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ABSTRACT
        A plan of action is presented for teachers of English for
Special Purposes (ESP) who wish to strengthen their professional competence,
either in ESP strategies and techniques or in content areas in which they
might teach. It begins with a list of recommended books, journal articles,
periodicals, World Wide Web resources, electronic discussion lists, ESP
directories, and providers of ESP training (in Great Britain only). A
subsequent section suggests techniques and sources for gathering information
about the profession and employment within it and about instructional
approaches and content. An example of some of the information an ESP teacher
in computer science might seek out is offered. This includes a definition of
computer science, names of two major professional associations, introductory
books, discourse samples (oral and written), and relevant specialized or
high-frequency vocabulary. Contains four references. (MSE)

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Professional Development in ESP:
A Heuristic for Self-Study

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March 13, 1997

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  For ESP teachers who are interested in strengthening their professional competence, this presentation offers an organized plan. Based upon a simple heuristic, this self-development guide enables teachers to assist language learners in professional and vocational areas with greater expertise.

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Abstract

For ESP teachers who are interested in strengthening their professional competence, this presentation offers an organized plan. Based upon a simple heuristic, this self-development guide enables teachers to assist language learners in professional and vocational areas with greater expertise.

Introduction

English for Specific Purposes is a relatively recent movement in English language education, and most practitioners have little formal training in either ESP or the vocation/profession they support. There are few graduate schools that offer programs in ESP, and the demand for ESP educators far surpasses the number of knowledgeable English teachers who have academic and/or employment experience in the areas they are hired to serve. Consequently, most ESP professionals, currently employed in the field, are self-taught. Though these teachers may be equipped with training in TESL/TEFL, theoretical and/or applied linguistics, composition and rhetoric, technical communication, speech, literature, or a variety of other areas of specialization, it is estimated that roughly 95% of those currently teaching in ESP contexts have educated themselves in ESP and the fields they support through personal investigation (Orr, 1995b).

If this is the current state of affairs, what is presently needed in the field of ESP is some instruction on *how* English teachers entering ESP for the first time can efficiently orient themselves to ESP as well as the vocation or profession of their language learners. This paper attempts to assist the field in this area.

In order to help English language teachers who are new to ESP and/or lacking sufficient knowledge of the vocation or profession they support, this paper offers a simple guide to assist ESP educators in their self-development. The second section lists some excellent starting places for self-orientation to the field of ESP, the third section offers advice on how to learn more about the culture and language practices of a particular vocation or profession, and the forth section provides an illustrative overview of the computer science profession to demonstrate what kind of information can be useful for understanding a particular line of work. The information that ESP teachers gather to orient themselves to

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the vocation or profession of their students is also the kind of information their students need if they are just beginning coursework or employment in the field. This information, furthermore, can offer a rich source of authentic material for teachers to employ in their ESP language instruction.

Self-Orientation in ESP

The following lists are not comprehensive but, rather, point to excellent *starting places* for learning about ESP theory, practice, people, and training.

Recommended Books

Bhatia, V. K. (1993). *Analysing genre: Language use in professional settings.* London: Longman.

Hutchinson, T. & Waters, A. (1987). *English for specific purposes: A learning-centered approach.* Cambridge: Cambridge University Press.

Robinson, P. (1991). *ESP today: A practitioner's guide.* New York: Prentice Hall.

Swales, J. M. (1990). *Genre analysis: English in academic and research settings.* Cambridge: Cambridge University Press.

Recommended Articles

Johns, A. M. & Dudley-Evans, T. (1991). English for specific purposes: International in scope, specific in purpose. *TESOL Quarterly, 25*(2), 297-314.

Johns, A. M. (1990). ESP: Its history and contributions. In M. Celce-Murcia (Ed.), *Teaching English as a second or foreign language* (2nd ed., pp. 67-78). New York: Newbury House.

Recommended Periodicals

English for Specific Purposes: An International Journal

Elsevier Science Inc.
660 White Plains Road
Tarrytown, NY 10591-5153 USA
Fax: 914-333-2444
E-mail: freesamples@elsevier.co.uk
http://www.elsevier.nl/inca/publications/store/6/8/2/682.pub.shtml

Recommended WWW Resources

Resources for Teachers of English for Science and Technology
http://www.u-aizu.ac.jp/ t-orr/est1.html

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Resources for ESP in Business Administration and Economics
http://econscience.uni-paderborn.de/WiWi/English/home.htm

Abstracts of Articles in *English for Specific Purposes*
http://www.elsevier.nl/estoc/publications/store/6/08894906/

Miscellaneous Links to Many ESP Sources
http://www.salsem.ac.at/csacl/esp/links.htm

Samples of Multimedia ESP instructional materials from EduSoft Ltd.
http://www.edusf.com/products/lengl/englspec.htm

Recommended ESP Discussion Lists

TESP-L (Send e-mail to listserv@cunyvm.cuny.edu; in the body of the message, type SUBSCRIBE TESP-L followed by your real name. For example, SUBSCRIBE TESP-L Jane Q. User. This list is only open to members of the TESL-L mailing list. To subscribe to TESL-L, send e-mail to eslcc@cunyvm.cuny.edu; in the body of the message, type SUBSCRIBE TESL-L followed by your real name. For example, SUBSCRIBE TESL-L Jane Q. User.)

