A VIRTUAL MARKETSPACE FOR NORTH AMERICAN COLLABORATION AND EXCHANGE

Introduction and Background

The concept of a "virtual marketspace" grew out of a meeting of a North American tri-national advisory committee convened in Washington, D.C. in March 2000. 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 governments of the United States, Mexico, and Canada. This study was developed to test the feasibility of creating a North American marketplace to advance North American higher education cooperation, collaboration, and exchange. The study was based on the identification and analysis of obstacles to exchange, description of 15 existing mobility programs, 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 agreed that the most cost-effective, productive, and sustainable approach to fostering North American interchange is not to develop a new structure, a marketplace at which potential partners convene, but instead, a virtual marketspace, a web-based system for providing information, showcasing good practices, and helping institutions find partners."

The committee charged the principal investigator with developing this short paper outlining the elements and components of such a marketspace for circulation to, and input from, the advisory committee and reference groups.

This paper focuses on:

- Issues and challenges to consider in developing a North American virtual marketspace.
- Categories and content.
- Mechanisms.
- Examples of sites.
- Budget elements.

Goal of the Virtual Marketspace

The goal of the virtual marketspace is to serve as "one-stop shopping" for North American institutions interested in collaboration and exchange in higher education. It should become the site of choice for prospective and current participants in North American interchange.

Issues and Challenges to Consider in Developing a North American Virtual Marketspace

1. *Functionality*: What areas of need does it fill? What problems does it address?
2. *Audience*: Whom is it designed to serve? Is it likely to reach them?
3. *Fit:* Do the "message" and "medium" fit? How can the virtual venue be best utilized as the appropriate medium for this purpose and audience?
4. *Parameters*: What are the strengths and limits of this medium? (What can and can't it do?)
5. *Categories and Content*: What categories of information and services should it cover? What content should it include?
6. *Balances*: Is there a balance between the infinite university of possible information and the manageable level of necessary information (process of selection)? Is there a balance between material provided by the webmaster and that posted by users?
7. *Dissemination*: "If you build it…" how will you get them to come? How will awareness among the target audience(s) be generated and maintained?
8. *Administration*: What are the size and nature (types and levels of skills) of staff needed? How will the size of the staff and budget differ in start-up vs. maintenance phase? What technical requirements (hardware, software, design) exist? What type of organization is needed to manage it?
9. *Sustainability*: What will it take to maintain up-to-date materials and technologies? What will be required to sustain the attention of existing and new audiences?
10. *Sources of Support*: What mix of support through user fees and outside funders should be sought (at levels that will not obviate participation of either). What are the most likely sources, e.g., firms seeking internationally trained human resources? Is this support sustainable?

Categories and Content

The advisory committee suggested that the virtual marketspace should provide information, showcase best practices, and help institutions create partnerships.

1. *Information*

The site should clearly list categories of information that users can scan. Content can be directly provided by appropriate sources, and/or through links to appropriate sites. Some suggested categories of information include:

- *Higher education institutions and systems in each country.* A profile of each system, its structure and degrees, and of individual institutions in each country, including their offerings, infrastructure for exchange (student services and accommodation), costs and fees, deadline dates, and contact information should be listed or links to existing sites given. Additional value could be added by the development and posting of a comparative profile of the three systems, e.g., a chart comparing the academic qualifications frameworks of the three countries. (This would, of course, have implications for resources.)

- *Exchange and other collaborative opportunities*. Numerous programs furnish opportunities for one- or two-way exchange within North America, e.g., the Program for North American Mobility in Higher Education, the National Security Education Program, or the Fulbright Program. Links to these and other

programs should serve users well. Less traditional opportunities for work-study, internships, and co-op programs should also be included (see IIE's Passport program on the web: www.iie.org). Categories should include all forms of collaboration–academic, research, and sabbatical opportunities.

- *Financial aid and scholarship possibilities*. Sources of support for exchanges and all types of collaborations should be searchable by category of fields and professions, as well as types of opportunity, e.g., internship or research (see Elnet at www.elnet.org/elnet2 and IIE sites for formats and information).

- *Conferences, seminars, and events of interest to those in the field.* An up-to-date calendar of North America-related activities, although difficult to maintain, is of value to the field. (ELNET provides this service.) Are there ways to keep this current and complete?

- *Visa and other technical information.* Accurate information on visa acquisition (between and among all three countries), including visas for less traditional programs, like work-study, is critical. Information on other technical requirements such as insurance, health issues, and fees should also be provided if not available elsewhere. (For U.S. visa information, see sites for U.S. Department of State at www.state.gov and NAFSA publications at www.nafsa.org.)

2. *Best Practices: Examples of What Works*

To address a number of obstacles in exchange, successful examples of best practice will serve to guide institutions in developing and implementing programs. Although such guidance would not be a formal "standard operating procedure for student mobility" or serve as industry standards, it would provide guidelines and useful strategies to address a number of areas of exchange.

