1. **Purpose of these notes**

The purpose of this brief paper is to offer colleagues who are working "at the coal-face" in situations where they are required, often with inadequate time, money and resources to plan, mount, maintain and improve ESP/EST programs, a procedural model which can be of practical help to them in planning and executing their task effectively.

2. **Why a Model?**

A model has, as its purpose, the representation of the essential characteristics of the real life situation in such a way that we get a clearer understanding of the situation and, as a result, some indication as to how to manage it. In this case, the model represents the phases involved in developing an EST/ESP program from scratch.

I believe that the model here is neither too general nor too specific to be of immediate use to ESP/EST program developers. It represents the crystallization of experience in developing, or encouraging the development of, ESP programs in various countries and contexts.

3. **The Rationale upon which the Model is based**

Any project arises from an identified need, an expression of interest and a commitment of support from an authorizing or funding body. This is the "rationale" for the program. It may be phrased in very general terms such as "We must do something to reduce the number of accidents occurring on the oil rig as a result of communication breakdowns" or "The foreign students in Engineering are not writing examination answers which reflect the knowledge they possess as demonstrated in their workshop activities" or "These doctors have to be able to work effectively with English-speaking colleagues and patients." If the problem is severe enough and the interest in solving it is proportionally high, then in general, the authorities be they a government agency, a research funding body, a faculty dean or a departmental head, is usually willing to endorse and encourage an effort to provide an adequate solution to that problem. It may be in the form of merely releasing someone from part of his regular duties to devote some time to the new task, or of providing him with the facilities and resources necessary to do a pilot study or to determine how best the problem should be tackled.

However the commitment is realized, the subsequent attempt to provide a solution must necessarily work within the constraints of time, personnel and money available. This means compromise, and compromise means a job less thoroughly or less well done than those handling it would have liked. However, given that compromise is virtually always necessary, it is important to know at what points compromise will result in the least damaging effects on the final outcome. An operational model helps the teacher or the applied linguist to examine the realities of his situation and to determine the phases to which greatest attention will be given.

For example, there would be little point in spending 80% of the time and money available for the project on a detailed needs analysis if the remaining 20% of the resources could not produce an adequate program. On the other hand it would be a mistake to spend the greater part of the time, money and effort available on developing and evaluating a set of instructional materials if they were based on an inadequate needs survey and goals specification and left little or no resources for the effective implementation of the program.
The Phases of ESP/EST Curriculum Development and Evaluation

4. The Basic Information Gathering Phase:

4.1 Focus on Purpose

Most ESP/EST projects have to begin with an information-gathering stage during which the purpose of the program, its goals, those who will benefit from it (the students, the institution) and those who will be required to teach it are all clearly specified and described.

The tools used here are usually instruments to survey the 'status quo' viz. questionnaires, structured interviews, controlled observation and checklists. The outcome is a clear description of what is and what is needed in terms of current practice and expertise, desired goals in terms of the skills required by students, and the necessary instrumentation in terms of the qualities of the personnel required to teach the program.

4.2 The Production Phase:

4.2.1 Focus on Language and Language Use

The production phase may have to include two components. The first, a selection of the appropriate language to be included in the program in terms of mode (written or oral), content (specified subject matter), reader-writer relationship (i.e. who the material is aimed at) and any other variable which appears appropriate, such as the inclusion or exclusion of accompanying illustrations, figures, tables, graphs, etc.

4.2.2 Focus on Teaching, Learning and Testing

Teaching points representing the characteristics of the target discourse are selected, practice material chosen and, if possible, exercise tasks, which take into consideration the difficulties that students might encounter in mastering the material, are developed and sequenced. At the same time tests can be developed. These can be criterion-referenced tests which are made up of the kinds of tasks the student is being taught to master and reflect the target discourse. One way of doing this is to turn exercise material in the program into testing material. These "syllabus embedded" tests help to determine what is being learned and how well.

4.2.3 Focus on Classroom Interaction

Methodological procedures for the appropriate exploitation of the teaching materials are developed and tried out. As well as being judged in terms of how successfully a teacher can use them, how "enjoyable" they are for teacher and student, it is also important to determine the extent to which they generate the kind of activity or language which has been identified as desirable.

