

International Exchange Programs: Getting Started

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Abstract

International academic exchange programs have long been enjoyed by those in pursuit of the fine arts. More recently, with the globalization of many industries, international exchange programs have taken on new importance for our technical graduates. Engineering and manufacturing activities are often a collaborative effort with international partners. If international partnerships are common, even required in many industrial endeavors, this same type of relationship should be included as part of our academic programs. Academic administrators, eager to join the bandwagon, have become increasingly more supportive of these programs and in many cases are actively promoting meaningful international technical experiences for students and faculty alike. Students are also enthusiastically embracing the idea of these experiences if they can be included into their academic program without unnecessarily extending their schooling or intruding into their summer employment or internships.

Recognizing the increasing value being placed on international experience, this paper will review the steps involved in starting a successful international exchange program that is focused on engineering and technical education. It will enumerate the rewards that accrue to both faculty and students through an international exchange and the components that must necessarily be included in the program if it is to be successful and live a long and prosperous life. It will include such things as: making the initial contact, evaluating the proposed site, developing a budget, generating support, documenting the responsibilities of each institution, planning for the trip, emergency contingency plans, orientation meetings with the students, language difficulties, academic credit, recruiting, technical projects, and final evaluation.

The paper will conclude by reviewing two different exchange programs, one in Europe, which is well established and has been operating for many years, and another in Central America which has been formed more recently.

I. Introduction

Few aspects of life today remain untouched by the global community. Many of the goods and services that we use every day are influenced by international relationships. American universities have recently recognized this fact and their faculty are being encouraged to actively explore different models of international education and to include an international component in their degree programs. Feedback from students who have participated in an exchange experience

indicates that, although financially challenging, it has been a pivotal point in their education, indeed, their lives.

International exchange experiences have traditionally been included in the liberal and fine arts curricula for decades. As such they have become natural and somewhat cloistered in philosophy, history, music, art, etc. Technical education has not typically enjoyed this same exposure. Recently university administrators have been actively promoting cultural diversity and the internationalization of the campus. This favorable climate not only provides verbal support for exploring new international relations, but will in many cases also provide start-up funding. It would seem that the time is ripe for technical education to include an international experience in their programs as well.

Some members of the university community are promoting the idea that all undergraduate degree programs must include a required core of foreign language courses. At first light this proposal would seem to add yet another layer of non-technical requirements on the student with the inevitable result of decreasing the technical content of their degree. Although this proposal may have merit, discussions with graduates have indicated that unless this classroom experience in a foreign language is soon followed by an in depth international trip/exchange, the long-term significance will be minimal. Experience has also shown that classroom fluency does not necessarily transfer meaningfully to “the street”. Rather than fight this move, the technical education community can turn it into an advantage by incorporating “International Engineering” courses into their degree programs. International engineering courses will satisfy several goals:

- Increase campus opportunities for cultural diversity/awareness
- Increase internationalization of the campus
- Increase campus wide awareness of global engineering concepts
- Retain student credit hour productivity within the technical department

II. Establishing Contact

Believe it or not, finding an international partner is not a difficult task. Most international universities are eager to explore study and research relationships, the problem seems to be one of someone taking the initiative to make that first contact. One of the most important components of any good exchange program is a dedicated leader, or coordinator. As is so often the case, the leader will set the tone for the exchange. The leader should be one who will stay with the exchange for at least several years. It is easier to establish solid relationships and trust with an international partner if there is a long-term dedicated local leader, rather than a new person every year. It also adds stability to the exchange, an element that is very meaningful to the students. The location must be interesting/exciting, the leader must be capable and enthusiastic, and the experience must be affordable. What may interest the professor may not interest the student. This aspect of the development must be thoroughly thought out before making the first serious contact.

During the initial search for an exchange partner, the following are important areas to consider:

A. Safety

Safety is the most important aspect of any endeavor. Even the most exciting and exotic international experience will be diminished, if not ruined, if health and safety are in jeopardy. As many international visitors have indicated, they can immediately spot a foreigner, especially an American, walking down a street. If the exchange is visiting a country that is economically struggling, the American visitor may be an inviting target for foul play.

If sickness or injury does occur, are facilities available for treatment? Does the university, or the community, have adequate health services for treating most common problems? This is a very important consideration. Parents, who often bear the cost of exchange trips, want to be assured that it will be a safe trip. Careful planning and prudent faculty leaders can provide this assurance.

B. Cost

One of the goals in the establishment of an exchange program is to have as many participants as is reasonably possible. If the cost of the experience exceeds the resources of the students, obviously there will be few participants. Following safety, the selection of the exchange site and the accompanying cost is a very significant factor. Cost has different levels of concern. Air transportation can be a large factor as well as in-country expenses. Both of these concerns can be somewhat minimized through careful planning. Group rates are usually available that can significantly cut back on airfares. In-country expenses can usually be borne by the host institution or can be minimized through a student hostel, or some such arrangement. Although exchange cost is a big factor, careful and creative travel considerations can be very effective in keeping costs low.

C. Time

Many of our technical students participate in career related summer employment or internships. An exchange trip should not intrude excessively into this time. Central Michigan University (CMU) has many different types of international experiences available to the students. They range from yearlong residence programs to one-week visits. The CMU Industrial and Engineering Technology (IET) department has found that their students are most favorably inclined to a three-week experience, maximum. This gives them a solid feel for the culture they are visiting, the visit peaks before getting boring, and it does not consume too much of their summer employment/internship time. When students inquire about the exchange dates they wince a bit when they hear it is a summer experience, however, when they are told it will only consume about three weeks they become much more interested. Obviously, the length of the visit is directly related to the cost of the program.

D. Perceived student interest

The voluntary nature of an exchange requires student interest. It should come as no surprise that a trip to England, France or China, as an example, would probably be more interesting to most students than a trip to Uzbekistan. Generally speaking, people are much more willing to spend money and time in a place that has interest to them, than one that doesn't.

