

02C044I

02C044I

Project Number: 00-GXT-LON-08

PROJECT DEVELOPMENT

An Interactive Qualifying Project Report  
submitted to the Faculty  
of the  
WORCESTER POLYTECHNIC INSTITUTE  
in partial fulfilment of the requirements for the Degree of Bachelor of Science  
by



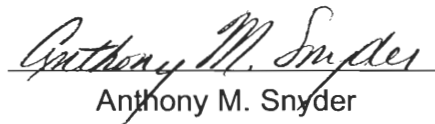
Mark Blackburn



Anne Francis



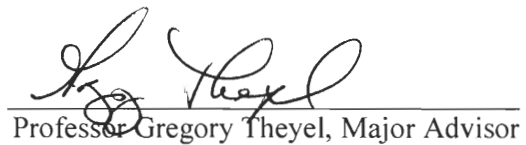
Jessica LaRiviere



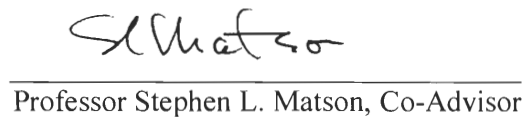
Anthony M. Snyder

Date: March 1, 2002

Approved:



Professor Gregory Theyel, Major Advisor



Professor Stephen L. Matson, Co-Advisor

Abstract .....	4
Executive Summary .....	5
1. Introduction .....	9
2. Literature Review .....	12
2.1 The IQP .....	12
2.1.1 History .....	12
2.1.2 Dimensions .....	14
2.1.2.1 Global Programme .....	15
2.1.3 Project Set-up .....	15
2.1.3.1 Sponsor .....	15
2.1.3.2 Finalising Project Set-up .....	16
2.1.4 Project Execution .....	16
2.1.4.1 ID 2050 and PQP .....	16
2.1.4.2 The Advisor's role .....	17
2.1.4.3 Completion of IQP .....	17
2.2 Marketing .....	18
2.2.1 Target Audience .....	18
2.2.1.1 Three Sectors of Organisations .....	18
2.2.1.2 Identify Prospects .....	19
2.2.1.3 Research the Prospect .....	20
2.2.2 Positioning .....	21
2.2.3 Marketing Strategies .....	22
2.2.3.1 Personal Selling .....	22
2.2.3.2 Networking .....	23
2.2.3.3 Testimonials .....	25
2.2.4 Contacting Prospects .....	26
2.2.5 Customer Relationship Management .....	28
2.3 Business Plan .....	28
3. Methodology .....	30
3.1 Potential Sponsors .....	30
3.2 IQP Projects and the Marketing Presentation .....	31
3.3 Marketing Strategies .....	32
3.3.1 First contact .....	32
3.3.2 Phone calls .....	33
3.4 Contact Management .....	34
3.5 Charity Fair .....	36
3.6 Analysis and Making Conclusions .....	38
4. Results and Analysis .....	39
4.1 Networking .....	39
4.2 Approach .....	40
4.3 Results of Solicitation .....	42
4.4 Past Sponsor Interviews .....	43
4.5 Assessment of Marketing Materials .....	44
4.6 Charity Fair .....	45
4.6.1 Informational Session .....	45

Works Cited.....145

## **Abstract**

The goal of this project was to aid the IGSD by expanding the network of potential sponsors for the London Centre. To accomplish this, the Project Development IQP Team formulated an action plan, created new marketing materials, solicited eleven London Boroughs and Groundwork as potential sponsors, and developed materials for an upcoming marketing event. This project also produced a marketing plan, which serves as a guide for gaining potential sponsors, as well as maintaining established relationships.

## Executive Summary

The Interactive Qualifying Project (IQP) at WPI is both a requirement for graduation and an important element distinguishing the school's undergraduate programme from nearly every other undergraduate programme in the United States. A unique aspect of the IQP is the Global Perspective Programme, which allows students the opportunity to study abroad. The problem that our IQP addressed was the need to maintain a stable supply of high-quality IQP projects at the London Project Centre. This is essential for WPI in order to give students varying choices of projects that are interesting and challenging, and that achieve the goal of the IQP: allowing students to address a problem at the interface between society and technology that is outside of their discipline.

This project had several objectives. The main objective was to expand the network of potential sponsor contacts in London through previous relationships that WPI has built with organisations in London. Our other objectives were to devise a marketing plan for gaining sponsors and maintaining the relationships with them at the London Project Centre, to review existing marketing materials created by WPI to promote the IQP and make suggestions for how they could be improved, to aid in the organisation of the Charity Fair held during the 26, 27, and 28 March 2002, and to create marketing materials to be primarily used at the charity fair.

Before leaving for London, our group focused on two primary research topics to help us with our main objective: the IQP and marketing. Our plan was to develop interest in the IQP programme among prospects. Therefore, we needed to know every aspect of the programme and how to market it. We researched its history, requirements a project

must fulfil to be considered an IQP, a sponsor's role, and expected project outcomes. We also researched techniques that we could use to market the IQP to potential sponsors. We discovered efficient methods for obtaining contact information of prospects, ways for approaching the prospect, and methods for gaining prospects' interest in hopes that they will want to learn more about the programme. We created a marketing presentation to convey to sponsors what WPI is, the important aspects of its project programme, and the benefits an organisation would receive from participating in the programme.

We targeted eleven boroughs of London, as well as the Groundwork organisation, for solicitation. We focused on boroughs because the London Borough of Merton has sponsored projects for several years, which not only provided excellent professional references for the new contacts, but also showed that London governmental organisations have many issues that can be explored through IQPs.

A well-thought-out process was required when we began to contact prospects and build relationships with them. We were able to obtain contact information for planning officers in several boroughs from a past liaison in Merton. We made preliminary contact with these boroughs by a fax, which gave them basic information on who we were and why we were contacting them, and informed them that we would be calling them within a few days. The fax mentioned that we had been referred by our contact in Merton, and it listed a few past Merton projects. This fax was intended to provide each prospect with sufficient information so they could decide whether or not they were interested in getting more information during our phone call.

Our next step, the phone calls, was extremely successful; all of the boroughs wanted to hear more about the programme. We told our new borough contacts about our

work with the Borough of Merton and gave examples of past projects so they could relate their needs to projects that had previously been completed. It was very apparent to us that our references to Merton and our projects there were the keys to getting prospects interested in speaking with us. Some boroughs wanted more information by mail, and we sent them WPI promotional materials. Other boroughs wanted time to consider the opportunity to work with WPI and consult with their colleagues. We recorded the outcome of these calls in an Excel workbook, where we listed the name of each contact, noted the current status of our relationship with them, and summarized all contacts that had been made with them.

Our assessment of WPI's marketing materials was based on both our marketing research and our experience. As mentioned, we designed our marketing presentation to explain the benefits of an IQP to a sponsor and to give examples of past London projects. These are two important aspects IQP promotional materials must include in order to spark a prospect's interest in the programme. We also made suggestions for how these materials could be improved.

The next objective, assisting with preparations for the Charity Fair, was accomplished during the last three weeks of the project. We developed design ideas for the booth, information content to be presented, and various posters to be placed in the booth in order for it to be effective. We also created different types of pamphlets that could be handed out during the exhibition. We gave these suggestions to the London Project Site Co-ordinator, Jennie Hawks, for approval, and then had these materials professionally printed.

Along with our final report, we wrote a marketing plan for recruiting sponsors. This plan presented all of our research and findings and was written specifically for readers who wish to learn about the process of recruiting IQP sponsors and maintaining relationships with them. Our marketing plan presents our knowledge of the IQP programme, how it can be effectively marketed, and the methods for building and maintaining relationships with potential sponsors.



# 1. Introduction

The Interactive Qualifying Project (IQP) at WPI is both a requirement for graduation and an important element in distinguishing the school's undergraduate programme from almost every other undergraduate programme in the United States. A unique aspect of the IQP is the Global Perspective Programme, which allows students the chance to study abroad. The growth of the London Project Centre has increased the demand for a stable supply of high quality projects, and the opportunity exists to expand the network of potential project sponsors.

Recently, the London project supply has become increasingly difficult to maintain. A number of extra projects must be obtained each year to ensure that replacements are available in case sponsors drop out. Dropouts occur for a number of reasons including sponsors running out of projects for students, loss of funding, or liaisons leaving the sponsoring organisation. In C term 2002 the London Borough of Merton sponsored four of the eight projects that were completed. Merton has been quite pleased with the WPI IQP programme and its students, and it has sponsored many excellent projects. However, a variety of new IQP research topics and sponsors are desired. The goals of this particular project are to develop new potential sponsor contacts in London and start the process of developing relationships with these contacts, devise a marketing plan for gaining sponsors at London Project Centre, aid in the organisation of the Charity Fair held in March 2002, and review the existing marketing materials used at the London Project Centre.

The client for this project is the WPI Interdisciplinary Global Studies Division (IGSD), which is usually responsible for sponsor recruitment. However, with this

project, the IGSD is aiming to expand its sponsor development and recruitment methods further by giving our group the opportunity to develop and carry out our own methods for identifying IQP topics and sponsors.

When looking at potential sponsors for IQP projects, a few factors must be considered. First and foremost, prospective organisations must be able to offer projects that fulfil the definition of an IQP – namely, they must involve aspects of both society and technology. Potential project sponsors must be geographically accessible to students who will travel there on a full-time basis for work, and the organisation should be able to provide workspace for students. Ideal sponsors must be willing and able to work with students through a committed liaison. They should also have ideas for projects that are appropriate, will help the organisation, and are interesting as well as challenging.

Our group chose to focus on targeting boroughs of London as potential sponsors. This decision was made for the following reasons: contacts in each borough are readily available from people who sponsor projects in the Borough of Merton; governmental organisations have a variety of issues to deal with that could make for promising project topics; and when other boroughs see that we have worked so extensively with Merton, they will take that into great consideration when deciding whether or not to sponsor an IQP. A borough can review all the projects Merton has done and contact people in Merton who have worked with WPI as references. This is beneficial to both them and us because references from Merton will be seen as professional and reliable sources of information by other boroughs, as opposed to having no professional references. An organisation that has no connection with anyone who has worked with WPI before would

have this problem, and may not be as inclined to show an interest in learning about the IQP programme.

Our objectives will be accomplished by calling and meeting with organisations and boroughs that have been selected as potential sponsors. We will have created a marketing pitch to convey to potential sponsors, and by analysing the outcomes of these phone calls and meetings; we will be able to determine if our method was effective. If our approach proves to be ineffective and very few contacts are interested in the IQP programme, analysis of our success or lack thereof will allow us to make suggestions on how the method we used can be improved. Based on these experiences and the analysis of past sponsor recruitment methods, we will create a marketing plan and assess the current marketing materials.

## **2. Literature Review**

This literature review discusses topics that our group must have knowledge of to successfully complete our project. First, a description of the IQP is given, including details of what the IQP entails and where its roots are. Next, findings from marketing research are presented as a basis for soliciting potential sponsors to participate in the IQP programme. Marketing techniques as well as possible methods that could be useful in completing our project goals are made clear. Also, the advantages and disadvantages of seeking sponsorship from non-profit organisations, government agencies, and private companies are mentioned.

### **2.1 The IQP**

WPI's educational experience and unique academic requirements are detailed in the WPI Plan, which consists of four major parts. The first requires fulfilment of the Distribution Requirements through an academic programme consisting of balanced courses that encourage student choices. The next three deal with WPI's project system, which is based upon three major projects: Humanities and Arts Sufficiency Project, Interactive Qualifying Project (IQP), and the Major Qualifying Project (MQP) (WPI Undergraduate Catalogue, 2000).

#### **2.1.1 History**

The Interactive Qualifying Project's roots are in one of the original degree requirements for WPI. These requirements mandated that the student majoring in the sciences or engineering complete two nine-credit-hour projects. Originally, the projects,

which were completed by the students, involved some technical aspect of their major (Schachterle, 1999, p. 5). A committee of seven faculty members lead by Imre Zwiebel examined these projects closely in 1972. This committee proposed that the project should deal with interactions among technology, society and human needs. The Handbook for IQP Advisors and Students makes the following statement:

The Zwiebel Committee expected that as a result of completing the Interactive Qualifying Project students [would] be sensitive to general social problems, able to question, criticize or reinforce prevailing ethics and value concepts, aware of societal-humanistic-technological interactions, able to analyse the interactions, and able to make better judgments and policy recommendations on the issues that affect society (Woods, 2001, p.1, ch. 2).

The hope of the Zwiebel Committee was that future graduates of WPI would have the ability to take a step back and detach themselves from the specifics of everyday activities. They would then be able to examine and analyse the many facets of the interactions between society and technology. By analysing and fully comprehending the nature of these interactions, the student would gain the ability to use their degree wisely while developing new technologies that will have an impact on society (Woods, 2001, p. 1-2, ch. 2).

These projects were the first of their kind, and WPI was the first university to institute such projects and require them for graduation. No one knew whether it was feasible to devise or even advise projects for 600 students every year. However, these worries were soon put to rest when the majority of students in the early 1970's chose the interdisciplinary option. Completing one interdisciplinary project was chosen where previously students had completed the two technical projects described earlier. By 1978, WPI faculty felt so confident in the projects that they required that all students complete a project designated as the "Interactive Qualifying Project." Since then, approximately

14,000 of WPI's graduates have completed an IQP. From 1978 to 1999, student groups have completed almost 6,000 IQP's. The IQP has undergone many developments since 1978, including the introduction of WPI project centres all over the world, which give students a global understanding of social and technological interactions (Schachterle, 1999).

### **2.1.2 Dimensions**

The IQP, which is normally executed in groups of three or four students, was designed "...to provide an understanding of the priorities of other sectors of society, develop the ability to communicate effectively with disparate groups, organise and derive solutions to complex problems, and gain an awareness of the interrelationships between technology and people" (WPI Undergraduate Catalogue, p. 20). The most important aspect of the IQP is the relationship between society and technology. This relationship allows students to gain experience and expand their skill set through problem solving, extensive writing, technical and scientific endeavours, professional communication, and interaction with professionals who use and/or need technologies (Woods, 2001).

Another important dimension of the IQP is that it is interdisciplinary - it allows students the opportunity to work outside of their major or with technology that is unfamiliar to them. It also provides practice in solving open-ended, unstructured problems. Students are given the freedom of choice, which allows them the chance to explore a subject matter that they have always been interested in, but never had the opportunity to study in any detail (Woods, 2001).

### **2.1.2.1 Global Programme**

IQPs can be performed either on-campus or off-campus. Off-campus projects are done through WPI's Global Perspective Programme. The programme consists of project sites in twenty cities and five continents, some of which include London, Melbourne, Bangkok, Hong Kong, Copenhagen, and Zurich. Today, WPI sends more engineering students abroad than any other university (*Global Perspective Programme*, 2001).

To do an IQP abroad through the Global Programme, students go through an application process where they opt to go away to the site of their choice for one term. The process includes an application, essay, and an interview with a faculty member; then the decisions are made of where each person is accepted based on those three steps.

### **2.1.3 Project Set-up**

#### **2.1.3.1 Sponsor**

The success of the IQP project is dependent upon an interested and enthusiastic sponsor. "The sponsor is an organisation, either governmental, corporate, or non-profit, that has something it wants to address but doesn't have the staffing for" (Prof. Davis, November 8, 2001). The sponsor presents WPI with a project that meets the educational goals of the university. Once WPI and the organisation agree on a project, the organisation must make a financial commitment (Prof. Davis, November 8, 2001).

A sponsor must provide a project liaison. The liaison is the person that represents the organisation and works directly with the students and faculty advisors. The student IQP group will be carrying out the project based on what the liaison's purpose is for

setting up the project, and will determine the goals according to what outcomes the liaison expects at the end of the project.

Many benefits exist to both the sponsor and the students. The students receive real-world experience by working for reputable organisations. The WPI Projects Office believes that:

The benefits to the organisation include: solutions to problems of interest to the sponsor; close sponsor-faculty cooperation; a unique opportunity to screen future engineers; increased professional satisfaction on the part of liaison personnel of the sponsor resulting from participation in the educational process; and faculty development with an orientation to the needs of the sponsor (WPI Projects Programme, 2001).

### **2.1.3.2 Finalising Project Set-up**

The three people that are involved in the process of setting up IQP's are the site co-ordinator, the centre director, and the liaison. The site co-ordinator lives and works at the site, and is employed by WPI. This is the person who has direct contact with the liaison of the sponsoring organisation in order to set up the project. The proposed project is then submitted by the co-ordinator to the centre director at WPI, who approves all projects that are done by students at the site. The director handles all the details to make the project official for the agreed term.

## **2.1.4 Project Execution**

### **2.1.4.1 ID 2050 and PQP**

Students must successfully complete two courses the term before they go away to the project site. The courses, ID 2050 and PQP, teach the students about social research, presentation skills, and writing techniques. By the end of the seven-week period, the students have acquired these skills and have completed a project proposal.



The project proposal provides the students and advisors with a structure for their ideas. This can be done for either PQP credit (1/6 of a unit) or for a fraction of the one unit of IQP credit. The proposal consists of an Executive Summary, Introduction, Literature Review, Methodology, and Conclusion. The Literature Review provides background research, while the Methodology outlines the steps that will be taken in order to complete the project (Theyel, 2001).

#### **2.1.4.2 The Advisor's role**

An IQP advisor is usually a faculty member who has knowledge or interest in the area of technology that relates to the project topic. The advisor provides the students with knowledge from experience and guidance by helping with team dynamics, interviewing techniques, research and writing skills, and the formulation of their proposal. The advisor helps both in the proposal stage of the project and helps during the actual project, whether it be on campus or off.

#### **2.1.4.3 Completion of IQP**

When students arrive at their project site in the beginning of the designated term, they are ready to meet their liaisons and they begin to carry out their methodology. It is not uncommon for methodologies to change at the beginning of the projects, due to the open-ended topics that make IQPs. Students spend the seven weeks at the project site revising the components of the project proposal which will become part of the final paper, gathering data by following the steps of their methodology, analysing the data, and recording results and conclusions. By week seven, an IQP group should have accomplished their goals to the best of their ability. The final paper is handed in, and

presentations are given to the advisors and liaisons to show what the group has achieved during the term.

## **2.2 Marketing**

When looking at the marketing of the IQP, one concern our group faces is discerning and executing the best approach to successfully recruit new sponsors. After researching marketing, the topics we decided are necessary are the target audience, marketing strategies, contacting the prospect, and customer relationship management.

### **2.2.1 Target Audience**

In order to effectively market an IQP project, the marketing team must know and understand the target audience. The target audience is the group of people that the marketing team aims their marketing strategy towards. For our purposes, these will include entities that deal with the environment or transportation and other boroughs. Additionally, before a potential client is contacted, some research must be done to determine whether the organisation would be an acceptable sponsor.

#### **2.2.1.1 Three Sectors of Organisations**

Three different sectors of organisations exist: government organisations, non-profit organisations, and private companies, all of which can be approached for sponsoring IQP's. The biggest advantage to having a non-profit organisation or a government agency sponsor a project, according to Prof. Fabio Carrera, is that they always have issues that deal directly with society. The projects that they need done

almost always fit the definition of an IQP. Although private companies are more concerned with profit, they also have issues that deal with society - just not as directly (Prof. Fabio Carrera, November 19, 2001).

Another aspect is that the projects offered by private companies or government agencies may be of more urgency than those given by non-profit organisations, which puts a large amount of pressure and stress on the students to do an excellent job on the project. Funding for each comes from different sources, and private companies could be most able to supply money to sponsor an IQP.

Despite all the advantages and disadvantages of the three types of organisations and companies, each one will have its own set of reasons for electing to sponsor a WPI IQP. According to Prof. Stephen Matson, private companies may be motivated to polish their public image and demonstrate good “corporate citizenship,” while a resource-poor non-profit organisation might care more about getting their projects done through the additional volunteer labour provided by WPI students on IQP project teams (Stephen Matson, November 29, 2001). Although judgments cannot be made until specifics are known about each organisation individually, these are concepts for us to keep in mind when researching potential IQP sponsors.

#### **2.2.1.2 Identify Prospects**

Locating and qualifying a prospect involves actively identifying potential clients from referrals, inquires, and other tools used to discover those interested in the IQP programme. This can be accomplished in a number of ways, such as cross-referencing different industry lists, telephone interviews, personal interviews, and speaking with organisations or people who have experience with the company (Zikmund & d’Amico,

1986). This applies to our group in that we will be working off of existing contacts initially, and expanding from there.

The first step in the qualifying process is determining whether or not the prospect has sufficient resources for a project. They can then be assigned to one of three groups: “a qualified group, a non-qualified group, or a group falling somewhere in between” (Zikmund & d’Amico, 1986, p. 517). Once the prospect is thoroughly researched, the marketing team may come to one of three possible conclusions: that the prospect is worthy of being contacted aggressively and having an interview set up, does not have the proper need for a project and may be eliminated from the list, or is worthy of a being contacted but not aggressively. Great care must be taken in order to ensure that a prospect is not put into the wrong category due to lack of investigation, thereby losing a good client (Zikmund & d’Amico, 1986).

During this step, the marketing team should also learn who the proper contact for the prospect would be in order to be able to effectively market the programme. Valuable time and energy can be wasted if the initial contact is someone who is not qualified to make this type of decision. This step also sets the marketing team up for the rest of the marketing process by being able to tailor each presentation directly to the prospect they are speaking with (Zikmund & d’Amico, 1986).

### **2.2.1.3 Research the Prospect**

When approaching a prospective client, a marketing team must have an understanding of the background factors of the client. These background factors can be discovered in a variety of ways, most commonly looking at the organisation’s website or

annual report. By understanding the client's objectives, the marketing team can tailor their pitch to the client's needs.

During this researching phase, the team must be very aware of what makes a good IQP sponsor. Sponsors must be able to provide a project that needs to be done, and can be accomplished in a seven week term by a group of three to four college students. These projects should have a link between society and technology. Also, sponsors must provide a liaison that is able to meet with the student group on a regular basis. The sponsor must be reasonably close to central London, within the M25, and be capable of providing a workspace for the students as well as transportation to the workspace.

Additionally, we must also pay great attention to what makes an IQP attractive to a potential sponsor. Examples of this could be a set of extra hands so work can finally be accomplished, the need to integrate technology into an organisation, or to use the face of American students to capture information that could not be obtained by current staff. If the benefits to the organisation are not clearly explained, the interest in the programme will be far less. Quite simply, if the contact does not understand what is in it for them, they will not express interest in sponsoring a project.

### **2.2.2 Positioning**

An important aspect of marketing is knowing what the target audience wants to hear, and this related to the concept of positioning. Positioning is the strategy of taking the characteristics of your product or service and presenting them to your audience so that they will see the benefits of those characteristics according to their needs. All organisations have different needs, and by determining these needs, the characteristics of

the service or product can be positioned to an organisation in a way that will benefit them specifically. By positioning a product or service to an audience, the audience's attention will be caught quickly and easily.

### **2.2.3 Marketing Strategies**

After reviewing the texts available, the two most appropriate strategies are personal selling and networking using testimonials.

#### **2.2.3.1 Personal Selling**

Personal selling is the act of pursuing customers, or sponsors in the case of our project, through human contact and oral communication as opposed to impersonal mass mailing. In their book Marketing (1986), William Zikmund and Michael d'Amico give a description of the job of the salesperson as one to remind, inform, or persuade.

The benefits of personal selling are depicted in its many facets. The largest advantage of personal selling is its flexibility. During a sales pitch of a service, if a client has a problem or concern, the question can usually be addressed during the interview. When our group solicits potential sponsors, for example, our presentation will be our sales pitch and any questions they might have can be immediately answered. The salesperson should also have the ability to read the body language of the customer, which could lead to insight on their interest in the product. The message can also be directly adjusted for each particular customer based on the customer's needs. That is something to keep in mind in our presentations of the IQP.

### **2.2.3.2 Networking**

After consulting Webster's Dictionary and the marketing dictionary provided on the Monash University web page, a concise interpretation of the word "networking" as it relates to our project is to obtain an informal set of contacts among people with common interests as a source of prospects, for the exchange of information, and for mutual assistance or support (31 January 2002). Networking is used for a variety of marketing schemes, and one of the most common uses is for job hunting. Often the key to finding a job is knowing a person who works for an organisation of interest and asking them if an opportunity is available. Even if no opportunity is available, the 'friend' will try to think of other people to contact who they know. This has been found to be far more effective than just distributing resumes in response to ads or even just dispersing resumes to organisations that have no ads posted. Because a personal level relationship is established, they will try much harder to help. This hand would not have been extended if this personal contact did not exist. People are far more willing to help their friends than a random stranger that approaches them for help.