4.2.4 Focus on Teacher Training

It is essential that teachers selected to use novel instructional material be adequately briefed as to the principles upon which it was written, the desired outcomes in terms of what the student should learn to do, and the ways in which the material might be best exploited in class. Many otherwise adequately planned ESP/EST programs founder because of inadequate teacher training.

4.3 Evaluation and Revision Phase:

4.3.1 Focus on Formative Curriculum Evaluation

The purpose of one kind of evaluation is to provide the program planner with information which he can use to make immediate improvements in the materials being produced. This is called formative evaluation and can be carried out by
directly observing the classes in which the new materials are being used, eliciting comments and opinions from the students, requesting comments and suggestions from the teacher, and building in tests to determine how much of what should be being learned is being learned.

4.3.2 Summative Evaluation

Summative evaluation, on the other hand, is carried out after the program has been implemented and taught one or more times. The information gained at this stage includes not only the extent to which the program is achieving the goals set for it, but also the extent to which there are unforeseen advantages accruing to the students, the teachers or the institution. For example, one of the outcomes of a successful EST/ESP program might be increased student use of the library putting unexpected pressure on library personnel and creating stress at another point in the system.

That briefly is an overview of the phases of development represented in the model. Each phase has listed against it interesting examples of the kind of work which can be carried out at that point. Readers may care to follow up the references for themselves in order to expand upon this limited discussion of a very large topic.
Pre-Program Development Stage

A stage of educational decision-making during which an unsatisfactory situation is identified and an interest in and commitment to remediying the situation is expressed in the form of a RATIONALE.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Focus on Purpose</th>
<th>Basic Information Gathering Phase</th>
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</thead>
<tbody>
<tr>
<td>Point of departure</td>
<td>Information about student needs</td>
<td>Richterich</td>
</tr>
<tr>
<td>Provide</td>
<td>Information</td>
<td>Mackay</td>
</tr>
<tr>
<td>From which are identified</td>
<td>Special purposes in terms of operational skills</td>
<td>Mackay</td>
</tr>
<tr>
<td>On the basis of which are selected</td>
<td>Texts</td>
<td>Mountford</td>
</tr>
<tr>
<td>Which provide</td>
<td>Descriptions of some or all of the language deemed necessary</td>
<td>Selinker; Selinker et al.; Swales, Tyma, Smith, Romler; see Pike</td>
</tr>
<tr>
<td>FOCUS on Language &amp; Language Use</td>
<td>Production Phase</td>
<td></td>
</tr>
<tr>
<td>Focus on Teaching, Learning and Testing</td>
<td></td>
<td></td>
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<tr>
<td>From which are selected and sequenced</td>
<td>Teaching points</td>
<td>Morrison; Cohen, et al.</td>
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<tr>
<td>On the basis of which</td>
<td>Teaching materials and testing instruments are developed</td>
<td>Morrow; Allen and Widdowson; Long et al.</td>
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<tr>
<td>FOCUS on Classroom Interaction</td>
<td>Phillips &amp; Shettesworth, Fanselow, Long</td>
<td></td>
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<tr>
<td>Focus on Teacher-Training</td>
<td></td>
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<tr>
<td>And</td>
<td>Appropriate teacher-training is undertaken</td>
<td>Ewer; Selinker; Mackay and Bosquet</td>
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<tr>
<td>FOCUS on Evaluation</td>
<td></td>
<td></td>
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<tr>
<td>Then</td>
<td>Materials are taught under observed conditions to determine their day-to-day effectiveness and subsequently modified in the light of feedback</td>
<td>Mackay</td>
</tr>
<tr>
<td>Summative Evaluation Phase</td>
<td></td>
<td></td>
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<tr>
<td>And</td>
<td>The congruence between the goals set and student performance is determined. Materials and methodological procedures are revised in the light of this information.</td>
<td>Allen and Bachman</td>
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</tbody>
</table>

A Model for Practical ESP/EST Curriculum Development and Evaluation


