Chapter 2

Literature Review

2.1 Introduction

E-learning, one of the tools emerged from information technology, has been integrated in many universities education programs, shifting from traditional way of education to electronic environment. It has not emerged in one night but can be considered as a revolutionary process that is start with generation of computers. Looking at the history of computer technologies, it shows that The First generations of computers were very huge and too expensive to be used by public; the phenomenon of personal computing that was popularized by Apple Computer in 1977 made computers more affordable for people to buy and easy to use for businesses and personal use. In 1981 IBM, the world's largest computer vendor introduced IBM personal computer. The Computers became more affordable and commonly used in businesses, industries and government organizations (Deitel and Deital, 2000). According to Stallings (2002), The Internet can be traced back to the ARPANET that linked computer networks at several universities and research Laboratories in the United States. The project was funded by Advanced Research project Agency (ARPA) in U.S department of defense in 1982-1983. ARPANET was converted to TCP/IP protocol, using this technology networks were connected all around the world. The World Wide Web was developed in 1989 by an English computer scientist Tim Berners-Lee at CERN (the European Laboratory for practical physic).

Today's advanced technologies in the field of Internet access, electronic file transfer, telecommunication and wireless networking are transferring the students from traditional classroom learning environment to e-learning environment. In many developed and under development countries e-learning is one of the important area that these countries are focused in order to adopt in their education system.

2.2 Historical Perception of Traditional Learning

2.2.1 Traditional Learning

Everyone in his or her life has experienced somehow traditional learning, the face to face learning. Traditional learning is an ancient method of learning that conducted by a teacher gathering students in places such as classes, labs or seminars to study and learn about different subjects. This method of learning has been practiced around the world in all levels such as kindergartens, primary, secondary, high schools, colleges and universities. In Traditional learning environment, teachers and professors have various teaching styles but the most popular traditional teaching style is teaching by telling [Schroeder (1993) quoted by Ebrahim Ali (2004)], Traditional learning method similar to any other method has its own advantages and disadvantages that are more or less similar in many cultures; Table1 refers to some of the important advantages and disadvantages of traditional learning.

Table2.1 Traditional classroom (Zhang *et. al.* 2004)

Advantages	**Disadvantages**
• Immediate feedback	• Instructor-centered
• Being familiar to both instructors and students	• Time and location constraints
• Motivating students	• More expensive to deliver
• Cultivation of a social community	

Source: Zhang *et. al*. 2004

The traditional context of learning is experiencing a radical change. Teaching and learning are no longer restricted to traditional classrooms (Wang *et. al*., 2007). It is obvious that in traditional learning the way teachers teach is very critical in students learning process. Delisle stated that it's how we teach, not what we teach that makes a lasting impact on our student [Smith (1990) quoted by Ebrahim Ali (2004)]. The strength of traditional classroom comes from face to face interaction among students and between students and instructors; this face to face interaction enables students to ask questions and make comments according to their understanding of the subject, allowing students to meet with other students in study groups and creating friendship between them that makes students more social. Some researchers argue that students generally want and need the access to the instructors, many times in a face to face environment, to ask questions and speak out their concerns. In traditional learning environment, instructors provide numerous opportunities to students during classes to ask questions or offer their opinions. In addition most instructors provide offices for students to stop by and chat, discuss problems and concerns (Hay *et. al*., 2004).

Like any other methods of learning, traditional learning has its strengths and weaknesses, one of the weaknesses of traditional learning or traditional class is that the numbers of students in the classrooms influence the performance of students. There are many researches on the factor of class size in student's performance. In 1960 Chant Royal Commission on Education in British Columbia reported that the size of the public school classrooms and teacher ratios were referred to in a number of briefings [that] invariably supported the view that class sizes should be reduced (Robertson and Kappan, 2005). According to the survey that was conducted in