Word of mouth networking is one of the most effective marketing tools to use when trying to expand the contact and sponsor base at a project site. To fully understand this concept, one must look at how it is used and applied. Word of mouth marketing can easily be seen when examining sales of small tangible products, but it also may be useful when trying to market a service such as the WPI IQP Programme. Many small businesses use this tactic to "advertise" their business. A personal reference may be seen as a more reliable source of information than flashy advertising campaigns, due to the fact that the reference may come from someone that they know and/or respect. In the

case of the IQP at the London Project Centre, other boroughs or organisations may have heard about the programme through friends, work contacts, or even through second hand experience with the programme itself.

Regardless of what is being marketed, such as a product or a service, there will be a specific group of needs that it will fulfil. Once these needs are established, it can be determined who the target audience is and how they will use the service. Also, one will be able to discover how their clients will be connected.

In the case of the London Project Centre, the use of London boroughs as potential sponsors will be investigated. The London Project Centre has found great success in using the London Borough of Merton as a sponsor, and hopes to expand this success to other boroughs in the Greater London area. This may be best achieved by using present contacts to gain new contacts. The content of the projects completed at the London Borough of Merton and what needs these projects fulfilled can be examined, observing whether or not these needs are Merton specific or if other boroughs in London may have the same needs. If it is found that other boroughs in London have the same needs, then the potential for successfully spreading the programme is great. For example, one will be more successful in gaining a new client/sponsor if they can give an example of how a problem that a potential client has was solved previously for another client. Once the prospect realises that his/her need is not the only one like it, and that the service has successfully helped others with the same problem, they are more likely to accept the service and expect the same high quality results that have been previously set as standard.

Another way of expanding a client base is through leads. A leads that is received from satisfied clients may have the same needs as previous clients, and might be able to



be helped by the service as well. By using leads, the new prospect may also have already heard of the programme or service that is being marketed, making it easier on the “salesperson” to complete the transaction and gain a new client. If the prospect has heard endorsements from the satisfied client, they have less reason to doubt that the service will work for them, and are therefore more likely to accept the service.

### **2.2.3.3 Testimonials**

Testimonials can be the next best tool to use when trying word of mouth networking. The client whom the testimonial is from was at some point in time in the same place as the prospect, not sure of the quality of the service, and not sure whether the service will work for them; seeing this, and finding that it was successful for the third party that gave the testimonial, they may find themselves more accepting to the idea that the service may work for them. This third party testimonial and status may build a level of credibility that a marketer’s own words cannot build.

One method of broadcasting a testimonial is through newspaper articles written about current projects. Articles that are written by newspaper staff are going to be somewhat unbiased when writing about the projects. If the articles are in popular newspapers or journals, they are in public circulation, so it is possible that an organisation that has a need for such projects could read about a project and make an attempt to contact WPI. The articles can also be distributed when meeting with prospective sponsors, and can be quoted in new marketing materials. Quotes from the *Times* or *The Evening Standard* would add reputability to the WPI IQP programme. Many articles have been written about the programme in past years; continuing to pursue this media outlet will be beneficial to the programme.

#### **2.2.4 Contacting Prospects**

In order to be successful when making a first contact with a prospect, a person must know the best way to approach them. Before contacting them, thorough research on the prospect must be conducted to be able to identify with the prospect right away.

Pointing out benefits that the service will have to their company is the best way to attract immediate attention, such as that the service will save the organisation money or make the prospect's image and name look good. Also, a person must make a good impression on the prospect in the first few seconds, or the conversation may be over very quickly.

(Zikmund & d'Amico, 1986)

The next step is the actual presentation. This presentation is meant to persuade the prospect that the service does have benefits useful to the organisation, and to explain how they can become involved with the programme. A well-prepared presentation will include topics such as the quality and reputation of the service.

Generally, the presentation begins by gaining the prospect's attention. This can be done in a number of ways, such as showing the prospect the outcome of a certain project or task the service performed. (Zikmund & d'Amico, 1986) Once the person has the prospect's attention, he or she must then gain their interest. They must convince the prospect of the service's usefulness, thereby generating more interest in the service and making the prospect desire it. (Zikmund & d'Amico, 1986)

The manner in which the presentation is given is extremely important. Including visual aids, such as Microsoft PowerPoint, slides, and videos can greatly improve the physical presentation and increase the chances of holding a successful meeting. Another

point is that some of the communication made during a presentation may not be verbal. The use of body language and seating arrangements can be very useful in conducting a successful presentation (Zikmund & d'Amico, 1986).

Handling objections is an important part of presenting a service. A prospect might have questions or strong objections to something the presenter says, and also may have reservations about making a commitment. Questions asked by the prospect prove that they do not understand how the service works or do not see how they will benefit from using the service. Objections and questions also show which aspects are most important to the prospect, and can help the presenter to better understand the weaknesses of the presentation. This situation allows the presenter to better explain their objectives and how the service works, making it evident that they came to the meeting prepared. It also indicates that the presenter and the service he is representing are both well organised (Zikmund & d'Amico, 1986).

The question and answer part of the presentation leads to the closing. This is vital because the presenter needs to realise when the prospect is sold on the service and can then move on to close the meeting. Reading the prospect's reactions after they have a clear understanding of all points of the presentation will help the presenter determine when to start closing the meeting.

Finally, if the prospect resulted in buying or accepting to the terms of the service, the presenter may want to make a follow-up visit to the prospect to make sure everything is operating smoothly. This is the best method of discovering how satisfied they are and whether or not they encountered any problems (Zikmund & d'Amico, 1986).

### **2.2.5 Customer Relationship Management**

Relationship building and management is vital in the marketing industry. This is applicable for both tangible and intangible products. In either case, there is a need to have both a listing and a documented relationship history for all organisations that have been contacted. This is known as customer relationship management, or CRM.

CRM is defined as “an information technology industry term for methodologies, strategies, software, and other web-based capabilities that help an enterprise organise and manage customer relationships” (*Customer Relationship Management*, 31 January 2002). Customer relationship management allows the organisation to focus on the client’s wants and needs.

One of the more important aspects of CRM is understanding the client; by doing so it is easier to meet their needs. This can be achieved by studying the trends of client and “salesman” interactions.

To implement and receive the most benefit from CRM, data warehousing technology should be used. This technology includes contact management software and the effective use of the World Wide Web, such as a local Intranet. By using these technologies, CRM “provides an integrated view of a company’s customers to everyone in the organisation” (Khera, 31 January 2002). By having all the information about the client accessible, the organisation, as a whole, is able to focus on satisfying the client.

### **2.3 Business Plan**

A business plan is a written document that clearly defines the goals of a business and outlines the methods for achieving them. The plan acts as a guide for those involved

with managing the business. It explains how the business will function, including marketing, managing, and the costs associated with its operation (*SBA*, 28 January 2002).

A business plan has four main sections: the description of the business, the marketing plan, the financial management plan, and the management plan. In addition to these sections, a business plan should include a statement of purpose, table of contents, executive summary, and any supporting documents.

The first section, description of business, should describe the product or service offered and location. The marketing plan describes the customers and the competitors, pricing and sales, and public relations. The management plan describes the operation procedures for the business, including how to manage employees. The final section, financial management plan, is built upon the business' budget. Once the budget is installed, this section should include procedures to ensure the business meets its financial obligations (*SBA*, 28 January 2002).

A business plan could be very useful to the Interdisciplinary Global Studies Division. The sections of the plan that will be most applicable would be the description of the business and the marketing plan. These sections could be useful in soliciting sponsors, managing contacts, and organising new project centres.

### **3. Methodology**

The methodology our group followed while in London has several different parts: research and interviews; obtaining names of people to contact within organisations that could be potential sponsors; contacting those people and setting up meetings; creating a marketing presentation; using our findings from all meetings to devise a marketing plan for recruiting sponsors; create the layout for WPI's booth in the Charity Fair 2002; and create marketing materials that can be used both at the Charity Fair and by WPI. Finally, we aimed to leave London with a list of organisations and their contact person who showed strong interest in sponsoring an IQP.

#### **3.1 Potential Sponsors**

The first step in the project was to find potential sponsors with whom we could discuss the opportunity of sponsoring projects. Our plan involved meeting with Jennie Hawks initially to investigate who our targets should be. From this meeting on the first week of arrival, we received the names of Steve Cardis, who is the Principle Planning Officer for the borough of Merton and Aileen Shackell who works for Groundwork Merton. She advised us to meet with Steve Cardis to obtain contact information of planning officers in other London boroughs, especially Haringey, Westminster, and Sutton.

During PQP, we decided to focus on environmentally- and transportation-oriented projects to give us direction. However, once in London, we decided that it would be much more effective to try to solicit boroughs. We did not want to limit our target

audience to just environmental and transportation projects. (Please refer to A1 and A2 for information on the environment and transportation in London)

We then contacted Steve Cardis via e-mail to ask him to meet with us to discuss his experiences as a previous sponsor. He agreed, and we met at the Merton Civic Centre about a week later. We asked him a variety of questions about why the projects worked so well in Merton and what he found quite beneficial about sponsoring projects. We used his answers as preliminary information in the creation of our marketing pitch. We then asked him if he had any contacts in other boroughs that we could approach about sponsoring projects. He listed off some names, but then suggested that he would e-mail us a list of contacts. A few days later, we e-mailed him again, to ask for the list of contacts, and they were delivered. This list originally contained thirty names of persons in a variety of boroughs, with their name, borough, and e-mail. (See A4) After closer investigation, some of these contacts were with the GLA, ALA, and the borough of Merton, which were contacts we were not interested in. We then found a map of the boroughs and toggled the contact list in order to narrow it down to the eleven boroughs that are geographically the closest to Westminster. (See A5 and Figures 1 and 2)

### **3.2 IQP Projects and the Marketing Presentation**

The most effective method of gaining the interest of potential IQP sponsors was to create a 'marketing presentation'. This presentation was created in Microsoft PowerPoint. Using our knowledge of the IQP that is described in our Literature Review, we constructed a presentation that contains information regarding WPI, the Global

Programme, and the benefits of IQP sponsorship. (See A10) A paper copy of this was presented to Ken Hullock from the Borough of Brent in our meeting with him.

To help strengthen our marketing presentation, we interviewed three project liaisons, two past and one current. The goal of these interviews was to obtain testimonials from sources outside the WPI community and also to get a grasp of why they liked working with WPI students. (Please refer to A3 for the interview questions, and A11 for synopses of these interviews.)

### **3.3 Marketing Strategies**

The process of marketing the IQP to potential sponsors required a few steps: faxes, phone calls, holding meetings when time allowed, and creating a contact management tool so that WPI can hold these relationships in the future.

#### **3.3.1 First contact**

Our group decided to target the ten boroughs closest to Westminster, plus the Borough of Sutton at the strong advisory of Jennie Hawks. A fax was sent out to the contact person from each of those boroughs, whose names and information had come from the contact list given to us by Steve Cardis. In the fax, we informed the contact briefly about WPI, what our project programme entails, that we worked with the Borough of Merton extensively on projects along with a few examples of projects, that we were going to be calling them, and we included Jennie Hawks' contact info. We emphasised that our project programme could benefit their borough greatly to get them interested in talking to us when we called. (See A8)



### **3.3.2 Phone calls**

After the faxes were sent out, we made the phone calls to the contacts. We introduced ourselves, making sure they knew whom we were and why we were calling them. We explained more specific details about our project programme, mentioning again that we were aiming to help their borough by doing a project for them. We gave them all information we thought was relevant for the phone call, answered all questions they asked, and told them we were available to set up meetings if they were interested. We asked them if they were interested in attending a final presentation in Merton, but it was too short of a notice. Our knowledge of the IQP programme was vital in this step, so that we could accurately and convincingly market the programme to the person over the phone as well as answer all of their questions.

Much of the information that the potential sponsor wanted to know, and much of it that we wanted to convey to them, was given during these phone calls; essentially, our marketing pitch was given to many contacts over the phone. Although we aimed at scheduling meetings with the boroughs, only one was scheduled, and a paper copy of the marketing presentation was distributed in the meeting. All other boroughs wanted to understand the concept of the project programme as fully as possible and have time to think about its benefits to them before they decided whether or not to have a meeting with us. Also, some contacts wanted us to e-mail them with more information.

During the meeting, which was with Ken Hullock of the borough of Brent, we answered questions Mr. Hullock had and gave details on how he could further the process of sponsoring an IQP in the next academic year. We made sure to dress professionally, were polite, and were careful as to what body language we conveyed; for example, not

slouching in our chairs. We went to the meetings prepared with what we were going to say, and by being prepared, we showed Mr. Hullock that we were organised and that the programme we were representing is organised as well.

Every phone call that we made was documented on a sheet with all information about the call on it. The time, date, tone of the call, what information they had been given, and any e-mails that had been sent out to them were recorded. This way, it was easy to keep track of the status of each relationship with the contact, and provided a guide to writing this portion of the results section in our final report. (See A6)

### **3.4 Contact Management**

Due to the expansion of the network of sponsors, there is a need for a system to organise contacts. Possible methods for organising and storing this contact information are a contact database, an Excel spreadsheet, and contact management software.

Our first step in finding a contact management system is to define who the users are. For the purpose of the London Project Centre, the users are the London Site Co-ordinator, the London Site Director, and the Dean of the Interdisciplinary Global Studies Division (IGSD). The London Site Co-ordinator, Jennie Hawks, is the primary user of the management system.

Once we know the users, we must understand the tasks this system will need to perform. The contact management system will need to serve as an address book. It must contain all of the contact information for every entity that was solicited for IQP sponsorship, along with the contact information for entities that will be pursued in the future. Also, the contact management system must be able to display contact history and

the current status of the relationship. Other useful features include a calendar that shows appointments and a section that would explain where the contact information came from, for example, was the contacts name given to us by another sponsor.

After reviewing the needs of the users of this task, we decided that contact management software best suit the needs of WPI. Contact management software is easy to install, organised well, and easy to use and understand. Contact management software can also be accessible to other users through Internet access. Excel and a database both presented many flaws. Excel would appear to be very unorganised and the data would not be displayed well. The user would not be able to search for a particular contact easily. The use of a database would be very time consuming to create. Our group knowledge is limited to Microsoft Access, which is not one of the greater database programmes. An Access database cannot be linked to another user using another computer. There is no way to update the database on one computer with information and simultaneously update the other, unless the user was to enter it manually. Therefore several copies of the same database with different information in them would exist, which would be extremely unorganised. The final flaw of creating an Access database is that there would be no instructions or user manual and there would be no support for future users; our IQP group cannot support the users until the system is no longer used.

We then continued to research different contact management programmes. By reading product reviews, *ACT* appeared to be the highest quality product. The next step for our group was to give our recommendation to the users and get feedback regarding their feelings towards the use of contact management software. First, we met with Paul Davis, the Dean of the IGSD. He approved the idea for the use of the software as well as

the funding for the software. Next, we approached the primary user, Jennie Hawks. She requested to view a demo of the programme and agreed that it would be very useful for managing contacts.

### **3.5 Charity Fair**

To help us achieve our goal of expanding the network of contacts at the London Project Centre, we decided to utilise the chance to exhibit WPI's Global Programme at the Directory for Social Change's annual Charity Fair. The London Site Co-ordinator, Jennie Hawks, made the initial arrangements for WPI to occupy a booth at the fair. In order to make this fair effective, we needed to work closely with her.

The first step was to attend the informational session held on February 7, 2002. This session allowed us the opportunity to view the type of booth, or shell scheme, that we would be given, as well as view another fair in progress. This fair was not a Charity Fair, but it did allow us to see the set-up of the exhibition floor, and helped us develop ideas for our own display booth. The informational session gave ideas on how to exhibit an effective visual display, and gave an overview of general information that the exhibitors needed to know, such as set-up time, break down time, lighting scheme set-up, and furniture one would receive with the shell scheme.

Next we needed to develop a layout for the shell scheme. We had a brainstorming session with Jennie Hawks to think about possible set-ups for the booth. We decided to develop posters, a slide show, and suggestions that could be used to make pamphlets to be handed out.

The slide show was based off pictures of students interacting with their sponsoring organisation and the other people involved with the project. To create the

slide show we followed each student team on days when they would have these types of interactions. Some examples of this would be taking pictures of the Arthritis Care team performing one of their training sessions, or SATRO running a workshop with young students. Then captions were added to each picture with a short description of the project and what was happening in the slide. The slide show was developed in PowerPoint and shown on a wall of the booth using a projector. Also, this slide show will be able to be used at other events that promote the WPI Global Programme.

Next, we needed to create posters that could be placed on the walls of the shell scheme. To create these posters, we needed to have brainstorming sessions as a group regularly, as well as to be open to suggestions from our advisors and Jennie Hawks. These posters needed to grab the attention of the people attending the fair and develop their interest in the WPI Global Programme, leading them to talk with a WPI representative. The information included on these posters was general WPI information, sponsor testimonials, a map displaying project sites, a map showing the area in which we currently do projects, and general sponsor information.

Our next step was to assess the current pamphlets and create suggestions for new ones. We did this by reviewing the Proposal for Public Relations for WPI created by JM Communications and listening to Jennie Hawks' ideas.

Finally, we had to get estimates for printing costs. We went to four different printing companies to get estimates for posters and pamphlets. The estimates we received were placed in an excel spreadsheet.

Our final step was to train the student representatives that were in London for D term 2002. This training took place on March 9, 2002. We instructed the students on the placements of posters and the operations of the slide show.

### **3.6 Analysis and Making Conclusions**

The last part of the process that was carried out in London by our group was to come to conclusions about what we learned from our solicitation process. Getting prospects interested in sponsoring projects for the next academic year is indeed one of the goals of the project; however, we needed to note the reactions and feedback we received from potential sponsors. Our contacts with potential sponsors can be seen as another form of research as well as a component of the solicitation part of our methodology. After recording our findings from the meetings, we determined how to organise and analyse this data.

The entire process - our research, interviews, and the feedback we receive from potential sponsors in the meetings – gave us the information we needed to allow us to organise this data, analyse it, and come up with a final, concrete marketing plan of getting organisations in London interested in sponsoring IQPs. We also have created relationships between WPI and organisations in London – essentially, a network of potential sponsors - that will be of great use to Jennie Hawks and WPI in the future.

## 4. Results and Analysis

### 4.1 Networking

Our first meeting in London was with Jennie Hawks, London Site Co-ordinator. This was arranged for January 13, 2002, so we could start to understand how the IQP sponsor recruitment process has been running and get suggestions on how to market the IQP programme. From this meeting, we received the name of a contact for the environmental organisation Groundwork from John Hawks, Jennie's husband. She also suggested that we target boroughs as potential sponsors, considering our continuing success with the borough of Merton. The best person for us to start with was Steve Cardis, the Principle Planning Officer in Merton and a past liaison.

Our next step was to meet with Mr. Cardis, who has played a key role in all the projects done with the Borough of Merton. We were very interested in learning why the projects worked so well in Merton, and in obtaining contact information for planning officers in other boroughs. He e-mailed us a list of contacts, which we used as our primary contact list. (See A4) He also gave us information from a sponsor's perspective, explaining to us some of the benefits the Borough of Merton has reaped from their work with WPI.

From the list of contacts given to us by Mr. Cardis, we chose the boroughs closest to Westminster, which we later contacted. (See Figures 1 and 2) We entered these names into an Excel workbook that we used to track the status of each contact. The design was quite simple. The front page listed the current status of each contact, and then a

worksheet was made for each contact, which contained detailed descriptions of every interaction with them. (See A6)

#### **4.2 Approach**

The next step was to begin contacting boroughs. Initially, we sent each faxes to ten boroughs. (See A8) We tried to fax two other boroughs, Southwark and Hackney, but the contact information we had was incorrect and the faxes did not go through. The fax gave basic information on the project programme and examples of past projects, and informed the contact that we would be calling to talk to them about the WPI Global Programme. This was sent out on Saturday, February 2, 2002. We waited until the afternoon of that Monday, February 4, to start calling the contacts, in hopes that they would have had a chance to read the fax before receiving the phone call. During the calls we discovered that only about half of the people we contacted had actually received the fax and read it before we called. We would have preferred to wait until at least Wednesday to call the contacts, but due to time constraints this was not an option. It is worthy to note that on the second and third rounds of calls, all the contacts had found the fax.

On the first round of calls, we were able to get in contact with three of the ten boroughs. Most were either out of the office or on the phone. In general, the people we did speak to were all very interested. The next day we went back and called all the boroughs we were not able to reach previously. None of the people we spoke to said that they were not interested in the programme. We later obtained the contact information for a planning officer in the Borough of Sutton, whom we e-mailed to prepare her for the fax, sent her the fax, and called.



The only deterring comments we received were that many of them were very busy and would have time later in the spring, they probably did not have the authority to make a final decision, and they were not the right person with whom to speak. One of the planning officers encouraged us to speak to contact in their respective borough. Four of the contacts requested further information, whilst another four wanted some time to discuss the idea with their colleagues. One was very busy and asked us to call back later, and the last wanted to have an informational meeting. Generally the contacts wanted all of our marketing information over the phone. Most were not terribly interested in an interview without discussing it with their colleagues. (Please refer to A6 for a detailed account of all these interactions)

At the same time we also made contact with Groundwork. We initially went through John Hawks to obtain contact information, and he also made a call into the organisation to let them know we would call. We later phoned Aileen Shackell in the Groundwork Merton office. She was a bit hesitant, but agreed to meet with us on January 29, 2002. She was extremely interested in the programme and thought we would make a very good partnership. She also mentioned to us that Groundwork had used the results of a past Merton IQP that had to do with Wimbledon Park, and that they would have liked to find out how to get involved with WPI several years ago but could not figure out how to contact WPI. She suggested that we speak to Danielle Byrne in the London office, as she is the regional director and would have more authority to start the sponsoring process. We have contacted Danielle via e-mail and sent her marketing materials, and she has responded by e-mail, asking us for more specific information on the programme. (See A6)

### **4.3 Results of Solicitation**

After approaching the eleven boroughs none were disinterested in sponsorship. We had hoped in these approaches to schedule meetings; however, the only person we met with was Ken Hullock in the Borough of Brent. We presented him with our folder of marketing materials and a printed-out version of our PowerPoint marketing presentation. (See A10) He was very excited about the programme and had ideas about project topics, including traffic-calming mapping using GIS. He found that the project topics we explore are similar to the issues addressed by his department and Borough. He is eager to speak with Jennie Hawks and hopes to attend the Merton presentations in April.

Some of the boroughs we spoke with desired marketing materials, and these include: Andrew Smith of Barnet; Derek Read of the Corporation of London; Brian O'Donnell of Camden; Shifa Mustafa of Haringey; Andrew Lainton of Lambeth; Carl Powell of Westminster; and Brian Whitely of Waltham Forest. We also sent them to Danielle Byrne of Groundwork. (For a detailed account of our interactions with all contacts, please refer to A6)

The most promising contacts we made, aside from Ken Hullock, were Aileen Shackell of Groundwork who referred us to Danielle Byrne in the Groundwork Regional office, Andrew Lainton of Lambeth, Andrew Smith of Barnet, and Bill Hodgson of Westminster. These contacts were very excited to learn about the programme and could be the most likely of all our contacts to sponsor projects in the near future.

#### **4.4 Past Sponsor Interviews**

As advised by Jennie Hawks, we conducted interviews with two past sponsors and one current sponsor: Marietta Clegg from the Royal Hospital for Neuro-disability; Sarah Langton-Lockton, Chief Executive at the Centre for Accessible Environments; and Dave Wright, IT manager at Arthritis Care, respectively. We spoke to Marietta Clegg on the phone and met with Dave Wright and Sarah Langton-Lockton in person.

The reasons for conducting these interviews were to understand the IQP process from the perspective of a liaison, to find out how these organisations benefited from sponsoring project/s, and to capture quotes from them about the programme to be used in the creation of marketing materials. We also asked questions about how they became involved in the programme, if they have worked with many organisations like ours, what they truly found valuable in the programme, what they would like to see improved upon, and what they thought the students gained from the experience. (The synopses of all of these interviews are in A11, and the questions we asked them can be found in A3)

Dave Wright from Arthritis Care had only good things to say about the programme. He has been a liaison for three projects and is anticipating another. He felt that we should position ourselves by saying “we are going to do this [project] for you, but you have to commit to it.” He also thinks that WPI students are very knowledgeable and “you guys [WPI students] just deliver.”