E. Academic compatibility

The university is not a travel agency. University related activities which generate academic credit must, of necessity, have soundly related academic goals. The same rationale must be used when selecting international exchange sites. As enticing as a particular site may be, it must have definable compatibility with existing home programs. The more closely matched the programs are between the two institutions the more transferable the knowledge and experiences will be. Meaningful collaborative research is also directly related to this compatibility.

F. Academic rewards

A significant portion of the value and attractiveness of international exchange programs stems from the academic credit earned during the trip. The amount of credit earned varies as widely as the variety of the programs that an institution has. Institutional guidelines will many times dictate the maximum amount of credit available. Creative structuring of the exchange experience and the student advising process should result in solid total program for the student.

When the preliminary investigation has selected a proposed location and institution it is time for the first contact. Perhaps the easiest method is through the university Office of International Education (OIE). They have personnel who are experienced in this and are usually very interested in being involved. After all, that is one of the purposes of their existence. Another method is through international professional societies, perhaps during an international convention or exposition. Still another is through a planned personal contact that a professor or a colleague may have. Finally, one of the least personal is through an Internet search followed by an e-mail message to the appropriate person.

Two of the three existing international exchange programs within the IET department at CMU have been established simply through chance meetings between professors, one during a Sister Cities tour and another through a remote teaching assignment. In both cases the subject of an exchange came up during professional conversations between the professors. When that first contact does occur and discussions evolve, ask probing, honest questions. Be sure that both parties understand the expectations involved. It is very easy to make assumptions that cause problems later on. At this point in time the evaluation process is still free. It is better to discover possible incongruities at this time rather than later after hundreds of dollars have been spent for travel and evaluation.

III. Site Evaluation

An exchange visit with students should never go forward without a signed formal exchange agreement. A formal exchange agreement should never be signed without an on site evaluation of the proposed exchange location. As simple and straightforward as the proposed exchange may seem, there are a multitude of potential difficulties lurking in the details. Things that seem painfully obvious to one party may not be so obvious to the other party. It is essential that a trip

be scheduled to physically examine and evaluate the academic exchange potential of the proposed site. International communications are the source of more problems than almost any other aspect of an international exchange. The following should be carefully considered during the site evaluation:

A. Safety

The proposed exchange site must exist in a safe environment. This means that participants should be able to walk where needed with relative comfort and safety. If public transportation will be used it must be safe and reliable. Remember, historically the most hazardous part of any international exchange experience is the local transportation.

B. Medical access

If every medical contingency were to be covered, then probably international exchanges would not exist. However, be sure the community you are evaluating as a potential exchange site has reasonable medical facilities. Plan for most common risks but realize that all risks cannot be covered.

C. Costs

Many different items must be considered when determining the exchange costs. Passport, visa, airfare, and other costs can be evaluated while at home; however, some costs can only be determined when sitting down with the representatives from the other institution. Room and board arrangements can have a significant impact on the exchange budget. A valuable component of any technical exchange is the inclusion of factory tours and cultural excursions. Be sure everyone involved understands who will pay for what. Generally, the host institution assumes most of these responsibilities, but be sure.

D. Housing

Housing is a major consideration related to safety, cost, and enjoyment of the exchange experience. Some universities provide dormitory accommodations for their visiting delegations. Although this might be a neat and clean package for the hosting institution, it may not be the safest or most meaningful for the visitor. Other hosting institutions put the visitors up in hotels with the visitor paying the cost of the room and/or board. This arrangement would probably be the least desirable. Perhaps the most desirable for students would be home-stay accommodations. Home-stay provides two advantages; first, an intimate day-to-day contact with the host family puts the exchange experience on a very personal level. Lasting personal relationships often result from this type of accommodation. Second, the home-stay arrangement is usually much less expensive. It does, of course, invite a reciprocal responsibility on the other side of the exchange. If the exchange will be faculty led then accommodations for faculty will also have to be explored.

E. Transportation

Transportation will likely consume the greatest part of the exchange budget. Normally a trip to an international destination will require air transportation. Some air carriers have a long history of commercial success while others are of a more recent origin. Some may

be American owned while others may trace their roots to formerly communist countries. Their rates often vary widely, as does their quality of service. Be careful! Parents are very sensitive to the perceived reputation of the carrier selected.

F. Academic potential

Before beginning down the road leading to an actual exchange, the department and professors should agree on the goals of the exchange. There are more than a few international institutions that would like to visit America and would perhaps enter into agreements for the wrong reasons. Critically review the institution during the evaluation visit, looking for areas where their programs, activities, and laboratories can compliment those on the home campus.

G. Potential for research collaboration

One of the more enjoyable aspects of an exchange, other than observing the students making what for most is their first international trip, is the possibility for research collaboration. Carefully evaluate the research potential of their laboratories and their willingness to collaborate in one or more yearly projects. Do not necessarily expect this collaboration to happen immediately. It may take a year or two to develop, but when it does it can be very satisfying. It puts the exchange at an entirely new level, especially when the students are also involved in the research activities.

IV. Drawing Up the Agreement

It is important that details of the exchange be made the content of a legal document. This document will enable both institutions to operate with the same clear ground rules. The first agreement should be a yearly document, quite rigidly structured. Later, after the institutions have grown accustomed to each other and the exchange itself, succeeding agreements may be multi-year documents that are more loosely structured, allowing greater flexibility for exchange activities. Generally, the agreement assigns the responsibilities of local travel, room and board, and related expenses of the visiting group of students and faculty to the host institution. The following topics should be included in the agreement:

- Length of stay
- Room and board
- Basic health care for accidents
- Health insurance for major needs
- Airfare
- Local transportation
- Translation services
- Office/research space
- Industrial/technical field trips
- Excursions to cultural/historical sites

V. Academic Considerations

The amount of academic credit that can be earned will perhaps vary with each exchange. Some exchange models require enrollment in a pre-trip course and have course requirements completed

prior to departure. Others begin with several pre-trip meetings accompanied by assignments keyed to the exchange. There are also models that have little pre or post trip activity, with the academic requirements being completed during the trip. Still another scenario might have the students completing preliminary research before the trip, with a final practical application taking place during the visit to the laboratories of the hosting institution.