Examples of best practice can also help address one of the major obstacles identified in the original study, that is, balancing asymmetries and differing priorities and needs among institutions and nations.

Providing detailed information on institutions and programs, as well as on practical strategies also can help users address quality assessment issues and ways to interpret academic value, including course and credit transfer and recognition.
Materials and examples can be supplied by associations, existing programs, and specialized accrediting or licensing associations in each profession.

Special research papers also should be commissioned by the marketspace organization leaders to address identified information needs.

Examples of good practices should be drawn from the professions, as well as traditional disciplines, and from different types of institutions (e.g., community colleges, liberal arts colleges, and universities). They should include new approaches in work-study, internships, and innovative approaches to study abroad.

Categories of good practice should include:

- *On-going programs*. Information on current programs provides examples, names of contact people, and information useful to the field. In most cases this information can be provided through links to existing sites (e.g., FIPSE and counterpart agencies). As these programs end, they offer sources of lessons learned, best practices, and possible mentors.

- *Institutional documents*. These include memoranda of understanding, institutional agreements, and guides to internal institutional coordination.

- I*nstitutional practices.* Policies addressing academic recognition and/or credit for courses or programs taken abroad. Approaches could include:

  (i) Examples of actual courses that have successfully been credited in one institution to act as a guide to others (as done with engineering programs under RAMP). Credit recognition may be eased as faculty members recognize and respect their colleagues' judgment.
  (ii) Course content and outlines for the information and review by faculty (to facilitate their advising students).
  (iii) Research and reporting on best practices in course and program recognition, examples of successful agreements, strategies, and practices, e.g., the existing Program for North American Mobility in Higher Education and other relevant programs.

- *Joint or dual degrees*. Examples of successful practices and strategies in developing and structuring joint or dual degrees.

- *Innovative approaches to language instruction*. Creative ways to produce need-based language learning, especially for students outside the language and literature fields, in professions, sciences, and social sciences. (Since language instruction is a field in itself, and too ambitious for the site to cover, users should be referred to other key sites.)

3. *Creating Partnerships*

The matchmaking function might be served either through an electronic selection process involving only the potential partners, or by supplementing the electronic component with an active brokering service by appropriate professionals.

Whichever option is chosen, the electronic component needs to offer a system that will provide matches based on user-friendly categories that will facilitate selection of partners. For data base matches, the selection process should give the user options in a number of areas and fields. Developing the right categories among which to choose is essential. (See examples of comparable data base matches in the IIE Passport Site and the ALO site, both mentioned below.)

Suggested search categories:

- *Geography.* Provide users with successive steps to select country, then region (province, state, city or town). It might also be useful to add specialized

geographic need or interest, e.g., coastal region, urban areas, linguistic groups (such as French). Note that the challenge is to avoid creating too numerous or too complex a set of categories for easy entry and searches.

- *Type of institution sought*. Categories could include small college, large university, community college, etc.

- *Fields and disciplines*. These include architecture, art history, business, computer science, engineering, environmental science, health sciences, history, civics, coastal zone management, water resources, etc. (Although separate categories could be provided for "professions" and within academic disciplines, e.g., social sciences, such division could complicate definitions without adding value. Note, too, that one challenge will be differentiating among countries in how they define disciplines or fields.)

- *Linkage type*. These include academic exchange, collaborative research, curriculum development, instruction and training, seminars and conferences, technical assistance, student mobility, and sabbatical placements. Subheadings will be necessary under each, e.g., under mobility ask both level and number of students. Under most categories, timeframe also would be needed (for beginning and ending of program).

- *Level of study*. Users may wish to search by B.A., M.A., Ph.D., professional, or other status.

Mechanisms

Technology will advance almost as rapidly as plans for this marketspace. However, at current writing, a few mechanisms appear useful to current needs. Examples of sites provided below demonstrate various technologies, and may serve both as examples and as potential links.

Technical expertise will be required to develop an actual site, and to know the possibilities for addressing the functions outlined above, but for the purposes of this document, some mechanisms that appear useful include:

1. *Portal Technology*
The home page of the virtual marketspace should serve as a portal for access to sources of existing information and data (as the Yahoo! home page, for example, links us to weather, news, shopping, and other information).

2. *Data base(s)*
Parts of the marketspace will require the creation of a searchable data base(s) in which users can identify single or multiple categories for their searches ("and/or" searches as appropriate). A data base should be developed only in those areas that are central to the primary purpose of the marketspace and unique to its mission, and not in areas in which information already exists. Therefore, use of data bases should be limited to one or two areas unique to this service. Such data bases, where possible, should be structured to provide for self-reported data, updated by the institutions or programs involved. The more complex the data base, the slower and more difficult it will be to

search. Two core areas of the marketspace that are likely candidates for data bases are:

- Creating partnerships as discussed in section 3, above.
- Information on existing, ongoing partnerships and programs rendered useful by data categories as discussed in section 2 A, above.

