

Education websites and their benefits to potential international students: a case study of  
higher education service providers in Malaysia

Teik Chooi Ooi  
Intel Penang, Malaysia

Henry Wai Leong Ho  
Swinburne University of Technology, Melbourne, Australia

Siti Amri  
Griffith University, Brisbane, Australia

*Biographical Information:*

Teik Chooi Ooi is currently the Senior System Analyst at Intel, Penang, Malaysia.

Henry Ho is a Lecturer in Marketing in the Faculty of Higher Education, Lilydale at the Swinburne University of Technology in Melbourne, Victoria, Australia. His research interests include marketing education in higher education and customer value creation and delivery.

Siti Amri is a Geographic Information System researcher at Griffith University in Brisbane, Queensland, Australia. Her primary research interest is on modelling spatial data.

*Correspondence should be addressed to:*

Henry W. L. Ho, Swinburne University of Technology, Melbourne, Australia.  
Phone: + 613 9215 7191. Fax: + 613 9215 7070. Email: hho@swin.edu.au

## Abstract

This paper looks at criteria on how education service providers' websites could benefit their potential students from overseas. Effective design of education website is important as web users are typically fastidious and want information fast - this serves as the background of this study. The study focuses on three selected education institutions' websites; identifying their strengths and weaknesses, followed by recommendation on how institutions can improve their websites to gain good impression or perception from potential customers, such that they will re-visit the websites to get more information. Ultimately, the goal is to turn potential students to real students. Three education service providers (all located in Penang, Malaysia) have been identified and used for this study. They are INTI International College Penang, KDU College Penang and Olympia College Penang. These websites are examined against a list of criteria: source, layout, accessibility, speed, navigability, content, accuracy, level of details, current information and appearance. Based on the study done, the KDU College website is the best website compared to the other two colleges. Nevertheless, further improvement can be made in terms of displaying all course fees, Frequently Asked Questions (FAQ) for international and local student admission, and contact information for faculty, staff and students.

Keywords: education service providers; international student; webpage analysis; education in Malaysia

## Education websites and their benefits to potential international students: a case study of higher education service providers in Malaysia

Private Higher Educational Institutions (PHEIs) in Malaysia have equal role as the government funded universities, that is, the Public Universities, in the provision of tertiary education in Malaysia (Wilkinson & Yussof, 2005). PHEIs are fully-funded by the private sector. A number of these educational institutions have also obtained listing in the Bursa Malaysia (formerly known as Kuala Lumpur Stock Exchange (KLSE)). These institutions of higher learning are under the jurisdiction of the Ministry of Higher Education (MOHE) Malaysia, and are governed by various legislations to ensure provision of quality education.

In 1995, MOHE found that 20 per cent of overseas-trained Malaysian students cost the country around US\$800 million in currency outflow, constituting nearly 12 per cent of Malaysia's current account deficit. In order to reduce the outflows of funds, the government has intervened by increasing the capacity of public universities and expanding the capacity of local (private) higher education sector (Sirat, 2008; Ziguras, 2001). The MOHE saw the local PHEIs as the key means of reducing this currency outflow and in the long term of transforming Malaysia into a net exporter of higher education (Ziguras, 2001).

Poised to be the centre of educational excellence in the Asia Pacific region, majority of the PHEIs are using English, an international lingua franca, as the medium of instruction for programmes conducted. Besides offering study opportunities to the Malaysian students, PHEIs are also the favourite choice of many international students.

The advantages for international students to pursue their tertiary education in Malaysia include time and cost saving, quality education awarded by foreign partners and the opportunity to explore in the country's diverse culture and language. As of January 2005, there were about 40,000 foreign students from over 150 countries studying in Malaysia

(ACCA, 2007). The number of foreign students increased into 55,000 in 2006 (Verbik & Lasanowski, 2007). As claimed by Verbik and Lasanowski (2007), Malaysia has an approximate 2% share of the international student market since 2006. The majority of international students came from China, Indonesia, India, Thailand, Singapore and the Middle East, and they pursued courses in business, information technology, and engineering. The target of the Malaysian government is to recruit 100,000 foreign students by year 2010 (Sirat, 2008).

Under the Ninth Malaysia Plan (2006 – 2010), the Malaysian government will double efforts to develop Malaysia as a regional centre for excellence in the provision of tertiary level education (Prime Minister Malaysia Speech, 2006). Malaysia intends to promote and export tertiary education through strategic marketing efforts and the branding of educational products. Promotion approaches through the Web is accepted to be one of new forms of technology that can contribute to the success of the plan.

