International Education and Exchange Through Work-Based Learning

Background and Rationale:

The impetus to explore work-based learning as a means to increase North American collaboration, cooperation, and exchange emerged from a meeting of a North American trinational advisory committee convened in Washington, D.C. in March 2000. [For use of the term “work-based,” see "Terms and Definitions" below.] The purpose of the meeting was to review the results of a feasibility study sponsored by the American Council on Education (ACE), la Asociacion Nacional de Universidades e Instituciones de Educacion Superior (ANUIES), and the Association of Universities and Colleges of Canada (AUCC), supported by the three governments. The study had been developed to test the feasibility of creating a North American “marketplace” to further higher education cooperation, collaboration, and exchange. It was based on the identification and analysis of obstacles to exchange, the description of 15 existing mobility programs, the response to a survey questionnaire, feedback from advisory and reference groups, and an earlier draft concept paper and first draft feasibility study.

After analysis and discussion, the advisory committee and three partners concluded that to bolster student interest in international exchange, student mobility needs to be viewed not only as traditional language- and culture-based junior year abroad, but also and alternatively as an opportunity for career development and professional enhancement.

The committee noted that work-based opportunities can galvanize exchanges by linking mobility to professional life and addressing student and corporate interests, and may also address identified obstacles to exchange—lack of language proficiency and shortage of financial resources—by increasing need for language acquisition and providing needed financial remuneration to participating students.

Therefore, the committee charged the principal investigator with developing an environmental scan focusing on existing programs, issues, and sources; and circulating the document for input from the advisory committee and reference groups.

This paper focuses on:

- Terms and definitions.
- Sample programs.
- Conclusions, issues, and additional areas for consideration and study.
- Sources and resources.

Terms and Definitions:

To allow shared understandings in this discussion, several terms need to be defined.
It should be noted that, first, there appears to be no generic term (in the United States) for the variety of work-based approaches in higher education: work-study, experiential learning, cooperative education, service learning, practical training, internships, and others are used. (TelCon, Jay Donahue, U.S. Department of Education, 5/24/00; Washington Post, see sources listed at the end of this section.) Thus, for present purposes, the new term "work-based exchanges" will be used as the generic term.

Second, it is likely that terms may be used differently in each country. Margo Schultz of WICHE and CONAHEC identified a long-standing need for a glossary of terms in higher education for use among the three countries and in three languages.

Specific terms:

**Work-study**—In the United States, "work-study" is a very specific term referring only to federally funded student aid, need-based paid employment for students, cost-shared between the employer and U.S. government.

**Cooperative Education**—Cooperative education is a structured educational strategy integrating classroom studies with learning through productive work experiences in a field related to a student's academic or career goals, according to the National Commission for Cooperative Education. Co-op education makes time-to-degree five years in most cases. While it once had government support in the United States, it no longer does. It is primarily practiced by a few institutions in the United States (Northeastern University the best known) and by institutions in Canada. Co-op programs take the form either of alternating (full-time work followed by full-time academics) or parallel (concurrent work and academics) programs.

**Internships**—ITESM in Mexico defines internships as an experience in which "students learn how to interact in the workplace and apply the knowledge of their specialty." The Canadian Association for Co-operative Education defines internships as "an extended period of work, typically 12 to 16 months of continuous duration. University and college students are employed in settings which provide work experience directly related to their academic programs and career objectives." In the United States, internships may or may not relate directly to course of study, be credit-bearing, or provide significant pay. Internships are popular in the United States today because they are seen to enhance students' marketability for employment.

**Service-learning**—Service related to courses of study, often in community/nonprofit organizations. May or may not provide academic credit for these experiences.

Sample Programs:

Work-based or internship-based international student exchange programs are offered in a few government programs, through a few large nonprofit institutions (in the United States), and at individual institutions in all three countries (found through web sites on study and work abroad, some of which are included in "sources," below).

