THE DEVELOPMENT AND TESTING OF THE ACADEMIC INFORMATION SYSTEM SURVEY

by

LIONEL PLUMMER

Presented to the Faculty of the Graduate School of

The University of Texas at Arlington in Partial Fulfillment

of the Requirements

for the Degree of

MASTER OF LANDSCAPE ARCHITECTURE

THE UNIVERSITY OF TEXAS AT ARLINGTON

May 2008

ACKNOWLEDGEMENTS

My work as a research assistant over the past three semesters under Dr. Pat D. Taylor has been the primary inspiration for this thesis. It was an honor to work by his side and it was his patience and dedication that resulted in the successful beginning of the large and multifarious project written about here. I would like to thank him for his support and guidance during my three years at the school of architecture.

I would also like to thank Dr. Taner Ozdil who contributed significantly with this project through his insight on professional research and website development. Abid Hafeez is owed a debt of gratitude for writing the code which brought our project online. I want to thank Professor David Hopman and Professor Gary Robinette whose dedication, hard work and thoroughness as teachers showed me what it takes to become an effective landscape architect student and professional.

Finally, I would like to thank my mother and my father who always supported me, and Kim with whom I share my life.

May 24, 2008

ABSTRACT

THE DEVELOPMENT AND TESTING OF THE ACADEMIC INFORMATION SYSTEM SURVEY

Lionel Plummer, M.L.A.

The University of Texas at Arlington, 2008

Supervising Professor: Pat D. Taylor

The Academic Information System (AIS) is a database for academic administrators and educators in landscape architecture programs which are members of the Council of Educators in Landscape Architecture (CELA), an international organization based in the United States. The system and its associated survey are designed to provide them with the ability to store and organize a variety of data on the way in which they prepare individuals to become landscape architects. The system also enables these educators to compare and contrast their institution with groups of other

institutions. The goal of the system's creators is to establish the most complete database possible to help these educators accomplish their missions.

In order to develop this database a survey was written to collect information from all academic administrators of landscape architecture schools who are members of CELA. This survey was developed over the course of 2006 and 2007 by a team organized by CELA. In 2007 the team incorporated this survey into CELA's website. During the winter of 2007-08 it was tested by several academic administrators from various universities throughout CELA's eight regions. The survey was then edited and refined throughout the spring of 2008 to prepare for a full launch to all academic administrators of CELA schools.

This paper examines if there is a need for a database system that academic administrators, educators and students can use. It examines those who are currently researching landscape architecture schools, how they obtain their data and what they do with it. The paper then details why these current processes are insufficient. The paper then shows how a new system to research landscape architecture schools was developed by CELA. It continues with an analysis on how this system functioned with a test group. The paper concludes with ideas on how to proceed with utilizing this new system in the future.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS ii

ABSTRACT iii

LIST OF ILLUSTRATIONS vii

LIST OF TABLES viii

Chapter

1. INTRODUCTION 1

Introduction 1

Definition of key terms 2

The need for ‘self-study’ 3

Current research on schools 6

2. RESEARCH METHODS 20

Creating the academic information system 20

The building of the AIS 26

Creating the online version 31

3. DATA ANALYSIS 40

The pretest 40

Data generated from pretests 42

Pretesters comment on the survey..... 50

4. CONCLUSION 56

Implications on higher education in landscape architecture..... 56

Questions generated by this thesis..... 57

Appendix

A. QUESTIONS DEVELOPED BY CELA TEAM IN 2007 AND INCORPORATED INTO ONLINE SURVEY ON CELA WEBSITE..... 63

B. LETTER TO PRETESTERS MAILED OUT ON FEBRUARY 2, 2008 93

REFERENCES 95

BIOGRAPHICAL INFORMATION..... 98

LIST OF ILLUSTRATIONS

Figure Page

1.1 Home page of CELA website..... 43

1.2 Sample page from AIS survey 45

LIST OF TABLES

Table Page

1.1 Report on the University of Buenos Aires in Guide to International Opportunities in Landscape Architecture Education and Internships 21

1.2 Report on the University of Texas at Arlington in Guide to International Opportunities in Landscape Architecture Education and Internships 23

1.3 Report on Lippe and Hoxter University of Applied Sciences on the education section of EFLA's website 25

1.4 Report on Manchester Metropolitan University's School of Landscape on the education section of EFLA's website 26

1.5 Differing expectations and criteria for AIS stakeholders 35

1.6 Graphic representing student employment as generated by AIS pretest 55

1.7 Graphic representing demographic breakdown as generated by AIS pretest 56

1.8 Graphic representing budget figures as generated by AIS pretest 57

1.9 Graphic representing University type as based on the Carnegie Rating System as generated by AIS pretest 58

1.10 Graphic representing laptop requirements as generated by AIS pretest 59

1.1 Graphic representing total number of classes in the history of landscape architecture offered and required as generated by AIS pretest 60

1.2 Graphic representing total number of classes in construction technology offered and required as generated by AIS pretest 61

CHAPTER 1

INTRODUCTION

Introduction

The purpose of this thesis is to describe and track the process used to develop the Academic Information System (AIS). The AIS is a digital storehouse of data managed by the Council of Educators in Landscape Architecture (CELA) that are to be used by educators to help them accomplish their mission of preparing individuals to become landscape architects. The thesis also includes results from a pre-test of the AIS along with recommendations from the pre-testers on how to improve the survey.

The impetus for a database on academic programs in landscape architecture emerged from the CELA Strategic Plan of 2000. The CELA Board of Directors created an academic information system task force co-chaired by Dr. Dennis Colliton of North Dakota State University and Dr. Pat D. Taylor of The University of Texas at Arlington. Upon Dr. Colliton's unexpected death in 2003 Dr. Taylor became chair of the Task Force and continued to push ahead with the goals called for in the 2000 CELA Strategic Plan. Beginning in 2003, Dr. Taylor and Dr. Amy Archambeau wrote a paper examining this issue in depth. This paper discusses both the need for information on academic units to be organized into a database and how that can be accomplished.

In 2006 a team was created by CELA that developed an extensive survey designed to collect this data from the administrators of all CELA member schools. This survey was written throughout 2006 – 07 and was incorporated into CELA's website in late 2007.

An initial phase of pilot testing began on November of 2007 and concluded on February 1, 2008. The data from these pilot tests are discussed in depth in chapter four. In chapter five, interviews with these pilot testers and their comments on the survey itself are also discussed. Finally, recommendations on next actions are listed.

Definition of Key Terms

Academic unit: Refers to departments or programs, typically; or those primary homes of landscape architecture curricula that carry the name "landscape architecture." (For example, Department of Landscape Architecture; School of Landscape Architecture; Program in Landscape Architecture and so on.)

Chief administrative officer: Refers to the chair/head/director of the academic unit in landscape architecture about which data are entered in the AIS.

CELA: The Council of Educators in Landscape Architecture: constitution states that:

> The CELA shall…encourage, support and further education in the field of landscape architecture specifically related to teaching, research, scholarship, and public service.
>
> - encourage and support scholarship and scholarly activities among faculty and students concerned with landscape architecture education.

- enhance opportunities for the improvement of existing and the development of new curricula in the teaching of landscape architecture.
- encourage, support and conduct research related to the improvement of teaching, public service, and the advancement of knowledge of landscape architecture.
- foster communication and the exchange of knowledge, information and experience of relevance to landscape architecture education through an annual conference and other educational meetings, the publication and the dissemination of scholarly writings, data and creative endeavors, and through liaison with related organizations.
- facilitate significant interaction among those involved in landscape architecture education.
- encourage and facilitate the involvement of the institutions, individuals and other members in the growth and improvement of landscape architecture education include the above purposes.

School/college/division: Refers to the larger amalgamation of related disciplines to which academic units typically belong. (For example, College of Design; School of Architecture; Division of Natural Resources and so on.)

Institution or university: Refers to the main campus of which the academic unit is a part.

Monetary amounts: All data collected are expressed in U.S. dollars.

Part-time/adjunct faculty members: Refers to all categories of teachers not on tenure-track, including adjuncts, affiliates, associates, visiting lecturers, professors-in-practice and the like.

Studio: Courses or classes where design and design deliverables are the main foci. Studio also refers to the space in which these foci are explored. Studios do not refer to those sections or classes that support specific learning.

The Need for 'Self-Study'

A driving force behind the creation of a database for educators is to help schools make the profession of landscape architecture a major force in the process of designing the environment in which we live. In 1950, Hideo Sasaki said that the profession of landscape architecture is, "at a critical fork in the road. One fork leads to a significant field of endeavor contributing to the betterment of human environment, while the other points to a subordinate field of superficial embellishment… landscape architecture schools… either may contribute toward making landscape architecture indispensable as a profession or may continue on a lethargical way and further lose contact with present problems (Sasaki, 1950).

Sasaki saw schools as having an unrealized potential. Recently an administrator of a landscape architecture academic unit wrote that:

> [I]t (the profession of landscape architecture) has evolved to display all the described as a minor profession, with some measure of control over a specific field of knowledge. Through accredited educational programmes, and self regulation through a professional society… Despite the passionate advocacy of past leaders ... the social and political influence of landscape architecture remains marginal in most countries (Swaffield, 2002).

In 2002 this same administrator sketched out a research agenda for academic units. The core of his recommendation is that the profession of landscape architecture should now begin to 'study itself'. Since the profession, like others, will continue to evolve in the new century, it is crucial that such studies be ongoing (Swaffield, 2002).

Taylor writes that:

> The absence of a solid base of academic information is a major barrier preventing programmes of landscape architecture from undertaking ongoing data driven inquiries to assess how well they are serving their stakeholders, including students, faculty, university administration, employers, alumni and the profession as a whole. In order to help move the profession along the right path of the fork, educators are presently faced with the challenge of developing and implementing a broad strategy for the collection, management and use of information from its constituencies: colleges/universities; departments/programmes; faculty; students; alumni; and employers (Taylor, 2003).

"A relational database is a structured information repository containing mission critical data that can allow an organization to perform daily operations, make important decisions, and create periodic/summary reports." (Harrington, 2002) It follows that a good database will help administrators, project managers, directors and others who are in constant need of reliable, accurate and secure data to perform their daily duties efficiently and effectively. It is essential that landscape architecture educators assume the leadership role in these inquiries, primarily because they are uniquely positioned to monitor key aspects of the profession (Taylor, 2003).

The primary goal of the creation of this database is to help schools with their methods in shaping the next generation of landscape architects so that they understand the full weight of the profession they are entering into and are capable of carrying that weight forward into concrete reality. Therefore schools must understand how they are performing their work and how their approach relates to the rest of the academic units teaching landscape architecture. A database that enables educators to look, not only at themselves clearly but also provides them with the ability to compare themselves to other units will help them maintain contact with, "present problems."

Current Research on Schools

There are currently several organizations which collect information on landscape architecture schools. The research contained here examines the methods of four of these organizations.

These are the Landscape Architectural Accreditation Board, the International Federation of Landscape Architects, the European Federation of Landscape Architects and *Design Intelligence*. The first three not-for-profit organizations collect and distribute their data at no charge to the public; the fourth, *Design Intelligence*¸ charges for their data analysis.