There may be no single model that will perfectly fit all situations. Each institution must make their own determination. In all likelihood, however, the assignment of academic credit will be an evolutionary process that may take several years to finalize.

VI. Determining the budget

Almost every aspect of an exchange hinges on the budget. Although preliminary costing may have been done during the evaluation process, it is now time to be specific. The final budget contains the figures that the exchange will live or die with. For that reason alone they must be as accurate as possible. It is always prudent to build a certain amount of flexibility into the budget. It is better to err on the high side than to run out of money when there are still responsibilities to be paid for.

Experience has shown that the fewer the number of details left to the student, the more smoothly the process will go. As an example; rather than task each student with obtaining their own travel visa, it is much easier and trouble-free to include this fee into the budget and have the exchange leader process all the visa applications at the same time. It also saves money. The students are told that the cost figure they are given includes all expenses for the entire trip with the exception of their passport, a few meals while in transit, souvenirs, and evening snacks and drinks. The total finalized amount of the budget will depend on the number of students participating. If the final number is ten or more, this will usually trigger air carrier group rates that can significantly reduce the cost to each individual. When the recruiting has started the final number of participants will obviously not be known, but students will ask how much the trip will cost. To be ready for this inevitable question, an estimate will have to be made. Remember to be as accurate as possible but be sure to allow some wiggle room.

Some students may wish to use university/federal financial aid to help pay for the trip. The university financial aid office will usually require an "official" budget sheet from the exchange leader showing the expenses for the exchange experience. The availability of financial aid for the students hinges on the timely filing of this document. Until that obligation is fulfilled the financial aid office may not be able to award any dollars to those students who have applied. If the university has an OIE, they will usually be the intermediary for documents such as this. The actual exchange budget will usually reside in this office as well.

The faculty tasked with leading the exchange should be under no illusions. This is hard, sometimes frustrating, work. It is a year round commitment that is many times taken on in addition to the professor's normal work load. At first glance an international exchange program may seem ideally educational, exciting and exotic. It is, and more! Experience has shown that if there is not a reward for those responsible, the initial enthusiasm will rapidly wear off and the

exchange will soon be without a leader and will lose continuity. To avoid this bad situation it is recommended that a stipend be paid to the exchange leader. If this is not possible, at least the airfare for the coordinator should be provided by the exchange budget. Although this is a very minimal amount of compensation for the time and effort expended to make this experience available to the students, it is better than nothing.

The following particulars should be considered for inclusion in the budget:

- Travel visa
- Airfare
- Meals
- Luggage storage/transfer
- Local transportation
- Field trips/excursions
- Lodging
- Health insurance
- Registration/application fees
- Tuition
- Hosting requirements
- Recruiting/PR

VII. Recruiting

The location of the exchange partner and logistical considerations will determine when to begin recruiting the participants. Throughout the academic year the exchange leader should participate in promotional activities orchestrated by the OIE. This may include such activities as the campus wide International Week celebration and the International Fair where the exchange programs from across the university are showcased. Advertisements can be inserted in the student newspaper, flyers posted in campus buildings, and announcements made in classes promoting the first informational meeting. This meeting should be scheduled as soon as possible, the semester immediately preceding the exchange trip.

The first meeting with interested students will provide an opportunity to disseminate detailed information regarding travel dates, exchange requirements, costs, and post trip obligations. It is often helpful to have several previous participants in attendance at this first meeting to provide additional information and give a student's perspective of trip dynamics and benefits. This is a good time to provide an informational packet that includes the exchange application. Depending on the exchange location and other variables, the deadline for final inclusion into the exchange group should not be later than approximately six to eight weeks before departure. Any later than this risks problems with air reservations and visas.

The criteria for the student selection process could include such things as class standing, letters of recommendation, and a short essay addressing such things as career goals, international experience, expected benefits, and how these benefits will be applied within the student's academic program. The size of the first exchange group should usually be limited to a dozen or less to minimize the details. A large group for the first visit is an invitation for problems.

Departmental students should be given first priority for inclusion, followed by students from other departments if there is space available. Remember, the larger the group the cheaper the cost.

VIII. Pre-trip Activities

After the participating group of students has been identified, schedule a series of monthly meetings at the home of the faculty leader. These pre-trip meetings are very important and help set the tone for the entire trip. In most cases the participating students will not know each other and will be somewhat uncomfortable and intimidated by the prospect of spending three weeks in a foreign country with complete strangers. The monthly meetings in a home setting are helpful in allaying these concerns, building a group identity, and assisting the participants in relating to each other on a personal basis. When the exchange group leaves America and lands on foreign soil it must be a cohesive unit, not a group of strangers. Post-exchange discussions have identified these early meetings as being an important pivotal point for the students. Most will not have participated in international travel before, indeed, some may never have even been on an airplane prior to this trip. There are bound to be anxious moments during the exchange, therefore, having an exchange “family” to provide support is meaningful. Advise the students that they can expect to have second thoughts concerning their decision to participate in the trip as the date of departure approaches. It is natural and expected, as predictable as rain in the springtime. A second low point usually occurs the first day in country. They will arrive tired, dirty, and surrounded by strange people, sounds, sights, and smells. After a day of rest, some food, and a good shower their new world will take on a much brighter perspective. They should, however, be encouraged by the fact that these will be passing sensations, and will be a source of humor as they look back after the trip. Faculty leaders must be sensitive to these dynamics, they are very real to the students. Talk about them before they happen.

All participants must be aware of the importance of the documents that they are carrying. The passport is their identity, it is the only official thing they carry that tells the world who they are. Without it they are essentially non-entities. A copy of the passport should be included in all pieces of luggage and carried on their person in case the original is lost or stolen. The visa, if needed, is also an important document. Without it the trip is over. In most cases they will not even be allowed to board the airplane without it. The participants must be made aware of the fact that the money and documents they carry are very valuable, and as such they may be targeted by muggers, pick pockets, and other ner-do-wells. Don't try to scare the students, but they should be aware of the facts of life away from home in a strange country. Nothing will spoil a trip faster than a careless attitude and being taken advantage of. Be organized, carry the all-important documents in a secure place that is not obvious to others nearby.