2005 in the Ontario College amongst teachers and administrators, nine of ten teachers and administrators believed that reducing class sizes would have the greatest impact on improving student's achievements (Robertson and Kappan, 2005). Because the number of students in a classroom in a traditional learning affects the performance of the students in most primary and secondary schools; for students to get better results and to learn more effectively, the size of classrooms should be between 20- 30 students per classroom. In many colleges and universities also, when the size of classes is too big they are divided into two or more classes or taught by different lecturers to facilitate the students. However this reduction of classroom size is not always possible due to the limited number of qualified lecturers for particular subject and time limitation in colleges and universities. The other weakness of a traditional learning is that, the students need to travel to institutions during day, a few days a week. Depending on location of the classroom and time becomes inaccessible sometimes. Therefore to solve this issue the new learning method is called e-learning and also known better as distance learning. It has been enabled students to learn regardless of time and their location. E- Learning advantages and disadvantages is discussed in Section 2.3.1.

2.2.2 Traditional Learning and Student Affairs Development

A close look at the history of each college and university indicates that student affairs department age go back to the age of that particular college or university. Each institution has its own history of its student affairs development. Some researchers believe that student affairs and student affairs profession started from USA Harvard University. According Arthur Sandeen (2004) student affairs formally began in 1890, when Harvard College was transforming into a university; in many

literatures stated that at that particular time President Charles Eliot realized that he needed someone to be in charge and take care of undergraduate student needs. Thus Eliot appointed this job to LeBaron Russell Briggs, a young English professor, to serve as a "student dean.", Briggs job and his personal concern for students became a legend for Harvard students , Briggs realized importance of his work in student's education thus the position was created. Many colleges followed Harvard's lead. It is interesting to know what Briggs thought about Harvard, and other institutions of learning in 1902 where he wrote that "An institution of learning, a college must be an institution of truth; a school of character, it must be a school of integrity. It can have no other justification'' (Winstion *et. al*., 2001). There are many good things about Briggs and his character written in literatures by researchers and student affairs professionals, among them can refer to one of the interesting statement about Briggs and what he accomplished is written by Fley in 1979.A Harvard alumnus wrote that he seldom saw the president, "But about dean Briggs there could be no doubt he was human, he was intimate, personal, vastly gentle and kind to me and to my brothers he meant Harvard, and Harvard meant nothing else than Briggs" (Winstion *et. al.*, 2001). There is no doubt that Briggs has done a great job at Harvard University; his job became a model for other colleges and universities; he was also a model for the next generation of deans; many literati agreed that the position of student affairs started from Harvard as a "student dean". There is no evidence about which university introduced student affairs division first.

2.2.3 Student Affairs and Student Affairs Administration

It is obvious that the student affairs profession started from Harvard University and progressed by time. According to Heath (2002) the student affairs profession

has been established since the first inception of American higher education and continues its existence and growth today. According to Manning and Boatwright (1991), Student affairs department's shape manages and influences significant aspects of the university environment. These environments include Residence life, student unions, campus activities, career planning, and athletics (Manning and Boatwright (1991), Gordon and Bonner, 1998). There are certain graduate programs that offer degrees for student affairs discipline; student affairs staff or student affairs professional mostly graduated from this programs Boice-Pardee Heath P (2002) wrote that a graduate program in the field of student affairs are also called: college student personnel, student services, higher education administration, student personnel services, counseling with concentration of student personnel.

Besides formal education, Student affairs professionals have an obligation to be familiar with student development theories; they also have an obligation to understand their own growth and development (Conneely 1994, Odeleye 1998 quoted Roberts 2005). The Student Personnel Point of View (American Council on Education, 1937) stated that educational institutions had an obligation to consider the student as a whole *his intellectual capacity and achievement, his emotional make-up, his physical condition, his social relationships, his vocational aptitudes and skills, his moral and religious values, his economic resources, his aesthetic appreciations. It puts emphasis, in brief, upon the development of the student as a person rather than upon his intellectual training alone.*

Nowadays most student affairs professionals attempt to implement that philosophy of student (McClellan and Cawthon 2005). Today Student affairs

department, student affairs profession and their services are well known by students in the academic world. Student affairs department consists of many divisions and professional staffs to provide facilities and services for students within universities, the head of student affairs department or the chief student affairs officer may also be named as the Vice President for Student Affairs who is in charge of monitoring overall activity of student affairs department.

