English program design
  - integrating all English courses to build ESP skills
  - working closely with subject specialists to provide real-world ESE experiences