The participants must be aware that while they are on the exchange trip they not only represent the university, but also the United States of America. Many foreigners have a very stereotypical impression about America and Americans. This trip provides an excellent opportunity to show our best side, to show the “world” who we really are.

Other countries have different laws and penalties than we do. What may qualify as a misdemeanor here may carry a very harsh and seemingly inhumane penalty there. Unfortunately

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some students use an exchange trip to drink and get stupid. Spend some time talking about drinking, drugs, and inappropriate behavior. It should be stressed that inappropriate behavior will not be tolerated and will result in an immediate trip back home. This penalty is usually a published university regulation.

The monthly meetings are also used to go over checklists, provide handouts, practice the foreign language, and discuss cultural peculiarities which most Americans would not be aware of. Having a basic familiarity of even a few foreign words and common phrases will give the students confidence for upcoming social contacts. It will also provide key words for emergency situations, and perhaps as importantly, it will communicate to the hosts that the Americans care enough to try to meet them halfway. Local international students from the same country the exchange group will be visiting should be invited to at least one of these pre trip meetings. Their assistance will help the group to improve their cultural sensitivity and language pronunciations. Generally, it is not necessary to be fluent in the language of the host country. Their university students have usually studied English and are nominally conversant. Even in those few cases where an American student has been paired with a student who does not know English, it has not been an insurmountable problem. Students are quite adaptable.

The IET exchange program requires the students to enroll in a departmental course entitled, "International Engineering Technology", for three to six units of academic credit. The course requires the students to attend all of the pre trip meetings where, in addition to the previously mentioned topics, industrial case studies of several international companies are reviewed. These studies serve as comparative benchmarks during the trip and provide the students with a perspective through which they can more accurately observe and evaluate the foreign technology they will visit during the exchange.

The course also requires the students to maintain a detailed daily journal. They are asked to begin their journal at their first meeting by recording their pre trip thoughts and expectations. While in country they are encouraged to include detailed descriptions of daily interactions, activities, and in particular, observations that relate directly to their academic field of study. The journal should conclude with a comparison of the pre trip thoughts and expectations with what they actually found and experienced. The journal is due approximately two weeks after returning to America and provides an important basis for the final grade they will receive. The journal also provides a basis for presentations they may be asked to give to local community or university groups.

IX. The Trip

The students who have not traveled by air before may be quite anxious on this first trip. Shortly after the trip has been under way things will begin to settle down. If there are layovers the group should stay together rather than trying to leave the airport facility to see the sights.

When the group arrives in country the first order of business is in passing through customs. This is serious business. The leader should have covered customs procedures in the pre-trip meetings.

Generally, the exchange group will be able to pass through the “Nothing To Declare” customs line. If the leader, or some of the students, is carrying a large amount of cash, perhaps for emergency purposes, this should be declared. By so doing it may avoid customs complications when leaving the country. Some countries have very strict laws concerning the amount of money one can take out of the country. If one does not declare it coming in a large tax will likely be charged on the way out.

Perhaps one of the more anxious moments of the trip is arriving at the airport and meeting the hosts they will be staying with. The visiting students can rest assured that the hosting students are just as anxious. Unfortunately, it is likely that everyone will be tired, feeling dirty, and not in the best mood when arriving at their destination. Couple this fatigue with forced interaction with strangers and you will begin to comprehend the group state of mind. Many times that first day is the low point of the trip. Once everyone has a good shower and some sleep things seem to brighten up. This is a good point to mention during the pre-trip meetings. Throughout the duration of the exchange visit the students will be exposed to a multitude of experiences, some will be positive and perhaps some negative. Students should be strongly advised to keep their negative comments to themselves. Negative comments overheard by hosts are one of the quickest ways to sour and destroy the exchange.

Encourage the students to take in all the cultural foods, sights and sounds that they can, while at the same time keeping up with their daily journals. Keep in close touch with the students. They appreciate that. Ask them probing questions, encourage meaningful discussions about what they have seen and experienced. It is a good idea to meet together weekly, perhaps at a local restaurant, to engage in group discussion, check for potential problems, and to reestablish that group identity that was present before the trip began.

The length of the stay will be determined by the activities that have been scheduled and will have been determined long before arriving in country. The leader should be aware of a third low point that will likely occur as activities begin to finish and slow down. This dynamic can be quite precipitous. It is best, if possible, to plan for departure before these feelings surface. Homesickness is a powerful attitude that can and will affect most people in very subtle ways. One dynamic that seems to cause the most disruption is the absence of girl/boy friends. One might think that university students would be past that type of thing, but that is not the case. It is often better to leave to soon while the group is still experiencing a high, rather than stretching it out past the time of meaningful activity. Discuss these feelings during the pre-trip meetings.

Most countries have very strict regulations about what souvenirs and other objects ‘d art can and cannot be removed from the country. Spending time reviewing this subject during the pre-trip meetings may help avoid complications with customs officials as the group processes out of country. Needless to say, if the passport or visa has been lost, it will be difficult to receive permission to leave the country on schedule. It is likely the rest of the exchange group will be required to leave as scheduled while the delinquent person is left to resolve the problem. Being stranded in a foreign country is not a pleasant experience. Being well organized has its’ own reward.

A brief stopover in an English speaking country on the way home is a nice touch at the end of the

exchange trip. If the exchange destination was non-English speaking country in Europe, as an example, spending a day or two in London can be a perfect culminating experience on the way home. That being said, two or three days in London can cost as much as two weeks in some other eastern European countries. Plan carefully.

X. Post Trip Activities

There are several activities still remaining to be accomplished to complete the exchange cycle; planning for the visit of the exchange partner, a post-trip evaluation, and public relations.