The Landscape Architectural Accreditation Board, LAAB, is an autonomous committee of ASLA and consists of three landscape architecture educators, three landscape architecture practitioners (public or private practice) three representatives of the public (cannot be landscape architects) and a representative each from ASLA, the Council of Educators in Landscape Architecture (CELA) and the Council of Landscape Architectural Registration Boards (CLARB). LAAB is recognized by the Council for Higher Education Accreditation (CHEA) as the accrediting body for landscape architecture programs in the United States.

LAAB states that its mission is to, "to evaluate, advocate for, and advance the quality of education in landscape architectural programs… LAAB is the accrediting organization for landscape architectural programs. As such, LAAB develops standards to objectively evaluate landscape architectural programs and judges whether a school's

landscape architectural program is in compliance with the accreditation standards" (website, 2007).

LAAB collects its data in two ways: First through an annual report that all accredited schools must complete; and second through a report that LAAB asks schools seeking re-accreditation to complete. Accredited schools must reapply every six years to LAAB for re-accreditation.

The report is not available online and that has been a concern of academic administrators for several years who would prefer the opportunity to fill it out electronically. LAAB is currently working on creating an online version of this annual questionnaire.

This annual questionnaire gathers data on the institutional character of the academic unit such as the degrees offered, the length of the curriculum and the current student enrolment. Short, descriptive passages on the programs mission and objectives, their emphasis and locale description as well as significant faculty and student accomplishments are required. Administrators must tally the number of degrees they have awarded during the past academic year as well as the activity of these current graduates. They must list the number of applications they received as well as the number of students that they accepted and their country or state, if born in the United States, of origin. A detailed breakdown of financial allocations is required. Finally, administrators are asked to state the major changes that have occurred at their unit in the past year.

The LAAB also goes to schools on a six year interim and reviews the academic unit to determine if they qualify for re-accreditation. Part of this process entails having the academic administrator complete a 'Self-Evaluation Report'. The instructions prefacing the report state that, "it is in the program's interest to examine itself carefully and present information in a clear and concise manner… The visiting evaluators, assigned by the Landscape Architectural Accreditation Board, will review this report prior to and during their visit, approaching the task as colleagues interested in understanding the program and its stated objectives within the framework of the institution and the accreditation standards" (website, 2007). These reports yield valuable data, both qualitative and quantitative, about the academic unit.

Administrators are required to write descriptive responses to inquiries. They are asked to relate the history of their academic unit, to illustrate their current strengths and weaknesses and to describe what students must know and be able to do upon graduation. The program's academic mission, goals and objectives need to be expressed. Administrators must explicate how the program collects information about student learning and how it uses this and other resources to make progress towards attaining the academic units goals. They are required to outline plans for improvement and to discuss long-range goals in terms of the next five to ten years. The report also asks administrators to highlight anticipated changes in the program's resources, mission and objectives in the foreseeable future.

Administrators must explain how their academic unit has the authority, resources and institutional support to achieve its educational objectives, including in

that explanation the number of faculty, the budget, and other resources. They are obliged to indicate the chain of administrative responsibility, beginning at the institutional level and moving into the program. They must describe how their unit relates to other educational units. A listing of faculty and titles is necessary along with the policies and procedures on academic rank, promotion and tenure and other faculty policies.

These and numerous other inquiries compel the academic unit to study itself and the areas where they are in need of improvement and refinement. The LAAB accreditation report is a wealth of valuable data on the academic units that are required to complete it. Yet there are several critical flaws that prevent it from being a fully functional tool for academic administrators. The greatest of these is the fact that all information is collected in hard format and is not processed into a digital format. This prevents it from being made available to other administrators and does not enable the academic unit that completed the lengthy survey to utilize it as an organized database for future uses. Another problem is that, being an extension of ASLA, the LAAB report seeks to investigate only those academic units in the United States and anyone studying the resultant data would not have a global perspective on the teaching of landscape architecture.

The International Federation of Landscape Architects is similar to the American Society of Landscape Architects but seeks to represent professionals in nations outside of the United States. They, “represent the landscape architectural profession globally, providing leadership and networks supporting the development of the profession and its

effective participation in the realization of attractive and sustainable environments." (IFLA website) In 2004 they published a document online edited by Annaliese Bischoff who is an associate professor in the Department of Landscape Architecture and Regional Planning at the University of Massachusetts. The 421 page report lists basic information on landscape architecture schools throughout the world and is available at no charge on IFLA's website. Two typical samples are reproduced here:

Table 1.1 Report on the University of Buenos Aires in Guide to International Opportunities in Landscape Architecture Education and Internships

School	Universidad de Buenos Aires, Argentina
Survey Data	2002
Degrees Granted	• Landscape Designer (LD) & Specialization degree in Landscape Planning (SLP) • Landscape Designer (LD)
Current Program Enrollment	29
Address	Carrera de Diseno del Paisaje Facultad de Arquitectura Diseno y Urbanismo Ciudad Universitaria - Pabellon 3 (1428) Buenos Aires, Argentina
Tel	54 1 4789 6288
Fax	54 1 4576 3205
Contact Tel	Jorge J. Cortinas, Chair 54 1 4789 6288
Email	dispai@fadu.uba.a
Web	www.fadu.uba.ar/home-carreras.html
Year Initiated	1993
Number of degrees awarded to date	10
Average number of graduates yearly (past three years)	3

Table 1.1 - continued

CELA affiliated	no
ECLAS affiliated	(left blank)
Government/national sanctioned	(left blank)
Admission requirements	High School Certificate and CBC (an introductory course consisting of 6 subjects to enter University)
Application deadline	October
Application fee:	Free
Curriculum	This program emphasizes the study of landscape design, the relation between human civilization and nature, including the artistic and cultural environment. It comprehends scientific and technical subjects as well as urban and rural planning.
Areas of specialization available	Landscape planning designer
Graduation requirements	The graduate degree is granted upon completion of 3300 credit hours.
Typical length of program	CBC & 4 years.
Special facilities	Computer stations; CAD; landcad; library
Annual tuition and fees	• In-state or citizen: Free • International or non-citizen: different situations, students can consult with the contact. • Financial aid available
Full-time faculty assigned to program	(left blank)
Part-time faculty assigned to program	24
Faculty Listing	
Mirta ala Rue, Architecture (UBA), ESP in landscape architecture (UBA)	Landscape history I & II.
Gloria Brener, Architecture (UBA), ESP in landscape architecture (UBA).	Open Space Management
Marta Ibarborde, Architecture (UBA), ESP in landscape architecture (UBA)	• Introduction to landscape management and design • Morphology I, II, & III
Martha Manzella, Architecture (UBA)	Vegetation II
Carlos Thays, Agricultural Engineering (UBA)	Vegetation I
Brisa Varela, Lic, (UBA)	Geography
Horacio Wilder Larrea, Architecture (UBA), ESP in landscape architecture (UBA)	Landscape planning and design I, II, & III
International exchange programs:	(left blank)
Are international student exchange programs offered?	No
Are international faculty exchange programs offered?	No
Students required to fulfill a work internship during their studies?	No

Table 1.2 Report on the University of Texas at Arlington in Guide to International Opportunities in Landscape Architecture Education and Internships

School	The University of Texas at Arlington, United States
Survey Data	2002
Degrees Granted	Master of Landscape Architecture (MLA)
Current Program Enrollment	60
Address	Landscape Architecture Program School of Architecture UTA Box 19108 Arlington, TX 76019
Tel	(817)272-2801
Fax	(817)272-5098
Contact	Pat D. Taylor Director of Landscape Architecture Tel: (817) 272-2801
Email	lindawilson@uta.edu
Web	www.uta.edu/architecture/pages/bprograms/blandsc.html
Year Initiated	1975
Number of degrees awarded to date	421
Average number of graduates yearly (past three years)	5
CELA affiliated	yes
ECLAS affiliated	(left blank)
Government/national sanctioned	(left blank)
Admission requirements	1000 minimum, GRE; 3.0 undergraduate GPA; TOEFL 600; undergraduate degree from an accredited program. Portfolio review for those with undergraduate design degree.
Application deadline	Summer - April; Fall - June; Winter - October
Application fee:	$25.00
Curriculum	The University is located in the center of a metropolitan area with a population of over 5,000,000 and the courses in UT Arlington's MLA program are taught during afternoon and evening hours. The student body is mature and experienced with many coming from diverse backgrounds and countries. Students have won many national research and design awards.
Areas of specialization available	The program focuses on problem solving strategies through its emphasis on design and applied research principles.
Graduation requirements	92 credit hours; all students must maintain a GPA of at least 3.0; advanced standing possible for people with first professional degrees in landscape architecture or degrees related to landscape architecture.
Typical length of program	2 to 3 years

Table 1.2 - continued

Special facilities	Computer labs, model shop, visual resources center, partial evening program, local office and agency visits and local project visits, Dallas Arboretum, Fort Worth Botanic Garden.
Annual tuition and fees	• In-state: $1296 • Out-of-state: $3972
Full-time faculty assigned to program	4
Part-time faculty assigned to program	3
Faculty Listing	
Gary Robinette, BSLA/MLA, (Michigan State)	Associate Professor
Richard Rome, BLA, (LA State University); MLA, (University of Texas - Arlington)	Associate Professor
Pat D. Taylor, BS (Texas Tech), Ph.D. (Texas, Austin)	Introduction to landscape management and design / Associate Professor / Program Director
Ogden L. Bass III, BS and MUP (Texas A&M),	Part-time Adjunct Professor
International exchange programs:	International student or faculty exchange programs are not currently offered.
Are international student exchange programs offered?	No
Are international faculty exchange programs offered?	No
Students required to fulfill a work internship during their studies?	Students are required to fulfill work internship during their studies. Length: 15 weeks. Students receive credit for work. Students do not receive payment for work. Six years of university study is required to participate in internship program: Special comments: A 320 hour practicum is required as a part of the curriculum. Opportunities usually abound in the metropolitan area among its numerous private and public offices.

While these reports offer a variety of information on the academic units, the data are not generally more revealing than what could typically be found on the programs webpage. Furthermore several of the data are dated and inaccurate. For example, the tuition at the University of Texas at Arlington has been raised three times since 2004, only two of the faculty members listed in the report are currently teaching there and international exchange programs are now offered to students.

Therefore this report, while comprehensive in its international scope, does not depict accurately or thoroughly the programs that are listed.

The European Federation of Landscape Architecture seeks to encourage the development of landscape architecture in the European Union and Switzerland. Specifically to, "to help promote study and research, the exchange of knowledge and technical information" (website, 2007).

EFLA's Education Committee works with the European Council of Landscape Architecture Schools (ECLAS) and European Landscape Education Exchanges (ELEE) and European Landscape Architecture Students' Association (ELASA) to further these aims. They maintain a list of EFLA recognized landscape schools and also publish details of each of the schools on their web site. Two samples are reproduced here.