- **Government programs**: The Program for North American Mobility in Higher Education, the United States / European Program, and the Canada/European Program.
• **Programs of large nonprofit program organizations**: Association for International Practical Training (A IPT); CIEE: Council on International Educational Exchange; The International Partnership for Service Learning (IPSL); International Student Exchanges Program (ISEP); Friends World Program (FWP); Institute of International Education (IIE).

• **Institutional Programs**: Canadian programs at University of British Columbia, University of Alberta, Capilano College, and others; ITESM, Mexico; U.S. institutional programs found through comprehensive sites.

(1) **The Program for North American Mobility in Higher Education** (and its related programs between the EU and Canada and EU and the United States) includes the possibility of work-based or internship experiences. Quick review reveals that few of the consortia appear to have utilized this approach, but those that do can provide good examples of the possibilities for such programs:

(A) North American programs:

(i) Daytona Beach Community College, Universidad Veracruzana, St. Clair College, and six others: "Education and Mobility in Industry, Information and Technology," a project which "integrates classroom learning and cooperative education/work experience by providing private and public sector work opportunities during the exchanges."

(ii) Pratt Institute, Universidad de Guadalajara, York University, and six others: "Consortium in Sustainable Community Development and Planning," a program in which "students participate in formal courses and as interns in community-based programs."

(iii) Lansing Community College, British Columbia Institute of Technology, Universidad de Colima, and three others; plus IBM: "A Trilateral Joint Venture to Provide Institutional Cooperation, Student Mobility, and Faculty Exchange in Computer Systems Technology," a program in which students participate "for a semester of study and customized work experience activity" and in which "a capstone internship is part of the academic experience."

(iv) West Virginia University, Mount Royal College, Universidad de Guanajuato: "Consortium for Design Education," a program that develops curricula in interior design and construction, involves students in actual and virtual problem-solving teams trilaterally, offers classroom and field-based experience, and provides a foundation for common accreditation.

(B) EU/U.S. programs:

(i) Austin Community College, Handwerkskammer Koblenz (Germany), and others: A program in computerized high technology processes, which establishes "college-accredited exchanges with work-based learning to prepare workers for technical jobs."

(ii) Oregon State University, Universite Lyon 1 (France), and others, "Transatlantic Academic Student Internship Program," which provides internships for business students. The project will make it economically possible for students
who would otherwise not have the opportunity for study abroad to do so and includes orientation, cultural background, and intensive language training. Government support provides student stipends, making opportunities accessible to students of lesser means in all countries. Credit transfer and language acquisition are requisite parts of agreements and programs. The preponderance of programming is in technical and/or professional fields. The program is competitive and selective. Individual students cannot apply directly for study abroad; awards are made to institutions only.

(C) EU/Canadian programs:

(i) École Polytechnique de Montréal, University of British Columbia, McGill University, Pulp and Paper Research Institute of Canada, Institut National Polytechnique de Grenoble, Universitat Politècnica de Catalunya, Universidad Complutense de Matrid (ucm), Université de Liège: "Advanced Training and Professional Development in Paper Technology," in which partners will develop a co-operative training program in paper technology at the graduate and professional training levels. Project will focus on systems engineering, emphasizing student and teacher exchanges and leading to the establishment of an international diploma.  
http://www.gresip.polymtl.ca

(ii) University of Ottawa, Université Laval, University of New Brunswick, Université de Moncton, Universitat Autonoma de Barcelona, Pädagogische Akademie des Bundes in Wein, Universidade do Minko: "The Training of Modern Language Teachers," pools institutions resources to improve training of modern-language teachers involving student academic and work placement. It includes structured student teacher/trainer and administrator exchanges, provides systematic and ongoing exchanges of curriculum and teaching materials, and promotes virtual mobility by modern communication technologies.