The only change that Dave would like to see in the programme would be to have students work on site for a longer period of time, and Marietta Clegg and Sarah Langton-Lockton had similar comments. This is obviously a constraint of the WPI plan, but one option we discussed at the interview was the possibility of having a student or two from

an IQP group coming over early, and a student or two from the same group staying slightly longer than the length of the term. This would allow the group to become more acclimated at the beginning of the term, reduce time coordinating efforts with the liaison during the first week, find all the resources needed by the group, and possibly give students the opportunity to schedule interviews before the term starts, so their work is not delayed as much by personal schedules.

#### **4.5 Assessment of Marketing Materials**

Proper marketing materials are important for creating interest in WPI's Global Programme. Effective marketing materials clearly and concisely explain an idea. WPI provided us with a wide variety of materials that could be used when soliciting potential sponsors, and we assessed the effectiveness of these materials.

The materials that were initially provided by the Interdisciplinary Global Studies Division include an IGSD folder with two London Centre flyers, a London centre pamphlet, a bookmark, and a key chain. After reviewing these materials, we determined that these materials are directed toward students who are trying to decide which project centre to apply to. We were also provided with printouts of a PowerPoint presentation called "WPI's Global Project Programme." The intended audience for this presentation is somewhat vague, but appears to be primarily directed towards alumni for fundraising purposes.

During our meetings with Jennie Hawks, she provided us with more recent marketing materials, which are directed towards potential sponsors. (See A9) Jennie Hawks also provided us with the document Public Relations Proposal for WPI produced

by JM Communications in 1998. This proposal reviewed many of WPI's marketing materials including the folder and the WPI London Centre material.

From our initial analysis of these materials, we found that little of the existing materials are geared directly for potential sponsors. Many of the materials are redundant, while other information such as who to contact and when projects occur is much harder to find. Currently, the JM Communications marketing team is starting to review the materials again.

## **4.6 Charity Fair**

To help in our goal of expanding the network of contacts, we decided to work closely with Jennie Hawks on the Charity Fair.

### **4.6.1 Informational Session**

We attended an informational session on how to have an effective visual display. This session gave us information regarding the lighting scheme, use of electrical outlets, and the overall display of the booth. From this session, we decided to create posters, tri-fold pamphlets, leaflets intended for a target audience, and a slide show. All materials created for the Charity Fair can be viewed in A12.

### **4.6.2 Tri-fold Pamphlet**

After reviewing the current materials and the Proposal for Public Relations for WPI from JM Communications, we felt that the information conveyed on the current materials was effective, but spread across a number of pamphlets and papers. Our goal was to create a pamphlet, which would describe general WPI information, sponsorship benefits, sponsor testimonials, and the topics that WPI projects cover. To create this

pamphlet, Jennie Hawks gave us her idea that she recommended to the IGSD. Her idea was centred on “The Global Era is Dawning.” We took this idea and made it more technology oriented.

#### **4.6.3 Posters**

The Charity Fair booth has seven panels. It is two panels in depth and three panels wide. (See A12) We decided to create four posters. The first two posters will cover the left wall. When the two posters are placed side by side, they fit together as one. We focused on the idea of “Technology Consulting Projects” and made this the posters’ title. The left poster provides general information regarding WPI and introduces the Global Programme. The right poster lists sponsorship benefits and previous sponsors. These posters are one-meter wide and 1.44 meters in height.

The other two posters will be placed on the back wall. The centre of the back wall will be the slide show; the two posters will be placed to the right and left of the slide show. Both posters are titled “Sponsors Say.” The posters are filled with a mix of sponsor testimonials and pictures of project teams at work.

#### **4.6.4 Leaflets**

In order to get initial interest in the WPI Global Programme, we created leaflets (one third the size of a pamphlet). The London Project Centre has three major audiences; the non-profit sector, the public sector, and the museum sector. These leaflets are tailored to the interest of the audience.

The front of each leaflet has the heading “Technology Consulting Projects for the \_\_\_\_\_ Sector.” After the heading are two brief paragraphs with information about the

Global Programme. In between the two paragraphs is a picture related to the targeted sector of the leaflet.

The back of each leaflet differs. The non-profit leaflet lists topics that past projects have covered followed by two examples. The public sector leaflet lists project titles completed for the Borough of Merton. The museum leaflet lists past museum projects. All the leaflets have the contact information of Jennie Hawks and Paul Davis.

(See A12)

#### **4.6.5 Slide Show**

To attract attention to our stand, we created a PowerPoint slide show. This slide show contains 25 pictures of student teams at work. These pictures were taken during the final two weeks of the term. We went to student team-liaison-advisor meetings to take these pictures.

On each picture, we placed the WPI twin towers logo and assigned each picture a caption. The caption contains information that summarises what is happening in the picture as well as the sponsor and project information. This slide show will be able to be used to interest both students and sponsors in the WPI Global Programme.

## **5. Conclusions & Recommendations**

### **5.1 Follow-up on Contacts**

From the beginning of this project our primary goal was to expand the network of contacts. During this project we contacted the following people: Andrew Smith of Barnet; Ken Hullock of Brent; Brian O'Donnell of Camden; Derek Read of the Corporation of London; Aileen Shackle and Danielle Byrne of Groundwork; Shifa Mustafa of Haringey; Andrew Lainton of Lambeth; Brian Regan of Lewisham; Brian Whitley of Waltham Forest; Zbig Blonski of Wandsworth; Bill Hodgson and Carl Powell of Westminster; and Sally Blomfield of Sutton. A full report of all of our interactions with these people is contained in A6. All of these contacts were initially approached about potential sponsorship, and our relationships with each are at different stages. It is our hope that Jennie Hawks can use these leads to create new projects, continue building relationships, and to obtain more new contacts.

### **5.2 Contact Management**

Once potential sponsors have been contacted, it is essential to monitor the status of the relationship. To promote smooth communication we suggest recording all interactions with potential sponsors.

A high level of awareness in relationships is required for successfully pursuing potential sponsors. This can be achieved by maintaining a log. The purpose of the log is to track every interaction, so that one can look back and remember past conversations and concerns. This log should track every interaction that occurred with the contact,



including the date of interaction, mode of interaction, purpose of the contact, and the results. It is also important to include a paper trail of the interactions by storing records of all e-mails, letters, and faxes. Anyone should be able to review the log, and afterwards be aware of the current status of all relationships and any significant interactions that occurred.

### **5.2.1 Contact Management Software**

Computerised logs are most effective. Many means exist for keeping a log of this type. A Microsoft Excel workbook serves very well for a small set of contacts of approximately one to twenty five. (Please refer to A6 to view an example of an Excel contact list) A software package such as ACT would be more useful for a larger set of contacts, starting approximately at thirty. The data can be sorted and filtered according to various criteria. By inputting the data into a database of this type, full manipulation of the data is gained. Examples of data manipulation are querying and report generation. The added value that queries and reports give are innumerable; they facilitate a filtering system for much more complex sets of criteria and efficient presentation of data. ACT also has a feature that involves online synchronising of the software. This would allow personnel at the IGSD in Worcester to access up-to-date information on the status of the contacts in London in. We feel that this service could be invaluable to the IGSD and recommend that the IGSD invest in ACT for the London Project Centre to begin carefully tracking all interactions with sponsors using a uniform system.

### **5.2.2 Sponsor Base Monitoring**

It is essential that contacts, past sponsors, and particularly upcoming sponsors are monitored. Unfortunately, it is not uncommon for sponsors to drop out after agreeing to sponsor a project, which could be potentially dangerous. For this reason, extra projects are arranged each year to ensure that all students who were accepted into the program have projects to work on.

To avoid this potentially dangerous problem we suggest conducting a risk analysis with the use of a contact management tool. By carefully detailing every interaction with the potential and current sponsors, it will be much easier in the future to look back at these interactions for warning signs. After a system is in place for a year or two, one can go back through the files of each of the contacts and set up a ranking system for risk. This system could be as simple as a scale from one to ten or as complicated as a statistical analysis taking into consideration a large number of variables. From this ranking system within the contact management program a report could be generated containing all the up coming projects, the sponsor's name, and the risk the sponsor entails.

Over time, a statistical analysis can be generated on the dropout trends the site has shown over the last few years. From this report a more accurate number of back-up projects can be derived. By constantly adjusting the number of back-up projects, the risk of dropout sponsors is reduced. By using available managerial tools to generate trends that have evolved, this will help reduce the risk of dropout sponsors. There will always be a risk when you depend on another organisation to provide a project, but the risk to the

IQP programme reduced by having an adequate supply of back-up projects to compensate for the risk.

### **5.3 Recommendations on Marketing Materials**

The current marketing materials supplied by the IGSD are not sufficient for sponsor recruitment purposes. Currently, the materials appear to be geared more towards students or alumni fundraising efforts. (A list of usable materials can be found in A9) They do not contain information tailored to the sponsoring process, nor do they contain information that is vital for a potential sponsor to know. Information such as the time commitment of the liaison, number of students on a team, ages of the students, the deadline for making the final commitment to sponsor a project, the costs, and the qualifications of WPI students are missing from the current handouts. Through our experiences we have found that this information is very important to potential sponsors, and should be made easily accessible to them through materials provided to the site co-ordinator for distribution. The materials must also be professional in appearance to convince potential sponsors that WPI student teams are young professional consulting teams. Other information that was not readily available in the materials included contact information for the site co-ordinator and the time frame associated with the projects.

In 1998 WPI hired the JM Communications marketing team to review the materials that the school was using at the time. They showed the materials to several business people and received feedback for suggestions and changes in the materials. After reviewing JM Communications' suggestions, we found that they matched some of our own. These include, but are not limited to: a cover letter that would grab the readers

attention and interest a potential sponsor in the programme; and a simple but professional flyer or leaflet that would explain the workings of the programme, give sponsor testimonials, and provide abstracts of completed projects. These flysheets might be best used by tailoring them to the targeted organisation. This means that three different flysheets should be created: one for government organisations; one for charity organisations; and one for museums.

The materials are also lacking photographs. New pictures of students working in professional environments need to be taken. Few photographs are available, and the ones that are available are quite out of date and many students look unprofessional. To market the programme as student consultant teams, we must portray them as young professionals. The sponsors must know that projects are taken seriously.

Our final recommendation on the marketing materials is that they need to be re-thought and re-developed with the sponsors' needs directly in mind. New materials should focus on professional projects and the great successes we have had in the past with large and small organisations. As stated above, the materials must concisely explain what an IQP is, what the benefits to the sponsor are, what is required of the sponsor, logistical details, examples of past projects, and past sponsor testimonials. By making this information readily available in an array of clearly presented materials, it will be easier for the potential sponsor to understand the workings of the WPI Global Programme, thereby increasing the likelihood of a potential sponsor deciding to become a sponsor.

#### **5.4 Charity Fair**

Charity Fair is an excellent opportunity for WPI to expand its pool of potential sponsors. Over 8,000 visitors are expected to attend, which presents high potential of meeting people who are interested in the WPI Global Programme.

In order to make the fair successful, the WPI representatives should be knowledgeable of the WPI Global Programme and the IQP process in general. The first recommendation for the Charity Fair is that the student representatives should meet with Jennie Hawks and Professor Jim Demetry regularly before the fair. The students should be instructed on all parts of the IQP process including sponsor recruitment, the sponsor's role during the IQP process, and sponsor benefits. They also need to become familiar with past London projects, C term projects and the current D term projects. This situation could also be handled by sending members of the Project Development IQP team to London to represent WPI at Charity Fair.

A second recommendation is for WPI to become involved in exhibitions more frequently. Exhibitions will allow WPI to spread its name and bring prestige to the school. This recommendation will have to be re-evaluated after Charity Fair takes place and WPI can determine how effective its participation in the fair was, based on how many potential sponsors were drawn to the booth.

The final recommendation is to consider expanding the London Project Centre to a United Kingdom Project Centre. With the numerous amounts of people that WPI can interest by attending Charity Fair, a good base for WPI's expansion could be provided. By expanding this project centre, student interest would increase as well as the impression WPI could make on organisations throughout the world.

## **6. Marketing Plan**

This marketing plan was created to capture the process of sponsor recruitment and give guidance to anyone in the future who attempts to recruit new sponsors. The plan initially gives some guidelines as to what to look for in a sponsor and what is required of them, along with what makes a high quality project. Next, a method of soliciting sponsors is detailed, followed by a system for managing contacts.

### **6.1 Potential Sponsors**

A potential sponsor must meet many qualifications before they are allowed to sponsor a project. Insistence on these qualifications helps to keep the programme high calibre. If any prerequisites cannot be fulfilled, the appropriateness of the potential sponsor should be reconsidered.

#### **6.1.1 Desirable Sponsor Characteristics**

Potential sponsors must possess many qualities before they are even considered for the programme. First and foremost, the sponsoring organisation must have a need for the project work to be done. The main objective of the IQP programme is to allow students to gain real world experience with issues bridging the gap between society and technology. Sponsors must be able to provide projects that exhibit a significant societal aspect coupled with a technological dimension, and that allow students the freedom to make the project their own within logical constraints. Additionally, they must be able to give students a clear problem statement and have enough confidence in the student's

abilities to let them form the project, whilst providing guidance that ensures the outcome of the project meets the requirements of the sponsor, the students, and WPI.

It is necessary for sponsors to be committed to the programme. An enthusiastic sponsor is preferable. Sponsors that are disinterested in the project will be less encouraging, provide less utility, and the project experience will be far less rewarding for the students. Any evidence of disinterest by a potential sponsor should be grounds for removal from consideration for the programme.

The other significant quality is that sponsors should be concerned with the outcomes of their projects. This relates to the earlier concept of the sponsor having a need for the project. If the outcome is important to the organisation, the students will become more motivated by knowing that their work is going to be used, and they will be more satisfied by the experience because they are contributing to the organisation.

### **6.1.2 Sponsor Requirements**

There are several requirements that all potential sponsors must fulfil. The first of these is providing guidance through a liaison. The liaison is expected to keep in contact with the student group throughout the PQP process, read the final proposal and make recommendations in a timely manner, and meet with the students at least once per week once they arrive; additionally, they must read over the final report, attend the presentation, and give feedback to the professor(s) before grades must be submitted. Each project requires varying amounts of time from the liaison, and it is difficult to estimate the amount of time spent by a specific liaison. However, every liaison should expect to spend an absolute minimum of four to six hours a week related to the project, once students have arrived.

The next expectation WPI has of every sponsor is that they must provide transportation and on-site workspace for the student teams. Because the students are travelling far from home, they need a place to work other than their flat and a means of transportation, preferably a tube pass for the term. The workspace should have access to computers, phones, copy machines, faxes, and any other costly materials that the students will require to complete their project. There is also a highly recommended project fee of £2000, which helps to reduce many of the high academic and administrative costs incurred by the project.

Finally, during week seven of the project, the student teams give final project presentations. The sponsor is expected to ensure that there is an adequate audience for the students to present to. It is also preferable that the students are given an on-site venue for their presentation.

## **6.2 Projects**

Sponsors must propose the project, simply because we want projects that are important to them, not creations of WPI. The sponsors are responsible for submitting the proposed project statement to the project co-ordinator, and this statement is later submitted to the site director for final approval. Since a straight definition of the IQP does not exist, we have assembled a set of criteria to help sponsors develop ideas for projects. The best approach to define the abstract concept of the IQP is to list the qualities and characteristics that most projects possess and a list of goals that IQP projects should reach.



### **6.2.1 Qualities and Characteristics**

The most defining aspect of an IQP is the link between technology and society. The concept was designed to give students real-world experience in a field outside of their discipline, and to show them how their work can affect society. Projects must utilise technology on some level and must require interaction with some facet of society. The societal aspect is the most important and must be integrated into the project. Any sector of society may be observed and analysed, but in some manner the project's goals must be aimed at finding a means of improving a situation.

Projects should also demand that students think critically. The projects must have enough definition so that students are not completely overwhelmed, but also have enough flexibility that students are allowed to make critical decisions that can dramatically affect the outcome of the project.

On the technical end, projects must be large enough for a team of three to four students to complete in one seven-week term. The projects must challenge the capabilities of third-year college students. The scope of the project must be broad enough to engage several students working full time for seven weeks, but also be small enough to be completed in this time as well.

### **6.2.2 Project Goals**

As listed in the Handbook for IQP Advisors and Students:

The educational goals of the IQP\*, as mentioned by a faculty committee at the inception of the WPI Plan:

1. Examine impact of social issues on technical systems
2. Examine impact of technology on social structures
3. Cultivate questioning of social values and structures
4. Raise value questions about social/technological interactions
5. Develop skills of analysis in societal, humanistic, and technological disciplines

6. Recommend policy changes in the social/technological interactions
7. Convey technical content to a novice or non-technical audience

\* Note: The intention was that every IQP should achieve some of the goals, not necessarily all of them.

### **6.3 Background Research**

Three areas of research must be conducted before approaching a potential sponsor. First, all facets of the IQP must be thoroughly researched. This information is vital for marketing the service. The second object of research is past and current IQP projects, and the third is the organisation to be approached.

Before a service can be offered, the workings of it must be completely understood. There are many things to learn about the IQP, such as its history and the process of conducting a project from the points of view of both a sponsor and a student. A student who has previously completed an IQP abroad will be able to explain the process but may not have insight as to how the process is completed in the eyes of a sponsor. Potential sponsors will want to know information regarding what will occur during the time that they commit to a project, what dates they will be committing to should they decide to sponsor a project, what fees are associated with sponsoring a project, who they will need to contact to make a project official, and what other projects have been done that might relate to their needs. This information can be found on the WPI website, in the course catalogue, and by interviewing experts in the IGSD. This knowledge is invaluable because a potential sponsor will not be impressed if simple, logistical questions cannot be answered immediately.

Along with having knowledge of the important aspects of the IQP, examples of past and current projects must be known. A potential sponsor will be very interested in

discussing other projects so that they can relate the topics to needs they may have, and start thinking of ideas for possible projects. In discussions with a potential sponsor, it is imperative to be able to immediately give them examples of projects that relate to issues the organisation faces. Not only does this keep the prospect's attention and lead to more discussion, it can also be a form of reassurance to the prospect. Examples of projects are concrete evidence that projects do indeed benefit organisations, and hearing descriptions of the projects will cause a potential sponsor to become more confident that the IQP programme is taken seriously by students and by WPI.

Researching the organisation to be solicited is vital because a potential sponsor must possess all the qualities listed in section 6.1. By researching them initially, it should be fairly easy to determine if they should participate in the programme. Once this has been established, the research can be used to tailor marketing information to their needs – such as IQP project abstracts that relate to current issues the organisation faces. It is particularly beneficial to have knowledge of which issues affect the organisation, so that relevant IQP projects can be referred to in discussions with the prospective sponsor.

#### **6.4 Positioning**

The first step in marketing a service is to discern what is unique about the service. In the case of the IQP, it is a one-of-a-kind service where students act as consulting teams. To successfully generate interest in the WPI IQP programme among potential sponsors, the programme must be properly positioned. This can be accomplished by first understanding and then articulating sponsorship benefits in the marketing presentation.

### **6.4.1 Sponsor Benefits**

Sponsoring an IQP has many benefits to the sponsoring organisation. IQP projects are a cost-efficient means of having consulting work performed. The student team, with the help of their project advisor(s), has extensive knowledge in the areas of science and technology; therefore they can complete a variety of high quality projects. IQP projects allow the sponsoring organisation to find solutions to problems they ordinarily would not have the resources to complete. Projects yield results of great utility to the sponsor. These results also are commonly used by other organisations in the field.

Another unique benefit is that sponsors often develop an “increased professional satisfaction...resulting from participation in the educational process” (*WPI Projects Program*, 2001). Working with a group of young adults often infuses the organisation with a new energy and vibrancy, which is often missing from the workplace. Past sponsors have said working with students is fun and it encourages a higher morale in the work environment.

### **6.4.2 Marketing Presentation**

The marketing presentation is the tool used by marketers to spark the interest of potential clients. This presentation contains an overview of WPI, the Global Programme, and information that pertains to sponsoring a project, including sponsorship benefits, responsibilities, and time commitments. The marketing presentation can be conveyed verbally or visually, although the most effective method to deliver the presentation is through an informal meeting. (Our marketing presentation can be found in A10 of our final report.) The presentation is tailored to each sponsor and is also a source of general information.

### **6.4.3 The Position Statement**

A position statement consists of two or three sentences that describe the programme and attracts the attention of the audience. Its goal is to capture the interest of an audience based on the particular audience's needs. A sample position statement for the WPI IQP programme aimed at potential sponsors is:

*Worcester Polytechnic Institute (WPI) is an American university of science and engineering that sends teams of three to four students abroad for a seven-week term to execute well-defined projects on behalf of sponsoring organisations. These projects, chosen by the sponsor, typically explore some issue or opportunity at the interface between society and technology, and they represent a cost-effective way of harnessing the energy, creativity, and skills of a highly motivated student "consulting team."*

### **6.5 Marketing Strategy**

A marketing strategy should be developed to solicit any organisation. This would include a method of obtaining contacts, approaching the contact, and delivering the presentation in which the marketing materials are used.

#### **6.5.1 Networking**

Although there are a myriad of methods to obtain names and contact information of people within organisations that may be potential sponsors, networking through existing contacts has proven to be the most effective and time efficient. Networking suggests looking at present and past contacts to obtain new contacts from people that they know.

The simplest form of networking is determining the target organisation and asking a reference for contact information for an individual in the target organisation. Other forms include calling or meeting with current contacts to talk about ideas for projects or project topics. From these conversations it is often quite easy to obtain the name of someone who works in these areas. The benefit of using networking is that when the contact is approached, they will be far more willing to listen because they know your reference.

Unfortunately, sometimes networking does not work. This could be because all the current contacts are exhausted or a project is desired in an area where current contacts have no leads. If current contacts have been thoroughly exhausted, then the next step would be to conduct a content analysis of newspapers. This would consist of reading news articles daily to determine what current issues are in the London area. Once several issues have been selected as relevant to London society, one should try to find contact information about these problems either in the news articles or by researching organisations in the field. One of the best resources for this is the Internet. These contacts are considered cold calls.

An alternative form of obtaining contacts is to participate in an exhibition. Business and charity fairs are held frequently at large exposition centres and they are intended for networking. By participating in such a large event the name of the programme can be distributed through a much larger network than possible otherwise. It allows the marketer to screen a very large applicant pool, and would provide a means of geographically expanding the centre throughout the entire United Kingdom. Exhibitions are a great opportunity to 'sell' the programme to newly interested organisations.

### **6.5.2 Approach – Cold Calling and Referrals**

The contacts received through networking may not know the reference directly. Sometimes the contact will know the reference's name or position but will not directly know the past sponsor. Moreover, it is likely that they will have never heard of the WPI project programme. If this is the case, the contact with the potential sponsor is essentially a cold call. Using a reference is still very effective; however, although a personal relationship may not exist between the reference and the new contact, the reference will usually be a professional who is a respectable and reliable source of information.

Cold calling should not be discounted, but much preparation and research are needed to be successful in using this method. With a reference, a person will want to know exactly what your objectives are and why exactly they were chosen to be contacted. Without a reference, they will have those same questions, but will be more reluctant to talk or set up a meeting because they have no way of knowing that their time will be well spent by evaluating the information given to them.

The most effective method of contacting a new potential sponsor is using referrals. A referral is a contact from a past sponsor who knows the past sponsor and has at least some knowledge of why you are contacting them. If the contact already knows what the programme entails before they are approached, it will not only take less time to explain the details to them, but their initial interest will have already been captured.

There is no one right way to contact potential sponsors. Although contacting referrals is the method where one is most likely to find interested potential sponsors, cold calling and using references also work – those methods just require more careful preparation. In case one does have to solicit a potential sponsor as a cold call, thorough

research on the organisation must first be completed. The organisation's operations, as well as issues that they deal with and might face shortly, must be known inside and out. Then, past projects that deal with the issues previously researched must be found and fully comprehended. Finally, every benefit that the potential sponsor could reap from the experience should be listed. From all this information a more successful preliminary contact can be made.

### **6.5.3 Marketing Presentation**

When first speaking with a potential sponsor, there is specific information that must be included in the initial approach, or marketing presentation. First, basic information must be given – your name, that you represent the American engineering university WPI, and that their name and contact information was obtained from a colleague or another person. The next idea, which is important to convey, is that WPI sends students to London to help organisations by doing projects.

We found it is best to send an e-mail to the contact first to alert them of WPI's interest in their organisation as a potential sponsor and that a fax or call should be expected. A fax can be useful to convey more information stating WPI has been performing projects in London since 1975 and a few more details about what types of projects are executed; however, it is not absolutely necessary. Often the positioning statement is used in either the introductory e-mail or fax. Either way, a phone call is the next necessary step. In this call it is hoped that an informational meeting can be set up; however, if the contact does not seem to be interested in a meeting, the best course of action is to start explaining the programme over the phone.