Table 1.3 Report on Lippe and Hoxter University of Applied Sciences on the education section of EFLA's website

Department / School	Landschaftsarchitektur und Umweltplanung Abteilung Höxter
Faculty / Level	Bachelors / Masters / Masters
Options	• Landscape architecture & Landscape management • Landscape science • Landscape planning Landscape Designer (LD)
Duration	• Three years • Two years • 3 semesters
Contact Address	Wilhelmshöhe 44 D 37671 Höxter
Web	http://www.fh-hoexter.de

Table 1.4 Report on Manchester Metropolitan University's School of Landscape on the education section of EFLA's website

Department / School	Manchester Metropolitan University, School of Landscape
Faculty / Level	Bachelors
Options	Landscape architecture
Duration	Not listed
Contact Address	Dr D. Pope Lower Chaltam Street M15 6HA Manchester +44 161 247 11 01 +44 161 247 63 90
Website	http://www.mmu.a.c.uk

EFLA is also compiling a 'blue book' of landscape schools. This information is currently being collected and will be placed on their web site under the Education section. Unfortunately this was not available at the time of this writing and no published copy was available. Repeated contacts to EFLA to determine when this would be available and the possibility of seeing sample selections were unsuccessful. They state that, "currently only a proportion of schools have returned the detailed questionnaires which list level, period of study and specialisms" (website, 2007)

Currently EFLA's data on schools provides only the most cursory assessment of the program and persons seeking a more detailed analysis are directed toward the programs website.

One other organization researches landscape architecture programs, a US magazine publication entitled, *Design Intelligence.* They publish an annual report where landscape architecture academic units located solely in the United States are

ranked. This information is sold in magazine format and is also available online for thirty dollars.

Their method for ranking, "American's Best Landscape Architecture Schools," is based on interviews exclusively with professionals responsible for hiring landscape architects at their firms and their experience with new employees. Specifically:

> The… annual America's Best Landscape Architecture Schools study ranks accredited undergraduate and graduate landscape architecture programs from the perspective of practitioners. The study, conducted in mid-2006, targeted professionals at leading US landscape architecture firms as well as those that work in the public sector. The study captured these organizations experience with landscape architecture graduates during the past five years, asking respondents to indicate which schools have produced the best prepared graduates. Participants were required to be directly involved in the hiring and performance of graduates (*Design Intelligence,* 2007).

The magazine then proceeds to list the "Top 15 Landscape Architecture Programs - 2007." There is a list for the undergraduate and graduate level. Following that list is another entitled, "Skills Assessment Rankings," which list the three schools which they believe excel in the following areas:

- Design
- Construction methods and materials
- Research and theory
- Sustainable design practices and principles
- Analysis and planning
- Computer applications

- Security design principles

This ranking is again based, "on hiring experiences of the firms surveyed… as determined by leading firms" (editor, 2007).

No other information on the schools presented is provided. Readers are simply presented with the lists and an article on their methodology.

Rankings are controversial in and out of academia. *Design Intelligence* itself acknowledges this and published an article in 2007 by Burley and Orland who are the directors of the landscape architecture program at Michigan State and Penn State respectively. Their article questions the value of *Design Intelligence's* methodology. Specifically:

> [Their] approach has some merit – after all, those of us in education are very interested in evaluating the outcomes of our programs. However, in these still early stages of developing rankings it is necessary to apply some caution. For instance, until a stable and regular reporting source is developed, it is inevitable that the results from year to year may be quite unstable. While some instability exists, the schools usually do not evolve or rapidly change as the results might suggest… Another factor hard to capture is the variability in the needs and thus values of the responding firms and agencies and how that reflects on the equally variable strengths and weaknesses of individual schools (Burley, 2007).

The broader idea of schools being able to shape the student in a formidable way has also been thrown into question. Gladwell questions the validity of all rankings systems by stating that:

> At the heart of the American obsession with the Ivy League is the belief that schools like Harvard provide the social and intellectual equivalent of Marine Corps basic training—that being taught by all those brilliant professors and meeting all those other motivated students and

> getting a degree with that powerful name on it will confer advantages that no local state university can provide. Fuelling the treatment-effect idea are studies showing that if you take two students with the same S.A.T. scores and grades, one of whom goes to a school like Harvard and one of whom goes to a less selective college, the Ivy Leaguer will make far more money ten or twenty years down the road.
>
> [However,]Three years ago, the economists Alan Krueger and Stacy Dale published… a study. And they found that when you compare apples and apples the income bonus from selective schools disappears.
>
> "As a hypothetical example, take the University of Pennsylvania and Penn State, which are two schools a lot of students choose between," Krueger said. "One is Ivy, one is a state school. Penn is much more highly selective. If you compare the students who go to those two schools, the ones who go to Penn have higher incomes. But let's look at those who got into both types of schools, some of whom chose Penn and some of whom chose Penn State. Within that set it doesn't seem to matter whether you go to the more selective school. Now, you would think that the more ambitious student is the one who would choose to go to Penn, and the ones choosing to go to Penn State might be a little less confident in their abilities or have a little lower family income, and both of those factors would point to people doing worse later on. But they don't" (Gladwell, 2005).

Design Intelligence is the only publication that researches and ranks landscape architecture schools and their annual issue in which these rankings appear is consistently their number one seller. Their research is controversial in the field and the data that are provided in their report do nothing to provide an assessment of the programs that they rank.

These four organizations that gather data on landscape architecture academic units are therefore deemed inadequate to program administrators, educators and students in need of data on a certain academic unit or a group of units. No organization looks at units in clusters; for example, all of the schools in France or in the southwestern United States. The data that are collected by LAAB is of great value but

it is not organized and easily accessible. IFLA and EDRA do provide comprehensive lists of programs that are well organized and are readily accessible but the data provided are similar if not identical to what could be found on the unit's website. *Design Intelligence* is the only organization that provides a direct comparison between the academic units yet its methodology is one-dimensional and their end result is a simple list of schools with no other data to verify or describe how these schools educate their students.

CHAPTER 2

RESEARCH METHODS

Creating the Academic Information System

Many people in the profession recognized the need for a comprehensive, accurate and accessible academic database. In 2000, as part of a process to assess the issues facing their organization, CELA's Executive Board participated in a planning exercise to clarify the collective thinking of organizational leaders about the future direction of the organization. At this meeting, CELA's "top six needs that will shape our future," were identified and stated as follows:

1.) Expanding the promotion of landscape architecture scholarship.

2.) Recognizing teaching innovations and publicizing them.

3.) Clarifying and refining CELA's mission, mandate and role.

4.) Being more aggressive in promoting landscape architecture education.

5.) Strengthening ties to other educational organizations, such as the Association of Colleges and Schools of Architecture (ACSA), the Environmental Design Research Association (EDRA), and so forth.

6.) Increasing revenues.

CELA then translated these needs into a series of action plans. One of the initiatives was the formation of the CELA Task Force on Academic Statistics. This task force would go on to create the database system that is the focus of this paper.

CELA organized a Task Force to work on the Academic Information System in 2002. This included the following members:

Dr. Pat D. Taylor, Chair, The University of Texas at Arlington (UTA)

Dr. John "Jack" Ahern, The University of Massachusetts

Dr. Amy Archambeau, U.S. Army Corps of Engineers/UTA

Prof. Mark Boyer, The University of Arkansas

Dr. Jon Burley, Michigan State University, Ex-officio

Mr. Theunis Devilliers, Graduate Research Assistant, UTA

Prof. Gary Kesler, The University of Illinois, Ex-officio

Mr. Ron Leighton, American Society of Landscape Architects, Ex-officio

Dr. James F. Palmer, SUNY ESF/Landscape Journal, Ex-officio

Mr. Lionel Plummer, Graduate Research Assistant, UTA

Dr. Taner R. Ozdil, Assistant Professor, School of Architecture, UTA

Prof. Art Rice, North Carolina State University

Ms. Janet Singer, Council of Educators in Landscape Architecture, Ex-officio

Mr. Abid Hafeez, Research Assistant, School of Engineering, UTA

The Task Force changed the name of the committee from the CELA System on Academic Statistics to the CELA Committee on Academic Information, and recommended that the database system be called Academic Information System

(AIS)… because the data this system needs to encompass are not purely statistical. Instead, they include both quantitative (statistical) and qualitative (textual) information to address identified needs (Taylor, 2003).

Phase I on the development of this Academic Information System entailed obtaining information to help define the problem better. Below are some typical (paraphrased) comments taken from meetings Taylor held with other academic administrators starting in 2003 about the landscape architecture profession's current state of affairs with respect to academic information:

- Every time we are asked something (about an academic program, about the profession, and so forth) we have to start from scratch. We develop information for various purposes (for example, the annual report submitted to LAAB through ASLA), but we never see it summarized, compiled or maintained. We treat data as if they were disposable.
- We need to be able to produce data that faculty and program, heads can readily use in applying for grants and other funding.
- We need data at hand about our academic programs that can be used to 'lobby' and 'tell our story' to deans and other university administrators.
- Good data can help us gain support for our programs within our university systems.
- We need to capture data that can be used to demonstrate the importance of the profession to society.

- With good data, we may be in a position to demonstrate the economic impact of landscape architecture.
- We need data that are 'renewable' and able to be built upon (data collected and maintained in a standardized form).
- It is almost impossible for our profession to study itself without the use of standardized data that are collected regularly and made available for research.

These comments made it evident that there was a strong desire for a database where schools could study themselves as well as efficiently respond to requests from outside of their departments for information about their academic unit. Their comments also showed an interest in qualitative information so that certain unquantifiable factors such as the way in which studios are taught could be included. These types of data are typically available only in hard copy with nonstandardized formats, and acquiring such data requires patience and time on the part of an investigator to track it down through phone calls, emails and/or other personal contact. For the dean of a department to ascertain precisely how her school compares to others with respect to credit hours required in plant material courses for example, a tedious and time-consuming investigation would be needed.

CELA conceived of an idea whereby a data base would be created that would also be a "self-describing collection of integrated records" (Taylor, 2001). Self-describing means that the system contains within itself a description of its own structure as part of the data that it stores. Integrated means that, " relationships exist among the

records to bind them all into a cohesive, logical system" (Archambeau, 2003). Academic administrators would be holding a virtual mirror up their program when they delved into the AIS and explored how, what and why they have been educating their students.

As a starting point to identify AIS's information requirements, members of CELA compiled input about the types of inquiry that typically confront them. These inquiries were informally labeled "the big questions."

Taylor and Archambeau then outlined what the expectations and criteria were among the various parties interested in seeing the AIS become a reality. These "stakeholders are important all through the process of designing and implementing AIS, because their inputs shape the ultimate system, the kinds of access/security the system is to have, and the things users can do with the system (Taylor, 2003). The following chart identifies what these "stakeholders," expected and needed.

Table 1.5: Differing expectations and criteria for AIS stakeholders

Stakeholder Group	**Expectations/Criteria**
Faculty member, researcher	Is the system easy to use? Is the system well documented? Does it provide complete, up-to-date information? Does it enable and support research?

Table 1.5- Continued

Programme administration	Does the system aid in managing the programme? Does the system reduce administrative paperwork? Are information-input processes simple and intuitive? Is information accurate, timely, and easy to obtain? Is the system secure from unauthorized use?
CELA Executive Director, Board members	Does the system help CELA provide better service to members? Does the system provide complete summary data? Are there mechanisms to ensure system security?
System operators/administrators	Is the system easy to operate and maintain? Is the technical documentation up to date? Can changes be made easily when users I request them?