A. Planning for the exchange partner's visit

- An important early responsibility of the hosting institution is that of issuing an official invitation to the international group that will be visiting their campus. This invitation is necessary for the visiting group to obtain the required travel visa to enter the United States. Sometimes this can be a time consuming process for the visitors, consequently, the invitation should be issued well in advance of their visit.
- If the host institution is contractually responsible (as outlined in the agreement) for providing air fare/tickets, the ticket reservations must be made early to allow for convenient scheduling of the visit.
- One of the obligations outlined in the agreement is that of hosting the international exchange partner. During the meetings occurring before the trip it was explained to the students that their participation obligated them to the responsibility of hosting their exchange partner when it comes time for them to travel to the United States. Experience has shown that the local students look forward to welcoming their friends they met earlier. If the exchange participant was a graduating senior, plans must be made to provide a substitute host for their incoming international visitor. This responsibility also involves reviewing the provision of the necessary meals for the visitors. The local host students are expected to provide some meals while others may be provided through the exchange program budget.
- Transportation arrangements must also be made in a timely manner. Campus activities can usually be accommodated on foot, however, industrial field trips, tours and excursions will likely necessitate special transportation arrangements.
- Check with a local bank or money exchange facility to be sure they can change the visitors' money to dollars, if needed.
- Check with the universities' OIE, immigration, or consulate officials, to determine the proper procedure for validating the visitors' visas after arrival, if necessary.

B. Exchange evaluation

To maximize the exchange experience and its academic value, it is important to conduct an annual evaluation. This evaluation should be performed after both groups have completed their travel, and before the next cycle begins. It is best to use a dedicated instrument for this purpose, rather than general questions appended to the students' exchange journal. Although the faculty leader may believe that the exchange is proceeding smoothly with sound academic accomplishments, the students may have a

different perspective. Generally speaking, no matter how carefully planned and structured an activity may be each student group has a different personality and will react differently in each situation. What works with one group may not work with the next. Each succeeding exchange cycle evaluation will add to the accumulated body of knowledge.

C. Public relations

It is helpful to keep the university community apprised of the on-going exchange activities. This can be done through university newsletters, the student newspaper, articles in the local newspaper, faculty presentations within the university as well as community groups. The students should be encouraged to do the same. A dedicated departmental display case filled with trip memorabilia is a good method of keeping the exchange program in front of the students and others in the university community as they traverse the halls.

A yearly report to the university OIE may not be required, but is always a good idea. From time to time you may wish to investigate new exchange opportunities; the OIE may be willing to fund these exploratory efforts. Timely notes expressing appreciation to individuals who contributed to the success of exchange activities are always welcome and well received. Occasionally local community groups and/or industrial entities may be willing to provide financial support to the exchange. In the case of an industrial contributor, they may be willing to support an international intern. There are many possibilities. Sometimes these possibilities can be massaged into realities through timely communications of appreciation and recognition.

XI. Review of Two Existing Exchange Programs

The IET department at CMU currently has three active international exchange programs. The Russian exchange program has been in existence for about six years, the Mexican program is in its second year, and a third new program is just getting started in China. With the evolution of the China program the IET department will have achieved seventy five percent of its goals for exchange opportunities for its students. The eventual goal is one exchange program in each of the following cultures; European, Asian, African, and South/Central American. The narrative below describes two existing programs.

A. The Russian Agreement

The Rector (President) and a Dean from Vladimir State University (VSU) were invited to CMU to sign the first agreement. The first agreements were yearly documents which were quite rigidly constructed, very clearly delineating the responsibilities of each institution. Over time, confidence in each other has increased and mutual understanding has developed. Although the latest agreement lists the major responsibilities of each institution, many aspects such as dates, numbers, and qualifications of participants are determined as the planning activities progress and are easily handled by timely electronic communication.

Generally, the agreement assigns the responsibilities of local travel, room and board, and

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related expenses of the visiting group of students and faculty to the host institution. Of course, individual personal expenses are the responsibility of each traveler. Refer to Tables I and II for a listing of the major responsibilities assigned to each institution.

Table I
Responsibilities of Central Michigan University

- Air transportation for both CMU and VSU
- All ground transportation while at CMU
- Home-stay accommodations for all Russian visitors at CMU
- All regular meals while at CMU
- Translators for official functions in Michigan
- Health insurance for all Russian visitors while at CMU
- Classroom and office space at CMU as needed
- Field trips to industries in Michigan
- Cultural/sightseeing visits to local points of interest in Michigan

Table II
Responsibilities of Vladimir State University

- All official ground transportation in Russia
- Home-stay accommodations for CMU students while at VSU
- Apartment for CMU faculty at VSU
- All regular meals in Russia
- Translators for official functions in Vladimir
- Basic health care for routine illness or injury in Russia
- Classroom and office space at VSU as needed
- Field trips to industries in the Vladimir area
- Cultural/sightseeing visits to local points of interest in the Vladimir area

B. The Mexican Agreement

The recently formulated agreement with the Monterrey Institute of Technology (MIT) was developed over the course of approximately six months, primarily through electronic communications and an evaluation visit to the Toluca campus. This agreement differs significantly from the Russian document. Each institution, CMU and MIT, is largely responsible for their own costs. Political accords between the United States and Mexico are such that no visa is required for short trips of this nature. Both of these features allow this exchange to be more cost efficient for the CMU students. Refer to Tables III and IV for a listing of the major responsibilities assigned to each institution

Table III
Responsibilities of Central Michigan University

- Local home-stay accommodations at CMU
- All regular meals while at CMU

- Local transportation in Michigan
- Instruction at CMU as determined by exchange institutions
- Field trips to local points of interest in Michigan

Table IV
Responsibilities of Monterrey Institute of Technology

- Home-stay accommodations in Toluca
- All regular meals while at MIT
- Transportation between Mexico City and MIT
- Translators as needed to fulfill academic objectives at MIT
- Classroom space and lectures as required at MIT
- Field trips to local points of interest in the Toluca area

C. Logistics of the Exchanges

International exchange programs can take several forms, faculty advised, faculty coordinated, and faculty led. A faculty advised exchange requires the least amount of time from the professor. It simply amounts to an advisory role pertaining to where to go, how to make the trip, how much credit will be earned, and how to apply the academic credit towards degree fulfillment. The faculty-coordinated exchange requires more of the professor's time. In addition to the above, the professor makes all budgetary, travel, and academic arrangements, without actually traveling with the student group. The third, faculty led, requires the greatest time and effort commitment of the three. This type of exchange also requires the accompaniment of the professor on the trip.