The marketing presentation should be tailored for each organisation approached. Different organisations will realise varying benefits from using the IQP programme, and these benefits must be revealed in the marketing presentation. Another aspect of this is to mention past or current projects being done that might relate to their needs. If contact is made with a borough of London, mentioning projects that the Borough of Merton has done will be valuable; and if contact is made with an organisation that needs to improve aspects of its information management, then making a reference to the intranet a WPI IQP team developed for Arthritis Care during term C-02 would be beneficial.

#### **6.5.4 Marketing Materials**

As alluded to earlier in the marketing plan, marketing materials are needed to fully explain the details of the programme. Potential sponsors appreciate being given the freedom to read details at their convenience. Materials also save the time of the marketer because information does not have to be given multiple times to the same person. Someone new to IQP sponsor recruitment should take an inventory of available materials, from which a decision can be made about how appropriate they are.

Generally marketing materials should include a form letter that can be tailored to the contact. We used our letter to tell potential sponsors basic information about the programme and that they should expect a call in a few days. (Sample letters are included in A9 of our final report.) The next most important item is a press kit. This would contain a flysheet tailored to the sponsor, probably containing some pertinent abstracts; a two to three page letter on WPI letterhead that would explain logistical details of the programme; and a brochure with information about the quality of the programme, lists of sponsor benefits, and past sponsor testimonials. Many variations on this exist, but as

long as the materials contain the information above they should work. This information should be contained in a colourful folder that will grab the attention of the reader and make the material harder to lose. (The cover letter and the three page informational sheet included in our press kit are included in Appendix A9). The utility of press kits is that they can be mailed to sponsors and save time for the solicitor. Usually, these are only given out at the request of the sponsor.

Finally, some fliers or pamphlets should be created, the purpose of which would be to give a brief synopsis of the programme, show pictures of students interacting with their sponsor, list benefits to the sponsor, and provide testimonials and contact information of the site co-ordinator. These can be used at exhibitions or meetings where a full press kit is not appropriate but something should be given out.

A slide show of the marketing presentation should also be made. The presentation should show the quality of the programme, give some details about WPI, explain benefits of sponsorship and illustrate the types of projects we do, and give logistical details. This can be shown either to a group of potential sponsors as a PowerPoint presentation, as a bound flip chart for use in one-on-one meetings, or it can be sent to a potential sponsor to read at their convenience.

## **6.6 Contact Management**

It is necessary to have an organised method of tracking the contacts and all interactions with them. By doing this, all of their contact information and the status of the relationship with them are kept in an easily accessible location, and this will help greatly when others need this information.

### **6.6.1 Contact Management Software**

Several options are available for tracking interactions with the potential sponsors, such as a log, a self-created Excel workbook or Access database, or a packaged programme such as ACT. Each of these is useful in different respects. A log would be kept in paper form, and would be best for a small number of contacts, approximately under ten. A self-design system, such as an Excel workbook, works very well for a small set of contacts of approximately five to twenty-five. (Please refer to A6 to view an example of an Excel contact list.) Logs that are contained in computer systems provide far more utility. The data can be sorted and filtered for all types of criteria. A software package such as ACT would be more useful for a larger set of contacts approximately starting at thirty. By placing the data into a database of this type, full manipulation of the data is gained. The decision on which type of system to use should be based on size of contact base; whether the data need to be manipulated, and if so how much; comfort level of the user; ease of use; and cost.

### **6.6.2 Sponsor Base Monitoring**

Once projects have been established over several terms, and several sponsors exist in the log, it is necessary to re-evaluate how dependent the current projects are on the past sponsors. If one sponsor provides a large number of projects each term, new sponsors should be sought out to relieve the burden on the overloaded sponsor. It is very important to remember all students in the programme want diversity in the projects, and relying too heavily on one sponsor will quite often cause uniformity.

# A1 - Transportation

The Interactive Qualifying Project stresses the interaction of technology and society. This link is clearly seen in the area of urban transportation. Transportation is very influential on people's lives today. It can determine where a person lives, works, and shops, influencing their daily schedule. Transportation also has a strong impact on economic, community, and ecological development (Newman, 1999).

Methods of transportation differ from city to city. Some cities rely heavily on the automobile, whilst others are dependent on the bus system. Each city has different needs and the modes of transportation have to be designed to suit those needs of the particular city. London has seven principal methods of transportation: aviation, railroads, bus systems, taxis, the tube, boats, and the automobile. All of these except aviation and boats could be feasible general topics for an IQP.

## **5.1 Bus System**

The next major mode of transportation is the bus system. There has been a steady increase in the amount of bus use over the last ten years; passenger kilometres increased by six per cent and passenger journeys increased by ten per cent (Transport Statistics, 2001). The bus system is managed by London Buses.

London Buses plans routes, specifies service levels and monitors service quality. It is also responsible for the bus stations and stops. The bus services are operated by private operators, which work under contract for London Buses.

London Buses provide many services for the passenger. As stated in *London Buses*, 2001, there are 2,300 wheelchair accessible, low-floor buses in service. Also, there is a Dial-a-Ride service, which goes door to door to people not able to use mainstream public transportation. London Buses has also added Automatic Vehicle Location, or AVL, to more than 2,000 of the 6,500 buses. AVL allows all the buses to be tracked and monitored. By March of 2002, each bus stop will display this information and give a stop-specific timetable. (*London Buses*, 2001) In May of 2001, bus fares were reduced. A single bus journey anywhere in London is now 65 pence.

Many people feel that buses are the best short-term option for increasing public transportation capacity. There are “many initiatives are in place to make journeys as reliable, quick, convenient, comfortable, easy to use, and affordable as possible” (*London Buses*, 2001).

## **5.2 Taxi Service**

The next method of transportation in London is taxis. Taxis in London differ from those in most cities in the world in that there is one type of car built to be a taxi. Every taxi in London looks the same with the only variation coming in colour. In order to become a taxi driver, one must pass a test called “The Knowledge.” In most cases, this takes two to three years to learn. The test involves a test of all possible street routes, a road test, and a medical examination (*The UK’s Definitive Taxi Cab Web Site*, 2001).

London’s taxi system is comprised of many different organisations. Over the last ten years, there has been a fourteen per cent increase in the number of licensed drivers and there has been a twenty-three per cent increase in the number of licensed taxis over

the same period. Taxi companies receive much of their business by driving people to airports, and taxis are the most common method of access to Heathrow and Gatwick airports (Transport Statistics, 2001).

### **5.3 Railways**

Another method of transportation in London is the railroad. Railtrack maintains the British railways. Railtrack currently serves 18,700 passengers a day (*Railtrack*, 2001).

The rail system in London is currently suffering many problems, mostly due to a lack of funding. Railtrack is currently facing a funding gap of 6 billion pounds due to the rising operating costs (Doran, 2001). This gap is getting larger every year. Due to this large debt, the company is seeking government funding or looking to be bought out (Doran, 2001).

This lack of funding is leading to many problems, including safety problems and an overall decline in performance. John Robinson, Railtrack's chairman, made this statement:

The past year has been a difficult and challenging one for Railtrack, its customers, the public, its staff and shareholders. We are deeply sorry that the tragedies at Hatfield and Great Heck, preceded by Ladbroke Grove in 1999, and Southall in 1997, occurred...Railtrack has to perform better, both in terms of safety and train performance. I am committed to ensuring that we continue to move towards a culture of zero tolerance of unsafe acts (*Railtrack*, 2001).

Due to the declining rail system, most of the UK is transforming their rail systems into the new high-speed train, called the Eurostar. The Eurostar is currently used throughout the Europe, in such cities as Amsterdam, Brussels, Cologne, Lille, and Turin (Berg, 1998). The Eurostar has never been fully integrated into London. The

management of the Eurostar is subcontracted to a consortium of train operators. The integration of this new train has been very difficult in London for two major reasons. First, London & Continental Railways (LCR) has overestimated the revenues of the Eurostar. This is causing many funding problems for the construction of the rail link (Brainstorming, 1999). Secondly, the rail system is expensive. A coach ticket to Paris costs about 400 dollars. (Fox, 2000) This is very costly for the average traveller, who can fly to the same destination for roughly the same price.

#### **5.4 The Underground**

The most popular method of public transportation in London is the Tube, also known as the London Underground. The London Underground is a subsidiary of London Transport. The company was formed in 1985, but the first Underground in London was installed in 1863 (*The Tube*, 2001).

The tube in London is a major business. Currently, there are three million passenger journeys each day, with 275 stations that cover 408 km (253 miles) of railway. In 1999 - 2000, there were 927 million passenger journeys (*The Tube*, 2001). These numbers have been steadily increasing over the last decade - there has been a twelve percent increase in the amount of passengers entering the stations, and there has been a twenty-six per cent change in the distance each train has travelled (Transport Statistics, 2001).

Along with the increase in tube usage, there was also an increase in cost. Both operating costs and fares have been rising. The average fare per journey in 1990 was 85.4 pence, and has increased to 114.3 pence in 2000; this was a thirty-four per cent

increase. The operating costs have risen from 655 million pounds to 826 million pounds, a twenty-six per cent change over the last decade (Transport Statistics, 2001).

These cost increases can be attributed to a few major factors. The first factor is the major expansion the London Underground is seeing. The London Underground is currently working on three areas of expansion: the Cross Rail, Chelsea-Hackney Line, and the Croyley Rail Link. These three expansion areas would open up new area to the Underground and reduce congestion in the central area. The second major factor would be the recent 3.5 billion pound renovation on the Jubilee line. The final contributing factor is the Private-Public Partnership (PPP). The PPP is a plan to regenerate the entire Underground, making it the prime mode of transportation like it was back in the 1930s (*The Tube*, 2001). The majority of government officials in London want the London Underground to be the “world standard for rapid transit” (Kiley, 2001, p. 1).

When the Underground was first installed in the early 1900s, “London Transport was unrivalled in the world as a finely tuned organisation that both invested in, and managed transport” (Kiley, 2001, p. 2). Recently, the tube system has been suffering a decline. Many transportation experts feel this is due to a lack of funding.

In an attempt to address the lack of funding, the government proposed a plan entitled the PPP, as mentioned previously. The purpose of the PPP is for “the infrastructure companies to maintain and upgrade the tube’s track, stations and tunnels in return for an annual payment, initially fixed for seven-and-a-half years” (*Doing the Splits*, 2001).

The PPP has brought about much debate. People involved in putting the proposal into action are split about using private corporations. London’s mayor, Ken Livingstone,



and his transportation aide, Robert Kiley, both feel that the government funding will not be able to pay the private corporations. They also feel the public control is inefficient and will not be able to handle the complex contracts of the private sector (Doing the Splits, 2001). The PPP is getting the majority of its support from Prime Minister, Tony Blair. Railway Age reports "...by the end of this year, the government plans to award thirty year concessions to three private groups that are expected to invest \$18 billion in infrastructure improvements during the next fifteen years" (British Rail System, 2001).

In an attempt to improve the tube's efficiency, the London Underground wants to introduce driverless trains. Ben Webster (2001) explains that driverless trains are already being used in foreign underground systems, such as those in Hong Kong and Paris. He further discusses how the trains currently brake automatically and the driver's only purpose is to operate the door. With an automatic driving system, the "driver" would then take on the role of walking up and down the train, which would improve security and safety (Webster, 2001).

### **5.5 Automotive**

The final method of transportation in London is the private automobile. Inner London residents used automobiles for fifty-three per cent of their distance travelled, while Outer London residents travel by automobile seventy-three per cent of the time. The average travel time to work in London was fifty-six minutes compared to the Great Britain average of twenty-five minutes (Transport Statistics, 2001).

The use of the automobile in urban areas is very inefficient. With the high amounts of people in the area, there is a lot of congestion. Rosie Waterhouse and David

Crackwell (2001) write, "Britain has the worst traffic congestion, the longest commuting times, and some of the most expensive public transport fares in Europe." This congestion leads into many traffic, parking, safety, and environmental problems.

The more visible effects on society are traffic problems. In central London, both peak and off-peak average traffic speeds are below 10 mph. This problem is getting increasingly worse every year with the growing number of cars on the roads. Currently, cars make up over eighty per cent of the traffic flow (Transport Statistics, 2001).

The second problem caused by automobiles is parking. In 2000 alone, there were over four million Penalty Charge Notices (Transport Statistics, 2001). This can be attributed to the fact that only half of the total number of parking spaces in central London are open to the public.

Safety is also a major issue in the use of automobiles. During the 1980s, London had a major problem with road casualties. In 1987, the government devised a plan to reduce the number of casualties by one third by the year 2000. Over the last fifteen years, there has been a downward trend in the both the number of casualties and the number of people seriously injured. The number of casualties has been reduced by fifty-one percent while the numbered injured has decline by twenty-three per cent. Cars and taxis accounted for forty-eight per cent of total casualties in London in 1999, with fifty-one percent of those killed being pedestrians (Transport Statistics, 2001).

The automobile also has many environmental side effects and will be discussed in the Environmental section in which air pollution related to automobiles is covered.

## 5.6 Issues

With seven major methods of transportation, many major problems are presented. The largest problem in London is the ongoing battle to shift from private transportation to public transportation.

In attempts to help popularise public transportation, Mayor Livingstone is promoting a new tax to fight traffic congestion. Government Finance Review writes:

London Mayor Ken Livingstone plans to continue with a radical proposal to reduce traffic congestion in central London that could become a model for crowded cities in other countries. Starting in January 2003, Livingstone plans to impose a daily tax of \$7.15 on every driver who enters central London during weekday daylight hours. Livingstone anticipates that the plan will decrease traffic by fifteen percent in central London and encourage motorists to use buses and subway trains (London Mayor, 2001).

This tax would help finance improvements to public transportation.

Another major transportation issue in London is the question of why major improvements are not being done to help the crumbling transportation infrastructure (Woods, 2001). London Times investigators, Richard Woods and Rosie Waterhouse (2001) believe the problem lies within the government, which they refer to as the “bureaucratic slow lane.”

Woods and Waterhouse (2001) give an example of this. In 1981, London officials proposed a plan to add a well-needed fifth terminal to Heathrow airport. This terminal wasn't approved until November of 2001. They attribute this problem to the public management of transportation. They feel that if private management did not have to get government support, this terminal would have been built in 1981 (Woods & Waterhouse, 2001).

A third transportation issue is general maintenance. This includes road conditions, street lighting, and railway station upkeep. Maintenance problems are numerous; for example, the London borough of Bexley had thirty-four projects in these areas between the dates November 23, 2001 and December 6, 2001 (*Bexley Council*, 2001).

The next transportation issue is pedestrian and bicycle safety. *Transport for London Street Management* (2001) reports that “London has particular difficulties with high numbers of pedestrian casualties, which account for over half of all road fatalities.”

In order to address the issues of safety and general maintenance as mentioned above, “*Transport for London*”, an organisation responsible for delivering the Mayor's integrated transport strategy, created Street Management. Street Management serves a variety of purposes “...including being the highway and traffic authority for a 550 km road network. It is responsible for the operating of London's traffic control systems, maintaining London's main roads, and improving conditions for those who travel in the Capital” (*Transport for London Street Management*, 2001).

## **A2 - Environment**

For decades, communities have been the most highly populated of residential settings. These communities over time have grown into modern day towns and cities. Such areas have become more and more run down with the overuse of their scarce resources. These problems are coined environmental issues. Particularly relevant to everyday life of civilians are the areas of air quality, water quality, waste management, and green space allocation. For the purposes of this project, the general problems and solutions relating to the urban environment will be described followed by a discussion of issues specific to London.

### **6.1 Air Quality**

On the topic of air pollution in a city setting, smog is one of the most prevailing issues. Smog is, by definition, a combination of the words smoke and fog, and is known for inhibiting visibility due to the existence of extreme ambient air pollution. In London this has been a particular problem for most of the twentieth century. Historically, the London Fog is comprised of “smoke from coal combustion mixed with fog from the North Sea” (Godish, 1997, p.25). Unfortunately, the coal that was burned in most of Europe for the majority of the nineteenth and twentieth centuries was brown coal. This particular variety of coal is abnormally polluting in that it is comprised of decomposed plant material. The difference between brown coal and black coal, which was burned in the U.S., is that brown has not been compacted and decomposed as much as the other.

Brown coal has more carbon-oxygen and carbon-hydrogen bonds, which burn much less cleanly than the straight carbon that is in black coal.

In the year 1952, approximately 4,000 Londoners died with the cause of death being linked to difficulty in breathing (*Encyclopaedia of the Atmospheric Environment*, 2001). To prevent this from happening again, in 1956 and then again in 1968 the government of England passed the Clean Air Acts (*Encyclopaedia of the Atmospheric Environment*, 2001). These acts implemented smoke free zones in the city, in which only smoke-free fuels could be burnt. This legislation also helped in cleaning up the pollutants which industry let off (*Encyclopaedia of the Atmospheric Environment*, 2001).

Current air pollutants are most commonly caused by mobile emissions. Fumes from power plants and industrial burn off are also an issue, but not to the extent that vehicle emissions are. Mobile sources include automobiles, trains, airplanes, and others.

A car individually does not pose a large threat to the environment, but in these times of multi-car families, the number of vehicles on the road has been greatly increasing. The large volume of traffic is the main cause of emission problems. Vehicles with fairly efficient engines produce mainly water and carbon dioxide during fuel combustion; however, this only happens when the car is running at high speeds, typically on the highway (*Encyclopaedia of the Atmospheric Environment*, 2001). As soon as a car is stuck in a traffic-jam, the engine idles. At low speeds or when the car is not moving, engines produce more pollutants than when the car is moving at a high speed, which is very detrimental to the air. Also if one car is in gridlock, usually another 1,000 are right there with it. Therefore, the reduction of congestion in cities would improve air quality dramatically.

Additionally, petroleum vehicles take about seven miles to warm up, while diesel vehicles take about three (*Encyclopaedia of the Atmospheric Environment*, 2001). The distinction is made because when an engine is started cold, it must heat up to perform efficiently; and if a car is started in the city and travels straight into heavy traffic, it will take even longer for the car to warm-up - therefore producing less pollutant emissions (*Encyclopaedia of the Atmospheric Environment*, 2001). Diesel engines are much more efficient in the city, but on the other hand they produce far more particulate matter and other toxins than petrol vehicles (*Encyclopaedia of the Atmospheric Environment*, 2001).

Recently, scientists have been able to create electrically powered vehicles; however, few have been placed on the market. Toyota has a hybrid car, the Prius, which is half electric and half petroleum. When the car needs power and the battery is not fully charged, it runs on gas and charges the battery, but if the battery is charged the car starts to run on the battery instead. The use of more fuel-efficient cars with low emissions would also greatly improve the quality of urban air.

Now that the sources of air pollution have been discussed, the actual pollutants, and levels of them must be covered. The following is a list of air pollutants, and their respective sources:

- Benzene – Petroleum vehicles
- 1, 3-butadiene – road transportation
- Carbon Monoxide – petrol vehicles & industry
- Lead – Petrol vehicles & industry
- Nitrogen dioxide – road transportation, power generation, & industry
- Particulate matter – road transport, power generation, & industry
- Sulphur Dioxide – Power generation & industry

These chemical compositions are the reason that ozone depletion and acid rain are now a public concern. Studies were conducted in the UK to measure the levels of these

pollutants from 1970 to 1999. The below table is a compilation of data retrieved from *The UK National Air Quality Information Archive* (2001):

All measurements are in ktonnes

	1970	1990	1999	Δ% (70-99)	Δ% (90-99)
Benzene	-	54.4	29.7	-	45.5%
1,3-butadiene	-	13.3	6.2	-	53.4%
CO	8531	7155	4760	41.9%	33.5%
Lead	7357	2831	906	87.7%	68%
NO <sub>2</sub>	2497	2761	1605	35.7%	41.9%
Particulate Matter	528	305	186	64.8%	39.0%
SO <sub>2</sub>	6518	3754	1187	81.8%	68.4%

From the table it can be inferred that the greatest emission reduction has occurred from 1990 to 1999. The significant decrease in carbon monoxide was primarily caused by the installation of catalytic converters (*The UK National Air Quality Information Archive*, 2001). Particulate matter has decreased because newer vehicles have more stringent regulations to follow for the emission of Particulate Matter<sub>10</sub>; however, in London 80% of these particles are attributed to diesel cars and heavy-duty trucks (*The UK National Air Quality Information Archive*, 2001). Recently, the emissions of lead have decreased dramatically with the dwindling use of coal and improvements in metals production (*The UK National Air Quality Information Archive*, 2001).

The three major effects that air pollution has are on degrading health, ozone destruction, and acid rain. Species with a prolonged exposure to these chemical compounds are known to develop chronic bronchitis, pulmonary emphysema, lung cancer, and bronchial asthma just to name a few.

The most significant effect of air pollution is acid deposition. This occurrence is better known as acid rain, which is the resultant of sulphur and nitrogen pollutants. The sources of these pollutants are “fossil-fuel-fired power plants, industrial boilers, metal



smelters, and automobiles” (Godish, p.107). These pollutants become concentrated in the clouds and precipitate as a mild acid. The term acid rain is a misnomer because this acid can be deposited through rain, frost, snow, fog, dew, and all other forms of precipitation. The urban affect is the destruction of infrastructure. Calcium and magnesium carbonates will aid in the neutralization of this acid, however, the historical buildings and statues, business buildings, roads, bridges, and tunnels that do not contain these elements over time will decay (Godish, 1997, p.106-110). Modern day buildings are much less susceptible to these erosions, because the civil engineers who built them now factor in the materials and erosion in their designs (*Encyclopaedia of the Atmospheric Environment*, 2001). Unfortunately, old structures such as “...York Minster and Westminster Abbey have been severely eroded in recent years...” by acid rain (*Encyclopaedia of the Atmospheric Environment*, 2001).

It is essential that air pollution must be minimised to reduce these terrible outcomes. Urban areas contain the largest amounts of these harsh chemicals, and they should be made the focus of campaigns to promote cleaner air. The city of London has created a commission to deal with these problems. The Greater London Authority’s Environmental Commission has focused its key tasks, one of which is “to consider the main environmental issues facing Londoners and to make recommendations to the Mayor” (*The Mayor’s Draft*, 2001). These advisories include reducing congestion, reducing the amount of emissions allowed by cars to emit, promoting zero-emission vehicles, and promoting Low Emission Zones (*The Mayor’s Draft*, 2001). As stated above, the main factor in air quality is mobile transportation. By reducing emissions, air quality will improve by approximately fifty per cent (Godish, 1997, p.28-29).

The Association of London Government (2001), or ALG, reports that the majority of London boroughs have declared that air quality is a major concern. When a borough has an air quality problem, they file an AQMA, or air quality management areas. An AQMA is a detailed report of the air quality problem. The ALG (2001) writes:

Most AQMAs (air quality management areas) have been or will be declared for nitrogen dioxide (NO<sub>2</sub>) and particles (PM<sub>10</sub>). One borough is also likely to declare for carbon monoxide (CO) and three for sulphur dioxide (SO<sub>2</sub>). No London borough is likely to declare an AQMA for benzene, 1,3-butadiene or lead. (*Association of London Government, 2001*)

The borough of Barnet is a prime example of an area with air quality problems. Barnet is currently taking many actions to improve the air quality. In 2001, Barnet started a process to review and assess local air quality, and to create a Local Air Quality Strategy. The Barnet government is bringing in many consulting firms to help assess this air quality issue. These firms include Middlesex University, many non-profit organisations, and many other boroughs (*Barnet Air Quality, 2001*). This issue presents a great opportunity for the WPI IQP.

The borough of Merton is also facing the same type of situation. Merton is currently looking for ways to achieve local air quality objectives. Some potential actions to help improve the air quality according to *Merton Environmental Services* are:

Traffic management schemes, road user charging or workspace parking charging, encouraging major employers to review their employees travel arrangements, introduce low emission zones, transport education and awareness campaigns, school travel plans, vehicle emissions testing, and regulation of industrial emissions and control. (*Merton Environmental Services, 2001*)

This also presents opportunity for the WPI IQP.

## **6.2 Water Quality**

Water quality is another major environmental concern. “In general, sources of pollutants may be classified into two categories: point source and nonpoint source” (Lazaro, 1990, p.44). Point source pollutants are dumped into water at a specific location. An example of this would be an industrial plant that had a discharge pipe that outlet directly into a river. Nonpoint source pollutants are much harder to track and control because there is no one direct source. Examples of these pollutants are litter, air pollutant discharges (from heating of buildings, manufacturing processes, and vehicles), droppings from animals, dusts from erosion, and various chemicals. Natural pollutants come from decomposing leaves and excrement. These are commonly found in and around water. These natural occurrences are the least of the problems (Lazaro, 1990).