Table 1.5- Continued

National agencies (American Society of Landscape Architects/ASLA, Landscape Architecture Accreditation Board/LAAB, Council of Landscape Architecture and Registration Boards/CLARB)	Does the system provide complete and accurate information about professional education? Does the information support and facilitate processes such as accreditation and registration?

From this chart is can be ascertained that CELA faces the same dilemma that has faced many organizations in the past: how to keep track of things that are important to many people, with different needs, who are in many different locations. There are some key points to keep in mind about the present situation:

1.) CELA, through its members and the institutions with which they are associated, has access to a great deal of information.

2.) That information can be much more valuable if it is organized and maintained.

3.) A database is the best way to organize and maintain most types of data.

4.) A relational database system provides the most flexibility when there are various user subgroups, each with unique needs (Taylor, 2001).

After all the analysis of the needed data there rose to the surface only three major categories that the CELA academic information system will need to keep track of:

1.) Institution

2.) Program

3.) Person

The Building of the AIS

Archambeau detailed a strategy for the collection and use of these data in her 2003 thesis. Specifically she discussed how, "to begin and productively move forward with the processes of collecting, protecting, accessing, managing, and using information that is of strategic importance to landscape architecture educators, academic programs, and the profession as a whole" (Archambeau, 2003). She also proposed that the collection of these data could be accomplished through a comprehensive survey to be completed by academic administrators on all aspects of their various programs. She recommended that this survey be instituted through The Council of Educators in Landscape Architecture because CELA had publically expressed its interest in an academic data system for a number of years (Archambeau, 2003).

The team had originally conceived of a vision whereby each school could develop a standard word processing document template to serve as the framework of institutional profiles for each college or university with a landscape architecture program. They further recommended that this template be designed to provide a measure of flexibility, in acknowledgement of the fact that institutions are not identical. They proposed a system whereby each institution could complete a profile with relevant information and any necessary explanatory information in a standard format. A new profile would be required only when changes to the current profile occur.

These profiles would then be translated into web pages and loaded on a CELA designated web server. The profiles would then be accessible to whatever audience is deemed appropriate. That is, these profiles can be made broadly available, or access can be restricted by means of access protocols, including user identification numbers and passwords. Alternatively, portions of the profiles could be handled in the same way. One example would be the project team deciding that anyone, including the general public, can see basic information about a certain landscape architecture program but that only program administrators or educators can see information about tenure guidelines.

The team strongly recommended that institutions be encouraged to stay within the guidelines of the format to the degree practical because if all institutions compile their profiles using the same basic format, this will greatly facilitate such inquiries (Archambeau, 2003).

In order to compile these profiles the team agreed that a survey should be sent to the academic administrators to gather the necessary data. This survey would be the heart of the process of creating the Academic Information System. It would need to be broad enough to provide a complete picture of an academic units portrait and precise enough to be valuable to educators in need of the smallest level of detail on how they operate. Meeting twice weekly, team members spent a full year writing and formatting the design of the survey questions. All of the LAAB annual report questions were included in the survey as it was hoped that the two data collecting entities (LAAB and AIS) might one day merge. These questions appear in their entirety in appendix 1.

Basic information on the academic unit itself such as the name of the unit, which degrees are offered, how it is ranked according to the Carnegie ratings and which of the eight CELA regions the unit falls into are asked to help to categorize the unit and enables comparisons with other units based on these categories. However, questions on the administration and organizational structure of the unit focus more specifically on determining how the unit functions on a managerial level and what the nature of their relationship with the organization (university) in which they are housed. There are also questions as to how much the academic unit spends specifically on faculty salaries and other expenses. Units are required to list the various degrees that are offered as well as how they develop themselves financially. How the units' enrollment and applications processes are handled is investigated to learn how selective it is in enrolling students and how desirable it is among prospective students.

Questions on alumni seek for the academic administrator to disclose the methods and how frequently his or her unit maintains contact with its graduates. It also asks the respondent to disclose the present occupation of its alumni over the last six years as well as how many students are registered and licensed and what is the typical length of time they need in order to attain that. Thus the CELA team sought to extract the data from the unit that would indicate which ones were producing graduates that focused on professional practice, research, education or government work.

Seeking to determine how the academic unit participates in cross-disciplinary study the survey has a category specifically for questioning their collaboration with other academic units as well as questions on continuing education, professional

development and certification courses. The practice of some schools to treat all architecture, landscape architecture and interior design students as one class in their first year as well as other methods stressing a cross-disciplinary approach would then be revealed. The units formal curriculum was investigated with the intent of revealing not simply the name of courses offered as is seen in many websites but how many total credits in a specific area such as plant material are required to be completed. Entire categories were written to delve into how the academic units handled studio classes, the teaching of construction technology, computer applications and landscape architecture history.

A number of categories were dedicated to faculty members, their credentials and how they are promoted and achieve tenure. Question were written in such a manner not simply to determine the number of faculty members but the awards they have won, where they have earned their degrees and how long they worked in the professional environment as well if they continue to do professional work.

The CELA team wanted to learn of the academic units' international activities and wrote questions asking not only if the unit offers these kinds of activities to students but also how faculty members participate. Questions also determine how many faculty were educated outside of the United States, and how many current students were born outside of the academic units country.

The students themselves are thoroughly analyzed through a variety of question spread throughout several categories. What kinds of awards have they won and at what levels? Does the academic unit help their graduates attain employment and at what

success rate? How many undergraduates pursue advance study? What is the nature of their requirements on practicum's and internships? These kinds of questions were written to determine exactly what an academic units students are currently engaged in and how quickly and successfully they enter into the professional workforce.

The questions were broken down into categories and the categories were arranged alphabetically. This had the benefit of enabling one to find a certain category quickly and as the survey developed in length and complexity this became a necessity. However there was the disadvantage of being unable to locate a specific question unless one knew exactly which category it fell into.

Many of these questions required a written response as opposed to a simple check of a box and the CELA team quickly saw that a balance would be necessary between these two types of questions in order that the survey provide a complete understanding of the unit and yet not be overly lengthy or time consuming for those taking it. When a written response was necessary, and it was always deemed the less desirable option, the question itself was designed to enable the briefest possible explanation sometimes including the words "in one or two sentences provide…"

Creating the Online Version

The next part of the process was translating the written document into a digital format that could be accessed through the CELA website. There primary concern at the outset was how to make the survey easily accessible to the academic administrators who would be utilizing it and at the same time provide a high degree of

security for the data they would enter. The secondary concern was the length of the survey and the team sought to explore every possible manner of providing the survey taker with the ability to click his mouse and move on to the next question rather than set his cursor and be forced to type in a response.

The first decision however was to resolve the issue of securing the data. Many of the data that were going to be entered was highly sensitive: professors salaries, student graduation rates and application procedures are just a few examples. Therefore simply to enter into the pages containing the survey one needed to be given, through CELA's administration, a username and customizable password. The general public would be able to see a description of the Academic Information System and a list of team members who developed it, but not the survey itself.

The team decided to utilize the test takers existing CELA username and password so as to eliminate confusion. An academic administrator taking the prestest would first arrive at the CELA home page. On the left are a series of links one of which will take them to the survey. Once the Academic Information System linked is clicked the user than proceeds to the AIS login page. From there he or she can fill in their username and password and then proceed to the actual AIS website to take the survey, view past reports and or update their current data.

The second decision in this phase was establishing an overall structural design that would provide the website with its visual format. It was agreed that the basic design would be structured on the categories and general layout would remain the same as the word processed version. However certain questions were rewritten so as to

exploit the conveniences afforded in a digital format such as drop down menus and radio buttons. It was also decided that CELA's colors and basic page layout would be maintained for the sake of consistency within the context of the CELA website. As an example, Section 2, Administration and Organization Structure, is shown below.