Central Michigan University has chosen the faculty led model for all international exchanges within the IET department. Although it requires a substantially larger commitment of time, it does provide closer support for the students and allows for a more intimate working relationship with the international partner. Students and parents have frequently expressed great appreciation for the hands-on support the faculty have provided by using this model. The university OIE has recognized and promoted these exchange programs as models throughout the university community.

Program promotion, student recruiting and selection, and academic credit have been covered in this paper under sections VII (recruiting) and VIII (Pre-trip Activities).

The yearly Russian and Mexican exchange cycle at CMU begins prior to the beginning of the fall semester with the selection of the faculty leaders, if necessary. Realizing that this will be a yearlong commitment at the least, hopefully a multi-year commitment, the selection is based on faculty availability and an expression of interest.

E. The Technology Project

Central Michigan University has taken the lead in developing technical projects that both

universities can share cooperatively. The projects usually involve an aspect of automotive and/or electronic technology and require the participation of both groups of students and faculty. The project includes research, systems engineering, and a practical application. As both groups work on this project, information technology, design, manufacturing, and service issues arise allowing both students and faculty to share ideas and perspectives. They also gain experience with communicating technical concepts across cultures.

The technical focus of the exchange project(s) is largely determined by the technical composition of the participating student group. If the group is primarily composed of a particular technical specialty, that fact will generally determine the technical focus of the project. If the group is sufficiently large and technically diverse, two concurrent projects may be selected.

The exchange project tries to tie into the academic strengths of the individual universities. The academic strength of VSU and MIT lies in their deep theoretical education. This is primarily due to the difficulty they have encountered in obtaining expensive, modern laboratory equipment. Since VSU and MIT have such deep roots in theoretical education, the practical application portion of the project is of particular interest to the foreign institutions. The strength of CMU is in the availability of advanced laboratory equipment and the practical application of technical education to realistic problems in industry

An important aspect of these projects, other than the obvious technical cooperation, is that of international communications. Telephone and postal communications are expensive, slow and very unreliable. Successful project completion quickly emphasizes to the students the importance, indeed the necessity, of frequent, efficient, rapid and reliable communication. The students soon discover the speed, efficiency, and convenience of modern electronic communications through e-mail and fax. These timely communications are conducted in English.

Technical projects are discussed and proposed during the fall visit of the Russian and Mexican delegations to the CMU campus. The faculties of these institutions attempt to identify projects that will allow the students to develop practical solutions to technical challenges in their country. When the CMU group travels to the host country, the project hardware and software is carried in their luggage. There have been no problems with customs so far! Upon arrival, the students and faculty work together, as much as possible, to complete the practical application. In most cases, however, the foreign institutions complete this portion of the project after the Americans have left. As the project moves toward completion, it usually requires continued international communication until it is finalized, months perhaps, after the American group has gone home.

One of the last exchange groups that went to Russia, being somewhat technically diverse, planned two projects, one for the electronic students with a manufacturing application

and another for the automotive students. The electronic students configured a programmable logic controller for a Russian robot designed for a manufacturing application. The automotive students developed a modified cylinder head and piston that their Russian counterparts fitted to a Vanguard Briggs and Stratton engine. Exhaust emissions and fuel economy tests are ongoing. Central Michigan University is also anticipating this same type of technical cooperation with MIT beginning in the year 2001.

As the exchange programs mature, CMU anticipates the technical projects will continue to evolve and add relevance to our institutional relationships. Although our language, history, and culture are very different, during the technology phase the student groups will focus less on these differences than they will on the common technical challenges at hand.

F. The Visit to the United States

As soon as summer schedules permit, the IET department at CMU begins planning for the exchange visits in October. This entails issuing an official invitation to the students and faculty representing VSU and MIT, making air travel reservations for the VSU delegation, and finding suitable home-stay accommodations for all participants. The VSU and MIT students are scheduled to visit CMU during the same time period. This has the obvious benefit of allowing the Russian and Mexican students and faculty to meet and interact with each other, providing yet another international experience. Concurrently, a schedule of activities is developed which will show the visitors who we are, how we live, how the university works, and how various industries operate. Once this schedule is confirmed a copy is sent to each university to assist their preparations for the exchange visit.

The foreign perception of the American way of life is somewhat limited and distorted. It has likely been shaped by what they have seen and heard through television and Hollywood productions. In almost every instance, they are as surprised about who we really are and how we really live as the American group is of them. The length of their visit to the CMU campus is approximately two weeks. Previous experience has shown that longer visits are not necessarily in the best interests of the students. The intense experiences and culture shock usually make longer stays counterproductive.

The exchange visit to CMU culminates with a farewell dinner accompanied by many toasts for happy memories, success for the students, and new opportunities for the future. Refer to Table V for a detailed description of the typical exchange schedule in America.