2.2.4 Why Division of Student Affairs Departments?

Simple look at any college or university indicates that student affairs services gather in a specific place named as student affairs unit or student affairs department, like many other departments student affairs department also categorized to sub unit or division; each division of student affairs is responsible to provide particular services for students within that university (Winstion *et. al*., 2001). The history of student affairs profession shows that the division of student affairs was not made by Briggs, the first Harvard Student Dean. Briggs did not have to concern himself about how to organize a student affairs division because he was a one man-operation. The authors wrote that the transition from college to university, the growth of coeducation, the increase enrolments, the emphasis upon faculty scholarship, the increased attention to individual differences, and the expectation that colleges should monitor, if not control student's behavior were major factors leading to the development of student affairs divisions as they are known today. According to Sandeen (2004) today's student affairs division is totally responsible for functions such as enrollment management, financial aid, housing, counseling, student health, judicial programs, career services, recreational sports, and student activities. Besides that, they may also have the responsibility for campus services

such as transportation, security, child care, and student academic support. Preston (2005) found out that if the student affairs' operational issues can be significantly improved, the students' motivational issues may be benefited simultaneously.

Student affairs department is one of the main divisions in a university that has controlling power on both students and staffs. The duty of this department is to monitor the staff performance and also consolidate the students' needs and requirements. The Division of Student Affairs is usually responsible for providing services, programs, resources, and facilities to solve student's issues and assist students in defining and obtaining their educational goals, providing personal and career development consoling services. This division is a center of academic advisory, cultural and personal consultancy.

2.2.5Advanced technology and Student Affairs Administration

The evolution in information technology and prescient of Internet quickly change the way people access the information. In 1991, Sanders wrote that electronic mail, and information technology in general, had begun to change the way people Conduct both their personal and professional businesses. (Sanders, 1991 quoted by Bowman and Cuyjet, 1999). Higher institutions during last two decades became more familiar with the effect of using advanced technology such as e-mail, Internet, advanced networking and overall information technology in their daily operation. According to Mills in 1990 quoted by Bowman and Cuyjet (1999) In today's college campuses, student affairs professionals in their providing services such as residence life, student activities, student unions, admissions, and registrars, "are becoming increasingly proficient with technology" through the use of word

processors, spreadsheets, databases, planning and decision-making packages, and other technological tools. Bowman and Cuyjet (1999) also wrote that Community development as one of the aims of student development can also be aided through the use of technology. Nowadays student affairs administrators and professional staffs are using, internet-based technology and resources such as World Wide Web, e-mail, chat, for their daily operation and communication.

Currently with the help of technology higher institutions are providing better and faster services in the field of student affairs administration , great improvements in electronic student's records, course catalogue, online career development, student registry and electronic enrollment can be observed more or less in many today's higher institutions as an essential elements in helping the students.

2.3 Present Scenery

2.3.1 New Learning Models

The quality of traditional learning always influences the size of classrooms (number of students) and knowledge of lecturers, its boundary to the time and location are the other weaknesses of traditional learning. With today's world population increasing, the people's trend to study is rapidly growing; education environments are changing and universities are looking to reach more and more students who bring them more marketing. Nowadays many college and university students are married, have children, involved in part time or full time jobs and other responsibilities to follow in their lives, the size of cities are growing and many students are living far distance from college and universities. The need of new

learning method becomes really necessary to facilitate today's students learning and educational trends.