In June 2007, there were 521 PHEIs approved by the Ministry of Higher Education Malaysia. They are categorized as below:

**Table 1: Number of PHEIs as at 30 June 2007**

Categories of PHEIs	Number
<b>University Status</b>	
- University Status	16
- University College Status	16
- Foreign University branch Campuses	4
Non-university Status	485
<b>TOTAL</b>	<b>521</b>

**Source: Study Malaysia.com (2008)**

The four foreign university branch campuses offer foreign degree qualifications and the 32 universities provide home-grown degree programmes. A number of these institutions also offer 3+0 Foreign University Degree Programmes. Under this 3+0 arrangement, institutions are permitted by the foreign partner university to conduct the entire degree

programme in Malaysia for their foreign-partner university, which will then award the degree qualification). 25 of the non-university status PHEIs conduct 3+0 Foreign University Degree Programmes in collaboration with overseas host universities.

Several PHEIs also have twinning degree arrangement with reputable foreign universities all over the world. At the beginning of year 2007, there were more than 320,000 students studying in PHEIs and about 35,000 (approximately 10% of the total) of them were international students pursuing tertiary programmes and English language courses (Study Malaysia.com, 2008).

#### Promoting tertiary education service providers in Malaysia

In order to achieve the target of 100,000 students by 2010, the government and PHEIs have implemented selected strategies. Under the Ninth Malaysia Plan, the Malaysian government plans to promote tertiary education through marketing efforts and the branding of educational products. This included the implementation of a quality assurance system, promotional activities and the establishment of education promotion offices in Beijing, Dubai, Ho Chi Minh City and Jakarta (Ninth Malaysia Plan, 2006). With these efforts, enrolment of foreign students in education institutions increased. De-regulation of visas by allowing foreign students in Malaysia to work part-time also helped to recruit more foreign students (Higher-Edge.com, 2004).

There are a few promotional approaches used by PHEIs. They are advertisements in selected education publications, education fairs and information sessions targeted at students and parents. Colleges also have ambassadors like personnel and programme providers (for example, IDP – Individual Development Programme) who directly provide advice. Other promotion approaches are running series of media and agent visits from targeted markets, exhibitions at conferences targeted directly at secondary schools and college counsellors, and

distribution of promotional publications such as flyers (Deupree, 2002). They also have partnership strategies to actively pursue dual degree programmes, which allow students to spend a year studying abroad, and awarded a degree by both the local and foreign institutions.

A study on attracting foreign students also recommends that students be allowed to seek employment during and after their studies. It also suggests adapting immigration rules to make it easier for Malaysia's private tertiary institutions to hire teaching staff from abroad. It will be more attractive if study loans and scholarships (Binsardi & Ekwulugo, 2003) from private sectors or the government are offered to foreign students.

#### Website and promotion of tertiary education service providers in Malaysia

The Web is important to organizations and is recognized by all industries including education. Fast and easy access to millions of potential customers are the main benefits of websites (Belch & Belch, 2007; Keegan & Green, 2008). Research has shown that total Internet user growth in Asia increased more than 406% from 2000 to 2008 (Internet World Stats, 2008). The Web facilitates an efficient way to conduct international business (Belch & Belch, 2007; Kotler, Brown, Adam, Burton, & Armstrong, 2007). Websites can be updated often with latest promotions and course information in timely manner, with comprehensive virtual brochures (Chaffey, Ellis-Chadwick, Johnston & Mayer, 2006; Strauss, El-Ansary & Frost, 2006). As claimed by Allison (2002), access to and use of the Internet is increasing rapidly:

- 39% of adults claimed use of the internet in August 2001, up from 28% the previous year
- 83% of potential higher education students had access the internet from home in 2001
- 81% of applicants used the internet for higher education information in 2001 compared with 50% in 2000
- 77% of applicants in 2001 had visited individual institution sites (Allison, 2002)

As a promotional medium, changes to the Web can be quickly implemented and with limited cost. Websites that are dynamic are those that get the hits. The Web enables the display of photos, sound and short movie clips at lower costs. Frequently Asked Questions on websites can address typical admission questions from customers, freeing up a lot of time for office staff. Websites serve customers 24 hours a day, seven days a week, without additional costs. Websites can efficiently reach target customers by presenting the right branding message at the right time, at the right place, to the right person - for optimum results (Belch & Belch, 2007; Chaffey et al., 2006; Kotler et al., 2007; Strauss et al., 2006).

Comparing the Web to other mediums such as print media advertising, education fairs, exhibitions, personnel fees, information sessions and publication mails, a website is cheaper, with faster and wider audience coverage (Belch & Belch, 2007; Chaffey et al., 2006; Strauss et al., 2006). This is in line with the quote, "Marketing on the Internet has received substantial attention. Businesses are not only able to reach a wider audience but also reduce marketing costs" (Ellsworth & Ellsworth, 1994).

As indicated by Porter (2001), "The Internet is a powerful set of tools that can be used, wisely or unwisely, in almost every industry and as part of almost any strategy". He stressed that companies which succeed will be the ones that use the Internet as complimentary to traditional ways of competing, not those who set their Internet initiatives apart from their established operations (Porter, 2001).