Timothy R. Lazaro (1990) has conducted extensive research into the sources of water pollution, and has divided urban areas into five principle areas: construction, industry, commerce, streets and roads, and residential. Construction sites are the source of large amounts of dust, sediment, oils or lubricants for machinery, “inorganic substances, and organics from litter or food wastes”. Commercial areas contain much litter, pollution generated by automobiles, and dust within buildings. Industry may cause many inorganic and organic chemical spills, outdoor inventory leaks, “spills from handling of materials, and leaky pipes”. Streets and roads accumulate automobile associated pollutants, such as oil and gas spills, and litter. Residential areas tend to be much cleaner but often have litter (Lazaro, 1990, p.46).

Although these locations do not seem to have much to do with water, pollutants found in rain in these areas are put into the water supply via urban runoff. These dirty

rivers of water that run down the city streets during a storm drain into storm drains or become drinking water for local flora and fauna. Another issue is that runoff causes erosion, because cities have been built to replace nature rather than to accompany it. Often storm water is not factored into the design, and erodes topsoils, infrastructure, and ledges.

Water quality for home use in London is a major issue. There are thirty-one water companies in England that deal with water quality (*Drinking Water Report*, 2001). The London government has set fifty-five standards that must be met which measure for bacteria, chemicals, and the look and taste of the water. In 1995, 99.5 per cent of the tests met these standards (*Drinking Water Report*, 2001).

Over the last few years, there has been a decrease in the amount of water quality incidents in London. In 1999, there were 227 successful prosecutions for water pollution, which was a decrease of twenty per cent from 1998. These incidents are attributed to high amounts of rainfall and displaced sewage (*Environment Agency*, 2001).

Like any other environmental problem, water quality must be addressed. The Mayor's Commission set recommendations for water quality, including the following: reduce building on the banks of the Thames; reduce the quantity of runoff and sewage expulsion into the Thames; protect and create more wildlife reserves along the banks of the Thames; closely monitor the increasing groundwater levels; and protect while continuing to improve the quality of the water supply for the city of London (*The Mayor's Draft*, 2001). This does not necessarily mean they will be used, but from an environmental stance this is what the governing body and community should be doing to improve the quality of water in London.

### **6.3 Waste Management**

There are numerous definitions and many classifications that try to classify and categorise waste materials. Most commonly, it is separated by source. According to the Environmental Protection Act [1]:

“Waste is any substance which constitutes scrap material or an effluent or other unwanted surplus substance arising from the application of a process, or any substance or article which requires to be disposed of as being broken, worn out, contaminated, or otherwise spoiled” (Read, 1999, p. 218).

Whether waste originates from households, commercial areas, or industrial parks, it is the imperfect utilization of raw materials. Household or municipal solid waste is the core of the waste management problem facing London today.

London is much different than all the other municipalities in the world, save the other European cities. London and other European cities, unlike cities of the United States are thousands of years old. Over time, the cities have become more and more complex. England is one of the smaller nations in the world, and in contrast with the US, which still has a lot of space, it can still use landfills. This space includes millions of untouched acres. Although it is not desirable that these acres be used to landfill space, they are in fact available. The US is also only about four hundred years old, and is approximately twenty-five times larger than the UK. London does not have the amount of space of the US and must now be very careful with its waste.

“It has been widely acknowledged that the UK is facing a disposal crisis due to the growing volume of solid waste generated in the UK and the diminishing availability of landfill void which [sic] can be utilized to dispose of these wastes, which [sic] perhaps as much as 59% of current landfill capacity is being used by the year 2010.” (Read, 1999, p. 225)

The current methods of disposal in use in London are landfills (78%), waste-to-energy (18%), and recycling (4%) (Read, 1999, p. 226). With the immediate problem of limited landfill space new methods of disposal must be utilised; unfortunately the current system is heavily dependent upon the landfill method. The other methods in London are waste-to-energy and recycling. Waste-to-energy is a method of taking non-recyclable waste and burning it in a special 'clean' incinerator to create energy. Many scientists currently view this as an alternative to recycling. Recycling is the collecting of certain papers, plastics, and glasses that are later taken to a factory and melted down and used to make more paper, plastic, and glass.

The current waste management hierarchy is a pyramid that shows reduction, re-use, recovery, and disposal (Read, 1999, p.221). The focus is to reduce and re-use more than is disposed. London has created a new strategy called 'Making Waste Work,' which implements the hierarchy. The creators of this strategy believe that if people used the hierarchy in daily life it would solve some of the waste problems without incurring an expense (Read, 1999).

It seems as though all London must do is shift their operations towards Waste-to-Energy (WtE) and recycling efforts. However, the people of London have not been very receptive to the recycling scheme. Curbside pick-up is available to the majority of the city, and a mere four per cent utilise the service (Read, 1999, p. 226). This four per cent is far below the anticipated twenty-five per cent participation rate (Read, 1999, pg. 222). Many factors have been attributed to the failure of the system including: "lack of markets for recycled materials, fluctuating prices for recycled materials, lack of adequate local authority funding, lack of clear policy direction from national government, lack of staff to

devote to the development of recycling, and lack of public participation” (Read, p.226-227).

Waste management seems to be an area where there is a dire need for help, partially caused by the lack of staffing. The Commission also has a set of recommendations regarding waste. These include:

- the promotion of recycling and the use of recycled products
- the reduction of waste by as much as possible
- the creation of a city-wide compost site
- the increase of office recycling (*The Mayor's Draft*, 2001).

These strategies would promote more environmentally sound means of disposal, as well as posing a solution to London's landfill problem.

In attempts to help boost recycling in London, the London Community Recycling Network (LCRN) has been established. The LCRN has forty-eight members, which includes non-profit organisations and private sector organisations. The LCRN also has contact with thirty-two London boroughs. The goal of LCRN is to increase recycling and put the Mayor's plan (as mentioned above) into action (*London Community Recycling Network*, 2001). This type of organisation serves as a prime target for WPI IQP sponsorship.

A recent issue is 'fly-tipping.' This expression is basically the illegal dumping of waste. Most commonly this has occurred on roadsides, parks, and even in some poor people's back yards. This is a major environmental concern, this not only destroys habitats, it also destroys the image of the beautiful English countryside (BBC News, January 15, 2001).

## 6.4 Green Space

Lastly, green space is the space left in urban areas for wildlife to grow and live. Usually, these are parks or reserves. Cities have many benefits of having green space. It improves soil conditions, hydrology, and wildlife diversity, reduces the extremes of urban microclimates, and reduces air pollution in the urban environment. The problem with creating green space is that city property is incredibly expensive. Developers buy out these properties and create large malls, several story housing complexes, or office buildings. The responsibility is thus placed the municipality to provide the community with these spaces.

There is no question that urban areas should include green space in any new development and try to expand spaces that are currently in use. Many of the available green spaces are littered and unpleasant to walk through. A well-kept green space can increase property values in a neighbourhood by seven to fifteen per cent (Laurie, 1979, p. 210). London is well known for its parks, and would like to maintain this image. The Commission's set of recommendations that the Mayor should follow when considering this issue are to improve the quality of the existing parks, try to provide more green space in ethnic areas, and establish "a biological record" (*The Mayor's Draft*, 2001). By implementing some of these suggestions the city of London would appear more beautiful and maintain its image as one of the most wondrous cities in the world.

The Institute of Leisure and Amenity Management, or ILAM, is looking to increase green space in urban areas of London at the local borough level. ILAM uses the borough of Walsall as an example. Walsall carries out a program called Greening the



City. ILAM feels that “improving the quality of urban green space should be a key aim in making urban living more attractive and reducing pressure on green field development in the countryside” (*Institute of Leisure and Amenity Management*, 2001). This is an opportunity for a project involving GIS to map out urban green space.

### **6.5 Issues**

A major issue in London involves Dibden Bay, which is a designated nature reserve. This area is home to many rare species of flies, beetles, and other insects. Dibden Bay is a proposed site for a deepwater container port. With the creation of this port, the wildlife in the area will begin to die off (Naish, 2001). This type of situation is a debate between preserving nature and economics.

## **A3 - Past/Present Sponsor Interview Questions**

1. How did you get involved with the WPI IQP programme?
2. Have you ever worked with any organisations like ours?
3. What do you really like about the programme?
4. If you could change anything about the programme, what would you change and why?
5. What benefits do you think the students get out of the experience?
6. What benefits has your organisation gotten from sponsoring projects?
7. Can we use a direct quote from you for our marketing materials?

## A4 - Original List from Steve Cardis

### Association of London Borough Planning officers

#### Development Plans Committee

E-mail contacts at October 2000

<b>Name</b>	<b>Address</b>	<b>Borough/Organisation</b>
Tim Johnson	<a href="mailto:tjohnson@barking-dagenham.gov.uk">tjohnson@barking-dagenham.gov.uk</a>	Barking & Dagenham
Jimmy Jemal	<a href="mailto:forwardplanning@barnet.gov.uk">forwardplanning@barnet.gov.uk</a>	Barnet
Ian Bailey	<a href="mailto:ian.bailey@bexley.gov.uk">ian.bailey@bexley.gov.uk</a>	Bexley
Ken Hullock	<a href="mailto:ken.hullock@brent.gov.uk">ken.hullock@brent.gov.uk</a>	Brent
Brian O'Donnell	<a href="mailto:brian.odonnell@camden.gov.uk">brian.odonnell@camden.gov.uk</a>	Camden
Lynn Nelson	<a href="mailto:Lynn_nelson@croydon.gpov.uk">Lynn_nelson@croydon.gpov.uk</a>	Croydon
Derek Read	<a href="mailto:Derek.read@corpoflondon.gov.uk">Derek.read@corpoflondon.gov.uk</a>	Corporation of London
Caroline Harris (attending for Philip Sheail)	<a href="mailto:Philip.sheail@enfield.gov.uk">Philip.sheail@enfield.gov.uk</a>	Enfield
Steve Tyler	<a href="mailto:Steve.tyler@greenwich.gov.uk">Steve.tyler@greenwich.gov.uk</a>	Greenwich
Michael Maguire	<a href="mailto:Michael.Maguire@hackney.gov.uk">Michael.Maguire@hackney.gov.uk</a>	Hackney
Shifa Mustafa	<a href="mailto:Shifa.Mustafa@haringey.gov.uk">Shifa.Mustafa@haringey.gov.uk</a>	Haringey
Dennis Varcoe	<a href="mailto:dvarcoe@harrow.gov.uk">dvarcoe@harrow.gov.uk</a>	Harrow
Jales Tippell	<a href="mailto:jtippell@hillington.gov.uk">jtippell@hillington.gov.uk</a>	Hillington
Paul Gibson	<a href="mailto:Paul.Gibson@rbk.kingston.gov.uk">Paul.Gibson@rbk.kingston.gov.uk</a>	Kingston
Andrew Lainton	<a href="mailto:alainton@lambeth.gov.uk">alainton@lambeth.gov.uk</a>	Lambeth
Brian Regan	<a href="mailto:Brian.regan@lewisham.gov.uk">Brian.regan@lewisham.gov.uk</a>	Lewisham
Steve Clark	<a href="mailto:Steve.clark@merton.gov.uk">Steve.clark@merton.gov.uk</a>	Merton
Steve Cardis	<a href="mailto:Steve.cardis@merton.gov.uk">Steve.cardis@merton.gov.uk</a>	Merton
Dave Whittaker	<a href="mailto:Dave.whittaker@newham.gov.uk">Dave.whittaker@newham.gov.uk</a>	Newham
Steve Rogers	<a href="mailto:Steve.rogers@redbridge.gov.uk">Steve.rogers@redbridge.gov.uk</a>	Redbridge
Sylvia Francis- Mullins	<a href="mailto:Sylvia.francis-mullins@southwark.gov.uk">Sylvia.francis-mullins@southwark.gov.uk</a>	Southwark
Brian Whitley	<a href="mailto:Brian.whitley@pla.lbwf.gov.uk">Brian.whitley@pla.lbwf.gov.uk</a>	Waltham Forest
Zbig Blonski	<a href="mailto:boroughplanner@westminster.gov.uk">boroughplanner@westminster.gov.uk</a>	Wandsworth
Graham Hadley	<a href="mailto:ghadley@westminster.gov.uk">ghadley@westminster.gov.uk</a>	Westminster
John Hack	<a href="mailto:John.hack@lonon.gov.uk">John.hack@lonon.gov.uk</a>	GLA
Emma Coulter	<a href="mailto:Ecoulter.gol@go-regions.gov.uk">Ecoulter.gol@go-regions.gov.uk</a>	GOL
Tony Thompson	<a href="mailto:Tthompson.gol@go.regions.gsi.gov.uk">Tthompson.gol@go.regions.gsi.gov.uk</a>	GOL

## A5 – List of Contacts Used

Name	Borough/ Organisation	Phone	E-mail	Address
Zbig Blonski (Male)	Wandsworth		<a href="mailto:boroughplanner@westminster.gov.uk">boroughplanner@westminster.gov.uk</a>	
Sally Blomfield	Sutton	020-8870-6253	<a href="mailto:sally.Blomfield@sutton.gov.uk">sally.Blomfield@sutton.gov.uk</a>	
Danielle Byrne	Groundwork	020-7922-1230	<a href="mailto:mailto:dbyrne@groundwork.org.uk">mailto:dbyrne@groundwork.org.uk</a>	
Bill Hodgson	Westminster			Westminster City Hall 64 Victoria Street London SW1E 6QP
Ken Hullock	Brent		<a href="mailto:ken.hullock@brent.gov.uk">ken.hullock@brent.gov.uk</a>	Brent House  London
Andrew Lainton	Lambeth		<a href="mailto:alainton@lambeth.gov.uk">alainton@lambeth.gov.uk</a>	Acre House 10 Acre Lane London SW2 5SG
Shifa Mustafa (Female)	Haringey		<a href="mailto:Shifa.Mustafa@haringey.gov.uk">Shifa.Mustafa@haringey.gov.uk</a>	Haringey Civic Centre High Road Wood Green London N22 8LE
Brian O'Donnell	Camden	020-7278-4444 switchboard	<a href="mailto:brian.odonnell@camden.gov.uk">brian.odonnell@camden.gov.uk</a>	Camden Town Hall Extension Argle Street London WC1H 8EQ
Carl Powell	Westminster	020-7641-2650		Westminster City Hall 64 Victoria Street London SW1E 6QP
Brian Regan	Lewisham	020-8314-8774	<a href="mailto:Brian.regan@lewisham.gov.uk">Brian.regan@lewisham.gov.uk</a>	

Aileen Shackle	Groundwork	020-8540-5533		14 The Apprentice Shop Merton Abbey Mills Watermill Way London SW19 2RD
Andrew Smith	Barnet	020-8359-4667		Stategic Planning Barnet House 1255 High Road London N20 0EJ
Derek Read	Corp. of London	020-7332-1846	<a href="mailto:Derek.read@corpoflondon.gov.uk">Derek.read@corpoflondon.gov.uk</a>	Dept. of Planning and Transportation, Corp. of London, P.O. Box 270 Guildhall, London EC2P 2EJ
David Walker	Camden	020-7974-2519		Camden Town Hall Extension Argle Street London WC1H 8EQ
Brian Whitley	Waltham Forest	020-8496-6194	<a href="mailto:Brian.whitley@pla.lbwf.gov.uk">Brian.whitley@pla.lbwf.gov.uk</a>	Chingford Municipal Offices  Ridgeway  London E4 6SP
Jeff Wilson	Sutton	020-8770-6258		

## A6 – History of Contacts

Organisation	Last	First	Department	Status	Last Update
Barnet	Smith	Andrew	Planning	<i>Mailed marketing materials 2/21, expecting a call from Jennie at some point</i>	02/21/02
Brent	Hullock	Ken	Planning	<i>Met 2/20/02, Jennie contact towards end of March</i>	02/21/02
Camden	O'Donnell	Brian	Planning	<i>Contact in mid to late summer</i>	02/13/02
Camden	Walker	David		<i>Jennie call him at your convenience, they have a space problem</i>	02/21/02
Corporation of London	Read	Derek	Planning	<i>Mailed marketing materials 2/21/02 - Jennie call him some time in March</i>	02/21/02
Groundwork	Byrne	Danielle		<i>Sent materials 2/21, e-mailed her on 2/25 to let her know we sent them and that she should expect a call from Jennie</i>	02/25/02
Groundwork	Shackell	Aileen		<i>Referred us to Danielle Byrne</i>	02/07/02
Haringey	Mustafa	Shifa	Planning	<i>Out until March 4th, Follow-up with her upon her return</i>	02/18/02
Lambeth	Lainton	Andrew	Planning	<i>Materials sent on 2/12, call back week of March 4th</i>	02/21/02
Lewisham	Regan	Brian	Planning	<i>Contact in mid to late summer</i>	02/21/02
Sutton	Blomfield	Sally	Planning	<i>Follow up in April or May</i>	02/13/02
Waltham Forest	Whitley	Brian	Planning	<i>Mailed marketing materials 2/22 - expecting a call from Jennie at some point</i>	02/21/02
Wandsworth	Blonski	Zbig	Planning	<i>Sent out Fax 2/21, expecting a call from Jennie around mid March</i>	02/21/02
Westminster	Hadley	Graham	Planning	<i>Out sick indefinitely, we spoke with Bill Hodgson instead</i>	02/07/02
Westminster	Hodgson	Bill	Planning	<i>Expecting call from Jennie in mid-March, also a call to a colleague</i>	02/25/02
Westminster	Powell	Carl		<i>He redirected the matter back to Bill, says his P.A.</i>	02/21/02

Name: Mr. Blonski, Zbig

Date	Method of Contact	Reason for Contact	Synopses
02/02/02	Fax	Warn about call	Fax went through
02/04/02	Phone	Initial Call about sponsorship	Called at 4:29 P.M. with no answer
02/05/02	Phone	Initial Call about sponsorship	Called at 11:30 A.M., cannot find the fax, please call back at the beginning of next week 2/11-13
02/12/02	Phone	Call back	He was out of the office try back on 2/13/02
02/13/02	Phone	Call back	Referred fax to his deputy borough planner, waiting for a response. Once receives response, will contact Jennie, so if she doesn't receive contact in a few days from him (around 2/21) then call him back.
02/21/02	Phone	Trying to prepare for Jennie hand off	Called at 2:45 P.M. talked to supervisor about programme, he lost the fax, so we need to send out another including when we are leaving and Jennie's information., said it was worth pursuing but his boss is quite hesitant

Name: Blomfield, Sally

Date	Method of Contact	Reason for Contact	Synopses
02/07/02	E-mailed	Warn about incoming fax	Sent her an e-mail to let her know we are going to send her a fax about our programme
02/07/02	Fax	Warn about call	Fax went through
02/12/02	Phone	Initial Call about sponsorship	Called her at approximately 11 A.M., she wanted to speak over the idea with her manager, and asked us to call back 2/13/02
02/13/02	Phone	Call Back	Not in the office, call back 2/14/02.
02/14/02	Phone	Call Back	She was interested in the idea, very pleasant, but the budget is tight right now, she suggested that we follow up with a phone call in a few months and see if the situation has changed



Name: Byrne, Danielle

Date	Method of Contact	Reason for Contact	Synopses
01/30/02	Phone	Set up informational interview	She will be busy for a week doing PR stuff, they have our information, she should call back
02/04/02	Phone	Set up informational interview	Not there
02/07/02	Phone	Set up informational interview	She was on her way into a meeting try again tomorrow
02/11/02	Phone	Set up informational interview	She is out of the office
02/11/02	E-mail	Set up informational interview	Sent an e-mail to let her know we had called and left messages, asked if she would like to speak on the phone or in a meeting
02/13/02	E-mail	Information	She had requested further information by e-mail, so we sent her an overview of the programme
02/13/02	E-mail	Information	She requested clarifications on a couple points, so we sent her a little more information, and she also asked if we had promotional materials.

02/21/02

Mail

Get her more interested, give her more information, and get her ready to be handed off to Jennie

Sent folder of marketing materials this included the project sampler brochure, the WPI London Centre fly sheet, bookmark, WPI London 3pg letter, form letter inviting her to the Merton Presentations, all in the global folders

02/25/02

E-mail

Info

To let her know we sent her materials in the mail and that she should expect a call or e-mail from Jennie.

Name: Hadley, Graham

Date	Method of Contact	Reason for Contact	Synopses
02/02/02	Fax	Warn about call	Fax went through
02/04/02	Phone	Initial Call about sponsorship	Called at 4:30 P.M. got voice-mail
02/05/02	Phone	Retry of Initial Call about sponsorship	He is out ill for an unspecified amount of time, Bill Hodgson talked to us please refer to his file

Name: Hodgson, Bill

Date	Method of Contact	Reason for Contact	Synopses
02/05/02	Phone	Initial Call about sponsorship	Called 11:10 A.M., discuss projects, seemed quite interested especially with the Merton Key Workers stuff, suggested projects about noise mapping using benchmarking, and allsorts of bridge projects, wants to talk to a range of colleagues in environmental policy, suggested that we mail stuff to Carl Power who has more authority than him
02/22/02	Phone	Follow-up	He was out of the office for the 21/2 and 22/2, we will call back on 2/25, we left a voice mail message stating that we will try to call back but if we are unable to our site co-ordinator would speak to him sometime in March.
02/25/02	Phone	Follow-up	Spoke with Bill at 3:30 P.M., he is still very interested in the project programme, although he does not think that the sound-mapping project will work, now talking about traffic calming projects, the use of stop signs, speed bumps, and slowing down traffic. Referred us to Ian Forbs and Engineer 207-641-3171. Expecting a call to both Bill and Ian mid March

Name: Hullock, Ken

Date	Method of Contact	Reason for Contact	Synopses
02/02/02	Fax	Warn about call	fax went through
02/04/02	Phone	Initial Call about sponsorship	Called at 3:15 P.M., he seemed to be in a fairly good mood, was hesitant about setting something up, he took our number and said he would call us back 2/5 or 2/6,he wanted time to review the fax
02/08/02	Phone	Follow-up	Was interested in hearing more after reading the fax, scheduled a meeting with us on 02/20/02

02/20/02

Meeting in Brent House

Give marketing presentation  
and answer questions

Told him more detailed information about the IQP programme than was on the fax. He asked about things such as workspace, costs, and time commitments. We told him what time frames students are in London to work on projects and that they do prep work in Worcester, that there is the requested fee of £2000 and travel expenses for students, that students require a workspace, and we explained the liaison's role. Discussed past and mostly present projects, and explained what sponsors get out of projects, such as recommendations in assessment projects like Key Workers, and products like the intranet Arthritis Care is building, also mentioned that website work would be a good project. Talked about a possible project being traffic mapping, and noted that we use GIS often in projects. He said he is already thinking of possible projects. Invited him to Merton presentations, he will contact us or Jennie if he or a colleague can go. Would like to hear from Jennie towards the end of March.

Name: Lainton, Andrew

Date	Method of Contact	Reason for Contact	Synopses
02/02/02	Fax	Warn about call	Fax went through
02/04/02	Phone	Initial Call about sponsorship	Called 4:15 P.M. seemed very friendly, but was very busy at the moment asked us to call back on 2/6 during the afternoon
02/07/02	Phone	Second Call trying to Marketing the IQP	Called 10:45 A.M., sounded very interested, said we could almost definitely help out next D-term. Interested in transportation projects, electronic interaction with the council's website, environmental appraisal, assessing visual impact of high buildings on sound, e-mail and send mailings, knew Steve Cardis
02/12/02	Mail	Send more information	Sent folder of marketing materials this included the project sampler brochure, the WPI London Centre fly sheet, bookmark, WPI London 3pg letter, form letter, all in the global folders, call back 2/15
02/21/02	Phone	Follow-up on mailing	Is very excited about receiving the information in the mailing and says he is looking forward to working with us. Wants to hear from Jennie week of March 4th.

Name: Mustafa, Shifa

Date	Method of Contact	Reason for Contact	Synopses
02/02/02	Fax	Warn about call	Fax went through
02/04/02	Phone	Initial Call about sponsorship	Called at 3:40 P.M. she is very busy, another person in the office suggested that we send her the details via e-mail so she could get back to us
02/12/02	Mail	Send more information	Sent folder of marketing materials this included the project sampler brochure, the WPI London Centre fly sheet, bookmark, WPI London 3pg letter, form letter, all in the global folders, call back 2/15
02/18/02	Phone		Not officially on post until 4th of March, she has popped in and out a bit, but definitely will not be back until March 1. They will look out for the package, suggested we contact her then.