(iii) Guelph University, McGill University, Université Laval, University of Saskatchewan, University of Alberta, Agriculture and Agri-Food Canada Food and Development Centre, Universidade Catolica Portuguesa, École Nationale Supérieure des Industries Agricoles et Alimentaires (Ensi), University College Cork, Technical University of Denmark, Technische Universität Munchen, Centre d’Enseignement et Recherche des Industries Agricoles et Chimiques (Ceria), University of Lund, University of Reading, Agricultural University Wageningen, Agricultural University of Norway: "Foodatlantic: European-Canadian University Network for Promoting the International Dimension of Training Programmes in Food Studies," includes three study activities: student exchange and internships, development of teaching modules on new topics (i.e. quality/innovation in management), and a feasibility study on the creation of international masters degree in food studies from the existing European master’s degree program.  
http://www.foodsci.uoguelph.ca/foodatlantic.html

Note: Programs above are described in "Existing Programs, doc. IV." To review North American Programs (and US/EU programs) by subject heading and/or by name of program, see FIPSE site,  
(2) Large nonprofit organizations (based in the United States) that offer work-based experience abroad for U.S. and other students; and U.S.-based experience for non-U.S. citizens:

(A) Association for International Practical Training (AIPT)
10400 Little Patuxent Parkway, Suite 250
Columbia, MD USA 21044-3510
Phone: (410) 997-2200
http://www.AIPT.org

This nonprofit organization promotes international understanding through cross-cultural on-the-job, practical training exchanges for students and professionals between the United States and 70 other countries. A new online placement service, PINPOINT, matches individuals seeking training opportunities with appropriate training positions in their field of education or experience.

AIPT is also the United States affiliate of the International Association for the Exchange of Students for Technical Experience (IAESTE), which provides international training opportunities for university students in engineering, architecture, agriculture, computer science, mathematics, and natural/physical sciences, as well as hospitality and tourism.

AIPT also offers short-term experiential learning programs for professionals and students from many fields and countries. It sponsors non-U.S. citizens for practical training and on-the-job training in the United States (under a J-1 exchange visitor visa program). For U.S. citizens, it assists with finding internships overseas.

Each program carries application and processing fees. Trainees are responsible for their own airfare, incidental expenses, and insurance coverage. AIPT fees can be paid by the trainee or the employer, and range (for students) from $400 to $800.

(B) CIEE: Council on International Educational Exchange
205 East 42nd Street
New York, NY 10017-5706
Phone: (888) COUNCIL
http://www.councilexchanges.org/work

CIEE is a nonprofit organization that offers three work abroad programs: paid, seasonal employment abroad, volunteer, unpaid projects, and English teaching in China. Destinations are France, Ireland, Canada, Germany, New Zealand, Costa Rica, and Australia.

CIEE helps students find paid or unpaid internships that may or may not be in student's professional field. For example, the first provides three- to six-month placements for college students or recent graduates to earn money abroad, not related to field of study (e.g., bartender in an Irish pub). (Program fees (for placement and miscellany) are $300 to $400; airfare needs to be provided by the student.) Some named scholarships with financial assistance for students with need are available. The "Teach in China" program covers half the student's
airfare if he/she spends a year, but not for shorter-term teaching. Programs are designed to cover room and board and local expenses through wages. The Council also offers traditional study abroad opportunities for American undergraduates, as well as Faculty Development Seminars.

For non-U.S. citizens, CIEE has a program that imports young professionals for training in the United States (under a J-1 exchange visitor visa program); and another, which imports interns to work in businesses.

(C) International Partnership for Service Learning
815 Second Avenue, Suite 315
New York, NY 10017
Phone: (212) 986-0989
http://www/ipsl.org
http://www.studyabroad.com

The mission of this nonprofit organization is "fostering programs that link community service and academic study." They offer off-campus programs in the Czech Republic, Ecuador, England, France, India, Israel, Jamaica, Mexico, the Philippines, and Scotland. Program materials appear to be aimed at students in the United States and Canada.

A student can receive credit for formal academic study, but must receive prior approval from home campus officials. Academic credit is not awarded for the community service experience itself. Program fees equal $250.

Existing financial aid from U.S. and Canadian colleges and universities can be applied to these programs. (This is also the case in other programs.)