In summary, although there are many advantages of having websites, tertiary education providers need to consider and overcome some common mistakes and limitations of websites. This is to ensure the institution's website is an effective marketing tool and brings value to institution.

## Method

Three higher education service providers (INTI, KDU, and Olympia) have been selected as a focus in this paper due to numerous reasons. Firstly, they are pioneers in Malaysian private education and both INTI and KDU colleges have been established for more than 20 years, while Olympia College started up 12 years ago. In addition, KDU and Olympia are public listed companies in KLSE, under the subsidiary of Paramount Corporation Berhad Group and Stamford Group respectively.

Secondly, they offer a wide range of programmes at Certificate, Diploma, Degree and Masters Levels. The Certificate and Diploma courses are internally developed while the Degree and Masters Programmes are conducted in association with prestigious universities in Australia, UK, USA, New Zealand and other countries. Thirdly, the institutions' high standards of academic provision are well recognized by employers of various industries and universities worldwide, as a result of their competent graduates who excel in their workplace.

Most importantly, they are internationally acknowledged as institutions that are committed to providing quality education. Students now come from various countries around the world including China, Indonesia, Middle East, Africa and others.

## Website Indicators for evaluation

The website evaluation criteria are designed based on two sections. First section consists of 10 criteria with their respective components. Criteria are scaled depending on a number of sub-components rated 'Yes'. However, criteria at second section are rated with Yes or No. For example, the first criterion in the first section has three sub-criteria located at second section. From the evaluation, if it only has one "Yes", the first section will have a score of "1". If there are no "Yes" ratings, then the first section scores "0".



Table 2 provides the detail listing of the criteria and its respective component used in this study:

**Table 2: Criteria used to evaluate tertiary service providers website**

No	Criteria
<b>1</b>	<b>Source</b> 1.1 More than 10 years 1.2 Awards 1.3 Public listed company
<b>2</b>	<b>Layout</b> 2.1 Center, left and right 2.2 Sequence base on important 2.3 Not “below the fold”
<b>3</b>	<b>Accessibility</b> 3.1 Highest hits at search engine 3.2 Counter 3.3 No error outage 3.4 Affiliate partner, newspaper and government sponsor 3.5 Cascading Style Sheet (CSS) 3.6 ALT attribute 3.7 Named links 3.8 Contrasting background + text color
<b>4</b>	<b>Speed</b> 4.1 Website site (bytes) 4.2 Flash (if none is there an option for flash or non-flash?) 4.3 Download time (<10 seconds)
<b>5</b>	<b>Navigability</b> 5.1 Number of clicks ( < 4 clicks) 5.2 Two minutes to find information 5.3 Site map usage 5.4 Button terminology – descriptive
<b>6</b>	<b>Content</b> 6.1 Admissions 6.2 Academic programmes 6.3 Faculty, staff, student, alumni 6.4 Student financial assistance 6.5 Welcome from the Chair or Programme Director 6.6 News and announcements 6.7 Cost of admission 6.8 Frequently Asked Questions (FAQs) 6.9 International student corner 6.10 Sign in/Request information 6.11 Contact Us 6.12 Other Languages used in website, besides English
<b>7</b>	<b>Accuracy</b> 7.1 College affiliated with well- known university 7.2 Testimonials from students 7.3 Government 7.4 Author of website
<b>8</b>	<b>Appropriate Level of Details</b>

	8.1	The level of details for information
	8.2	Courses offered
	8.3	Pre-requisite to register course
	8.4	Credit transfer
	8.5	Course fees
<b>9</b>	<b>Current Information</b>	
	9.1	Regular update
	9.2	Reliable link
	9.3	Event date
	9.4	Semester calendar
	9.5	Copyright
<b>10</b>	<b>Appearance</b>	
	10.1	Good spelling
	10.2	Grammar
	10.3	Font
	10.4	Professional look
	10.5	News flash

**Source: Develop for this research**

The criteria designed were implemented in these three colleges' websites, and data collected by surfing and browsing each college website. The strategy is to use case study evaluating three identified colleges' websites in gathering primary data. The data collection was performed within 32 days, commencing from second week of September until the third week of October, 2008. Most of the time, access to respective website were performed during night time in Malaysia, although evaluation of speed was done during day and night time in order to have more accurate data.

After data collection, a separate analysis focusing on each individual institution calls out both available and non-available attributes at respective websites. The result and summary are presented in the following section.

## Results

### *Webpage analysis of INTI International College Penang*

For more than 19 years, INTI International College Penang has maintained its commitment to uncompromised teaching excellence. This continues to benefit students in

Business, Law, Computing & IT, Engineering, Applied Science and Social Science (INTI International College Penang, 2008).