The growth of the internet and its impact on education system has created a new learning model called e-learning that is considered as a new revolution in the world of education; e-learning refers to the type of learning that people take a professional or educational course without the use of traditional methods; taking a course or going to school remotely, using the web as a classroom (Talbott *et. al*., 2002). According to Tastle, *et. al*. (2005) for the purposes of study and education e-learning or electronic learning refers to the delivery of educational material via any electronic media such as internet, intranet, extranets, satellite broadcast, audio/video tape, CDs and computer-based training. E-Learning currently is a one of the popular models of learning, like any other idea it has its own advantages and disadvantages. The most important advantages of e-leaning are that participants can access programs anywhere at any time compared to the traditional learning students who are bounded to the time and location. Table2.2 refers to the sum of advantages and disadvantages of e-learning.

Table2.2 E-learning (Zhang *et. al*., 2004)

Advantages	• Learner-centered and self-paced • Time and location flexibility • Cost-effective for learners • Potentially available to global Audience • Unlimited access to knowledge • Archival capability for knowledge reuse and sharing

Disadvantages	• Lack of immediate feedback in asynchronous e-learning • Increased preparation time for the instructor • Not comfortable to some people • Potentially more frustration, anxiety, and confusion

Source: Zhang *et. al.,* 2004

Although e-Learning is becoming more widely spread for education and training still many online courses are poorly designed. Some are little more than electronic versions of paper-based materials; overall the reputation of online courses is not good and the exception of well-designed course that effectively teach a topic to its target students is high (Neal *et. al*., 2004). The most important strengths of e-learning courses for students comes from its indecency to the time and unbound to location, beside that, the number of students in virtual classrooms is not an issue since e-leaning courses are student oriented compared to traditional learning courses that are instructor oriented. Some researchers believe that interaction is an important element in learning Vygotsky, (1978), quoted by Hay *et. al*. (2004), was Indeed, interaction has been proposed as one of the key parts of any learning experience, some other researchers suggest that on-line education adversely affects interaction, therefore lowering the quality of the educational experience (Abrahamson, 1998; Rahm and Reed, 1997; Sonner 1999, Hay *et. al*., 2004). Further studies on-line learning indicated that dissatisfaction with online courses resulting from feelings of isolation and lack of interaction with students and instructors (Hay *et. al.,* 2004). According to Labay and comm (2003) e-learning produces the better learning outcomes than the traditional methods. The Internet and the World-Wide-Web have become the predominant media for distance education offering degrees at bachelor's, master's, and doctorate levels.

The weakness of e-learning courses is that they are not suitable for all subjects; it is not comfortable for all students that are used to traditional learning; low motivation of learners due to the lack of face to face interaction between instructor and students is also another weakness of e-learning courses. Because lack of face to face interaction influences the student performance in some universities for example UNITAR university and Open University in Malaysia the e-learning courses are not fully conducted as a distance learning, and there are some face to face session to solve students issues and briefing of the course.

2.3.2 Technology Innovation and Student Affairs

Figure 2.1 shows the evolution of learning technology. It indicates that actually there were three era that many higher institution gone through changes and adopting new type of learning methods.