(D) International Student Exchange Program (ISEP)
1601 Connecticut Avenue NW, Suite 501
Washington, D.C. 20009
Phone: (202) 667-8027
http://isep.org

Among ISEP’s student mobility programs are several internships. (See more on ISEP in "Existing Programs" in the feasibility study.)

(E) Friends World Program
Southampton College, Long Island University
239 Montauk Highway
Southampton, NY 11968
Phone: (631) 287-8474
FW@southampton.liunet.edu

This program places students abroad for in-depth and long-term experiential studies in a range of humanities/social science/arts fields as part of their field of study. Destinations are wide-ranging, with tuition per semester about US$8,000; total costs US$13,000 per semester.

(F) The Institute of International Education (IIE)
IIE has a few programs that offer experiential opportunities abroad for specialized professions, especially in engineering. Global Engineering Education Exchange (Global E³), a worldwide engineering exchange program underwritten by foundations and governments, provides international professional exchange experiences. RAMP, a precursor to the Program for North American Higher Education Mobility, offers professional and educational exchange, primarily in engineering, business, and environmental studies, but emphasis appears more on classroom than workplace. (See more about RAMP in the feasibility study).

Note that IIE, along with other U.S.-based organizations, manages a range of international training and development programs, supported at least in part by the U.S. Agency for International Development. These programs offer opportunities abroad to apply professional and technical expertise to international economic development. Therefore, although these programs are often directed by higher education institutions, their goal is professional development rather than international mobility of postsecondary students. Therefore, these programs fall outside the scope of this paper.

(3) Institutional Programs take a variety of forms and cover a range of fields.

(A) Canada:

Capilano College in British Columbia offers one-year preparation in Canada and one year of work in Asia through an Asia-Pacific cooperation program; this post-baccalaureate program is being expanded into Latin America (see www.capcollege.bc.ca/apmcp & /lamp). The University of Alberta offers, among other work-based programs, cooperative programs in Japan, in partnership with the University of Victoria. York University offers a work-study program abroad; and the University of British Columbia has a long-term management education linkage between its business school and institutions in China, offering work experience and executive training (see www.commerce.ubc.ca). The Canadian JET program, begun with federal funds and continuing through an ongoing consortium, offers placement and training for Canadian engineering students in Japan.

Some support for cooperative or work-based programs in Canada derives from a clearly developed youth employment strategy of the Canadian government. Additionally, recent changes in immigration law allow international students to work in Canada (with certain restriction and limitations), augmenting opportunities in work-based programming.

(B) Mexico:

The largest work-based international programs among institutions in Mexico appear to be those of Monterrey Tech University System (ITESM). The mission of these institutions is to foster practical learning and provide internships (for
incoming and outgoing students). These include company-based work for 25 to 35 incoming students per year (mostly non-paid); and other programs for outgoing students. Their internships for incoming students are both credit-bearing and non-credit bearing; and range from working with corporations to working on community development projects. (Contact: Rosalinda Ballesteros, ITESM Study Abroad Director, at rballest@itesm.mx)

(C) The United States:

Examples of work-based programs (in addition to those offered by large nonprofit organizations noted above) are diverse, unique to an institution or department, and found through web sites that collect and list these examples. See listings at the sites of the University of Michigan, the University of Minnesota, and the University of Southern California, listed below under "Sources."

Conclusions, Issues, and Additional Areas for Consideration and Study:

While this brief paper and environmental scan is not intended to be comprehensive, some conclusions may be drawn, issues identified, and considerations for further study posed.

Work-based programs are numerous, largely institution-based, and diverse. As with study abroad, most programs arise through the efforts of institutional leaders and/or interests and connections of particular faculties. However, several associations offer opportunities for internships and service learning for students from a variety of institutions. Technical and professional fields predominate, particularly business and engineering. It is difficult to ascertain easily the total number of students involved in such programs, or the trends of participation. Some programs that began with government support (especially in Canada and the United States) strive to continue operations, often with decreased funds and fewer participants.