**Figure 1** Website of INTI International College Penang



**Source:** INTI International College Penang (2008)

The College offers programmes wherein students complete Certificates, Diplomas and Bachelor degrees. In the 3 + 0 programmes, students can complete their studies on-campus at INTI and still obtain overseas degrees. In addition, they can select from an impressive list of prestigious universities and enrol in the UK Degree Transfer Programmes, the Australian Degree Transfer Programmes, or the American Degree Transfer Program before proceeding overseas to complete their degrees (INTI International College Penang, 2008).

Strategic links with partner universities have resulted in several exchange programmes that enable students and staff to expand their knowledge, experiences and creativity. INTI encourages such exchanges as they provide unique opportunities for participants (INTI International College Penang, 2008).

**Sources** for this college are its 20-year history as an established education center. INTI International College Penang is the top-notch centre in the world for Higher School Certificate (HSC). The layout for page uses top center as the main menu and left hand is the sub-menu from the main menu selected. Sequence of menu is based on the importance of information and length of the page is just nice, not a very long page that required scrolling down the page.

**Accessibility** is part of the quality and popularity assessment of websites. Higher search engines ranking translate into greater traffic on a site and, subsequently increase its accessibility degree. Practical ways to examine INTI College was conducted through search engine Google. The result is INTI College has the highest result from search engine ranking. Second factor used to measure accessibility is the site popularity. The most common of web performance is the number of "hits" a site generates. For INTI College, there is no counter included in their website. The third factor used is website up time. Almost all the time, the site is accessible. Other factors used to measure the accessibility are the website uses CSS, ALT attribute, named links, and contrasting background and text color.

**Speed** is important as potential customers are looking for information and they do not have much patience to wait a long time for a web page to down load. It is not advisable to use Flash site, if there is a need, should have options of Flash or Non-Flash site. The web page is a non-Flash website with reasonable download time (~30 seconds). The average number of clicks needed to access faculties or college pages  $< n$ , and to access courses information was  $n$ . However, some sites require around ten clicks to access programmes, implying a very poor organization of the information that should be improved.

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Navigability for INTI College by potential customer is less than five, in terms of number of clicks. It took two minutes to find the information that is readily available with the descriptive buttons as a main menu and sub-menu.

The **content** of the web page includes Admissions, Academic Programmes, Alumni testimonial, Student financial assistance, Welcome from the school principal, News and announcements, and Online enquiry for information. However, the webpage lacks Frequently Asked Questions, Cost of Admission, Site Map and International Student Corner. In addition to this, the INTI College Student Affair information provides information about general welfare of students and provides other services to increase the quality of student life in IICP. The services are included as follows: Accommodation Transfer, Booking of Bus Tickets, Students' Mail, Lost and Found, Health & Emergencies, Available Facilities, Available Equipment/Games, Grievance Report, Rental of Lockers, On/Off-Campus Jobs, and Notice Boards.

Other information published at the website are map to college, contact information and campus facilities photos at Library, Convenience Store, Lecture Theaters, Cafeteria, and Cybercafe. Sports facilities include football, pool, table tennis, gymnasium, basketball, table soccer, tennis, Chinese chess and music room. Computer labs include Engineering labs, Physics labs, Chemistry labs, Biology labs. Various forms of campus accommodation are provided types with reasonable prices and listed in the website.

The site publishes contact information like email address, phone number and fax number. The language used in website meets the needs of their targeted market. It uses English as the official language of the Internet.

Site **accuracy** is good - promoting college facilities, services, and courses with reasonable price and yet not compromising quality, and good study environment through their websites. The site has short testimonials with good comments from students. The site

also publishes affiliations with well-known universities in United States, United Kingdom, Canada, Australia and New Zealand, JobDb.com and Industrial Training Center, which gives confidence to potential customers to pursue their studies in the college. Courses offered by the college are also recognized by National Accreditation Board (NAB), or better known as Lembaga Akreditasi Negara (LAN) in Bahasa.

The *detail level of information* for courses offered include description, academic pathway diagram, course structure, intake, course link with affiliated university and subjects needed to complete per semester/year. Another value-added feature shows past track record of college achievement on passing score specifically on pre-university programme and it lists out the partnership of respective universities for credit transfer programme. The limitations are no course fees and credit transfer details available. For admission, it also contains the information for local student and international student requirements.

Respondents mentioned that sites need to be dated [x]. In order to know if the website is current, last updated date needs to be listed at the bottom of web page. Furthermore, the home page can publish coming events like college open day, seminars, forums and other workshops. *Current information* appears on the college's intake calendar and latest news on serving community and student achievements.

An organization that regularly updates websites gives confidence to potential customers and influences them to visit the site repeatedly, while a website's current reliable links should be available and working. The copyright year at the bottom of the website also reflects the current status of websites. There is no last updated date listed at the INTI site.

*Appearance* of the site looks professional. Generally, the site has short and meaningful text, good spelling and grammar, and font size and color are appropriate, usage of frame to make websites look organized, links are working, minimal animation, quality college picture, best viewed information of the website example with Internet Explorer &

resolution (1024 X 768). There is no virtual tour to college with multimedia component that could make the website look more professional.

