

Integrating Science, Math and Engineering Programs Abroad into the Academic Curriculum

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OVERVIEW

- Introduction to KEI
- KEI Program Model
- Curricular Integration

Knowledge Exchange Institute (KEI)

- Founded in 1997 on the principle that study abroad should go beyond liberal arts education and cultural exchange to include discipline-specific studies and professional development.
- KEI's goal is to make study abroad accessible to all students, regardless of academic major, foreign language proficiency and educational level.

KEI Believes

that programs abroad must:

1. Allow students to complete major, minor and general academic requirements.
2. Allow students to explore professional interests.
3. Provide sufficient geographic options in traditional (Western Europe) and non-traditional locations (Eastern Europe, Asia, Africa and Latin America).
4. Minimize the need for foreign language proficiency.
5. Cost effective and financial aid

KEI Programs

- Science, Mathematics & Engineering
- Computer Science & Software Engineering
- Information Systems & E-Commerce
- Medicine, Health & Biomedical Sciences
- Environmental Science & Wildlife Management
- Tourism & Hospitality Management
- Business, Law & Diplomacy
- Psychology, Sociology & Human Behavior
- Visual, Performing & Graphic Arts
- Journalism, Mass Media & Communications

KEI Program Locations

- **Moscow, Russia** (Moscow State University)
- **Puschino, Russia** (Puschino Science Center)
- **Hobart, Australia** (University of Tasmania)
- **Bangkok, Thailand** (Mahidol University) **
- **Dublin, Ireland** (Griffith College) **
- **Nairobi, Kenya** (United States International University)
- **Brussels, Belgium** (International Management Institute)
- **Beijing, China** (U. of International Business & Economics)
- **Venice, Italy** (Scuola Internazionale di Grafica)
- **Mexico City, Mexico** (Alliant International University)
- **Moreruela, Spain** (Moreruela: Escuela de Espanol)
- **Barcelona, Spain** (Barcelona Business School) **

** New programs starting in Spring 2005 Semester

Model of Operation

- Partner with respected institutions abroad.
- Establish an administrative center/staff.
- Utilize the academic and campus resources of the host institution.
- Courses and research projects led by faculty from the host institution.
- English is the language of instruction.
- Open courses to KEI and local students.

Components of a Successful Discipline-Specific Program

- **Wide selection of courses in the academic discipline (as well as language and humanities).**
- **Professional opportunities**
 - Planned visits (companies, NGOs, research centers, etc.)
 - Internships (research, field work, clinical, professional, etc.)
- **English language**
- **Small groups & flexibility**
- **Extensive cultural excursions and activities**
- **Packaged programs and on-site support**
- **Affordable**

Academic Requirements

- 4 to 6 courses (12 to 22 cr.) per term
- Area Studies Seminar is required
- 2 discipline-specific courses are required
- Research/professional internship (for credit) strongly recommended
- Language course strongly recommended

EXAMPLE:

Science, Math & Engineering Program

Moscow State University – Moscow, Russia



Top: **Human Gross Anatomy Course**

TR: **Research internship (genetic eng.)**

Puschino Science Center, RAS

BL: **KEI student presenting her research at a seminar in Russia**

Curricular Integration

- Consortium Based
- Affiliations
- Partnerships
- *NOTE:*
 - *KEI: 3rd party provider of international education programs*
 - *Well suited for institutions that do not have the resources (financial, administrative, etc.) to organize and manage programs*
 - *WPI model*

Consortium Collaboration

- Individual student basis
- Credit approval by academic department and/or study abroad office
- Flow of Financial Aid
- Advantages & Disadvantages

Affiliations

- University has closer involvement in programs
- Credit approval on a program basis, not individual
- Non-exclusive agreement
- University has more control over the application process & program fees
- Financial benefits to university
 - KEI scholarships for students
 - KEI grants for faculty development
- Institutional benefits
 - Expand the number of offerings abroad
 - Use as recruitment vehicle for new students

Curricular Integration at Clark Atlanta University (CAU)

- Phase 1 (Exploratory):
 - Select programs that meet institutional needs
 - Site visits
- Phase 2 (Experimental):
 - Student participation in KEI programs (consortium)
 - Program Evaluations
- Phase 3 (Integration): **
 - Inclusion of KEI courses abroad into the CAU catalogue
 - Student advising on campus. No need for application process
- Phase 4 (Capitalization):
 - Recruitment of new students
 - Development of joint degree programs

Partnership Programs

- Addresses a specific need of the university
- Jointly developed programs
 - University responsible for academic content
 - KEI responsible for organization and management
- Types of Partnerships:
 - Faculty-led vs. integration models
 - Short-term programs (2-week, summer, semester)
 - Joint-degree programs (Ex: 3+2, BS/MS)

Further Discussion

- For Faculty:
 - Academic integrity
 - Accreditation
 - Course equivalencies & credit transfer
- For Administration
 - Financial concerns & campus budgets
 - Liability & legal issues
- For Students
 - Program costs & Financial aid
 - Pre-departure & on-site support
- For All:
 - Changing perceptions and culture on campus

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