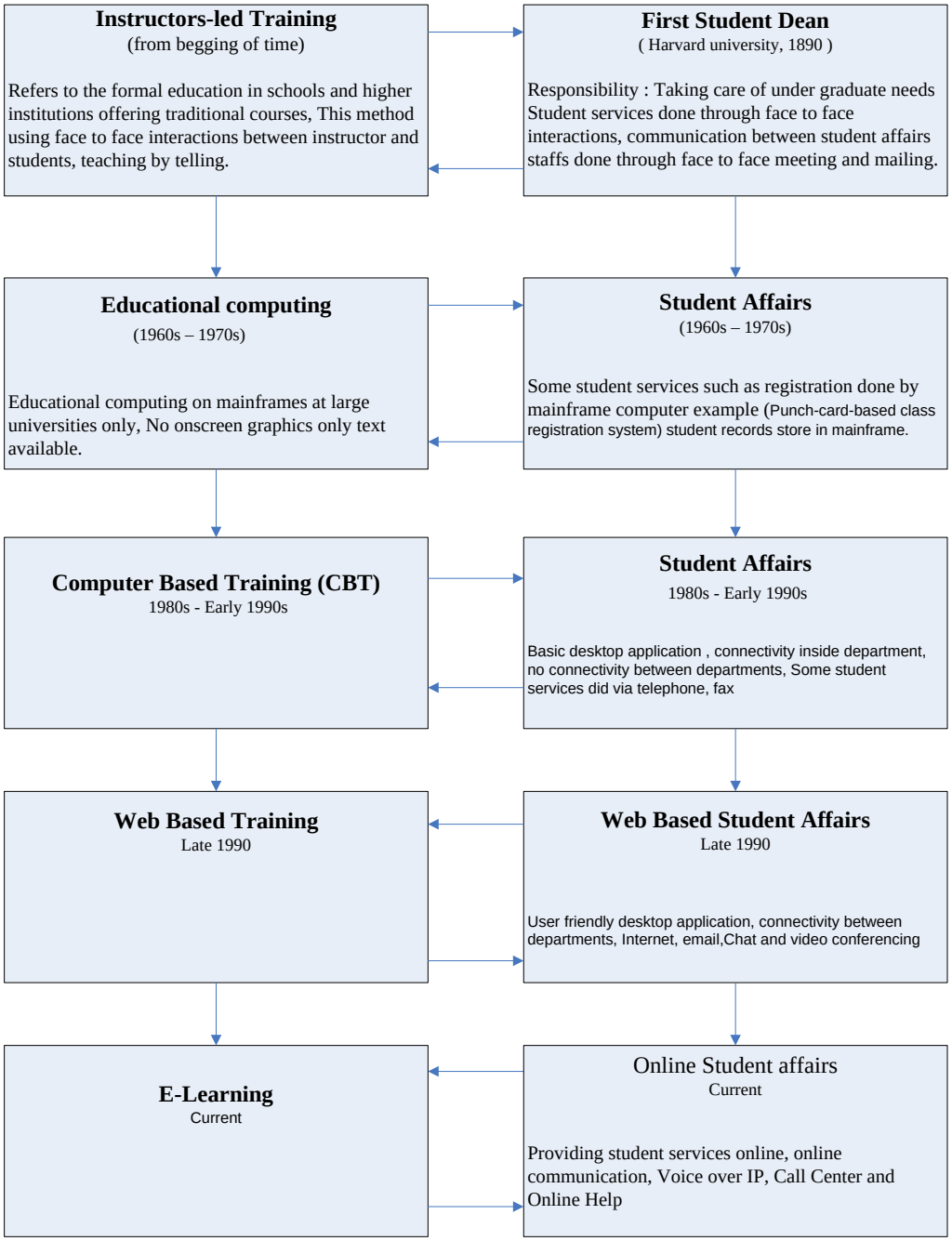

Figure 2.1 Developments of Learning Technology and Student Affairs
Source: Adopted from all the previous studies mentioned above.

According to Oakes (2003), early to mid -1990s was (CBT) era. Computer -based -training was dominated by instructor-led content repurposed into asynchronous, linearly designed courses delivered largely on CD-Rom. The advantages of CBT were availability of course material 24 hours a day 7 days a week and better learning retention. Mid 1990s could be consider as Web-based

training era (WBT),web based training refers to delivery of instruction or learning content over a company's Intranet or more sophisticated over Internet (Doris *et . al*., 2005). According to Oakes (2003), late 1990s was e-learning era; he wrote that as opposed to desktop focus of CBT era, the e-learning era is more rather than expectation. Electronic type of course material became available on internet, CD, Video, Audio and etc through many vendors. Improvement in Information Technology from 1990s till now facilitate student affairs professional in their job and responsibilities , advance technology in internet, world wide web, enables student affairs professional to provide better and more efficient service to students.