### *Webpage analysis of KDU College Penang*

From its humble beginnings in 1991, KDU College Penang has evolved into one of the leading higher learning institutions in the country, offering a commendable range of industry-driven courses. In a poll conducted by the Star Education during the Star Education Fair 2004 in Penang, KDU College was listed as one of the Top Four choices for higher education in the Northern Region (KDU College Penang, 2008).

**Figure 2** Website of KDU College Penang



**Source: KDU College Penang (2008)**

Strategically located at Jalan Anson (Anson Road), the five-storey college building is well-equipped with state-of-the-art teaching, learning and research facilities to provide a more conducive learning environment for students enrolled in its six schools: American

University Studies, Arts & Science, Business, Computing & Information Systems, Engineering, and Hotel & Tourism Management. A new eight-storey block was also completed in October 2003 to meet the demand of increased students and to provide more facilities. With this expansion, the college now has a capacity of 5,000 students (KDU College Penang, 2008).

With a current student population of 2,500, KDU Penang is becoming a popular higher educational institution for international students from Indonesia, Thailand, China, Hong Kong, Japan, Korea, Mongolia, Europe and many other nations (KDU College Penang 2008).

*Sources* for this college are also its 20-year history as an established education center. KDU College was established as a small institution, becoming a well-known education center today. KDU College, under Paramount Corporation Berhad Group is a public listed company in Malaysia. Potential customers, who visit these websites, should be impressed, considering the good track record. The layout for the page has the main menu located at the top center and left hand side. Menu sequence is based on the importance of information and length of the page is just nice – not a very long page that requires significant scrolling down the page.

*Accessibility* is part of the quality and popularity assessment of websites. Higher search engines ranking translate into greater traffic on a site and, subsequently increase its accessibility degree. Practical ways to examine KDU College was conducted through the search engine Google. KDU College is the highest result from search engine ranking. Second factor used to measure accessibility is the site popularity. The most common of web performance is the number of hits a site generates. KDU College does not have a counter in its websites. The third factor used, is website up time. Almost all the time, the site is accessible. However there is one limitation where expand function for respective button will only work when it starts from the Home button. Other factors used to measure the



accessibility are usage of CSS and ALT attribute, which are not used in this web page.

However the page has a contrasting background and text color and it does name the links as well.

**Speed** is important as potential customers are looking for information and they do not have much patience to wait a long time for a web page to download. It is not advisable to use Flash site, if there is a need, one should have options of Flash or Non-Flash site. The web page is not a Flash site but has some animation and graphics with reasonable download time of ~30 seconds.

**The average number of clicks** needed to access faculties or college pages  $< n$ , and to access courses information was  $n$ . However, some sites require around ten clicks to access programmes, implying a very poor organization of the information that should be improved. Navigability for KDU College by potential customer is less than five, in terms of number of clicks. It took two minutes to find the information that is readily available with descriptive buttons as a main menu and sub-menu. Site map is also available to ease finding information.

The **content** of the web page include Admissions, Academic Programmes, Alumni testimonial, Student financial assistance, Welcome from the school principal, News and announcements, International Student Corner and Online enquiry for information. However, the webpage lacks Frequently Asked Questions and Cost of admission. Other links are online enquiry, Contact information and Site map. Photos of campus facilities photos such as Career corner restaurants, canteen and gymnasium are published. Laboratories include Class lab, Multimedia lab, Workshop lab, Computer lab, Internet lab, Communication lab, Chemistry/Biology lab, Electronic lab, Electrical power lab, Smart lecture theatre, Library, Resource centre, and Studio.

The site publishes contact information like email address, phone number and fax number. KDU College website has additional contact information, which is KDU Online

Enquiry. Besides this contact information, some value-added services provided to students are KDU 24-Hours Emergency Assist Line information for emergency assistance to staff and students. There is a KDU Accommodation Help-line for assistance with an accommodation or to lodge complaints about repairs to the hostel or student houses. Both these services could influence potential customers to study at the college.

Language used in the website meets the needs of their targeted market. The site uses English as the official language of the Internet. In addition, KDU College website does use Mandarin in certain WebPages, as China and Taiwan are their targeted markets.

Site *accuracy* is good - promoting college facilities, services, and courses with reasonable price and yet not compromising quality, and good study environment through their websites. The site has short testimonials with good comments from students. The site also publishes affiliations with well-known universities in the United States, United Kingdom, Canada, Australia and New Zealand, giving confidence to potential customers to pursue their studies in the college. Courses offered by the college are also recognized by NAB.