EST-L (Send e-mail to listserv@asuvm.inre.asu.edu; in the body of the message, type SUBSCRIBE EST-L followed by your real name. For example, SUBSCRIBE EST-L James Q. User.)

Recommended ESP Directories

World Wide Web International Directory of Professionals in ESP
http://www.u-aizu.ac.jp/ t-orr/international-esp-menu.html

Castro, A. (1995). *The English for specific purposes directory.* Alexandria, VA: TESOL.

Recommended Providers of ESP Training

Language Studies Unit
Department of Languages & European Studies
Aston University
Birmingham B4 7ET, UK
Tel: 0121-359-3611 (ext. 4242)
Fax: 0121-359-2725
E-mail: lsu@aston.ac.uk

Centre for English Language Studies
Westmere
The University of Birmingham
Birmingham B15 2TT, UK
Tel: +44(0)121 414-3239/5695
Fax: +44(0)121 414-3298
E-mail: j.e.gardinen@bham.ac.uk

The Secretary
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Tel: UK + 1524-592437
Fax: UK + 1524-594149
E-mail: iele@lancaster.ac.uk

Self-Orientation to a Vocation or Profession

This heuristic is designed to help make self-orientation to a particular vocation or profession more efficient and productive.

To Obtain an Overview

Guiding Questions

1. How does the vocation/profession define or describe itself?
2. What goals motivate and direct vocational/professional activities?
3. What events, discoveries, and people distinguish the vocation's/profession's history?
4. How does the vocation/profession subdivide itself into areas of specialization?
5. What concerns or issues are important to each area of specialization?

Good Sources for Answers:

- career guidance information found in schools or public libraries
- new member information for the field's major organizations
- home pages of vocational/professional associations
- the first chapter of introductory textbooks on the field
- general and specialized encyclopedias
- published letters/articles on issues in the vocation/profession
- knowledgeable informants

To Obtain Information on Membership

Guiding Questions

1. What constitutes membership in the vocation/profession?
2. What are the possible employment/career options?
3. How are these positions obtained?
4. What qualifications are required?
5. How does the vocation/profession define and reward expertise?
6. How is authority/responsibility distributed within the vocation/profession?
7. How does the vocation/profession define and reward leadership?

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Good Sources for Answers:

- career guidance information found in schools or libraries
- new member information for the field's major organizations
- association constitutions and policy statements
- home pages of vocational/professional associations
- vocational/professional job ads in the field
- minutes of local, national, and international meetings
- management distribution charts
- knowledgeable informants
- special award nomination information
- promotion policy statements

To Obtain Information on Language Use

Guiding Questions

1. When is English spoken or written within the vocation/profession?
2. What are the intended purposes of these language acts?
3. Who are the intended audiences?
4. How do different audiences and contexts affect the discourse?
5. Can these language acts be classified, described, and taught?
6. What English vocabulary frequently appears in the field's discourse?
7. What grammatical constructions frequently appear?
8. What organizational/rhetorical patterns are conventional?
9. What conventions govern layout and mechanics?
10. What conventions govern spoken discourse?
11. What standards and procedures govern language exchanges?
12. How much creativity/difference is tolerated in the field's discourse?
13. What language practices distinguish the expert from the amateur?

Good Sources for Answers:

To answer questions 1-14, you must enter vocational/professional environment where the English you are investigating takes place. You need to

- collect written and spoken samples of discourse for study
- talk to writers and speakers about their language use
- talk to writes and speakers about their language training
- collect articles on language use within the field
- collect writing guides/advice used by practitioners in the field
- collect relevant dictionaries of jargon and technical terminology
- obtain referee evaluation sheets used to judge proposals and manuscripts
- list frequent language errors and difficulties in the field
- communicate with other researchers/educators working in the same area
- gather pertinent articles from ESP literature

An Example from the Computer Science Profession

The following is an example of some of the information an ESP teacher supporting students and professionals in computer science might gather to orient him/herself to the computer field. This kind of information, of course, is does not only help English teachers understand more about computers and language use within the computer field, but this information is also useful for students who are just beginning their studies in this area.

Definition of Computer Science:

Computer science is the systematic study of algorithmic processes that describe and transform information — the theory, analysis, design, efficiency, implementation, and application. The fundamental question underlying all computer science is "What can be efficiently automated?" (Association of Computing Machinery)

Two Major Professional Computer Organizations:

IEEE[1] Computer Society (http://www.computer.org)

Association for Computing Machinery (http://info.acm.org)

Both of these sites house a tremendous volume of information on professional policies, computer-related publications, conferences and other professional activities, career opportunities, computer-related news, special interest groups, organizational structure, manuscript guidelines, etc.