Looking at the last decade shows that overall computer and communication technology dramatically changed. According to Winston *et. al*. (2001) by 1990, technology was limited and centered on the desktop computer. There were few computers in each department and staffs needed to share them. Software such as word processing, spreadsheet, and desktop publishing were not very user friendly. E-mail was largely unavailable, communication between colleagues was through face to face meeting and exchange information was through diskettes or over telephone. Although access to the institution's student information system was possible, the user interface was not suitable enough to discourage widespread use and electronic access to information outside of the institution was virtually nonexistent. In contrast, by 2000 the majority of staff had a personal computer on their desks. The devices were connected beyond the department to embrace a wide variety of systems across the campus and the internet, enabling collaborative communication with colleagues around the world by voice, data, text and video transmission. The software was fast, powerful, and intuitive, resulting in easier and

more rapid access to information. Files could now be sent to others electronically, and many services that once required the physical presence of staff and students are now located in the virtual domain and accessed over the World Wide Web (the web). It is obvious that new world of education started with some combinations of real and virtual interactions. The need of e-learning is undeniable in today's world. It is obvious that contemporary student affairs administrators also must effectively provide services to increasing number and diversity of student in part time status at the institution for example, or who never come on campus, such as distance learners (Winston *et. al.,* 2001).

Today student affairs professionals need to deal with different types of students, and they should provide services that address on-campus. Not only e-learning students would benefit from online communications, but this also system can be developed for international and off-campus students (distance learners) in order to receive better services in a shorter time.

2.3.3 E-learning Students' Inclination for the Usage of Online Services

In the Beginning of the summer of the year 2000 a survey of our online students was developed to assist in the development of priorities to use in developing online student services. The survey is online, using Chi- square, a testing program developed at Weber State University for online courses. As indicated by the survey results, advising is the biggest trend of students who prefer online learning. Some of the questions were as follow:

1. Please indicate which of the following services you currently use ON CAMPUS.

2. Indicate which of the following services you currently use ONLINE.

3. Which of the following services WOULD YOU USE if it was available online?

- Academic Advising
- Financial Aid
- Scholarships
- Career Services
- Tutoring
- Services for Women Students
- Services for Multicultural Students
- Services for International Students
- Services for Students with Disabilities
- Supplemental Instruction
- Writing Center
- Student Government