Table V
Exchange Schedule in America

Day 1	7:00 pm	Depart to pick up visitors at airport
Day 2	1:00 pm	Canoe trip and picnic

Day 3	8:00 am 9:15 11:00 6:30 pm	Departmental tour Campus tour Local community tour Walleyball game at Student Activity Center
Day 4	9:30 am 12:00 1:30 pm 3:00 5:30	Industrial tour Lunch with President of the university Industrial tour Automobile dealership tour Dinner with students in dormitory
Day 5	8:00 am 1:00 pm 5:00 7:30	Depart for Detroit metropolitan center Prototype engineering tour Visit the Renaissance Center Ethnic dinner in Greektown
Day 6	9:30 am 1:00 pm 6:00	Industrial museum tour Depart for shopping mall German dinner in Bavarian Inn
Day 7	8:30 am 12:00 2:00 pm 6:30	Student project time Dinner with Provost and Council of Deans Sports event Dinner at faculty home
Day 8	9:00 am	Depart for all day fishing trip
Day 9	3:00 pm 6:30	Bowling Dinner at faculty home
Day 10	8:30 am 6:30 pm	Student project time Walleyball game at Student Activity Center
Day 11	8:00 am 9:30 11:30 1:00 pm 3:30	Depart for Industrial tours Automobile body plant tour Lunch in Clara's restored train depot restaurant Automobile assembly plant tour State capitol tour
Day 12	9:00 am 1:00 pm 3:30 7:00	Industrial tour Visit Jay's sporting goods super-store Visit dairy farm Dinner at faculty home
Day 13	8:30 am 6:30 pm	Student project time Dinner at department chairman's home

Day 14	8:30 am	Student project time
Day 15	11:00 am 12:00	Cardboard boat race Homecoming football game
Day 16	1:00 pm 6:00	Automobile show Farewell dinner
Day 17	8:30 am	Depart for airport

G. The American Visit

The plan of activities for the American visit to VSU is usually not known until the CMU group arrives in Russia, or in some cases, it is developed on a day by day basis. The CMU students sometimes find this aspect of their trip a bit disconcerting, not knowing from one day to the next exactly what they will be doing. From a faculty point of view this is one of the valuable lessons that an exchange can provide, learning to cope with a new culture that moves and plans at a different pace than they are accustomed to. A typical list of activities scheduled for the American students and faculty include:

- Welcoming banquet the first evening at the university
- Excursion to the ancient nearby town of Suzdal
- Tour of the university classrooms and laboratories
- Participation in the annual Victory Day celebration
- Tour through the city of Vladimir, including historical spots and museums
- Students visit classes and spend time on mutual technical projects
- Tours through various manufacturing and engineering facilities
- Excursion to Moscow including Red Square, the Kremlin, and Arbot street.
- Various recreational opportunities (basketball, volleyball, swimming)
- Excursion to Gus Chrystalny for a tour through the crystal plant and museum
- An Ooh-Hah picnic in the forest
- Participation in the annual VSU English language competition
- Farewell banquet at the university

The length of the visit in Russia is approximately two to three weeks. Feedback from students has determined that two weeks in Russia is about as much as they can handle graciously. The culture shock and intense experiences over this two-week period have shown that the enthusiasm for the exchange experience peaks at about two weeks, and then drops off rather precipitously thereafter. The students are usually very anxious to begin the homeward journey by this time. A three day lay-over in London on the way home allows them to experience yet another culture and also gives them an opportunity to relax a bit in an English speaking country before returning to the United States.

The visit to Mexico is somewhat shorter than the Russian visit. The travel arrangements are quite simple, no visa is required, and the cost is quite reasonable. This is a ten-day trip that occurs during the semester spring break. Because so many industrial manufacturing facilities are located in the Toluca area, scheduling industrial tours is no problem. Aztec ruins and

Mexico City are in close proximity to the university and provide interesting opportunities for cultural excursions. Some of the activities included in the MIT visit include:

- Tours through a variety of industrial and manufacturing centers
- Collaborative student project activities in MIT laboratories
- Excursions through the many local historical spots
- Excursion to Mexico City and the National Museum
- An official dinner to recognize the participants of the exchange
- Recreational opportunities
- Family experiences with hosts
- Tour through the city of Toluca
- Hike to the Monarch butterfly migration site

XII. SUMMARY

Again, a foreign exchange program can be ideally educational, exciting, and exotic. Many people have traveled and interacted with foreign cultures with few problems, however, nothing is ever as simple as it first seems. Seemingly simple logistic situations and problems sometimes require hours of discussion and negotiation to resolve. This can be very frustrating for Americans who are constantly consulting calendars and watches to be sure things stay on schedule. One of the most predictable aspects of any exchange program is its day-to-day unpredictability. Planned excursions are postponed, bus transportation fails to show up, dinner plans are interrupted, and lengthy trips are made at a moment's notice with little time to prepare. Each day is a new adventure! As unsettling as it sometimes seems at the time, post exchange feedback from exchange participants has indicated that these experiences have enriched their lives and have provided valuable reference points from which they guide their professional lives.

Listed below are some of the important aspects of a successful exchange program.

A. Support

Adequate support is an obvious requirement. This support can take many different forms. As always, verbal support is much easier to garner than financial support. Support must start at the departmental level and move vertically through the chain of command. The upper level administration at CMU has for some time been calling for greater efforts toward internationalizing the campus. The Russian and Mexican exchange programs not only nicely fit their idea of internationalization, but they are also being held up as a positive example to others on campus as one method of providing our students with relevant international experiences.

The exchange programs are designed to operate as entirely self-supporting activities. Continuing efforts are always ongoing to identify outside sources of support. Although the International Relations Committee of the local community has been supportive both with their organizational efforts and financial generosity, other efforts towards identifying sources of financial aid have been less successful.

The OIE at CMU, is dedicated to facilitating international activities and programs. This office handles the day-to-day budget affairs and some of the exchange program promotional activities. The exchange budget also resides in this office, but the exchange activities are an autonomous entity within the IET department. The OIE has observed the degree of control and resulting high quality of the IET exchange programs, and has allowed the department exchange programs to operate quite independently from outside control.

B. Dedication and Time

A successful exchange must be directed by dedicated faculty leaders who are committed to the program. The required time commitment is greater than one might imagine. There are countless details which must be monitored and expedited in a timely manner to ensure program success. Refer to Table VI for a detailed chronology of major events and responsibilities.