Excellent Introductory Books on Computers and Computer Science:

Student Textbook: Capron, H. L. (1995). *Essentials of computing* (2nd ed.). Redwood City, CA: Benjamin/Cummings.

General Reference: maranGraphics. (1995). *Computers simplified: The 3-D visual approach to learning about computers* (2nd ed.). Foster City, CA: IDG Books.

General Reference: Kinkoph, S., Fulton, J., & Oliver, K. (1994). *Computers: A visual encyclopedia.* Indianapolis, IN: Alpha Books.

Dictionary: Freedman, A. (1995). *The computer glossary: The complete illustrated dictionary* (7th ed.). New York: Amacom.

Examples of Written Discourse in Computer Science[2]

- e-mail messages
- e-mail discussions
- proposals
- technical reports

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[1]Institute of Electrical and Electronics Engineers, Inc.

[2]For more detailed treatment of written discourse in computer science, see Orr 1995.

- conference papers (published in conference proceedings)
- correspondences (a 1-4 page journal article)
- concise papers (a 5-14 page journal article)
- papers (a 15-35 page journal article)
- biographical sketches
- abstracts
- chapters in books
- books (textbooks and scholarly books)
- OHP slides (to accompany presentations)
- PR (brochures, conference announcements and posters, etc.)
- book/software reviews
- on-line computer documentation
- instruction manuals
- business letters
- Web pages
- letters to/from an editor (in periodicals)

Examples of Spoken Discourse in Computer Science

- conference/seminar presentations
- telephone conversations
- project team discussions
- speeches and keynote addresses
- course lectures (with and without demonstrations)
- committee/faculty/business meeting participation

Examples of Specialist Computer Science Vocabulary

areal density, benchmark, command queuing, femtosecond, hypercube, LISP, synchro-stratum, thermionic, Unicode, wafer, WAIS[3]

Examples of Non-Specialist Computer Science Vocabulary

computer screen, click, delete, e-mail, file, font, key, keyboard, highlight, Internet, menu, mouse, printer, scan, Web page, window, World Wide Web (vs. Worldwide Web)[4]

High Frequency General English Vocabulary

analysis, application, device, efficient, human, management, perform, problem, project, research, results, such, time, use, verify, which[5]

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[3]This vocabulary should be taught by computer scientists who cover this material in computer science courses. Language faculty should teach the English used in the definitions and explanations of these specialist terms.

[4]This vocabulary should be taught by language teachers.

[5]See Orr, T. Christianson, K., Goetze, C., & Okawa, H., 1995

High Frequency or Problematic Grammatical Features

Adjective Clauses: This paper discusses some general requirements for CASE tools *which support object-oriented software development.*

Passives: In this paper, a model of a heterostructure bipolar transistor incorporating an RT collector structure *is developed and discussed.*

Anthropomorphization:[6] computers *perform*, the screen *shows*, a computer program *instructs*, this paper *presents*[7]

Conclusion

Self-education characterizes much of an ESP teacher's professional work. ESP teachers must not only develop their understanding of ESP, but they must familiarize themselves with much of the content, language, and conventions that govern the vocational/professional practice of their English language learners. The simple heuristic presented in this paper offers one possible study plan for ESP teachers. Further treatment of this important issue in ESP is sorely needed.

References

Kojima, S., & Kojima, K. (1978). S (inanimate subject) + Y + O: A syntactical problem in EST writing for Japanese. in M.T. Trimble, L. Trimble, & K. Drobnic (Eds.), *English for specific purposes: Science and technology* (pp. 198-226) Corvallis, OR: Oregon State University Press.

Orr, T. (1995a). *Models of professional writing practices within the field of computer science.* (Doctoral dissertation, Ball State University). Dissertation Abstracts International, 56A, 4754.

Orr, T. (1995b). Studying the professions we serve. *TESOL ESP News* 4(2): 11-12.

Orr, T., Christianson, K., Goetze, C., & Okawara, H. (1995). *An analysis of lexical frequency and discourse need for instructive purposes.* (Tech. Rep. 95-5-002). Aizuwakamatsu, Japan: University of Aizu. (ERIC Document Reproduction Service No. ED 389 229)

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[6]inanimate subjects with active verbs

[7]This seems to be especially problematic for Japanese. See Kojima, S., & Kojima, K., 1978.

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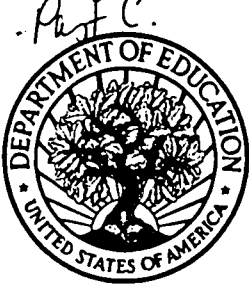
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Sincerely,
Thomas Orr
Associate Professor

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