Name: O'Donnell, Brian

Date	Method of Contact	Reason for Contact	Synopses
02/02/02	Fax	Warn about call	fax went through
02/04/02	Phone	Initial Call about sponsorship	Called at 3:20 P.M., he is on leave until Thursday (2/7), talked to a pleasant man in his department, he suggested we e-mail Brian with the details of the projects especially the Merton one, call again on 2/8
02/11/02	Phone	Follow-up	Might not be the right person to talk to, just got back from being out of the office for a while suggested that he catch up with his work, and he will look over everything he has, and then call him back later in the week like Thursday or Friday
02/12/02	Mail	Send more information	Sent folder of marketing materials this included the project sampler brochure, the WPI London Centre fly sheet, bookmark, WPI London 3pg letter, form letter, all in the global folders, call back 2/15
02/18/02	Phone	Follow-up on package	Called to make sure he had received our informational package. He sounded busy and referred us to David Walker in his department, and said he has passed all the information on to him at 7974 2519

Name: Powell, Carl

Date	Method of Contact	Reason for Contact	Synopses
02/12/02	Mail	Send more information	Sent folder of marketing materials this included the project sampler brochure, the WPI London Centre fly sheet, bookmark, WPI London 3pg letter, form letter detailing our discussion with Bill Hodgson, all in the global folders, call 2/15
02/18/02	Phone	Follow-up on package	He answered the phone, and had not seen the package, wants to look for it, and will then call us back. At 207-240-597 flat 12
02/21/02	Phone	Trying to figure out the status	Secretary answer, suggested we speak with Sue Min his Personal Assistant - 0207-641-2683
02/22/02	Phone	Contact Sue Min	Spoke with Sue, she remembered receiving the package from us, but as she recalls the matter was handed back to Bill Hodgson in Planning

Name: Regan, Brian

Date	Method of Contact	Reason for Contact	Synopses
02/02/02	Fax	Warn about call	Fax went through
02/04/02	Phone	Initial Call about sponsorship	Called at 4:16 P.M., he was not there and we got his voice mail
02/05/02	Phone	Initial Call about sponsorship	Talked to someone else in the department, they were not ready to discuss the matter, we are waiting for an e-mail to Jessie
02/22/02	Phone	Follow-up	Said they have staff shortages currently and public inquiries start towards the beginning of the summer, so Jennie should contact him mid to late summer

Name: Read, Derek

Date	Method of Contact	Reason for Contact	Synopses
02/02/02	Fax	Warn about call	Fax went through
02/04/02	Phone	Initial Call about sponsorship	Called at 3:45 P.M., was not there should be in tomorrow, gave them our number they should call back
02/05/02	Phone	Follow-up on yesterday	Called at 11:30 A.M., he sounded interested, he wants to pass the information on to another, they will get back to us
02/21/02	Phone	Position them to be handed off to Jennie	Spoke with him at 11:15 A.M., still interested in the programme, he passed the fax onto a personnel officer, he has not received their response yet, he requested some marketing materials, which we will send out tomorrow. His address is Dept. of Planning and Transportation, Corp. of London, P.O. Box 270, Guildhall London EC2P 2EJ, his phone number is 020-7332-1846
02/21/02	Mail	Provide marketing materials which he had asked for	Sent folder of marketing materials this included the project sampler brochure, the WPI London Centre fly sheet, bookmark, WPI London 3pg letter, form letter inviting him to the Merton Presentations, all in the global folders

Page missing cf ]bVcfffYVim  
.....bi a VYfYX in original

## IQP/MQP SCANNING PROJECT



George C. Gordon Library  
WORCESTER POLYTECHNIC INSTITUTE

Name: Smith, Andrew

Date	Method of Contact	Reason for Contact	Synopses
02/02/02	Fax	Warn about call	Fax went through
02/04/02	Phone	Initial Call about sponsorship	Called 3:10 P.M., he wasn't there, spoke with somebody in the office who is leaving a detailed message for him, he was out all day today...she seemed interested
02/05/02	Phone	Second Call about sponsorship	Called at 11:45 A.M., He is very busy, trying to catch-up with his work, he has our information and will get back to us
02/21/02	Phone	Positioning contact for hand-off to Jennie	Called at 2:30 P.M., went very well, he was still very interested in the programme, spoke about project ideas relating to linking GIS to development value of flats, developing new software for monitoring housing developments, he asked us to send him some materials, his address is Strategic Planning, Barnet House, 1255 High Road, London N20 0EJ
02/21/02	Mail	Provide marketing materials which he had asked for	Sent folder of marketing materials this included the project sampler brochure, the WPI London Centre fly sheet, bookmark, WPI London 3pg letter, form letter inviting him to the Merton Presentations, all in the global folders

Name: Walker, David

Date	Method of Contact	Reason for Contact	Synopsis
02/21/02	Phone	get an understanding of where they stand	We were referred to him by Brian O'Donnell, David liked the sound of the projects, however, he knows that they have absolutely no space as it is, forget trying to accommodate students. He is not opposed to talking to Jennie about trying to work around this problem, but he sees this as a large roadblock.

Name: Whitley, Brian

Date	Method of Contact	Reason for Contact	Synopses
02/02/02	Fax	Warn about call	Fax went through
02/04/02	Phone	Initial Call about sponsorship	Called at 4:16 P.M., he seemed pleasant, gave him the marketing pitch, said that the program sounded great, very short notice for him, he will contact Jennie if he comes up with a project
02/21/02	Phone	Probe interest, get them to a point where Jennie can take over	Very interested, would like as much logistical details as possible, he would like the marketing materials sent to him on 2/22, he wants to pass this along to his colleagues, but thinks that what we have been doing is grand, he cannot attend the presentations of this terms Merton projects, will try to get to the Merton presentations next term April 02, address is Chingford Municipal Offices, Ridgeway, London E4 6SP



## A7 – Journal

Date	Goals	Accomplished
January 13, 2002	Meet with Jennie Hawks and finish our slides	We had a very productive first meeting with Jennie, got a better sense of what she does for the program.
<b>Week 1</b> January 14, 2002	Complete our presentation by 12 noon, get contact info for Steve Cardis, firm up updated methodology, begin Content Analysis, and present	We spent 2.5 hours in the morning working out our presentation. Then we took a break to eat and get dressed, and preceded to King's College where we set up our computer accounts, after receiving our ID's. Then we presented our project to Prof. Theyel, Prof. Matson, Mrs. Hawks, and the class. Received the phone number of Steve Cardis from Jennie, as well as her Norfolk phone number since she will be on holiday for 2 weeks starting Saturday the 19 <sup>th</sup> .
January 15, 2002	Get maps & 3-ring binder, go to Library check out the facility, call Steve Cardis and setup appointment; do 2 days worth of content analyses (at least 4 different periodicals), talk to Jennie about getting the Josef Sherpa MQP before she leaves, try to find the UDP's for Sutton, Westminster, and Haringey; start to map out how the GLA, ALA, and Boroughs work together; <b>work on Methodology.</b>	Steve is not there today, we e-mailed him instead. We got a street map of the entire M25 area for £10. We did 2 days worth of the content analysis for the BBC and The Times. We figured out the correlation GLA, ALA, & Boroughs. We cannot as of yet get the UDP's because they cost big \$\$\$\$. E-mailed Jennie about getting MQP. Boys read Evening Standard, Mirror, Metro. List of projects that Cambridge would like accomplished, looking into those. Worked on the methodology, however it is lost right now and may have to be completely redone.
January 16, 2002	Work on methodology if we can't find it, then start refine it; refine problem statement, update literature review, journal, and content analysis; follow up on e-mails from Steve Cardis & Jennie Hawks; confirm agenda	We had a group meeting in which we discussed how we are going to move forward with this project. We discussed our goals, and decided we need to meet with the professors and read the Joseph Sherpa MQP before really moving forward. We continued to do more content analyses.
January 17, 2002	Refine methodology more, research Groundwork, get feed back from Steve Cardis, make sure we have agenda done, meet with prof's, have	We went to Brixton to get the Joseph Scherpa MQP, they also had an hour chat with Jennie about goals. We then met as a group, created the agenda, read the MQP, which turned out to be a proposal,

	post meeting discussion, Journal, and Content Analysis	so we are now trying to get the actual MQP from WPI. We then met with the professors, who liked our progress.
January 18, 2002	Work on what was talked about during the meeting with the professors; re-do methodology & pass in methodology, try to talk to Mr. Hawks about ground works, try to follow-up with leads	Called Mr. Hawks in the morning and got the name of Aileen Shackle in Groundworks. He talked to her and then we scheduled an appointment with her for Tuesday the 29 <sup>th</sup> . We met as a group, all read the methodology, made individual corrections, and as a group discussed which ones to keep and updated the methodology. We received an e-mail back from Steve Cardis and are meeting with him at 12 noon on the 22 <sup>nd</sup> .
<b>Week 2</b> January 21, 2002	Prep questions for meeting with Dean Davis, Prep presentation for tomorrow, and prep discussion with Steve Cardis. Meet with Dean Davis 2ish. Start working on the Literature Review.	Held meeting at the Library to discuss day, we made list of questions to talk to Dean Davis about, made list of questions for Steve Cardis, refined our problem statement, and started our slides. We then had a very successful meeting with Matson, Theyel, & Davis completely covering agenda. Then we went back to the flats later we finished up the slides for tomorrow's presentation and created the budget.
January 22, 2002	Redo Problem statement, do a run through of the presentation. Have meeting with Steve Cardis at 12:00 PM, go to King's from 2-5, present presentation. Do up agenda. Individually make corrections to the Literature Review. Pass in our budget.	Re-did the problem statement, went through a run-through of our presentation, travelled to Merton to meet with Steve Cardis. Took extensive notes on the meeting, he will e-mail us list of contacts. Generally meeting went very well. Presented our methodology at Kings. Did up our agenda. Individually we are making our corrections to the literature review.
January 23, 2002	Have meeting with Prof's at 10AM. Write up Steve Cardis meeting notes. Finish the Literature Review. Turn in Literature Review by 6 PM.	Meet with the prof's to go over progress. Became confused about the cell phone issue, redid budget. Had another meeting at night to clarify. Wrote up Steve Cardis meeting notes. Worked on the Lit. Rev. all day, passed in electronically at 5ish. Looked up Groundworks online, they do not have a website, however, there were a few article about them on consulting sites, where they hired consultants to build a bridge in the shape of a leaf. Will try to

		call John Hawks tomorrow to get information on the Groundworks.
January 24, 2002	Research about marketing/operations plan, marketing materials. Have group meeting to discuss findings. Go to Westminster Library read up on Westminster UDP, read Sutton's UDP online, & research <b>Groundwork</b> , by calling John Hawks. Start calling potential contacts on making meetings. Write e-mail to Dean Davis with the cell phone stuff, on his approval, go out and buy one immediately. Have an end of the day meeting to discuss where we are. Buy card thanking Steve Cardis for meeting with us. Write a follow up e-mail to him to get the names and numbers of contacts.	Spent the morning playing phone tag. First called Jennie, asking for John to get info on Groundwork. She asked how we are doing, and offered to loan us a cell phone for the term, pending approval of her husband. Then called John Hawks trying to find out info on Groundwork, he said call them, and said he would call back later about the cell phone. Then called groundwork, got their URL. Then went to King's College library to research Operation/Business/Marketing Plans, Groundwork, and Marketing materials. E-mailed Steve Cardis thanking him for meeting us Tuesday, and asking him for the list of contacts. He e-mailed us back with 28 contacts with their e-mail addresses. Those were then entered into our excel sheet. Prof. Kasouf was also e-mailed asking for info about marketing materials. Waiting for a response from him. Wrote up the synopses of Groundworks, and started that appendix.
<b>Week 3</b> January 29, 2002	Meet with Aileen Shackle about Groundworks 2pm. First e-mail Jennie about which contacts have already talked to Jennie. Look up HR in the boroughs that we have contacts for, look-up phone numbers of list of contacts that Steve gave us, and call them all. Continue to research and write up the business plan section of the literature review. Add the section on how the GLA, ALA, and the boroughs work together. Also add the Steve Cardis interview to that appendix. Hopefully get phone all set up. Start Intro and the outline of the analysis and results section. Make up agenda for	We met in the morning to refocus after the long weekend, and we discussed which goals we really want to accomplish since this is our project. We then proceeded to the library to look-up phone numbers of the contacts and their corresponding HR phone numbers. Then Jennie was emailed to make sure we aren't contacting someone she is in the process of working with. Two of us went to Merton to meet with Aileen Shackle. We then met up with John Hawks to get the cell phones from him. Received e-mail back from Prof. Kasouf telling us how to create marketing materials. While the other 2 researched and wrote up the business plan section. Tried to get numbers for the contacts, with limited results. Compiled the interviews with the summaries. Could not find the section previously written on the ALA, GLA, and

	tomorrows meeting.	the boroughs work together.
January 30, 2002	<p>Have meeting, have post-meeting meeting with the group. Make up script of what we are going to say on the phone. Get phone numbers. Intro &amp; Outline work on them!!! Pass them in a 6pm. Make up letter to send out to prospective contacts, so they know we will be calling them. E-mail Jennie about which boroughs were mass e-mailed and who responded. Make up a sheet to record all of our phone conversations.</p>	<p>Had meeting with Prof. Matson. Wrote up scripts for the phone calls to both the contact and HR. Re-wrote the Introduction and Outlines for the Analysis and Conclusions section. We then wrote up a business letter, which we sent to Jennie and the Prof., the letter announces to the contacts that we will be calling. We created some letterhead to print the letters on. We received an e-mail back from Jennie about which boroughs she had contacted, and there are none to worry about. We are searching for fax numbers, and phone numbers for all the contacts. We also created a sheet so all of our phone calls can be logged when we make them. We then e-mailed the final drafts of the Introduction and Outlines for the Analysis and Conclusions section to the professors.</p>
January 31, 2002	<p>After we get approval from Jennie Hawks we will, revise the letter, then start faxing/e-mailing out the letters. Work on Literature Review. Think about contacting the centre of Environmental Initiatives. If time allows we will really start looking at the marketing materials or start figuring out which sections of the business plan are applicable to us.</p>	<p>Morning meeting with the group we got an e-mail from Jennie last evening saying that we need to revise our letter before sending and we should e-mail it out. Completely rethought Lit Review. Began rewriting marketing and IQP section. Emailed another draft of the letter to potential contacts to Jennie and Profs. Waiting for approval from Jennie before sending it because her name is on it. Did background research for marketing section.</p>
February 1, 2002	<p>Work on Lit Review Hard Core! Call all the contacts and make appointments. If time allows we will really start looking at the marketing materials or start figuring out which sections of the business plan are applicable to us.</p>	<p>We met with Theyel and Matson to discuss the direction of our marketing section. We are going in the right direction and they suggested that we add a section called Positioning. We called up the switchboard for the boroughs we are going to contact and got the fax numbers for all of the people. We worked on the letter to send out to potential clients, got it approved, and preceded to make up personalized letters. We brought them to a fax place to get them faxed out, however, it was later in the evening and</p>

		they were closed.
February 2, 2002	Get the faxes sent out	We went to a fax place and got 10 out of 11 letters sent. These were just the boroughs as close if not closer than Merton. We have another list of names just as long for persons that are further away.
<b>Week 4</b> February 4, 2002	Work on Literature Review – Pass in Literature Review by 6 PM. Prep slides for presentation tomorrow. Call all of the contacts whom were faxed letters on Saturday, call in the afternoon so they have a chance to read the fax, to get appointments. Consider making a call to Daniel Byrne at Groundwork, to make sure we follow up on that lead.	Worked on literature review all day. Passed in by 6 P.M. We made the first round of phone calls to the people we faxed, recorded all the phone calls on forms we created.
February 5, 2002	Create presentation, Present at Kings; work on Second Draft of the Methodology, table of contents, paragraph level outline of analysis & conclusions, list of tables & figures, & appendices; analyse the feedback from the first round of calls yesterday, and make follow-up calls etc.	Created presentation, presented at Kings, and called the boroughs, which needed follow-up calls. Created agenda for meeting with Theyel, Matson, and Jennie on Feb. 6 <sup>th</sup> .
February 6, 2002	Meet with Theyel, Matson, & Jennie Hawks as soon as we can get down there at her house ~11 AM. Second Draft of the Methodology, table of contents, paragraph level outline of analysis & conclusions, list of tables & figures, & appendices are due at 6 PM.	Met with Theyel, Matson, & Jennie then went immediately to Kings to work on the deliverable due today.
February 7, 2002	Download trial of Act for Jennie, call the borough which still needs to be contacted, go to the charity fair meeting, start making notes from phone calls computerised, tailor fax to the three boroughs which	Tried to download ACT, but were unsuccessful because of the particular network connection at Kings, must find another way to download. E-mailed Dave Wright from Arthritis Care to set up appt. for old sponsors. Called borough of Lambeth. Tailored fax to 3 boroughs

	<p>needed more information by e-mail, start fleshing out the marketing plan for the section of potential sponsors. Continue typing up abstracts for the borough of Merton for the past 5 years. E-mail Steve Cardis/Sutton web-page try get a contact in Sutton. Call Groundwork- schedule meeting with Danielle Byrne.</p>	<p>which need more info, waiting on response from professors and Jennie before they get sent out. E-mailed Steve about Sutton contact and received name of Sally Blomfield – e-mailed her and faxed her the info fax. Typed up rest of abstracts for past projects in the borough of Merton. Found map of all London boroughs. Made History of contacts in an Excel spreadsheet. Went to Charity Fair meeting. Started scheduling dates with all the groups to get pictures of them doing work, started to get cameras for this as well. Started to revise our budget. Scheduled meetings with Prof Demetry and Jennie. Discussed initial ideas for Charity fair with Theyel and Jennie.</p>
February 8, 2002	<p>Call Ken Hullock, Danielle Byrne, Marietta Clegg, and Sarah Langton-Lockton. Have meeting about what we are going to do with the Charity Fair organisation. Finalise budget and e-mail to Davis. Start mega work on Marketing Plan. Call Brian O'Donnell back.</p>	<p>Made appointment with Ken Hullock for Feb 20<sup>th</sup> at 2 P.M. Made phone interview with Marietta Clegg for Feb 12<sup>th</sup> at 10 A.M. Met with Dave Wright and interviewed him about his prospective on the IQP program, and wrote up the interview. Outlined the marketing plan. Improved Marketing pitch. Brainstormed charity fair. Began looking into printing and design for charity fair.</p>
<b>Week 5</b> February 11, 2002	<p>Make appointment with Sarah Langton-Lockton. Get an interview with Danielle Byrne. Call Brian O'Donnell back from the Borough of Camden. Organise mailings to boroughs that need more information. Get printing cost estimates. Potential Sponsor section of marketing plan. Work on Deliverable due tomorrow.</p>	<p>Made appointment with Sarah Langton-Lockton. Called Brian O'Donnell-call back Thursday. E-mailed Danielle Byrne as suggested by the person who answered the phone. Worked on the results section of the deliverable due on the 12<sup>th</sup>. We also decided which materials we are using for sending to the boroughs which requested further information. Priced some printing shops.</p>
February 12, 2002	<p>Call Sally Bloomfield &amp; Zbig Blonski. Phone interview with Marietta Clegg at 10 A.M. At 6 P.M. the Introduction, first draft of Analysis and Conclusion, list of tables and figures, updated table of</p>	<p>Tailored each of the letters for the boroughs, organised the materials to be mailed, and mailed them. Spoke with Marietta Clegg to get past sponsor testimonials. Priced printing shops. Worked on deliverable due at 6 P.M.</p>

	contents, and any appendices that compliment our results are due.	
February 13, 2002	Meet with Sarah Langton-Lockton, make up agenda for meeting, advisor meeting, Call Sally Blomfield and Zbig Blonski. Write up all past sponsor interviews. Start reorganising Marketing Plan. Redefine what we are really going to deliver, and start it. Start organising the Charity Fair.	Created Agenda for meeting. Had weekly meeting with advisors. Brainstormed about Charity Fair design. Emailed Jennie with present ideas for design. Made spreadsheet of pricing for printing. Began design work for posters for Charity Fair. Meet with Sarah Langton-Lockton about past sponsorship. Group brainstormed about new organisation of the Marketing Plan and Conclusions & Recommendations. Work began in completely revising the documents. E-mailed Danielle Byrne.
February 14, 2002	Call Sally Blomfield, work on Charity Fair and Final report	Called Sally Blomfield, she was interested in the programme, however the financial situation at the borough was slightly tight right now; she suggested that we try her again in a few months. Worked on the Methodology – Charity Fair section. Finished off the second rehash of the Recommendations & Conclusions section.
February 15, 2002	Call all the boroughs we sent marketing materials to. Work on Charity Fair and Final report.	Made up 2 posters in Photoshop, contacted Jennie about pamphlets. Worked on the Literature Review – Charity Fair section. Started rehashing the Marketing Plan.
<b>Week 6</b> February 18, 2002	Call all the contacts that were unsure about the programme. Meeting with Jennie 12:30 P.M. Make presentation for 2/19 class presentations. Abstract and Executive Summary due at 6 P.M.	Tried calling a few contacts, did not get ahold of any. Had lunch at Jennie's, discussed Charity Fair ideas and progress with potential sponsors. Worked on posters and pamphlet for Charity Fair. Prepared presentation for Tuesday. Refined Exec. Summary and Abstract, handed them in at 6. Worked on Marketing Plan.
February 19, 2002	Meeting with Demetry & Jennie 10 A.M. Presentations at King's 2 P.M. Make up agenda for advisor meeting.	Met with Demetry and advisors at Jennie's at 10 A.M., gave Demery overview of Charity Fair and progress with potential sponsors. Gave presentation at King's at 2. Worked a lot on Marketing Plan. Worked a lot on pamphlets, posters, and leaflets.
February 20, 2002	Meet with professors at 10	Met with advisors at Theyel's apartment

	A.M. Prep for Ken Hullock meeting. Meeting with Ken Hullock 2 P.M. Second draft of the Results & Analysis, Conclusions & Recommendations, and draft slides for final presentation are due at 6 P.M. Take pictures with SATRO for Charity Fair slide show.	and discussed how the Marketing Plan should look and what sections of Contact management should go where. Met with Ken Hullock in Brent, went very well, he's very interested. Took pictures with SATRO. Worked on deliverables and handed them in late because a disk got stuck in the laptop. Worked on pamphlets, posters, and leaflets.
February 21, 2002	Take pictures of Science Year and all Merton projects for Charity Fair slide show. Call boroughs that we sent materials to and ones that were hesitant. Colour-code maps of boroughs for appendix, work on revisions of the final paper.	Called every borough we needed to tidy up so that Jennie could call them, and we did not require any further interaction with them. Four boroughs requested the marketing materials; we prepared letters and mailed 3 of these out. We made up a folder for John's (from the Arthritis Care Group) Uncle. We made Figures 1 & 2 for the final paper. Continued making updates to the History of contacts. Went to Merton and took pictures. Went to Science Year, but meeting was cancelled at last minute. Began designing Sponsor's Say posters. Worked on leaflets and pamphlet. Got more printing estimates. Made final budget for materials.
February 22, 2002	Start fine combing the final report, look at appendices, literature review, methodology, results and analysis, marketing plan, conclusions and recommendations, references, and table of contents. Call Carl Powell via his assistant, Sue Min. Mail the marketing materials to the borough we prepared them for on 2/21.	Mailed out the marketing materials. Re-wrote the Results and Analysis. Called Sue Min, she said that they referred the authority back to Bill Hodgson, who is out of the office till Monday. Put digital pictures from 2-21-02 onto laptop and began integrating them into pamphlets, posters, and leaflets. Wrote results and analysis Charity Fair section. Bought Global Map and M-25 Map. Began work on slide show.
<b>Week 7</b> February 25, 2002	Refine Presentation; call Bill Hodgson; review Marketing Plan, review professors' remarks, start working on Appendices and References. Also start calling all the boroughs to get a more updated contact list.	Integrated all of the professors comments into the Abstract and Exec Summary and then submitted them, re-submitted an updated Results and Analysis section, input all e-mail interactions with Danielle Byrne into the History. Updated contact e-mails and phone numbers. Overhauled the presentation.