Table VI
Chronology of Events and Responsibilities

15 Sep	Participate in campus wide International Exchange Fair
20 Sep	Send follow-up letter to interested Fair visitors
25 Oct	Send second letter to Fair participants announcing first student organizational meeting
3 Nov	Budget planning meeting with OIE
5 Nov	First organizing meeting with students
5 Jan	Promote second organizing meeting
20 Jan	Second organizing meeting
26 Jan	Exchange applications due
24 Jan	Participating students selected
26 Jan	Prepare handouts for first meeting
28 Jan	First exchange meeting at faculty home, provide passport applications
2 Feb	Request official invitation from VSU
4 Feb	Make air and hotel reservations
26 Feb	February meeting at home of faculty leader
28 Feb	Silk screen Mexican exchange tee shirts
3 Mar	Depart for Toluca, Mexico
11 Mar	Pick up students returning from Toluca, Mexico
20 Mar	Invite on campus Russian students to March meeting
30 Mar	March meeting at faculty leader home, collect copy of passport information page
3 Apr	Send information out for Russian visas, Purchase air tickets
7 Apr	Silk screen Russian exchange tee shirts
10 Apr	Request financial assistance renewal from IRC
24 Apr	Receive Russian visas

28 Apr	Final meeting at faculty leader home
1 May	Confirm and finalize exchange arrangements
7 May	Meet at department for trip to airport
12 May	Arrive in Vladimir, Russia
17 May	Meet for dinner to evaluate ongoing exchange activities
23 May	Depart for London
26 May	Depart for home
16 Jun	Journals due
30 Jun	Grades due at registrar's office
10 Aug	Request list of Russian visitors
14 Aug	Send invitation to Russia
	Make air reservations for Russians
5 Sep	Make home-stay arrangements, purchase air tickets
8 Sep	Send tickets to Russia
Ongoing	Arrange activities for Russian and Mexican visitors
Ongoing	Confirm activity calendar
30 Sep	Pick up Russians and Mexicans at airport
Ongoing	Host Russians and Mexicans (Table V)
15 Oct	Farewell dinner
16 Oct	Bring Russians and Mexicans to airport
19 Oct	Write thank you letters to all who helped with exchange
27 Oct	Rectify budget with OIE

One faculty member should be charged with the overall responsibilities of the exchange, or, if more than one, the duties must be clearly delineated to be sure nothing is overlooked. The ideal scenario would have release time given to the person who has been designated as the lead faculty member.

It is important that exchange activities proceed smoothly and details fall into place as planned. This inspires student confidence and makes the exchange a more positive experience. Again, never underestimate the amount of student anxiety. The exchange may be rather routine for faculty who have made the trip before, but this is usually a first-time experience for the students. They are still dealing with their stereotypical perceptions of whom the Russians and Mexicans are and how they might act toward Americans, our best efforts to dispel these images, notwithstanding.

C. Communication

Another critical component of an exchange program is the importance of efficient and precise communication among all parties involved. It is very easy to misinterpret what another party has said, particularly given the differences of language and culture. The Russian language, especially, presents a number of interesting challenges for both students and faculty. It is completely different from Latin based languages such as English and Spanish. For most Americans the Cyrillic alphabet is very complex and difficult to read, speak, and learn. However, since most educated Russians, and Mexicans for that matter, have been exposed to English in their schools, many speak at

least rudimentary English. They are quick to point out, however, that English and American English are two entirely different things. Interpersonal communications have not been an insurmountable problem for any students thus far.

Foreign cultures are very interesting for students. There are many customs and modes of behavior that a foreign visitor must be aware of to deal successfully with new people. Knowing the cultural factors of a foreign country is critically important to the success of any visit; however, in Russia they seem more pronounced. Russian and Mexican students enrolled at CMU who have attended the monthly pre-trip meetings were very helpful and instrumental in alerting us to these cultural differences. As previously mentioned, e-mail, which is always in English, is the preferred method of distance communication.

D. Safety

It is a well-established fact that the greatest physical threat to the safety of the students during exchange experiences is that of surface transportation while in the host country. From time to time it can get a bit wild and unpredictable. To the extent possible, faculty must strive to anticipate these situations and promote safe alternative methods of transportation. Even seemingly little things like looking right, rather than the familiar left, when crossing a street in London have special significance. Many visitors to England have been severely injured, even killed, for failing to heed this simple precaution.

Alcohol and sexual freedom present their own special problems as students' experiment with new cultures. Faculty, and to a greater degree, the universities involved, must appreciate the responsibility and liability associated with directing exchange programs. This accountability cannot not to be taken too seriously. Faculty must devote a period of time during the pre-trip orientation sessions to review these concerns with the students, talking openly and frankly about alcohol, drugs and sexuality as they relate to the exchange activities. Even a small incident can ruin the most carefully planned exchange program in an instant.

E. Benefits for Students

During the initial discussions with VSU and MIT a decision was required regarding the length of the exchange visit. Traditionally, many exchange programs are constructed around a time period of one semester. This fits comfortably into most academic calendars and allows for a deep immersion into the day-to-day life of the host country. In an effort to make the exchange experience available to as many students as possible, the CMU exchange programs described in this paper purposely deviated from the semester model for several reasons. First, the cost is an important consideration for most students. Second, a trip scheduled for three weeks in May does not intrude prohibitively into summer employment or internships. Third, the culture shock is intense, but is minimized by the shorter residence interval in the host country. This is equally true for all groups, the Russians, Mexicans, and the Americans.

With increased internationalization taking place in the world today, universities are strongly encouraging departments to include an international component in their academic curriculum. These exchange programs serve as an important vehicle to show the students at CMU, VSU, and MIT this global aspect and the importance of international familiarity.

Feedback from the students, both verbally and from their journals, indicates that their participation in the exchange programs, although financially challenging, has been a pivotal point in their education, and their lives. It has greatly expanded their appreciation of what Americans have and has dispelled their stereotypical impression of who the Russian people are. The exchange with MIT has also given the students important insights into their friends south of the border. After graduation many of these students will likely work for companies with international divisions. We hope their international exchange experience will enable them to enjoy a smooth transition from academia to the global village awaiting them.

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