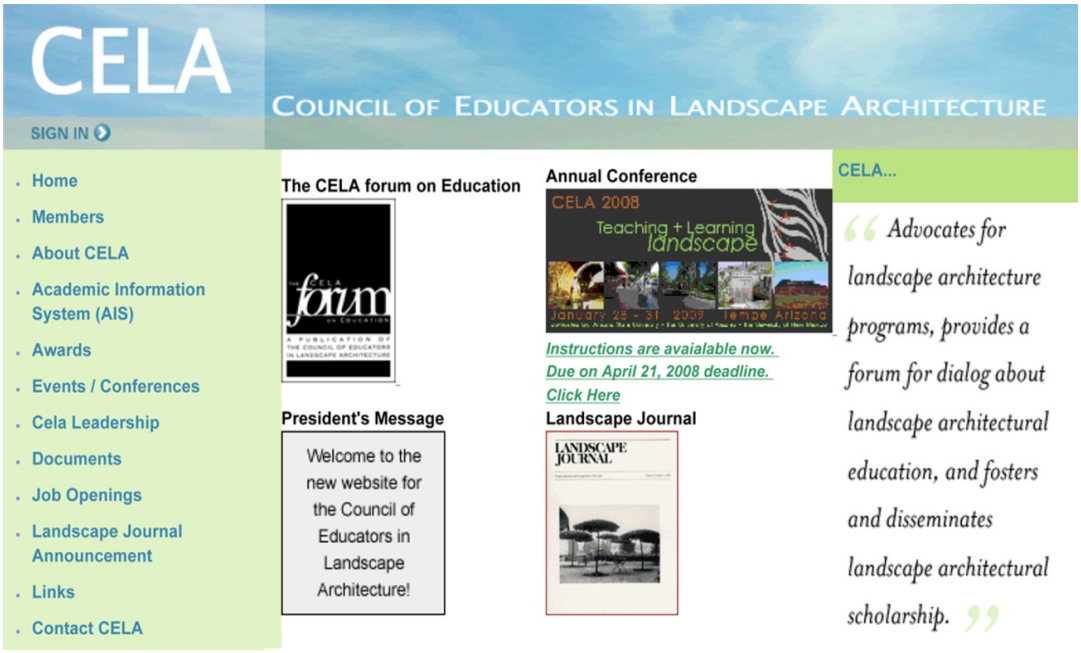


Figure 1: CELA homepage with link to AIS

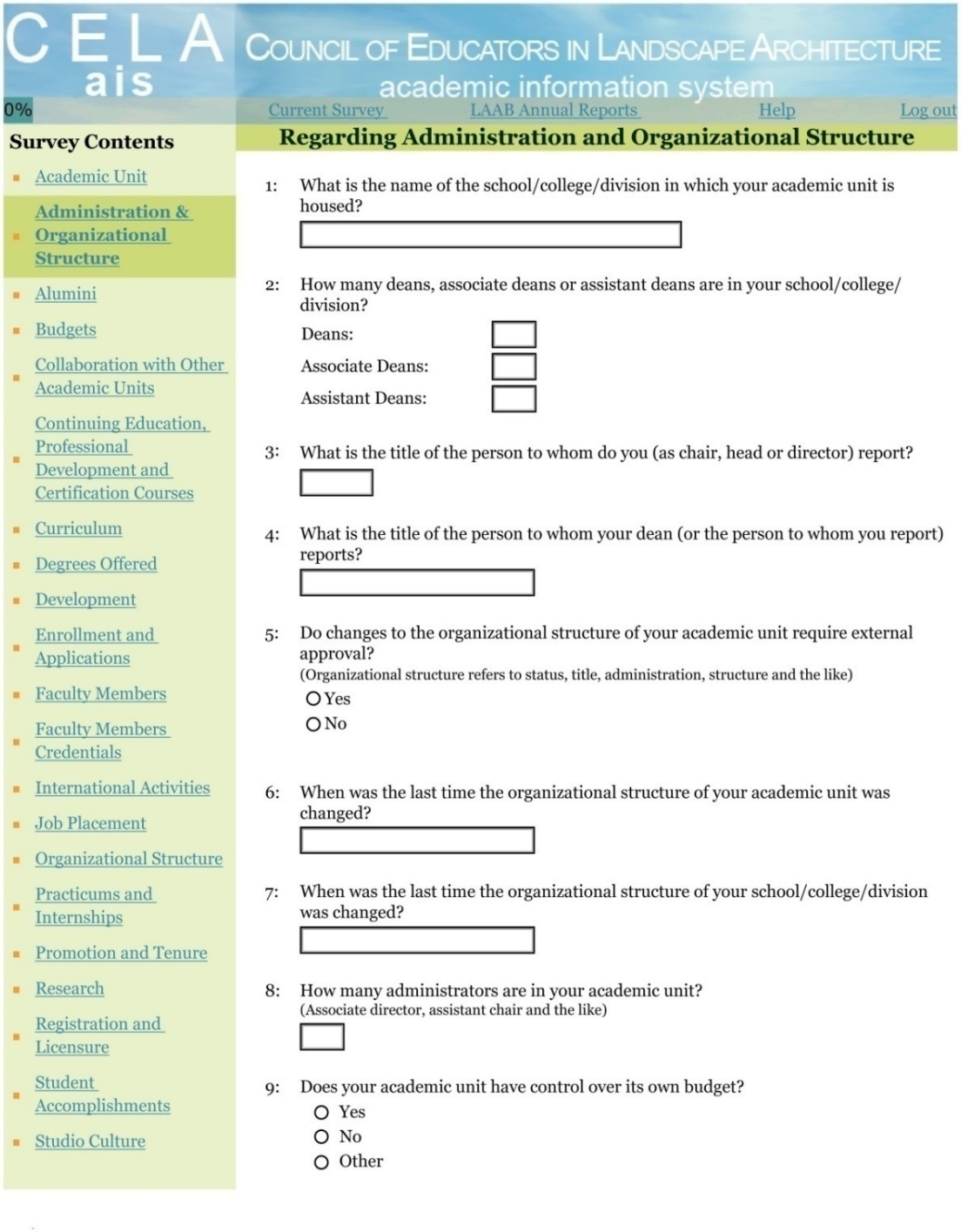
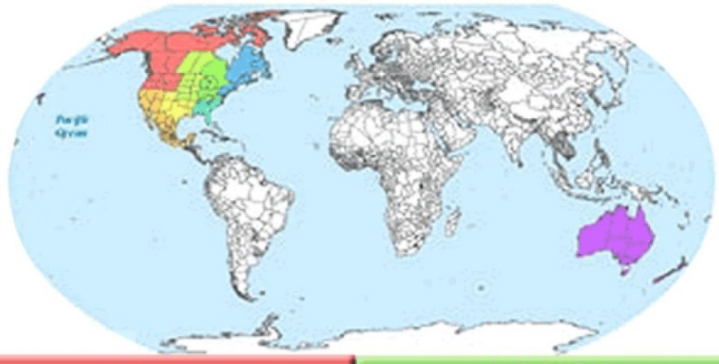


Figure 2: Section 2, Administration and Organizational Structure from the Academic Information System survey in CELA's website (Part 1)

- Student Demographics
- Student's Academic Performance
- Student Recruitment
- Student Retention and Graduation
- The History of your Academic Unit
- The Teaching of Design
- The Teaching of History
- The Teaching of Computer Technology
- The Teaching of Construction Technology
- Qualitative Questions for the Annual Report

10: Who must give your academic unit permission to hire new or additional faculty (part-time or full-time?)

11: Please identify in which CELA region your school is located.



REGION 1
Alaska, Washington, Oregon, Idaho, Montana, Wyoming, the provinces of British Columbia, Alberta, Yukon and Northwest Territories

REGION 2
California, Nevada, Utah, Arizona, Hawaii and the country of Mexico

REGION 3
Colorado, New Mexico, Texas, Oklahoma, Louisiana, Arkansas

REGION 4
North Dakota, South Dakota, Nebraska, Kansas, Minnesota, Iowa, Missouri, and the provinces of Saskatchewan and Manitoba

REGION 5
Wisconsin, Illinois, Michigan, Ohio, Indiana, Kentucky, West Virginia,the province of Ontario

REGION 6
Tennessee, Mississippi, Alabama, Georgia, North Carolina, South Carolina, Florida and Virginia

REGION 7
Pennsylvania, New Jersey, Maryland, Delaware, New York, Vermont, Maine, New Hampshire, Massachusetts, Connecticut, Rhode Island, the provinces of Quebec, New Brunswick, Nova Scotia, Prince Edward Island and Newfoundland

REGION 8
Australia, New Zealand ,Malaysia

Region1

12: Please describe your university's institutional character.
(Please check all that apply)

Figure 3: Section 2, Administration and Organizational Structure from the Academic Information System survey in CELA's website (Part 2)

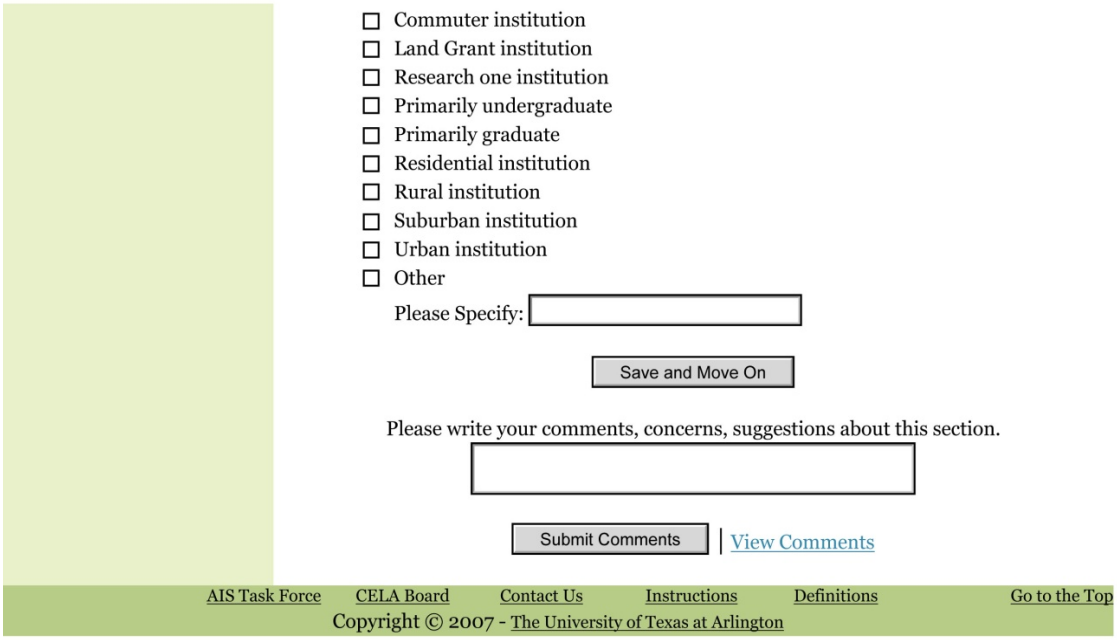


Figure 4: Section 2, Administration and Organizational Structure from the Academic Information System survey in CELA's website (Part 3)

Due to the length of the survey it was assumed that many respondents would not be able to finish it in one sitting. Therefore, survey takers needed to be able to submit parts of their work and leave other parts incomplete and still have the ability to return to the survey days or even weeks later and know what they had completed and what they still needed to work on. It was agreed that information could be submitted by singular category. When a survey taker was satisfied with his or her answers in a particular category, even if they were unable to answer all of them, they would click a button at the end of that categories questions entitled, "Save and Move On." That being done, their data would then be transferred to the database. They could then choose to move

onto another category or close out of the survey. Figure 2 depicts how the categories are listed on each page. Note that the categories are listed on the left with a small square to their left. These appear on every page and the category currently being worked on is highlighted. The small square, initially orange, turns blue when that section has been completed and submitted. This enables users to return to the survey and see exactly what remains in order for them to finish.

It was understood that many would be unable to finish every question in every category due to possible difficulties in obtaining data. It was also agreed that a certain percentage of the survey would need to be completed in order to be able to compare their school data with clusters of others. That percentage has yet to be finalized as of this writing but 70 to 80 percent was a number that many on the team deemed appropriate. For the pretesters no such percentage was required and we asked of them to only complete data for the last academic year.

Upon completing the survey a series of charts and graphs would be made available to the user. These graphics would depict the users school and chart the changes and progressions of various topics over the years past six academic years (assuming of course that they entered the necessary data for those years).

The ideal situation at this point would be to enable the user to type in the question or command of his choosing and see the resultant data appear in a handy chart or graph. For example they could type; “Depict the rise of applications in the last six years.” A graph would then appear showing this data. Unfortunately technical limitations excluded the possibility of providing this feature to users. The team hoped

that with advancing technology this use would be incorporated into the site in the future. Currently though one would be able to view their entered data on demand and could rather easily build these custom charts and graphs themselves.

Presently, the team is researching systems whereby the user, upon completion of the survey, would then be able to see a variety of predetermined charts and graphs depicting his data in ways that were thought to be most useful.

The comparison or his or her data with that of other schools was a core feature of the AIS however, the ability to compare ones data with that of another school was ruled out as an option to protect the individual data entered by each school. No one therefore, would be able to access schools personal data except for the academic administer of that school who had been issued clearance by CELA to participate in the AIS. All data would be available to the CELA team whose job it would be to maintain and modify the AIS. These team members were kept to a minimum for security reasons and as of this writing were limited to four individuals.

In order to allow schools to compare themselves with others while at the same time protecting school-specific data, a solution was devised whereby administrators could compare their school with groups of others. "Comparison by cluster" would enable for example, one academic administrator to compare his school with all of the schools in a certain region of the United States.

The first step in this process was creating the various, 'cluster categories.' These are listed as follows:

1. CELA region

2. BLA only
3. MLA only
4. BLA and MLA
5. Commuter institution
6. Land Grant institution
7. Research one institution
8. Primarily undergraduate
9. Primarily graduate
10. Residential institution
11. Rural institution
12. Suburban institution
13. Urban institution

These categories are broad enough to protect individual school anonymity and yet specific enough to provide one with a valuable series of contrasts.

The next hurdle that the team needed to jump was that of allowing users the opportunity to comment on the survey. This was deemed critical so that all members would be allowed to participate in the creation of the system they would one day be using. The team also looked forward to receiving valuable criticism and suggestions on how to improve the survey itself. It was agreed that at the end of each section a text box would appear asking survey takers to, “please write your comments, concerns, suggestions about this section.”

CHAPTER 3

DATA ANALYSIS

The Pretest

The team then set out a schedule to test the online survey. Ten CELA members from all eight regions were selected. At the annual CELA conference at Pennsylvania State University in August of 2007, Taylor presented to the attendees the progress the AIS team had made thus far. Many of these members had expressed an interest to Taylor in taking part in the prestest.