Consensus exists that the key obstacles to the success of institution-based programs include lack of financial support for students, administrative time to develop and maintain programs, faculty buy-in, and visas for work-based opportunities. (For example, an administrator at one large university in Canada noted that its students working in Mexico could not receive pay, and therefore could do only short-term stays.) Efforts underway between the governments of Canada and the United States, if signed and implemented, could increase visa acquisition for interns between the two countries; and in the next stage, expand to include Mexico in a trilateral intern visa program.

In the long-term, work-based, co-op, and internship opportunities for international student mobility could address barriers to exchange (including language and resources); increase the number of students who travel abroad by addressing their professional interests; and broaden the range of students who participate in learning abroad. Work-based programs can also diversify the types of institutions and fields of study that engage internationally, and strengthen institutional offerings. Over time, such programs can prepare a greater number of higher education students for a global workplace.

Some good examples of existing programs, including those sponsored by the Program for North American Mobility in Higher Education, the Canada/EU program, and the U.S./EU program, provide models that address criteria for successful experiences. They
address integration between academic/professional studies and work-place experience; issues of credit recognition or transfer to preserve time-to-degree; language facility; and subsidized student costs to attract less affluent participants.

Additionally, these programs treat not only technical aspects of credit recognition and transfer (in requisite mutual agreements), but also professional and academic needs by involving faculty in travel to sites, building confidence in programs, and creating partnerships with colleagues. These professional bonds not only build trust necessary for successful partnerships, but also increase the likelihood of long-term sustainability, and of program expansion through professional networks of colleagues within a field.

In the programs of nonprofit organizations outlined above, a variety of opportunities are offered. Even in programs in which students do not receive placement directly tied to their academic/professional course of study, they nonetheless gain cross-cultural experience and understanding, as well as greater language proficiency. The greatest barrier in many programs offered by nonprofit organizations or institutions, is that students are responsible for costs of travel, program fees, insurance, sometimes tuition, and incidentals that may exceed what they earn abroad, requiring a draw on personal or family resources, and making the programs inaccessible to those of lesser means.

**Strengths of work-based programs:**
- Increase the number of students interested in international mobility.
- Provide students with cross-cultural experience at lower cost than traditional study abroad programs.
- Offer practical experience, sometimes tied directly to professional or academic work.
- Expand students' perspectives about their profession or field.
- Strengthen individual student's experience, resume, and school-to-work transition.
- Allow the "home" higher education institution to expand its offerings, and attract new or additional constituents to enroll.
- Mix and diversify industrial and corporate workforces.
- Fit flexibly into studies, as many programs are short-term, and can be undertaken during summer or semester breaks.
- Expand language acquisition spurred by "need-to-know."

**Challenges or issues:**
- Without the infusion of government or foundation funds (directly or through institutions), can these programs attract less affluent students in all three countries?
- Can these programs draw "nontraditional" students, that is, students who are part-time, older, with family responsibilities, at community colleges, or with a need for steady paid employment?
- Although most of these programs are now in technical and professional fields, do they lend themselves to traditional academic disciplines as well? (Should they?)
- Is awarding of credit more difficult than, or the same as, other exchanges, that is, are these types of programs more or less likely to increase time-to-degree?
- Is measuring, assessing, and monitoring the quality of these programs different from or more difficult than other international exchanges?

**External issues:**
• Visa acquisition: Are visas more difficult to obtain for work-based or co-op programs than for traditional academic classroom exchange programs? Can government agreements ease the process?
• Is there opposition from workers who may fear competition from foreign workers?
• Are regulatory issues more difficult in these than in other programs (e.g., health insurance, paperwork)?
• Are legal and liability issues for institutions and/or corporations for these programs different from others? Do they differ between international and domestic students, workers, and interns?
• Are there ways to enlist greater financial and placement support from corporations? Are there ways to raise the awareness of corporations to the benefits to their workforce by hosting incoming international interns?