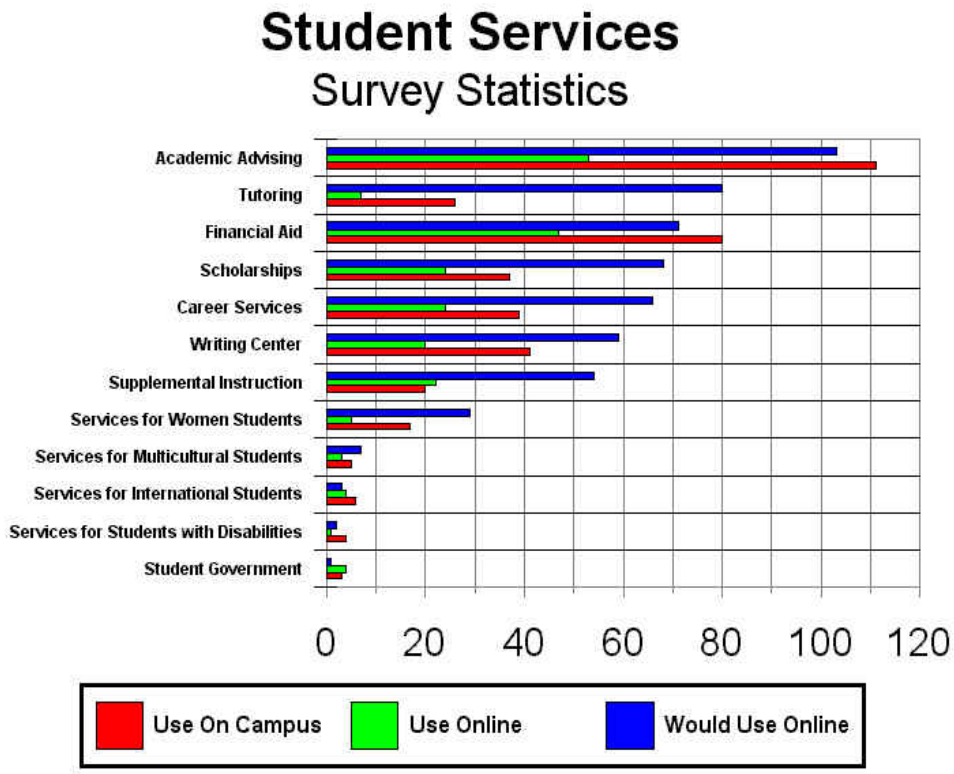

Figure 2.2 this encompasses question 1 – 3

Source: Simth, 2001

This survey shows that among some services provided by student affairs administration there are a huge request for online services on Academic advisory, financial aid, career services. Most of the students are using these services on campus and they are more interested to do it online (Smith, 2001). Romanova and Nevgi's (2006) study that the e-learning seemed to be more effective when students were provided with specially designed learning tools, such as general discussion groups and special discussions about lectures.

2.3.4 Evaluation Criteria for Student Affairs Web Sites

According to Janet E. Alexander and Marsha Ann Tate (1999) to evaluate a web site there are five traditional evaluation criteria- authority, accuracy, objectivity, currency and coverage. The authors define these terms as below:

Authority

Authority is the extent of which material is the creation of a person or organization that is recognized by having definitive knowledge of a given subject area.

Accuracy

Accuracy is the extent of which information is reliable and free from errors.

Objectivity

Objectivity is the extent of which material expresses facts or information without distortion by personal feelings or other biases.

Currency

Currency is the extent of which material can be identified as up to date.

Coverage and Intended Audience

Coverage is the range of topics included in a work and the depth to which those topics are addressed. Intended audience is the group of people for whom material was created.

At it can be observe from the above five criteria, it indicates that the first three are not suitable to evaluate universities student affairs web sites. Obviously the student affairs professionals have sufficient knowledge about student affairs activities thus the authority evaluation criteria is out for this part; definitely the information in their web site is reliable and free from any distortion since they are part of academic system; the information written in student web sites is certainly accepted by the university authorities therefore the objectivity and accuracy

criteria's are also meaningless in this part. The only criterion that is suitable is currency criteria that indicate the material on the web sites is up to date. According to Barratt (2001) the work in student affairs is value driven. In evaluating a site, determine the basic values that should be reflected then determine if these are reflected in the site. He proposed the following list of basic values that could be used in evaluating student affairs web sites:

Inclusion: All student groups and student organizations must be included in material presented in the site.

Representation: All departments and divisions in student affairs, and related departments must be represented.

Active: Content must contain active information such as current events, schedules, names, dates, and times.

Informative: Content must contain regulatory information such as codes of student conduct and the student government constitution.

Interactive: The web site must provide mechanisms for student interaction.

Currency: All information must be current and not out-of-date.

Convenience: The site must be designed for easy use.

Community Building: The web site must be linked appropriately to the campus, the community and the world.

Developmental: The web site must promote student development goals.

Learning focused: The web site must promote appropriate learning goals.

Clarity: The web site must have a written set of goals and measurable outcomes.

Accountability: The site must contain evaluation mechanisms such as feed back and counters.

Accessibility: The web site must meet accessibility guidelines.

As shown the mentioned list of value is quite suitable for student affairs web site evaluation.

2.3.5 Checklist for Evaluating a Student affairs Website

Web designers are using many different techniques to design a web site; for a good design of the proper combination color text and images are essential. The proper use of navigation tools and design feature makes the web site more user-friendly for the users. Barratt (2001) suggested four main areas to serve as a beginning point for the evaluation process of student affairs web pages. The areas are web site navigation and design, web site technical details, web site aesthetics and web site content. The following checklist that includes details for each of the four areas is suggested by Barratt as a starting point for evaluating a web site.