On October 24 of 2007 Plummer sent these ten members letters indicating that the pretest would begin within the next few weeks and to expect an email with the link which would take them to the online survey (see appendix B). The team then worked at a rapid pace to finish the website and incorporate all of the features that team members deemed necessary. On November 21 Plummer emailed the ten protesters an email containing a hyperlink to the website with the survey. It was assumed that most protesters would need two to three months to complete the survey and the team decided not to set a hard deadline.

By the end of November the team was able to determine that not one pretester had begun to enter data and it was decided to send a follow up email to determine if the

problem had its roots in accessing the website. There were several methods however that the team had in place for the protesters to contact them in case of such problems yet there were no indications that the protesters were trying to contact them. The team assumed the problem could be one or more of the following:

1.) Pretester clicks on the link from the November 21st email to an unsatisfactory result
2.) Pretester clicks on the link and is taken to the survey homepage but is unable to log on because either they forgot their CELA username and password or do not understand that they had been issued one automatically in the past
3.) Pretester is unable to respond to email due to time constraints

Research indicated that many of the pretesters had not accessed the CELA website for several years and were also in arrears on paying their annual dues. The team reasoned therefore that the problem lay with them having to enter usernames and passwords that they either forgot or did not realize they had. Therefore each pretester was issued a new username and password and these were emailed to them on November 30, 2007. By early December the team was able to ascertain that several protesters had begun the process of filling out the survey.

By early January the team decided to set a deadline to end the pretest and began the process of analyzing the data generated. An email was sent out on the 15th of January, 2008 informing the ten protesters that on February 1st the pretest would be over.

Data Generated from Pretests

Out of the ten pretesters invited to participate, five completed the survey to greater or lesser degrees. The data resulting from these surveys was enough to generate samples of the comparative data that the survey was expected to generate; the charts and graphs comparing one's own academic unit to the rest of those in CELA and those cluster categories listed earlier.

A software package that is able to assimilate the data entered and generate of variety of charts and graphs is available and the team is currently looking at a number of options. The following examples will illustrate how the data will appear in its final form. These data have been collected from the pretest and the charts and graphs were generated by Microsoft Excel.

Table 1.6 Graphic representing student employment as generated by AIS pretest data

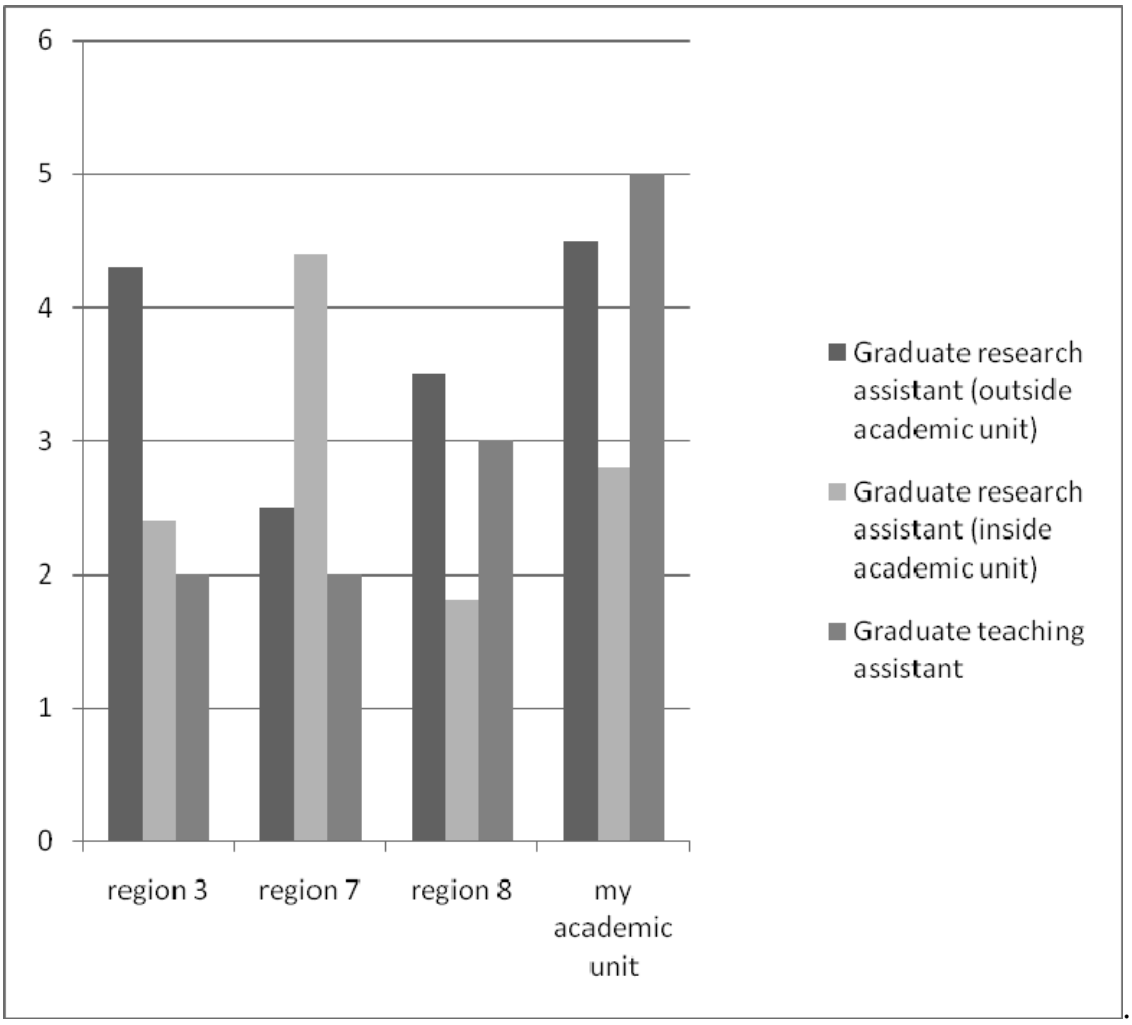
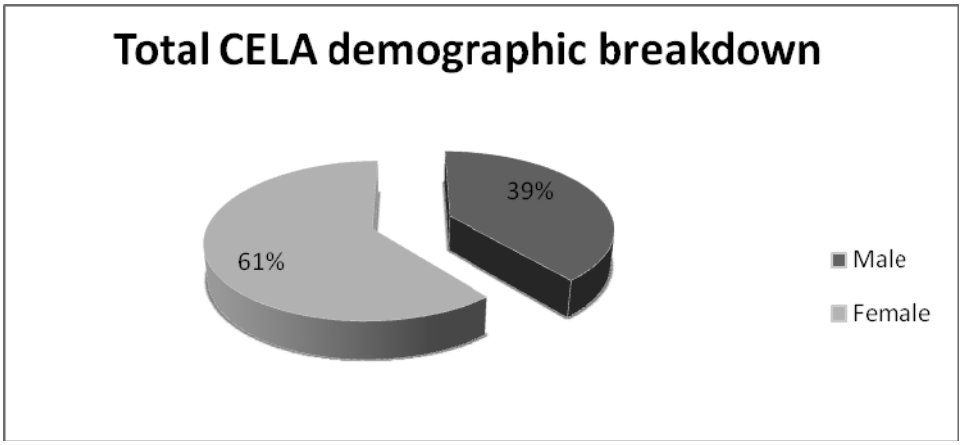
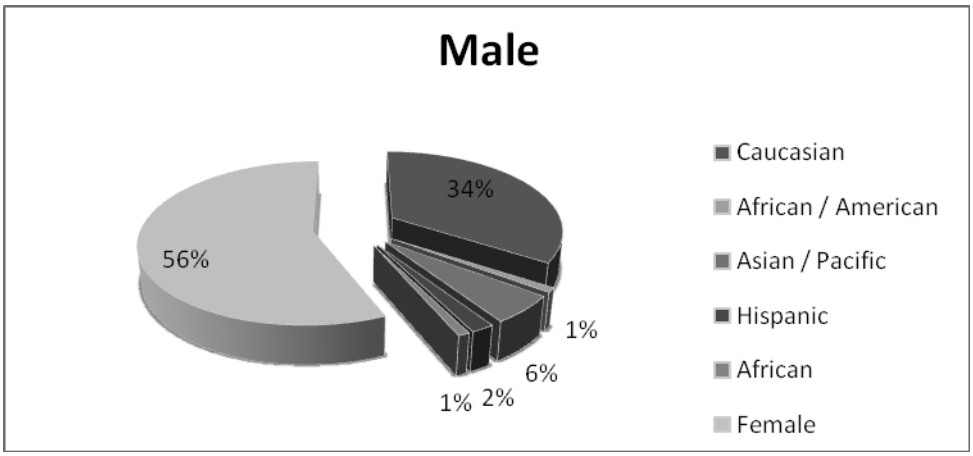


Table 1.7 Graphic representing demographic breakdown as generated by AIS pretest data