*Level of details* of the site and its information available are for international students, where it provides information about Malaysia, climate, people and language, religion, food, currency and banking, living expenses, One-stop center for International Students, accommodation, transport and shopping. Apart from this, there are a few services provided to international students, such as airport pickup, accommodation check-in, banking and currency exchange, immigration matters, safe-keeping of passports, and booking air tickets. Besides this, appropriate level of details for courses are available, such as course introduction (affiliated university), course description (intake and duration), structure (syllabus) requirement, study route (in diagram), and full accreditation. The limitations are no publication of course fees except for one-course and credit transfer details.

Respondents mentioned that sites need to be dated [x]. In order to know if the website is current, the last updated date needs to be listed at the bottom of the webpage. Furthermore, the home page can publish coming events like college open day, seminars, forums and other workshops. ***Current information*** appears on the college's coming intake calendar and latest news on serving community and student achievements are available by utilizing the RSS (Really Simple Syndication).

An organization that regularly updates websites gives confidence to potential customers and influences them to visit the site repeatedly, while a website's current reliable links should be available and working. Copyright year at the bottom of the website also reflects the current status of websites. There is no last updated date listed at the KDU site.

***Appearance*** of the site looks professional. Generally, the site has short and meaningful text, good spelling and grammar, font size and colour are appropriate, usage of frame to make websites look organized, links are working, minimal animation, quality college pictures, best viewed information of the website example with Internet Explorer & resolution (1024 X 768). There is no virtual tour of the college with multimedia component that could make the website look more professional. However, the usage of RSS for coming intake calendar, latest news on serving community and student achievements contributed to the appearance of web page as well.

#### *Webpage analysis of Olympia College*

Olympia College Penang has a five-acre campus and has an extensive range of facilities for its students that include sports and accommodation. It has always been at the forefront of co-curricular activities where staff and students alike maintain equilibrium of academia and recreation. Perhaps it's the typical Penang culture that influenced the campus

environment as it buzzes with activities, be it their work, study or otherwise (Olympia College, 2008).

**Figure 3** Website of Olympia College Penang



**Source: Olympia College (2008)**

For more than 10 years, Olympia College has provided quality training and education services to benefit students in Secretarial, Business, Entrepreneurship, Hotels, Multimedia Specialist, Systems Engineer, Financial Services, Accounting, Sales and Marketing, Human Resource, Administrative Management, Public Relations or Advertising, System Analysis and Web Designing (Olympia College, 2008).

The college offers programmes wherein students complete Pre-University/Foundation, Certificate Programmes, Diploma Programmes, Higher National Diploma and Degree Programmes. The qualification would lead to external awards from Australia, United Kingdom and United States of America universities (Olympia College, 2008).

**Sources** for this college are its 10-year history as an educational institution. Olympia College, under Raffles Education Group, is a public listed company in Malaysia. Potential customers, who visit these websites, should be impressed, considering with the good track record. Apart from this, Olympia College has been awarded the NAPEI Education Excellence 2005 Award, for the best large private education institution in Malaysia. The layout for the page has the main menu located at top left hand side. Sub-menus based on the selection from Main menu are located at the middle left hand side. Menu sequence is based on the importance of information. However, length of the page is quite long and requires significant scrolling down the page.

Higher search engines ranking translate into greater traffic on a site and, subsequently increase its **accessibility** degree. Practical way to examine Olympia College has been conducted through the search engine Google. Olympia College has the highest result from search engine ranking. The second factor used to measure accessibility is the site popularity. The most common indicator of web performance is the number of hits a site generates. There is no counter included in Olympia College's websites. The third factor is website up time. Generally all sites are accessible except at the Intake button, where there was an error due to Microsoft OLE DB provider.

**Speed** is important as potential customers are looking for information and they do not have much patience to wait a long time for a web page to download. It is not advisable to use Flash site, if there is a need, one should have options of Flash or Non-Flash site. The web page is non-Flash website with reasonable download time of ~30 seconds.

**The average number of clicks** needed to access faculties or college pages  $< n$ , and to access courses information was  $n$ . However, some sites require around ten clicks to access programmes, implying a very poor organization of the information that should be improved.

Navigability for Olympia College to potential customer is less than five, in terms of number of clicks.

The **content** of the web page includes Home (Campuses, Student Testimonial), About Us (College, Country), Courses (Why Choose Olympia College, Programmes Available, Courses FAQ), Fees, Intakes, Scholarship, Career Opportunities, Galleries (Events & Forum), Contact Us (Campus facilities contact, Application & Scholarship form) photos with facilities such as Library, Classroom, Computer Lab and Canteen, for the benefit of students. The only weakness in terms of content is the lack of a Site Map that will help ease the navigating perspective of a potential customer.

The site publishes their contact information like email address, phone number and fax number. It uses English as the official language of the Internet.

Site **accuracy** is good - promoting college facilities, services, and courses with reasonable price and yet not compromising quality, and good study environment through their websites. The site has short testimonials with good comments from students. The site also publishes affiliations with well-known universities in the United States, United Kingdom, Canada, Australia and New Zealand, giving confidence to potential customers to pursue their studies in the college. Courses offered by the college are also recognized by NAB.