February 26, 2002	Present to Jennie and the professors, later present to the class. Start fixing up the final paper.	Presented to sponsor as well as the class. Started finalising the paper.
February 27, 2002	Finalise the paper	Edited paper, and started to put it into its final form.
February 28, 2002	Meet with Jennie about final Charity Fair preparations, and make several digital copies of the final report.	Jennie was not at her house, arranged different time to coordinate final Charity Fair efforts. Finished paper, zipped it, and put it into a digital format. Made-up cover page, had group sign it. Group prepared their CDRs.
March 1, 2002	Pass in FINAL REPORT	Report delivered to professors and Jennie.
March 2, 2002	GO HOME	Left the UK.

## A8 – Fax to Potential Sponsors



LONDON PROJECT CENTRE

Co-ordinator: Jennie Hawks  
10 Spenser Road, London SE24 0NR

Telephone: 020 7274 9128

Fax: 0207 274 3236

E-mail: [jhawks@waitrose.com](mailto:jhawks@waitrose.com)

# February 2002

Name  
Planning Department  
Borough of \_\_\_\_\_  
Fax #

Dear \_\_\_\_\_,

We are writing to you today to inform you that we have received your name and contact information from Steve Cardis, the Principle Planning Officer at the Borough of Merton. We will be calling you next week to discuss the benefits your borough can receive by participating in the WPI Global Programme.

Worcester Polytechnic Institute (WPI) is an American university of science and engineering that sends teams of three to four students abroad for a 7-week term to execute well-defined projects on behalf of sponsoring organisations. These projects, chosen by the sponsor, typically explore some issue or opportunity at the interface between society and technology, and they represent a cost-effective way of harnessing the energy, creativity, and skills of a highly motivated student “consulting team.” As Steve Cardis would attest, LB Merton has participated as a project sponsor for a number of years now in a relationship that has been beneficial both to the borough and to WPI.

WPI student teams have completed many successful projects in the past, which greatly aided the sponsoring organisation. Past projects include *Development of a Consultation Process for Air Quality Issues in the London Borough of Merton*, *Reducing Car Traffic in Wimbledon Town Centre*, and *Assessing Public's Opinion on Parks in Merton*.

We would like the chance to tell you more about this programme and how LB of \_\_\_\_\_ might benefit from it, and we look forward to speaking with you.

Sincerely,

Mark Blackburn, Anne Francis, Jessica LaRiviere, Anthony M. Snyder

WPI Student Representatives

## A9 – Marketing Materials



# February, 2002

Name  
Planning Department  
Borough of \_\_\_\_\_  
Address

Dear Name,

Thank you for speaking with us on \_\_\_\_\_. We really enjoyed telling you about our projects, and hope that we can form a partnership in the way we have with the Borough of Merton.

As requested, attached is a set of materials detailing the project system for your review. We will be calling you in about a week's time to set-up informal meetings for answering any questions, if you are interested. Any further questions may be directed towards Jennie Hawks at 020 7274 9128.

If you are interested in viewing some of the current projects, presentations of the Merton projects will occur on February 27<sup>th</sup>, from approximately 2 till 4 P.M. Please contact [jhawks@waitrose.com](mailto:jhawks@waitrose.com) to be added to the guest list and to receive a set of directions to the civic centre.

Thank you again for your time, and we look forward to working with you in the future.

Sincerely,

Mark Blackburn, Anne Francis, Jessica LaRiviere, Anthony M. Snyder

WPI Student Representatives

Enclosure

### LONDON CENTRE

Co-ordinator: Jennie Hawks  
10 Spenser Road, London SE24 ONR

Telephone: 020 7274 9128

Fax: 020 7274 3236

E-mail: [jhawks@waitrose.com](mailto:jhawks@waitrose.com)



**LONDON CENTRE**  
Co-ordinator: Jennie Hawks  
10 Spenser Road, London SE24 0NR

Telephone: 020 7274 9128  
Fax: 020 7274 3236  
E-mail: [jhawks@waitrose.com](mailto:jhawks@waitrose.com)

## WPI LONDON CENTRE

Our student teams are solving problems at the interface between society and technology. Solving such a problem can require technical tools or exploration of the impacts of technology. However, the connections to society and to human concerns, must be evident. Some areas that often lead to good projects are:

### A. Environmental issues such as:

- Public education on alternative fuel sources
- Pollution, transportation issues
- Developing, monitoring or evaluating strategies for public education

*Examples of such completed projects are: Wind Energy usage and Fuel Cell Projects (Science Museum); Air Pollution survey (London Borough of Merton); City Car Clubs (London Borough of Merton);*

### B. Information Technology such as:

- Improving public or client services through IT
- Use of specific IT systems, education of and training of staff
- Web site development that reflects organisational needs and goals

*Examples of such completed projects are: Web Site developments ( Centre for Accessible Environments, John Groom's Association, Calibre); Management Information Systems ( Royal National Institute for the Blind, Arthritis Care); Staff training in the use of software, GIS ( Guide Dogs for the Blind Association, London Borough of Merton); Digitisation of images ( Courtauld Institute)*

### C. Urban issues such as:

- Planning, economic development, transportation, land use

*Examples of such completed projects are: Public Consultation - best methods ( London Borough of Merton) Use of Public and Private Open Space ( London Borough of Merton); Vulnerable Car Users, Safer routes to school ( London Borough of Merton)*

### D. Education issues such as:

- Curriculum improvements
- Materials in science and mathematics

*Examples of such completed projects are: Educational Users Survey ( Tower of London ); Information Literacy in Worcester Schools ( Worcester MA USA); A Hands-On Approach to Environmental Science ( Worcester MA USA)*

In the course of a project students might use a broad range of tools, including surveys of all sorts, supported by careful design and analysis, databases such as Geographic Information Systems, spreadsheets, the world wide web and so on. Student teams work on projects for fourteen weeks in total. Seven weeks in preparation at WPI and seven weeks executing the project in London. At the end of this time the students make a final presentation of their findings and recommendations to the sponsor who will also receive a written report.

*Critical to our decision to accept a project is:*

- *The prospective sponsor's commitment to the project*
- *The importance of the outcome to the sponsor and*
- *The willingness to provide a committed liaison during the preparation and execution phases of the project.*
- *The availability of a suitable working environment on site, together with computers, software, access to telephones, fax and photocopier for the student teams is essential.*

*Sponsors are asked to pay local travel expenses for student teams. For a team of three students zone 1-2 tickets are about £300 zone 1-4 tickets are about £500. If organisations can pay it, a project fee of £2,000 is asked. ( The project fee equates to a 1,000 person hours at a rate of £2.00 per hour.) This helps to cover the academic and administrative costs of each project.*

Essential points for all sponsors:

1. Teams ( three/four person) require desk space, access to a computer, a printer, telephone, fax and photocopier. Teams bring a laptop computer with them. Treat the teams as you would a new member of staff so an induction in the work of the organisation and department where they will be working is very helpful. If other training is needed, this should be set up during the first week if possible.
2. A named liaison with whom the team and Faculty Advisor will work throughout the fourteen weeks of the project. The liaison needs to be available on demand ( *but the demand may be limited*) during the preparation phase, but on an 'as and when' basis once the students are in London. E-mail connections are often found to be best though conference calls and fax may also be used. The liaison does need to react promptly to requests, to drafts of the proposal etc. The preparation phase is very important, on this rests the smooth running of the project as well as a one that is useful to the sponsor and to the students. This is why it is critical for total liaison commitment at this stage. Remember there is a five hour time difference between the UK and the US East Coast.
3. Once in London, the student teams will work with you from day one. The first afternoon they will be required at King's College for induction at 2.00pm. They and the Faculty Advisor will require to meet with the liaison once a week, but other than this the liaison should not need to be much involved.
4. Week one the students may make a presentation to the sponsor if required. Week seven is the final presentation week for all project teams. We would ask that the liaison ensures that there is a good audience for the students to present to.

Off site visits are the sponsor responsibility. If these are outside the team's travel pass areas the costs must be picked up by the sponsor.

**Further information is available from: Jennie Hawks, London Centre Co-ordinator,  
10, Spenser Road London SE24 0NR. Tel: 020 7274 9128 Fax: 020 7274 3236 E-mail:**

**[jhawks@waitrose.com](mailto:jhawks@waitrose.com)**

**Please also visit the WPI Website at : <http://www.wpi.edu>.**

## **Inventory of Marketing Materials**

### *The Global Perspective Program Folder*

*WPI London Centre Project Sampler pamphlet* – three-fold pamphlet that includes six project abstracts, all which have been completed in London; information regarding student teams and their role as consultants; four testimonials from sponsors (the sponsors name is not listed after the testimonial) [printed on The Global Perspective Program (TGPP) heavy paper template]

*The WPI London Centre flyer* – brief description of problems student solve; brief listing of sponsor benefits; explanation of how project teams operate over a 14 week period; selection criteria for projects; list of past sponsors in London; contact information for Prof. Davis, Prof. Demetry, and Jennie Hawks [printed on TGPP heavy paper template]

*WPI London Centre information packet* – describes areas of research that lead to good projects; listing of criteria WPI uses to accept a project; description of project fee; essential points for points (printed on WPI letterhead)

*WPI London Centre flyer* – same as above without essential points for sponsors (printed on TGPP heavy paper template)

*WPI Dates flyer* – listing of starting and ending dates for C, D, and E term, including ID 2050/PQP dates, as well as date students arrive at project site [printed on WPI letterhead]

*WPI The Global Perspective Program bookmark* – fits into slot in folder, includes WPI IGSD website

*WPI Projects with NGOs at The WPI London Centre flyer* – brief introduction to WPI projects; information about past non-governmental projects, including past sponsors; contact info for Prof. Davis, Prof. Demetry, and Jennie Hawks

# **A10 – Marketing Presentation**

## **1. WPI's Global Project Programme**

### **2. What is WPI?**

- WPI is an American engineering university
- Location: Worcester, Massachusetts, USA
- One of 16 Great Expectations Leadership Institutions selected by the American Association of Colleges and Universities
- The WPI Plan
  - 3 major projects
  - Required of all undergraduates for graduation

### **3. What kind of projects are these?**

- Society-Technology Project
  - Performed during 3rd or 4th year of college
  - Teams of 3-4 students
  - Equivalent to 3 courses
  - Problem at interface with society and technology
  - Usually performed off-campus through the Global Programme

### **4. What is the Global Programme?**

- Allows students the opportunity to travel abroad to accomplish their projects
- 20 project centres are located in 13 countries
- Students act as consultants for the sponsoring organisation

### **5. What are the benefits of sponsoring a project?**

- Solutions to problems of interest to the sponsor
- Cost efficient
- Sponsor/faculty co-operation
- Written report detailing results and conclusions of project research

### **6. What does being a sponsor entail?**



- Sponsor must provide a liaison
- Sponsor must provide adequate workspace for the team
- Sponsor is asked to pay local travel expenses for student teams

## **7. What is the role of the Liaison?**

- The liaison needs to be available to the students and advisors during the 14 week project
  - During the first 7 weeks liaison needs to be available on demand for phone and email communication
- Liaison needs to respond promptly to requests and drafts of proposals
- During the last 7 weeks the liaison is asked to be available once a week for a meeting with the advisors and student teams

## **8. What are examples of these projects?**

- Assessment of Key Worker Housing in the Borough of Merton
- Merton Sustainability Checklist Revisions
- Assessing Public Opinion on the Merton Tramlink
- Merton Safer Routes to School
- Reducing Car Traffic in Wimbledon Town Centre

## **9. Contact Information**

London Project Centre  
Co-ordinator: Jennie Hawks  
10 Spenser Road  
London SE24 0NR  
United Kingdom  
Telephone: +44 207 274 9128  
Fax: +44 207 274 3236  
Email: [jhawks@wpi.edu](mailto:jhawks@wpi.edu)  
[www.wpi.edu/Academics/Depts/IGSD/sponsors.html](http://www.wpi.edu/Academics/Depts/IGSD/sponsors.html)

# A11 – Past and Current Sponsor Interviews

## Steve Cardis - Principle Planning Officer for the Borough of Merton

**Initial Contact:** Email request for interview sent on 16 January 2002

**Intension of Interview:**

- To obtain contacts
- Gain insight into the programme from a sponsors point of view

**Interview:**

- Attended by all four-group members at Merton Civic Centre on 22 January 2002.
- Contact given by Jennie Hawks.

**Content:**

- He was introduced to the IQP program through John Hawks
- Recommends setting up 30 minute meetings with potential sponsors to discuss benefits
- One-to-one basis, or two-to-one basis
- Need to be in contact with individuals instead of just organisations may make it easier to start a program that way
- Stressed there must be personal interest from a person to get the program running
- Recommended contacting human resources department and setting up interviews
- Also recommended contacting personal contacts within organisation and attacking from both sides
- Compare which method works better
- Explained the ALG and the GLA and their involvement in the boroughs
- WPI is like recruiting consultants or temporary staff
- Negatives
  - Students aren't planners, don't know everything
  - Not fully skilled individuals
- Positives
  - Flexible
  - Well motivated
  - Professors support
  - Act Profession
  - Academic Motivation, part of our graduating credits
- Funding
- Low Cost
- Funding program needs review, not well organised

- Can come out of consulting budget
- Lot's of money for transportation issues
- Companies like being part of international scheme
- American undergraduate studies standards are just as high if not higher than those in the UK

**Contacts Given:**

- Roger Chapman of the ALG (Principle Planning Officer)
- Claire Henn
- Hennessey of the GLA
- Names and email addresses of members of the Development Plans Committee

**Dave Wright – IT manager at Arthritis Care**

- Date: February 8, 2002

- Intention of Interview: To get testimonials and quotes, to gain insight into the process from a sponsor's point of view

- How got involved with WPI: previous director arranged a meeting with Jennie, to his knowledge Arthritis Care was never pursued

- Benefits to the organisation: Has done projects for three years, this year's is the third and there will be one more. These four projects are all stages of a process to produce a final product. The projects are:

1. Information flow analysis
2. How it could be put into an intranet
3. Make intranet (this term)
4. Enhance with management information

- Benefits to the student: Teamwork skills, job references, work experience rather than just having classes on a resume, shows we are committed, shows we know how to negotiate, learn people management skills, knowing that you accomplished something that matters

- Why he likes working with WPI: We are American which means we come with no baggage or biases, people open up to us, we are capable and able to do tasks that are needed, considers us consultants because of our abilities, more capable than volunteers

- How programme could be improved: If there was more than seven weeks to be here. Also if there was more of an understanding of the projects before we got here, and more communication between students and liaisons, time could be saved in figuring out what exactly needs to be done in the term

- Side comments: sees WPI students as consultants, likes teams of 4 students over 3, it is ok to quote him in marketing materials

### **Marietta Clegg – Royal Hospital of Nero disability**

- Date: February 12, 2002

- Intention of Interview: To get testimonials and quotes, to gain insight into the process from a sponsor's point of view

- How got involved with WPI: previous director was involved, she picked up where they left off

- Benefits to the organisation: It was a unique experience, it allowed them to accomplish tasks they never had time for before

- Benefits to the student: They learned a lot of about British Health Care System, human interactions, dealing with people with disabilities, experienced many social skills, learned to appreciate life

- Why she likes working with WPI: Very pleased with the calibre of the students, projects were always followed up on, the projects were very beneficial to the organisation

- How programme could be improved: It really worked well; more communication on the front end would have been useful, overall quite happy with the program

### **Sarah Langton-Lockton – Chief Executive of Charity for Accessible Environments**

- Date: February 13, 2002

- Intention of Interview: To get testimonials and quotes, to gain insight into the process from a sponsor's point of view

- How got involved with WPI: the charity made contact with WPI in the late 1980's

- Benefits to the organisation: it is very hard for charities to find funding for very small projects, the programme allowed them to accomplish projects which otherwise would not have been done. They are very satisfied with the quality work being produced and its utility. Brings a new energy to the organisation with a project, which must be completed in a very short time span.

- Benefits to the student: an opportunity for the students to see how the real world works. Team work. They get out of the high competition in the scholastic world, and start applying their skills to achieve a common goal. They improve their presentation skills.

First experience living so far away from home, most students go through large amounts of maturation.

- Why she likes working with WPI: “Program is visionary, practical, extends the concept of education in a way that is very valuable to students making the transition from school to work.” They can accomplish a piece of work that might otherwise be impossible.

- How programme could be improved: Very unique, valuable, carefully designed, well thought through. The students want a good grade and the sponsor wants a result sometimes these conflict. A longer timeframe would be nice, having a student come over before the term started would be very useful to clear-up cultural differences

- Side comments: It’s a lot of fun; novel way of working. The work they used was passed on to another library; it was very satisfying to see the work used by another organisation. The projects have practical and tangible outcomes. It is not an easy program. A sponsor should not participate just to participate; they must derive something out of the project.

# A12 – Charity Fair Layout and Marketing Materials

## Non-Profit Leaflet

### Technology Consulting Projects for Non-Profit Organisations

WPI has been a pioneer with its Global Programme, where student teams go abroad to complete projects at the interface of society and technology for sponsoring organisations. WPI has been completing projects of the highest quality at the London Project Centre since 1975.



WPI student project teams operate over a fourteen week period. During the first seven weeks, students work in the U.S. with their faculty advisor to define the problem and its method of solution. For the second seven weeks, each student team works full-time in London to complete its project assignment. The work ends with the submission of a fully documented written report and a formal presentation to the sponsor.

**WPI** London Project Centre  
WORCESTER POLYTECHNIC INSTITUTE

Projects with non-profit organisations have covered a range of topics, including:

#### Information Technology:

**Centre for Accessible Environments** - Computerisation of a specialist library, needs assessment, development, and refinement of a web presence for CAE

**Arthritis Care** - Development and integration of a Corporate Information Database.

#### Organisation and operation:

**Royal Hospital for Neuro-disability** - Expert system for wheel chair prescription

**Guide Dogs for the Blind Association** - Implementation of aids to assist the transition of office workers and office culture to the use of information technology

#### Needs and attitudes of clients, volunteers, and employees

**Cottage Homes** - Employee satisfaction study to assess the effects of a transition in operational policies

**Contact the Elderly** - Survey and analysis of factors motivating volunteers, survey of attitudes and needs of elderly clients

#### Client Services

**Preparing the Freewheeler for the European Market** - Conduct a risk analysis and prepare a users and technical manual to obtain the CE Mark.

**Solon-Wandsworth Housing Association** - Information technology needs of the central office and tenants

#### WPI London Centre Coordinator

Jennie Hawks 0207 274 9128 (Office)  
10 Spenser Road 0207 274 3236 (Fax)  
London SE24 0NR email: [jhawks@waitrose.com](mailto:jhawks@waitrose.com)




#### WPI London Centre Director

Paul Davis 1-508-831-5212 (Office)  
Worcester Polytechnic Institute 1-508-831-5485 (Fax)  
100 Institute Rd. email: [pwdavis@wpi.edu](mailto:pwdavis@wpi.edu)  
Worcester, MA 01609 USA

## Back of all Leaflets

leaflet-nonprofit-back	leaflet-museum-back	leaflet-public-back.psd@100%
<p>Projects with non-profit organisations have covered a range of topics, including:</p> <p><b>Information Technology:</b>  <b>Centre for Accessible Environments</b> - Computerisation of a specialist library, needs assessment, development, and refinement of a web presence for CAE.  <b>Arthritis Care</b> - Development and integration of a Corporate Information Database</p> <p><b>Organisation and operation:</b>  <b>Royal Hospital for Neuro-disability</b> - Expert system for wheel chair prescription  <b>Guide Dogs for the Blind Association</b> - Implementation of aids to assist the transition of office workers and office culture to the use of information technology</p> <p><b>Needs and attitudes of clients, volunteers, and employees</b>  <b>Cottage Homes</b> - Employee satisfaction study to assess the effects of a transition in operational policies  <b>Contact the Elderly</b> - Survey and analysis of factors motivating volunteers, survey of attitudes and needs of elderly clients</p> <p><b>Client Services</b>  <b>Preparing the Freewheeler for the European Market</b> - Conduct a risk analysis and prepare a users and technical manual to obtain the CE Mark.  <b>Solon-Wandsworth Housing Association</b> - Information technology needs of the central office and tenants</p> <p><b>WPI London Centre Coordinator</b>            Jennie Hawks 0207 274 9128 (Office)            10 Spenser Road 0207 274 3236 (Fax)            London SE24 0NR email: jhawks@waitrose.com</p> <p><b>WPI London Centre Director</b>            Paul Davis 1-508-831-5212 (Office)            Worcester Polytechnic Institute 1-508-831-5485 (Fax)            100 Institute Rd. email: pvdavis@wpi.edu            Worcester, MA 01609 USA</p>	<p>Projects in the museum sector have covered a range of topics. Some past projects with museums include:</p> <p><b>Renewable Energy Exhibit for the Science Museum</b> - Designed interactive web-site which simulated the output potential of wind and solar energy systems. Observation and feedback surveys enabled the Museum to assess relative interest between different renewable energy systems and exhibit formats</p> <p><b>Assessment of Education at HM Tower of London</b> - Assessed through surveys and interviews the effectiveness of promotional and development strategies for the Education Centre at HM Tower of London and the usefulness of the Centre's programmes</p> <p><b>Science Museum</b> - Developed prototype for interactive displays that combined the latest biomedical research with cutting edge face morphing software. Implemented strategies to advertise, recruit volunteers, and build the database that would contain the images.</p> <p><b>WPI London Centre Coordinator</b>            Jennie Hawks 0207 274 9128 (Office)            10 Spenser Road 0207 274 3236 (Fax)            London SE24 0NR email: jhawks@waitrose.com</p> <p><b>WPI London Centre Director</b>            Paul Davis 1-508-831-5212 (Office)            Worcester Polytechnic Institute 1-508-831-5485 (Fax)            100 Institute Rd. email: pvdavis@wpi.edu            Worcester, MA 01609 USA</p>	<p>Projects with the public sector have covered a range of topics. Past projects sponsored by the Borough of Merton include:</p> <ul style="list-style-type: none"> <li>- Merton Consultation Database</li> <li>- Reducing Car Traffic in Wimbledon Town Centre</li> <li>- Merton Air Quality Assessment</li> <li>- Travel Plan Development for Schools within London</li> <li>- Merton Safer Routes to School</li> <li>- Assessing Public's Opinion on Parks in Merton</li> <li>- Merton UDP: Best Value Consultation Project</li> <li>- Merton Town Planning Service in the Millenium</li> <li>- Assessing Public Opinion on the Merton Tramlink</li> <li>- Financing A Town Improvement Zone in Wimbledon</li> <li>- Assessment of Key Worker Housing in Merton</li> <li>- Assessment of Ederly Housing in Merton</li> </ul> <p><b>WPI London Centre Coordinator</b>            Jennie Hawks 0207 274 9128 (Office)            10 Spenser Road 0207 274 3236 (Fax)            London SE24 0NR email: jhawks@waitrose.com</p> <p><b>WPI London Centre Director</b>            Paul Davis 1-508-831-5212 (Office)            Worcester Polytechnic Institute 1-508-831-5485 (Fax)            100 Institute Rd. email: pvdavis@wpi.edu            Worcester, MA 01609 USA</p>

## Front of all Leaflets

<p>leaflet-museum-front</p> <h3>Technology Consulting Projects for the Museum Sector</h3> <p>WPI has been a pioneer with its Global Programme, where student teams go abroad to complete projects at the interface of society and technology for sponsoring organisations. WPI has been completing projects of the highest quality at the London Project Centre since 1975.</p>  <p>WPI student project teams operate over a fourteen week period. During the first seven weeks, students work in the U.S. with their faculty advisor to define the problem and its method of solution. For the second seven weeks, each student team works full-time in London to complete its project assignment. The work ends with the submission of a fully documented written report and a formal presentation to the sponsor.</p> <p><b>WPI</b> London Project Centre <small>WORCESTER POLYTECHNIC INSTITUTE</small></p>	<p>leaflet-nonprofit-front</p> <h3>Technology Consulting Projects for Non-Profit Organisations</h3> <p>WPI has been a pioneer with its Global Programme, where student teams go abroad to complete projects at the interface of society and technology for sponsoring organisations. WPI has been completing projects of the highest quality at the London Project Centre since 1975.</p>  <p>WPI student project teams operate over a fourteen week period. During the first seven weeks, students work in the U.S. with their faculty advisor to define the problem and its method of solution. For the second seven weeks, each student team works full-time in London to complete its project assignment. The work ends with the submission of a fully documented written report and a formal presentation to the sponsor.</p> <p><b>WPI</b> London Project Centre <small>WORCESTER POLYTECHNIC INSTITUTE</small></p>	<p>leaflet-public-front.psd @ 100% (...)</p> <h3>Technology Consulting Projects for the Public Sector</h3> <p>WPI has been a pioneer with its Global Programme, where student teams go abroad to complete projects at the interface of society and technology for sponsoring organisations. WPI has been completing projects of the highest quality at the London Project Centre since 1975.</p>  <p>WPI student project teams operate over a fourteen week period. During the first seven weeks, students work in the U.S. with their faculty advisor to define the problem and its method of solution. For the second seven weeks, each student team works full-time in London to complete its project assignment. The work ends with the submission of a fully documented written report and a formal presentation to the sponsor.</p> <p><b>WPI</b> London Project Centre <small>WORCESTER POLYTECHNIC INSTITUTE</small></p>
--	--	---



## Pamphlet – Inside

pamphlet-trifold-inside4.psd @ 100% (Layer 5, Lab)

### THE GLOBAL ERA IS DAWNING

Today, professionals from far corners of the world are linked by satellite in real time, allowing for cross-cultural collaboration. Technology is advancing rapidly through the world, and business and industry are becoming more and more dependent on these advancements. Engineers, scientist, and business people of all sorts must be prepared to work with new technologies and unfamiliar cultures. In this quickly advancing world, a technical and global perspective is no longer an option for a successful professional – it is an imperative.