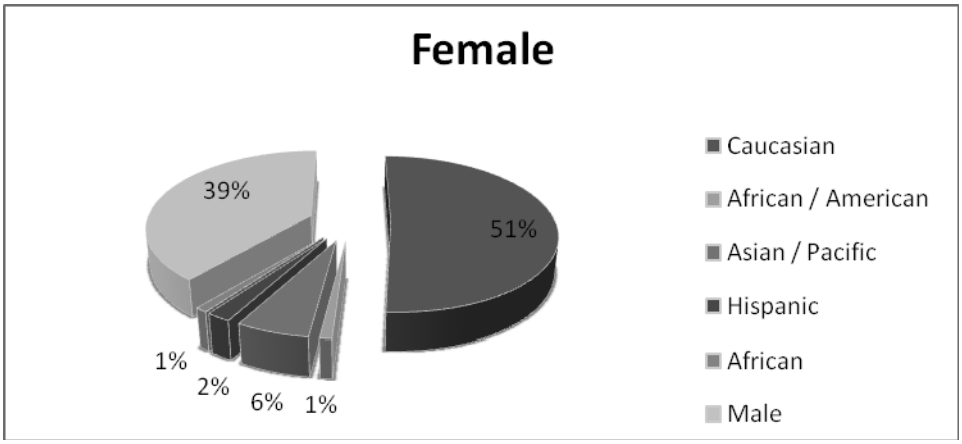
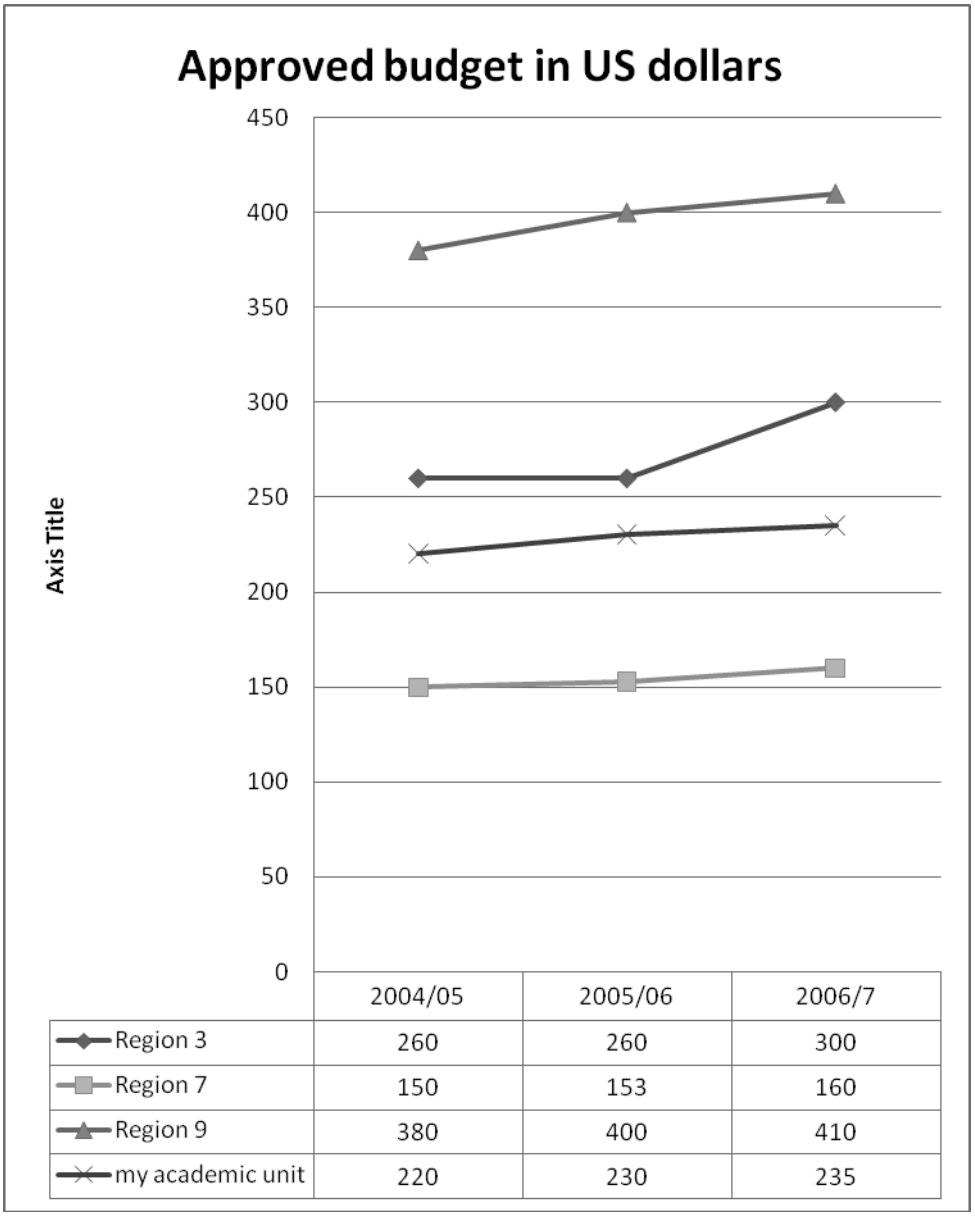


Table 1.8 Graphic representing budgets figures as generated by AIS pretest



	2004/05	2005/06	2006/7
Region 3	260	260	300
Region 7	150	153	160
Region 9	380	400	410
my academic unit	220	230	235

Table 1.9 Graphic representing University type as based on the Carnegie Rating System as generated by AIS pretest

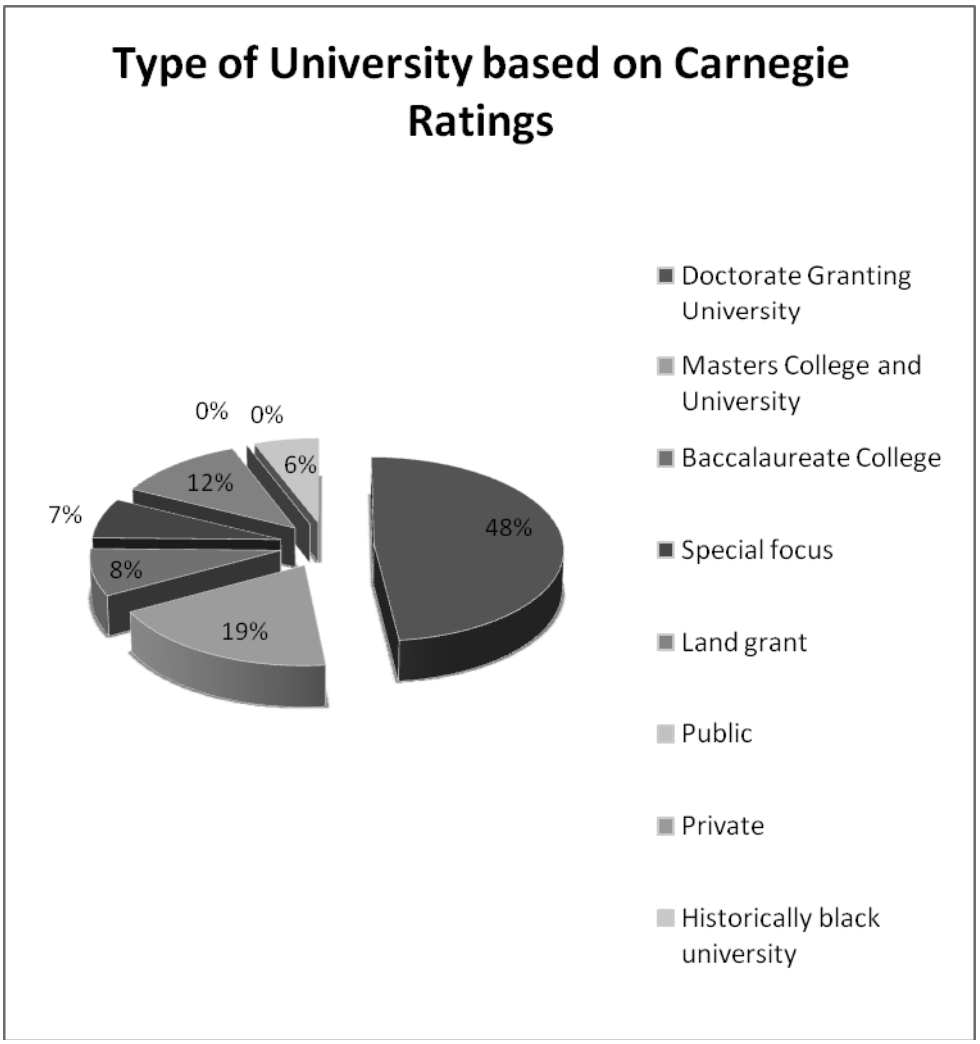


Table 1.10 Graphic representing laptop requirement at academic units as generated by AIS pretest data

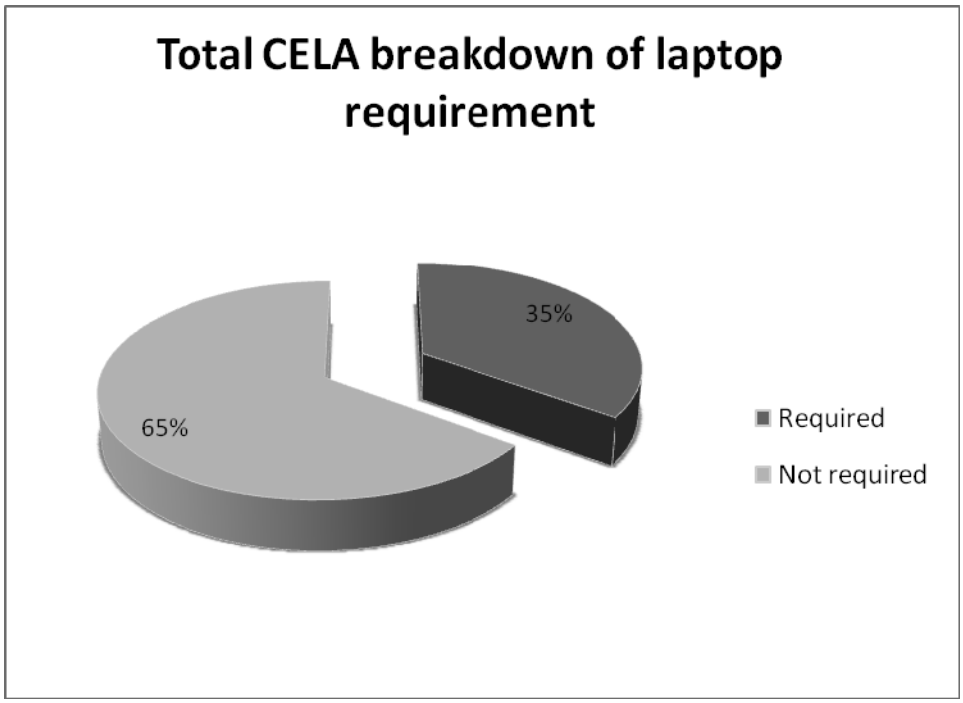
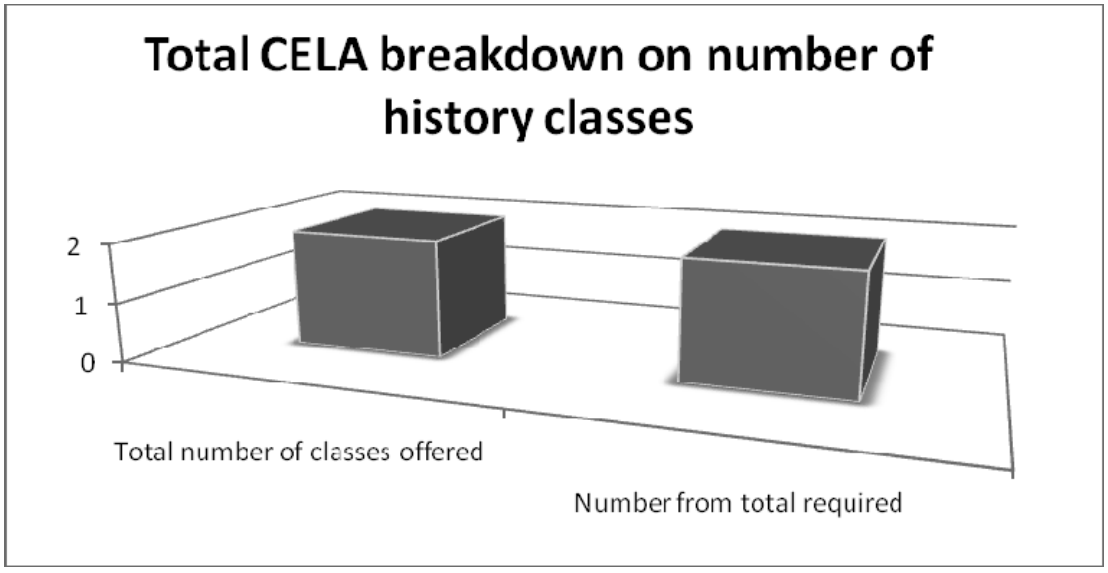


Table 1.11 Graphic representing total number of classes in the history of landscape architecture offered and required as generated by AIS pretest data