Additional areas for consideration and study:
• A more comprehensive study should be undertaken to explore the full range of existing programs in international work-based learning, internships, and cooperative education to get a sense of numbers and trends; and to glean from these programs examples of best practices to be posted on the “virtual marketspace.”
• Further study should be done surrounding accessibility of programs to students of limited financial means in all three countries, and of sources of support and models that work to address student need-based support.
• A glossary of terms (with meanings for each culture), in three languages, should be developed to advance discussion of these types of exchanges.
• Relevant government agencies (e.g., Departments of Commerce, Labor, Science, Energy, Education, Environment) should be convened in each country with corporations and foundations, to explore joining forces to create partnerships to further trinational mobility through work-based and internship programs.
Sources and Resources:

Miscellany:

Upcoming conference: "Global International Internship Congress, 2001." March 13-17, 2001, in Monterrey, Mexico. For presentations contact: Dr. Dan Ferguson, Brigham Young University, dan_ferguson@byu.edu. Fax: (801) 378-7461, www.byu.edu/myl/gic.


Books written for a Canadian audience:


Other useful web sites:

The University of Michigan's International Center site for overseas opportunities, www.umich.edu/????, which includes links to opportunities worldwide to work abroad. It contains a full, annotated list of references, sites, and links.

The University of Southern California, www.USC.edu/dept/education/globaled, which links to internships and work experience abroad.


Associations:

Association for Experiential Education
2305 Canyon Boulevard, Suite 100
Boulder, CO 80302
Sharon Heinlen, Executive Director
Phone: (303) 440-8844
www.aee.org
The association develops and promotes experiential education, and supports professional development and evaluation in the field of experiential education.

Campus Compact
Brown University
Box 1975
Providence, RI 02912
Elizabeth Hollander, Executive Director
Phone: (401) 863-1119
www.compact.org
This is a primarily U.S. membership organization of 675 campuses committed to engaging students in community service. However, recognizing worldwide interest, it is considering an international meeting of presidents in 2003; and is currently traveling to South Africa to seek partners there.

Canadian Association for Co-operative Education
Carol Cox, Secretary at CAFCE national office
Phone: (416) 483-3311
E-mail: co-oped@idirect.com
www.coop.uvic.ca/cafce
This association, which represents employers, governments, students, and educators, assists in and fosters the co-operative education process. It appears to be focused on domestic experiences, and consists of seven regional groups (within Canada). It has an established system and process for the accreditation of co-operative education programs in Canada, and offers accreditation guidelines on request.

Cooperative Education Association
Columbia, MD
Phone: (410) 290-3666
www.ceainc.org
With the mission of integrating work with learning, this association promotes cooperative education as the premier model of work-integrated learning. The site contains a good, multi-page history of co-op education in United States.

Council for Adult and Experiential Learning
243 S. Wabash, Suite 800
Chicago, IL 60604
Pamela Tate, President
Phone: (312) 922-5909
www.cael.org
This national organization dedicated to expanding lifelong learning opportunities for adults, in collaboration with educational institutions, industry, government, and labor. Adult learning appears to be its main focus, and international appears not to be covered.
International Partnership for Service Learning
815 Second Avenue, Suite 315
New York, NY 10017
Phone: (212) 986-0989
www/ipsl.org
Described in the text under "Programs."

National Commission for Cooperative Education
360 Huntington Avenue, 384CP
Boston, MA 02115-5096
Phone: (617) 373-3770
Fax: (617) 373-3463
www.co-op.edu
This site provides an excellent annotated list of resources in the field of cooperative education. The Commission is developing a virtual model that describes mechanisms for delivering cooperative education.

National Society for Experiential Education
1703 North Beauregard Street, Suite 400
Alexandria, VA 22311-1714
Phone: (703) 933-0017
Fax: (703) 933-1053
www.nsee.org
This nonprofit membership association of educators, businesses, and community leaders serves as a clearinghouse for the development and improvement of experiential education programs nationwide. Its goals include cross-cultural and global awareness. The organization does not appear to have an international dimension.