WPI is part of this as a leader in global, technological education. Founded in 1865 in Worcester, Massachusetts, WPI is the third oldest private university of science, engineering, management, and the liberal arts in the US. WPI has been a pioneer with its Global Programme which demands that each student completes three projects; one being a consulting project at the interface of technology and society. Since 1975, WPI has been completing projects of the highest quality at the London Project Centre.



### Benefits to Sponsors

- Solutions to problems of interest to the sponsor
- Cost efficient way of completing your project
- Sponsor-faculty cooperation
- Student consulting work
- Energetic and enthusiastic student team
- Students provide a fresh perspective on ideas

**WPI** WORCESTER POLYTECHNIC INSTITUTE

### Sponsors say

"We have been very pleased to host another WPI project. The high standard of work produced by the students was widely recognised as beneficial to the whole of the organisation."

"...well received reports based on valuable research. Congratulations to all involved. Looking forward to working with you and the students again."

"Allows our organisation to do things we never had time to do before. I am very pleased with the calibre of the students and projects, and the projects were very beneficial to the organisation"

"Programme is visionary, practical, extends the concepts of education in a way that is very valuable to students making the transition from school to work."



## Pamphlet - Outside

pamphlet-trifold-back.psd @ 100% (http://www.wpi.edu,Lab)

### Technology Consulting Projects

Areas that often lead to good projects include:

A. Environmental issues such as:

- Public education on environmental affairs
- Pollution, transportation issues
- Developing, monitoring or evaluating strategies for public education

B. Information Technology (IT) such as:

- Improving public or client services through IT
- Use of specific IT systems, education and training of staff
- Web site development that reflects organisational needs and goals

C. Urban issues such as:


- Planning, land use
- Economic development
- Transportation

D. Education issues such as:

- Curriculum improvements
- Materials in science and mathematics
- Developing student interest in science and technology

### Contact Information


London Site Co-ordinator  
Jennie Hawks  
10 Spenser Road  
London SE24 0NR  
Phone: 0207 274 9128  
Fax: 0207 274 3236  
Email: [jhawks@waitrose.com](mailto:jhawks@waitrose.com)




Please visit the WPI Website at:  
<http://www.wpi.edu>

*Approximately 20% of the U.S. engineering students studying abroad come from WPI, representing "the largest single institutional commitment of engineering students involved in study abroad activities."*

- The Institute of International Education





LONDON PROJECT CENTRE

PART OF THE WPI GLOBAL PROGRAMME

## Poster – Panel 1 & 2

# Technology Consulting Projects

WPI is the third oldest  
**American Engineering**  
University



Located in Worcester,  
Massachusetts, **USA**

One of 16 Great Expectations  
**Leadership** Institutions selected  
by the American Association of  
Colleges and Universities



WPI Global Programme -  
students go abroad to complete  
**consulting** projects

Projects have a  
**sponsoring** organization



Project topics involve  
the interface between  
**society** and **technology**

**Benefits** of sponsoring a project include:

- **Solutions** to problems of the sponsors interest
- **Cost-efficient** way of completing your project
- Sponsor-faculty **cooperation**
- Student **consulting** work
- **Energetic** and **enthusiastic** student team
- Students provide a **fresh perspective** on ideas

How do **you** fit in?

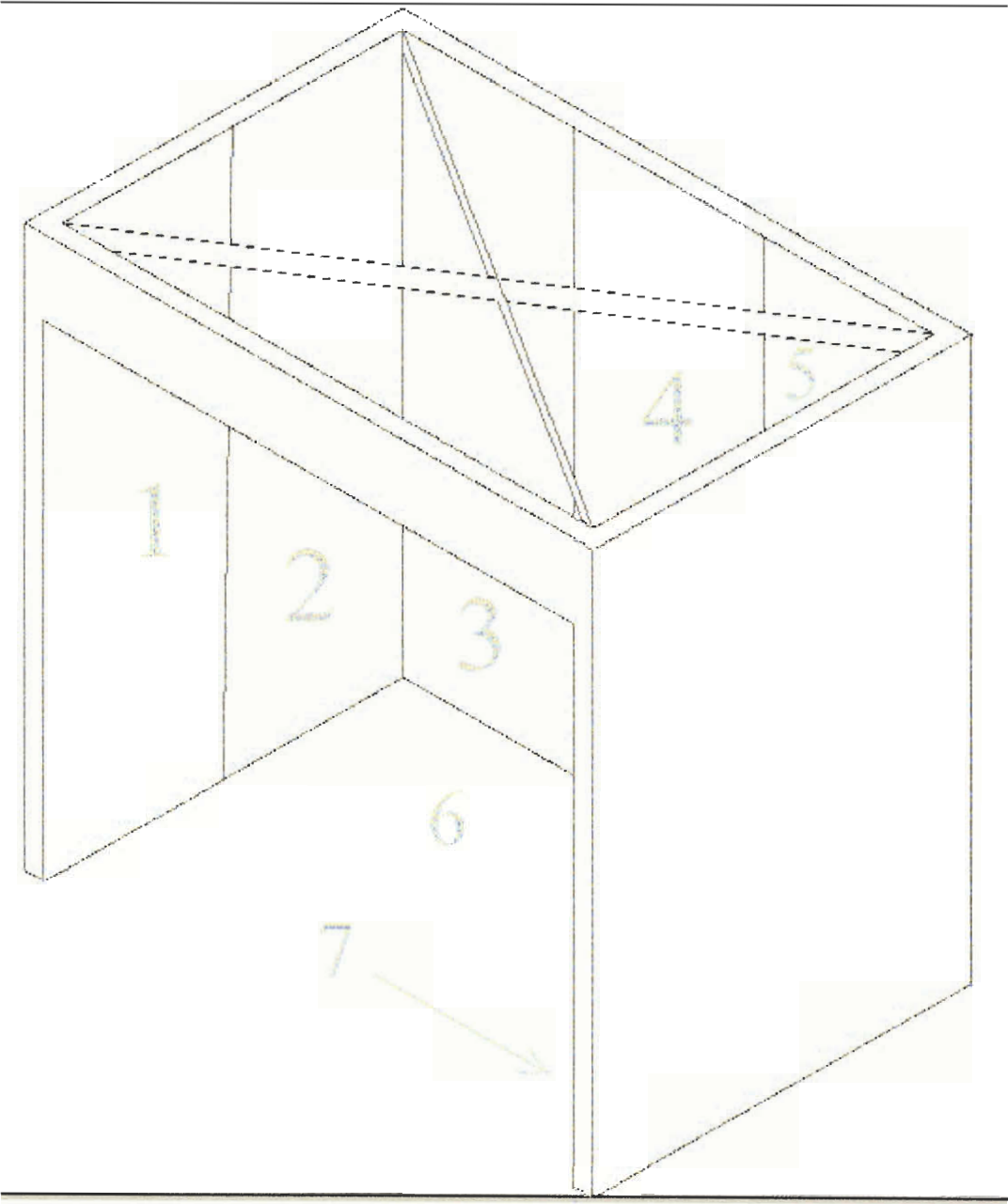
Sponsors wanted in the Greater London area

Please speak to one of our representatives to learn more

Project sponsors include:

- Arthritis Care
- Science Year
- Science Museum of London
- ShopSmart Limited
- Royal Hospital for Neuro-disability
- National Art Library
- Cottage Homes
- Royal National Institute for the Blind
- Tower of London
- London Borough of Merton

Shell Scheme



## Sponsors Say

*"Allows our organisation to do things we never had time to do before. I am very pleased with the calibre of the students and projects; and the projects were very beneficial to the organisation"*

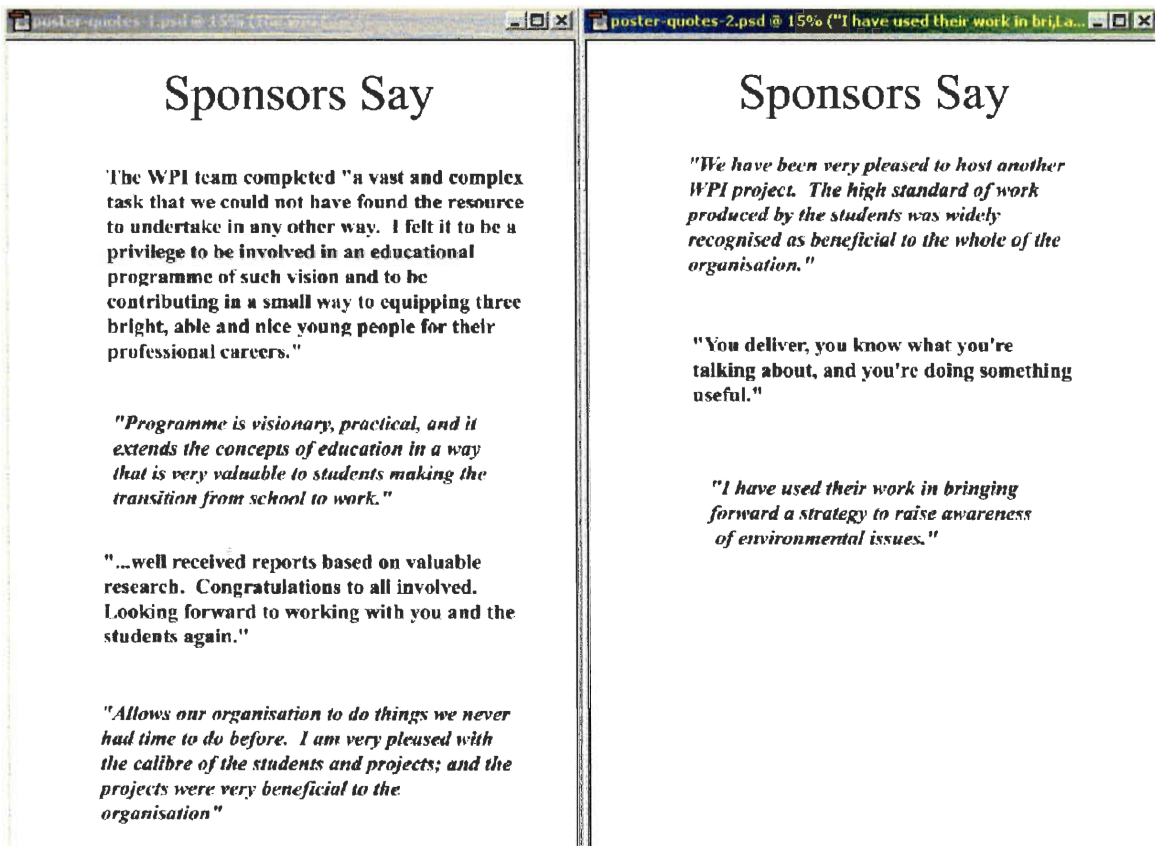
**"...well received reports based on valuable research. Congratulations to all involved. Looking forward to working with you and the students again."**

*"Programme is visionary, practical, and it extends the concepts of education in a way that is very valuable to students making the transition from school to work."*

**"I have used their work in bringing forward a strategy to raise awareness of environmental issues."**

*"We have been very pleased to host another WPI project. The high standard of work produced by the students was widely recognised as beneficial to the whole of the organisation."*

## Posters – Sponsors Say if we use 2



# Figures

## Figure 1




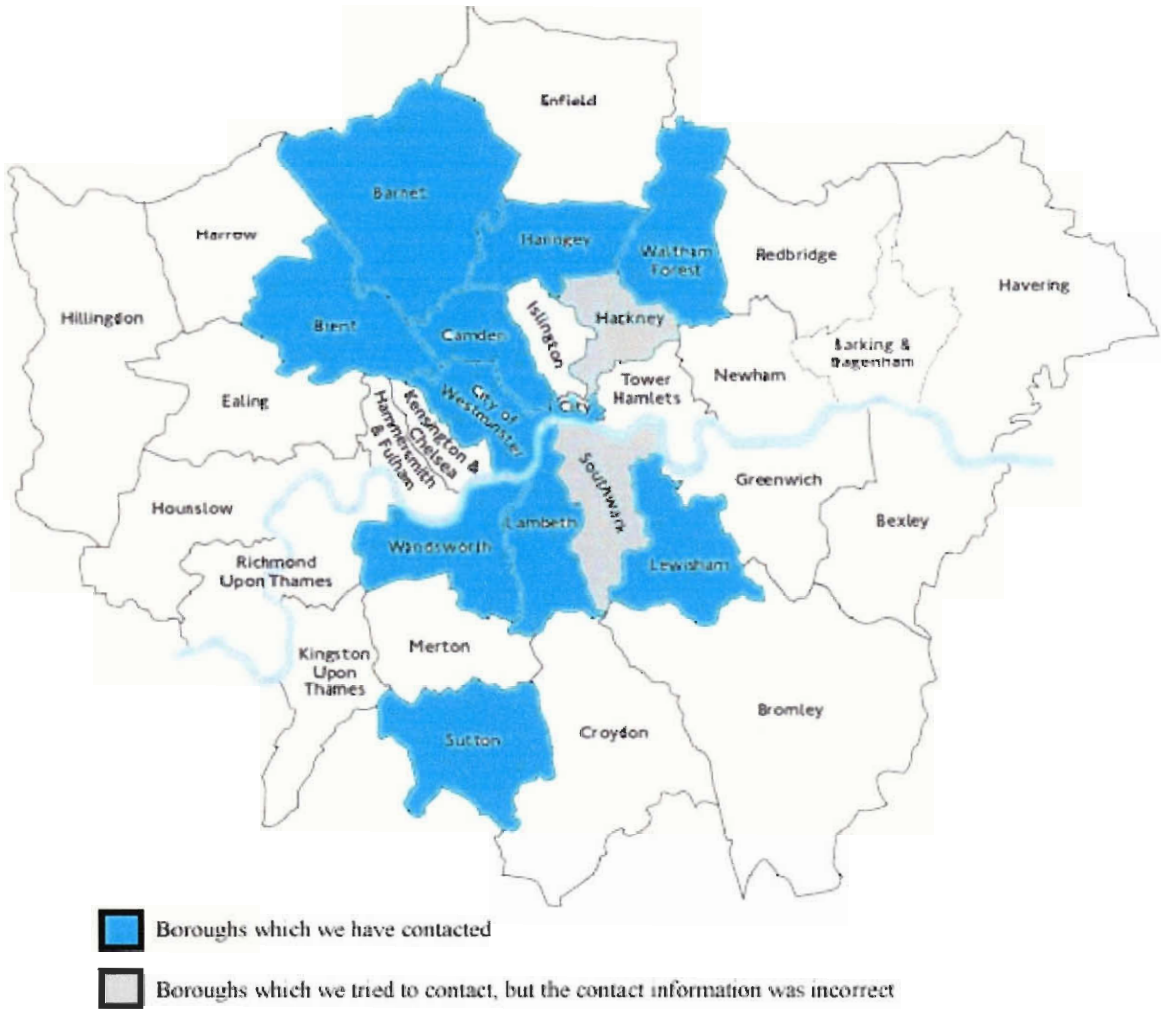
 Boroughs for which Steve Cardis, Principle Planning Officer in the London Borough of Merton, gave us contact information

Figure 2





## Works Cited

- AirSafe.com*. Retrieved November 30, 2001 from web site:  
<http://www.airsafe.com/issues/security.htm>
- Association of London Government*. Retrieved December 1, 2001 from Web site:  
<http://www.alg.gov.uk/attachments/55/Air%20Quality.doc>
- BAA*. Retrieved November 21, 2001 from Web site: <http://www.baa.co.uk>.
- Barnet Air Quality. Retrieved November 28, 2001 from Web site:  
[http://barnet.gov.uk/environment\\_transport/air\\_quality/consult.htm](http://barnet.gov.uk/environment_transport/air_quality/consult.htm)
- Berg, Leo van den. (1998). The European High-Speed Train-Network and Urban Development: Experiences in Fourteen European Urban Regions. Brookfield, VT: Ashgate.
- Bexley Council*. Retrieved November 28, 2001 from Web site:  
<http://www.bexley.gov.uk/service/road/html>
- Brainstorming Rescue Plan for Channel Tunnel Rail Link Deal. (1999, June). Privatisation International.
- British Rail System. (2001, September). Railway Age, 202, 33.
- Cross River Partnership*. Retrieved November 9, 2001 from Web site:  
[http://www.londontransport.co.uk/river/cib\\_about.shtml](http://www.londontransport.co.uk/river/cib_about.shtml)
- Customer Relationship Management*. Retrieved January 31, 2002 from Web site:  
<http://www.ittoolbox.com/help/crmoverview.asp>
- Doing the Splits; London Unerground. (2001, October 27). The Economist (US).
- Doran, J. (2001, November 24). Rail funding gap heading for 6 billion. The Times. Retrieved November 28, 2001 from Web site: <http://www.thetimes.co.uk>
- Drinking Water Report*. Retrieved December 1, 2001 from Web site:  
<http://www.official-documents.co.uk/document/doe/drinking/summ.htm>
- Encyclopedia of the Atmospheric Environment*. Retrieved December 1, 2001 from Web site: [http://www.doc.mmu.ac.uk/aric/eae/Air\\_Quality/Older/Legislation.html](http://www.doc.mmu.ac.uk/aric/eae/Air_Quality/Older/Legislation.html)

- Environment Agency*. Retrieved November 11, 2001 from Web site:  
<http://www.environment-agency.gov.uk/>
- Fox, J. (2000, October 16). Why I Hate the Eurostar: It sounded so great. A sleek, high-speed train from London to Paris. What went wrong? *Fortune*, 142, 448+.
- Global Perspective Program*. Retrieved November 19, 2001 from Web site:  
<http://www.wpi.edu/Academics/Depts/IGSD/>
- Godish, Thad. (1997) Air Quality. (3<sup>rd</sup> ed.). New York: Lewis Publishers.
- Institute of Leisure and Amenity Management*. Retrieved November 28, 2001 from Web site: <http://www.ilam.co.uk/Policy/99-1.htm>
- JM Communications. (1998) Proposal for Public Relations for WPI.
- Kiley, R. R. "Engineering London's Future." Diss.Royal Academy of Engineering, 2001. Available: <http://www.transportforlondon.gov.uk>
- Khera, M. "Customer Relationship Management – Beyond the "buzz."” United Customer Management Solutions, 2001. Available:  
[http://crm.ittoolbox.com/peer/docs/ucms\\_contributed\\_article.htm](http://crm.ittoolbox.com/peer/docs/ucms_contributed_article.htm)
- Laurie, I. C. et al. (1979) Nature in Cities: The Natural Environment in the Design and Development of Urban Green Space. New York : John Wiley & Sons.
- Lazer, W., LaBarbera, P., MacLachlan, J.M., & Smith, A.E. (1990). Marketing 2000 and Beyond. American Marketing Association.
- Lazaro, T. R. (1990) Urban Hydrology. (Updated ed.). Lancaster, PA: Technomic Publishing.
- Livingstone, K. (2001, October). London Mayor Promoting Tax to Fight Traffic Congestion. Government Finance Review, 17, 7.
- London Buses*. Retrieved November 9, 2001 from Web site:  
[http://www.londontransport.co.uk/buses/cib\\_about.shtml](http://www.londontransport.co.uk/buses/cib_about.shtml)
- London Community Recycling Network*. . Retrieved November 28, 2001 from Web site:  
<http://www.othas.org.uk/lcrn/lcrn1.html>
- Merton Environmental Services*. Retrieved November 28, 2001 from Web site:  
<http://www.merton.gov.uk/planningpp/airquality.asp>
- Myers, J. H. (1986). Marketing. New York: McGraw-Hill, Inc.

- Naish, J. (2001, November 24). The D-Bay invasion. The Times. Retrieved December 3, 2001 from Web site: <http://www.thetimes.co.uk>
- “Networking.” Monash University website [Online]. Available <http://www.buseco.monash.edu.au/Depts/MKT/MTPonline/Dictionary/nnn.html> [2002 January 31].
- “Networking.” Webster’s Dictionary [Online]. Available <http://www.dictionary.com> [2002 January 31].
- Newman, P. (1999). Sustainability and Cities: Overcoming Automobile Dependence. Washington, D.C.: Island Press.
- Poole, R., & Butler, V. (2001, September 21). Fixing Airport Security: 21<sup>st</sup>-Century Strategies for 21<sup>st</sup>-Century Threats. *Reason Public Policy Institute*. Retrieved November 30, 2001 from Web site: <http://www.rppi.org/rr106.html>
- Railtrack*. Retrieved December 1, 2001 from Web site: <http://www.railtrack.co.uk>
- Read, A. D. (1999, June) “A weekly doorstep recycling collection, I had no idea we could!” Overcoming the local barriers to participation” Resources, Conservation, and Recycling, 26(3-4), 217-249.
- SBA*. Retrieved 28, 2001 from Web site: <http://www.sba.gov>.
- Schachterle, L. E. (1999). Interdisciplinary Studies at WPI. Interactions 17. Worcester: Worcester Polytechnic Institute.
- Stanton, W.J. (1978). Fundamentals of Marketing. McGraw-Hill book Company.
- “*The Mayor’s Draft Municipal Waste Management Strategy*”. (2001, July 24). Greater London Authority. Retrieved November 11, 2001 from Web site: [http://www.london.gov.uk/mayor/environment\\_commission/report\\_index.htm](http://www.london.gov.uk/mayor/environment_commission/report_index.htm)
- The UK’s Definitive Taxi Cab Web Site*. Retrieved November 21, 2001 from Web site: <http://www.taxicab.co.uk>.
- The UK National Air Quality Information Archive*. Retrieved December 1, 2001 from Web site: <http://www.aeat.co.uk/netcen/airqual/>
- The Tube*. Retrieved November 21, 2001 from The Tube Web site: [www.thetube.com](http://www.thetube.com).
- Transport for London*. “Proposed Management Plan for the London Underground.” Retrieved November 9, 2001 from Transport for London Web site: <http://www.transportforlondon.gov.uk>

*Transport for London Street Management*. Retrieved November 9, 2001 from Web site:  
<http://www.streetmanagement.org.uk/>

*Transport Statistics for London 2000*. Retrieved November 9, 2001 from Web site:  
<http://www.transportforlondon.gov.uk>

*US Department of Transportation*. Retrieved November 30, 2001 from web site:  
<http://www.dot.gov/affairs/airportsec.htm>

Vuchic, V. R. (1999). Transportation for Livable Cities. New Brunswick, N.J.:  
Center for Urban Policy Research.

Waterhouse, R., & Crackwell, D. (2001, November 25). Britain's transport system is the  
worst in Europe. The Times. Retrieved November 28, 2001 from Web site:  
<http://www.thetimes.co.uk>

Webster, B. (2001, December 3). Tube trains may drive themselves. The Times.  
Retrieved December 3, 2001 from Web site:  
<http://www.thetimes.co.uk/article/0,,2-2001560449,00.html>

Woods, D. W. (1999). The Interactive Qualifying Project. Interactions 17. Worcester:  
Worcester Polytechnic Institute.

Woods, D. W. (2001). Handbook for IQP Advisors and Students. Worcester:  
Worcester Polytechnic Institute.

Woods, R., & Waterhouse, R. (2001, November 25). Focus: Why Britain is going  
nowhere. The Times. Retrieved November 28, 2001 from Web site:  
<http://www.thetimes.co.uk>

*WPI Projects Program*. Retrieved November 19, 2001 from Web site:  
<http://www.wpi.edu/Academics/Projects/information.html>

WPI Undergraduate Catalog 2000-2001. (2000). Worcester: Worcester Polytechnic  
Institute.

Zikmund & d'Amico. (1986). Marketing 2<sup>nd</sup> Edition. New York: John Wiley & Sons.