**For level of details**, the site has information line up the main menu, such as About Us, Fees, Intakes, Scholarships, and Contact. A portion for foreign potential customers lists out details in the following sequence: About Us, followed by The Country, Study Abroad and International Student Office.

Besides this, appropriate level of details for availability of information for courses offered, pre-requisite to register course, credit transfer and course fees are available. Quality education and support, arrival and orientation, studying on-campus, study abroad and

exchange, sufficient publications and forms and Frequently Asked Questions were found. Olympia College has a Country Introduction link, providing information about Malaysia, climate, people and language, religion, food, currency and banking. The Study Abroad link provides information such as international passport application details, and furnished accommodation services provided by the college. The International Student Office offers services including airport pickup, accommodation check-in, banking and money changing, immigration matters, safe-keeping of passports, and booking air tickets.

There is a link to the Malaysia Immigration office, which is useful especially to foreign students who need to apply for visas, understand lead times and custom restriction on food and plants.

Respondents mentioned that sites need to be dated [x]. In order to know if the website is current, the last updated date needs to be listed at the bottom of the webpage. Furthermore, the home page can publish coming events like college open day, seminars, forums and other workshops. ***Current information*** appears on the college's coming intake calendar and latest news on serving community and student achievements are found.

An organization that regularly updates websites gives confidence to potential customers and influences them to visit the site repeatedly, while a website's current reliable links should be available and working. Copyright year at the bottom of the website also reflects the current status of websites. There is no last updated date listed at the Olympia College site.

***Appearance*** of the site is professional. Generally, the site has short and meaningful text, good spelling and grammar, and font size and color are appropriate, usage of frame to make websites look organized, links are working, best viewed information of the website example with Internet Explorer & resolution (1024 X 768). There is no animation or virtual college tour with multimedia component that could make the website look more professional.

The following is a summarized analysis of the three colleges' websites:

**Table 3: Summary analysis for three colleges**

No	Criteria	INTI	KDU	Olympia
<b>1</b>	<b>Source (0 - 3)</b>	2	3	3
	1.1 More than 10 years (Yes or No)	Yes	Yes	Yes
	1.2 Awards (Yes or No)	Yes	Yes	Yes
	1.3 Public Listed (Yes or No)	No	Yes	Yes
<b>2</b>	<b>Layout (0 - 3)</b>	3	3	2
	2.1 Center, left and right (Yes or No)	Yes	Yes	Yes
	2.2 Sequence based on importance (Yes or No)	Yes	Yes	Yes
	2.3 Not "below the fold" (Yes or No)	Yes	Yes	No
<b>3</b>	<b>Accessibility (0 – 8)</b>	7	5	4
	3.1 Highest hit at search engine (Yes or No)	Yes	Yes	Yes
	3.2 Counter	No	No	No
	3.3 No error outage	Yes	Yes	No
	3.4 Affiliate partner, newspaper and government sponsor	Yes	Yes	Yes
	3.5 CSS	Yes	No	No
	3.6 ALT attribute	Yes	No	No
	3.7 Named links	Yes	Yes	Yes
	3.8 Contrasting background + text color	Yes	Yes	Yes
<b>4</b>	<b>Speed (0 – 3)</b>	2	2	2
	4.1 Website size (bytes)	Yes	Yes	Yes
	4.2 No flash (if no, is there an option for Flash or non-Flash?)	No	No	No
	4.3 Download time (<10 seconds)	Yes	Yes	Yes
<b>5</b>	<b>Navigability (0 – 4)</b>	3	4	2
	5.1 Number of clicks ( < 4)	Yes	Yes	No
	5.2 Two minutes to find information	Yes	Yes	Yes
	5.3 Site map usage	No	Yes	No
	5.4 Button terminology – descriptive	Yes	Yes	Yes
<b>6</b>	<b>Content (0 – 13)</b>	8	10	10
	6.1 Admissions	Yes	Yes	Yes
	6.2 Academic Programmes	Yes	Yes	Yes
	6.3 Faculty, Staff, Student, Alumni	Yes	Yes	Yes
	6.4 Student Financial assistance	Yes	Yes	Yes
	6.5 Welcome from the Chair or Programme Director	Yes	Yes	Yes
	6.6 News and Announcement	Yes	Yes	Yes
	6.7 Cost of Admission	No	Yes	Yes
	6.8 Course Frequently Asked Questions (FAQs)	No	No	Yes
	6.9 Foreign Student Frequently Asked Questions (FAQs)	No	No	No
	6.10 International Student Corner	Yes	Yes	Yes
	6.11 Sign in/Request Information	Yes	Yes	Yes
	6.12 Contact Us	Yes	Yes	Yes