Navigation and Design

Statements	**Points**				
	(4)	**(3)**	**(2)**	**(1)**	**(0)**
Material should be found within three clicks from the home page and take no more than 30 seconds to load, even on a slow modem.	3 clicks	4 clicks	5 clicks	6 clicks	7 clicks
All pages should list a most recent update date, and have been updated within the past 12 months.	All		Most		Some

There should be an appropriate and consistent tool bar/navigation set on pages.	All		Most	Some
It should be very easy is it to find the Student Affairs pages from the school home page. *Main link - not a pull down menu item.	Home page link*	Second page link	Menu item link	No link
Material should be organized or indexed by function (department).	All depts.		Most depts.	Some depts.
Material should be organized or indexed by population being served - Information for students, faculty and staff.	All		2 of 3	States only
Sum of points in each column				
Navigation and Design Points				

Technical Details

Statements	**Points**				
	(4)	**(3)**	**(2)**	**(1)**	**(0)**
There should be a search function for the pages or site.	Yes				No
There should be a feedback section for pages or site.	Yes				No
There should be page counters on all pages.	Yes				No
Pages should meet accessibility standards.	Yes		Most		No
Pages should reside on a fast server.	Fast		Med.		Slow
Pages should load quickly at 28.8 baud.	Fast		Med.		Slow
All links should be active.	All				Most
Sum of points in each column					
Technical Details Points					

Aesthetic Appropriateness

Statements	Points				
	(4)	(3)	(2)	(1)	(0)
There should be a consistent 'look and feel' within the site.	All		Many		Some
There should be school and division identification throughout the site.	All		Many		Some
The pages should be appropriately attractive.	All		Many		Some
Sum of points in each column					
Aesthetic Appropriateness Points					

Content

Statements	Points				
	(4)	(3)	(2)	(1)	(0)
Information should be provided for all types of current, prospective and alumni students, faculty and staff.	All		3 of 5		1 of 5
Care should be taken to not overemphasize any student sub-population.	All		Many		Some
Student affairs functional areas should be covered broadly.	All		Many		Some
Student affairs functional areas should be covered in depth.	Deep		Some		None
Academic material should be well integrated into the student affairs pages.	Fully		Some		None
Material must be current and accurate.	All		Many		Some
Department or division home page should list contact names, numbers and E-mail addresses for important people, as well as hours of operation.	All		Many		Some
Department or Division Mission is available.	Yes				No

Sum of points in each column

Content Points

Total Evaluation Score

2.3.6 Current Technology in student affairs for E- Learning Students

Face to face advisory seems to be not practical since many of the students do not live on campus and they are far from the university. It costs traveling expenses and valuable time. It happens for the students not to be able to visit the advisor and the advisor may be very busy at that time and since there is no booking and guarantee for the students to visit the advisor in time of need, they won't be able to solve their problems within a short period of time. The majority of online advising is currently done via e-mail, but answers may delay or the student sends -mail to an attendant whom could has been transferred to another section so there would be a delay. Nowadays, students are more technologically sophisticated and seem to like to use the internet for everything. There are technical issues such as system quality and Internet quality that have a significant effect on the effectiveness (Ullrich *et . al.*, 2008). In addition in some colleges and universities a "chat" advising system has been developed where during normal business hours, students could ask questions through "Live Help".

However, since the number of students taking online courses has increased dramatically, and the idea was feasible, the chat advising which is an added item to the above systems is being implemented through Online (Sun *et . al*., 2008). Besides chat technologies, call center can also be observed in some universities. In fact call

center is a good service, but it is not practical in every university because of the high cost involved. It is also costly for the students since they need to make a call to have accessed to the service. In case of international students beside the problem of connection, the operators could be busy at the time of the call therefore making the operation even more expensive.