3. Other mechanisms for the site include an interactive discussion or chat room, and working group software, or other electronic meeting space.

4. General features of the site should include:

- Built-in feedback mechanisms for user response on the home page and subsequent pages to shape the system. An e-mail return reply should appear on the home page that says “Help us build a better site” with reply to the web master. Within the site, other places should elicit feedback as well. Note: It is essential to ensure prompt responses to such input, not always characteristic of existing sites.

- Trilingual and trinational materials; trilateral financial support.

- Possibility of two levels of entry: general access to capture a broad audience; and member-only services [to be paid for through dues, subscription fees, or service fees to help cover cost of system–if evidence exists that people will support such service. (Alternative: commercial advertisements to cover some costs.)]

- A system for continuous web searches to identify new, related sites for linkages.

- A system of "flagged alerts," notifying users when a potential match has been found (and not relying on users to return to the site regularly to check for themselves.)

Examples of Sites

- Association Liaison Office
  www.aascu.org/alo/ihelp
  ALO’s data base for technical assistance programs worldwide allows for a text search by region, country, and institution; and linkage types by categories (e.g., curriculum development, instruction/training; seminars and conferences; collaborative research). Allows "and/or" searches on types of content mentioned; and could serve as a model for matchmaking as well as existing programs. Data is self-reported and self-updated.
  www.aascu.org/alo/cupid/cupid.htm
  This page provides a place to post brief information about an institution's international development needs and what the institution has to offer partners.

- Institute of International Education
  www.iie.org

See especially "Passport" heading on "Study Abroad" programs by cost, credit offered, duration, eligibility requirements, field of study, housing availability, language of instruction, and other variables. IIE Passport allows update of materials by program operator. (Other information resources are also available on this site).

- National Center for International Education of Missouri Southern State College www.mssc.edu/ncie

- Center for Global Education, USC and U.S. Department of Education www.usc.edu/dept/education/globaled/ and also www.usc.edu/globaled

- FIPSE, U.S. Department of Education: www.ed.gov/offices/OPE/FIPSE/Northam
  This site includes information on existing Programs for North American Mobility in Higher Education, as well as guidelines and other information.

- The National Security Education Program http://extranet.ndu.edu/nsep
  Information on its graduate and undergraduate awards, including some for U.S. students to study in Mexico is available at the sites of the Academy for Educational Development (AED) and of Institute of International Education (IIE).

Other sites with international education information are those of:

- CONAHEC and ELNet (http://elnet.org) NAFSA (www.nafsa.org); AUCC (Canada) (www.aucc.ca); ANUIES (Mexico) (www.anuies.mx); ACE (USA) (www.acenet.edu); Department of State and USIA sites (and their counterpart in Canada and Mexico), including information on visas, passports, safety, and other matters.

NOTE that Appendix G lists additional web sites.

Budget Elements

The two largest budget elements in constructing the virtual marketspace outlined above are the development of one or more data bases, and the creation of new content. Design and development (costing from $75 to $200 per hour) can add up quickly for a large data base. A matchmaking data base with designated categories and "drop-down" menus in each, and incorporating other requirements discussed above (including multiple languages), might take about two months to develop. At $100 per hour, this could easily cost $30,000 to $40,000. Any comprehensive data base of existing programs would be enormous; therefore, it may be best to confine the site to hot links with existing data bases (FIPSE, ALO, universities, etc.). Alternatively, it will become increasingly likely in future technologies that a data base could be established which would create links to certain topics or parts of existing sites (e.g., environmental programs), bypassing home pages to supplement the portal approach. Thus, costs will depend on the number and scale of the data base(s), and on how many of the elements already exist in technical programs and can be incorporated into design (e.g., portals, response programs, etc.).

Note that this process requires, in addition to a data base software specialist and a web site designer, a content-based administrator to oversee and test technical development and outcomes, with an eye toward users. Additional computers and/or connection lines may also drive up costs during the development phase.

To begin, an inventory of existing sites, data, data bases, materials, and resources should be commissioned to find items that the site can incorporate or to which it can link. Not all of these will be online. For topics like best practices, additional research will be required. Templates and systems may need to be developed for self-reporting of programs or practices. The budget should therefore include funds to invest in research, development, and compilation of initial information.

Technical maintenance of the site will require a web master less than or up to one full-time person to respond to queries, post new materials, and maintain continuous web searches for existing sites. Maintenance will also require a "knowledge manager" to maintain and add content; research, develop, or commission new materials; and work with technical support on updating, cleaning, checking, linking, and correcting, the site and material.

Existing organizations should have sufficient technical capacity to launch and maintain this site with existing hardware, networks, servers, and IT staff.

Summary of budget elements:

For startup, personal costs include web designer, data base creator, content researcher, and manager. For maintenance, web master and knowledge manager. Together, one to two full-time equivalents.

Equipment, hardware, and software costs must be added.