	a. International Number	No	No	No
	6.13 Other Language used in Website, besides English	No	Yes	No
<b>7</b>	<b>Accuracy (0 – 4)</b>	<b>2</b>	<b>2</b>	<b>2</b>
	7.1 College affiliated with well-known universities	Yes	Yes	Yes
	7.2 Testimonials from students	Yes	Yes	Yes
	7.3 Government	Yes	Yes	Yes
	7.4 Author of website	No	No	No
<b>8</b>	<b>Appropriate Level of details (0 – 5)</b>	<b>1</b>	<b>2</b>	<b>2</b>
	8.1 The level of details for availability of information	No	No	No
	8.2 Courses offered	Yes	Yes	Yes
	8.3 Pre-requisite to register course	No	No	No
	8.4 Credit transfer	No	No	No
	8.5 Course fees	No	Yes	Yes
<b>9</b>	<b>Current information (0 – 5)</b>	<b>5</b>	<b>5</b>	<b>5</b>
	9.1 Regular update	Yes	Yes	Yes
	9.2 Reliable link	Yes	Yes	Yes
	9.3 Event dates	Yes	Yes	Yes
	9.4 Semester calendar	Yes	Yes	Yes
	9.5 Copyright	Yes	Yes	Yes
<b>10</b>	<b>Appearance (0 – 5)</b>	<b>5</b>	<b>5</b>	<b>4</b>
	10.1 Good spelling	Yes	Yes	Yes
	10.2 Grammar	Yes	Yes	Yes
	10.3 Font	Yes	Yes	Yes
	10.4 Look professional	Yes	Yes	Yes
	10.5 News Flash	Yes	Yes	No
	Total possible score 55	38	41	34
	Percent score	69%	75%	61%

**Source: Develop for this research**

Table 3 provides the results of the websites evaluation. This study shows that KDU College has the best overall scores for web content and information presentation. All three institutions have on average similar ratings. This study revealed that these institutions have perfect scores for information currency and appearance.

This evaluation also illustrates where the selected institutions performed poorly, especially in areas of level of details and accessibility. The results of this study can be useful for website content improvements for better servicing of their potential students.

Speed is in an acceptable range, as all of them are non-Flash websites. Three websites have current information by through regular updates, reliable links and updated event

calendars. Three websites have good spelling, grammar and font, and professional outlook, especially the KDU College website which has RSS feature where it could be refreshed by the latest news and events. Layout from three websites look good, except that Olympia College has a long page that requires significant scrolling down to read the whole page. Generally, the basic content are available, such as Admissions, Academic Programmes, Student testimonials, Student financial assistance, Welcome message, News and announcement, International student corner and Contact information. However, three websites lack Frequently Asked Questions for international students, and costs for local and international student. Cost of admission is fully available at Olympia College and some courses in KDU College. Site Map feature is only available in KDU College website. English is the language used at three websites, while Chinese language is also used in the KDU college website. With existing content available, three websites are rated moderate for detailed level of content.

Accessibility and navigability for INTI College are the best compared to the other two colleges. Olympia College needs to improve on their accessibility and navigability, as there is an error outage encountered when a certain button is clicked, while it takes more than three clicks and exceeded two minutes to find the International student corner. Therefore, it can be concluded that the KDU College website is the best website compared to the other two college websites. Nevertheless, more effort can be made to further publish all course fees, FAQs for international and local student admission, and contact information for faculty, staff and students. This study indicates that these web site attributes are vital to convert potential customers to real customers.

In summary, the study shows that source and accuracy of the content are trusted based on prestige of higher education service providers that are established over 20 years. Two are public listed companies and all of their courses are recognized by the Malaysian government,

and are affiliated with well-known universities from UK, USA, Australia, New Zealand and Canada.

### Conclusion and future research

The present paper is a timely and useful report that can be used to identify the benefits of higher education service providers' websites to potential international students. It can also be used to build competitive advantage. As previously mentioned, the study focuses on three tertiary education service providers websites from Malaysia.

This study illustrated a website evaluation technique for educational institutions to undertake a comprehensive assessment of their respective Websites. This study also provides useful recommendations for educational institutions to integrate in the improvements of websites content and appearance. Websites specific to private tertiary education promote courses offered, promoting services provided, promote the tertiary education institution, promote events, facilitate potential customer interaction 365 days, 24/7, answer Frequently Asked Questions, improve branding, reach targeted markets, improve communication and timely information, and support inquiry marketing. The key strategies used to promote private tertiary education were identified, and having a website is a key strategy to promote private tertiary education in Malaysia.

As an exploratory study of how higher education service providers' websites could benefit their potential students from overseas, we limited our investigation into three institutions only. It would be interesting for future studies to undertake the investigation across public and private tertiary institution websites that located in different states and/or cities within Malaysia. Future research could also look at private tertiary institution within Asia region such as how tertiary institution websites across different countries in Asia could benefit their potential students from overseas.

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