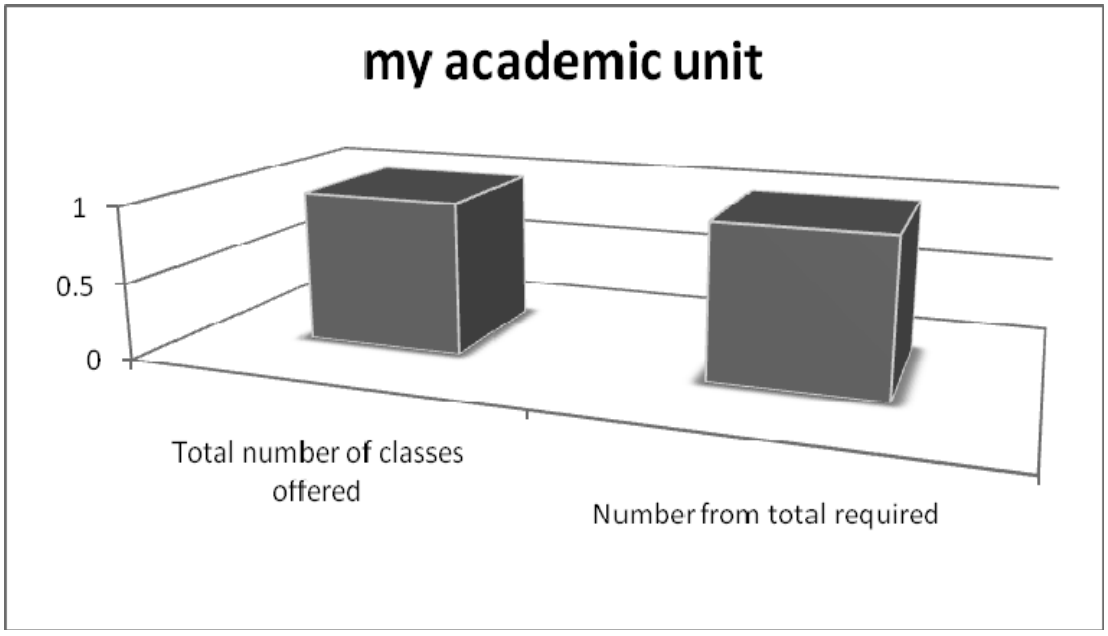
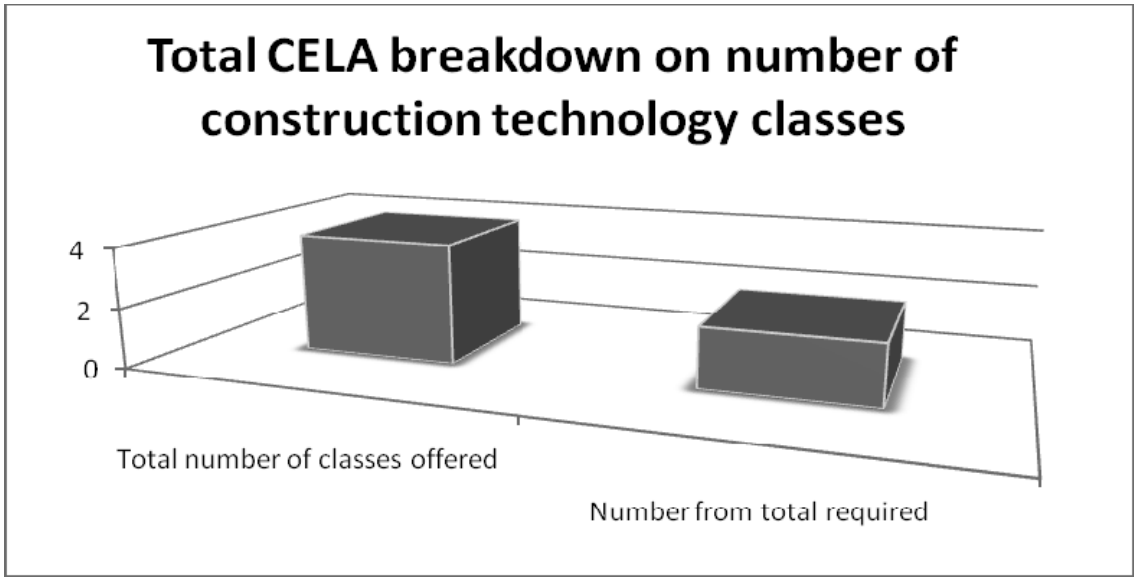
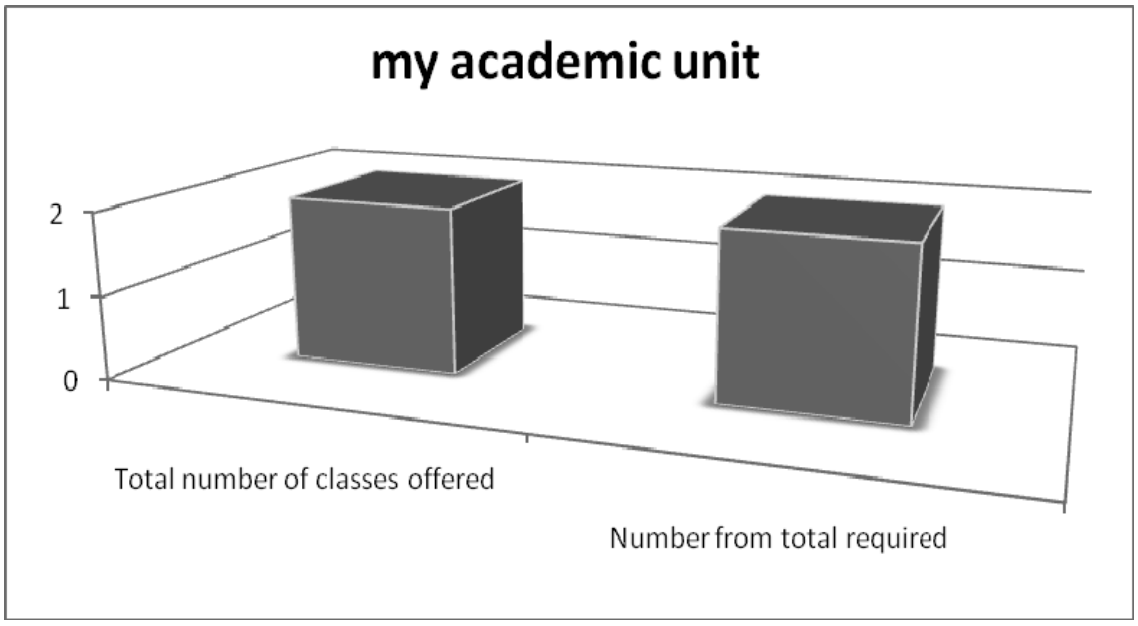


Table 1.12 Graphic representing total number of classes in construction technology offered and required as generated by AIS pretest data





Pretesters Comment on the Survey

Reviewing the comments the pretesters entered while taking the survey the AIS team discovered several oversights. The first being that several of the schools participating were located outside the United States and yet the questions and vernacular was distinctly American English. For example the spelling of the word, 'program' was commented on by pretesters as well as the fact that many of the questions requesting data indicated, 'which state,' instead of which country. The following are some of the comments by pretesters regarding this issue:

- … issues of nomenclature and relevance that I've noted ... so you might want to anticipate in some way that responses from outside the US may vary significantly from the norm you clearly expect
- The categories in 12 are specific to the US
- Our doctoral programme does not follow the US model and so the credit questions are irrelevant
- The questions about nationality presume an American home base- this is inappropriate for CELA The questions about travel could be seen by some staff as an invasion of privacy
- the language/concepts are irrelevant outside the US

Another issue the prestesters had difficulty with was their inability to correlate their faculty structure to the questions presented in the survey. Comments below highlight this:

- Our different budgets are managed and controlled at Divisional level, and I do not have direct access to this level of disaggregated data. Some would be available if I requested it from the divisional administrator. The historic info is probably not complete. We do not have a single one line budget
- Due to the various people who control portions of the budget at _____ University, this section took more time to complete since I could not get in touch with certain people in a timely manner.
- Several of these line items are not calculated per academic unit. Other costs such as computer hardware and software are dependent on the IT department to provide, which is slow to respond.
- Our University has an open entry policy, and so if academically qualified students apply they are accepted. In the event of numbers exceeding our budgeted teaching capacity, additional funding is allocated to hire additional adjunct staff. Doctoral students are enrolled at Divisional level, and many are jointly supervised across academic units. We currently have 8 enrolled in the unit, but are involved in supervising others across the University, and vv.

- The category of 'tenure track' is not used in our institution many of our professional qualifications from the 1970s were awarded as 2 year postgraduate diplomas
- the GPA info is not disaggregated at academic unit level

The other theme that ran through the comments was the length of the survey and the inability to complete this due to time constraints. The comments listed here suggest that the survey was simply too long and complex to be handled by none but the most dedicated participants:

- I have now completed the questionnaire- it took two hours and I have left many spaces unfilled as much of the data you seek is not readily to hand at unit level. Most could be collated but it would require a significant administrative effort. While this might prove useful in the longer run it aint (sic) going to happen quickly...
- The data on adjunct and visiting staff is too extensive and time consuming to collate.
- This type of data (student demographics) is held centrally and would need a specific request at programme level to access. I just don't have time for that at present

- I don’t have publication data to hand- it is recorded centrally by the university and would be difficult to obtain

There were no comments on ease or difficulty of use of the website itself and the team decided that telephone interviews with the pretesters would be necessary to determine more precisely their experience with the survey. It was deemed vital to determine as well why one half the pretesters failed to participate. These telephone interviews were conducted by Plummer with questions approved by the team during the month of March 2008.

Questions asked during a telephone interview:

1. Did you have any problems accessing the survey?
2. What was your overall impression of the website in terms of graphical interface and user-friendliness?
3. Did you feel that you had enough time to take the survey properly? Did you feel rushed while you answered the questions?
4. What was your major concern or problem throughout the entire pre-test experience?
5. Did you see the Academic Information System as an endeavor worthy of your time and efforts in the future?
6. Do you feel it is important for the academic community to have this database available?

7. How would you change the data collection process or do you feel the online questionnaire is sufficient?
8. What was the single most important factor that prevented you from taking the pretest? (To be asked of those who did not participate.)

The first major theme that developed as a result of the telephone interviews was the length of the survey. Almost without exception, everyone interviewed mentioned the overall length of the survey as a severe hindrance. Several interviewees did not wait to be questioned but stated immediately that the survey was, "too long." The fact that many of the questions required time-consuming outside research was noted as well.

Responding to the two questions: how would you change the data collection process and what was the single most important factor that prevented you from taking the pretest, every interviewee with one exception mentioned condensing the length for the former and time constraints as the reason for the latter.

The other theme that developed was the nature of the AIS survey and the LAAB annual report. Many interviewees questioned why they needed to respond to the lengthy AIS survey when they had already completed a similar effort in filling out the LAAB annual report. Some mentioned that they would be much more amenable to completing the AIS survey if it took the place of the LAAB annual report. One person interviewed said that it would be, "great if your online survey replaced the LAAB annual report because your survey is online and the LAAB is not."

Regarding the overall impression of the websites graphics and user-friendliness all those interviewed stated that they did not see a problem with either issue and that they were able to navigate easily throughout the site. The critical question that the AIS team had of pretester being able to access the site itself through the link provided to them via email was resolved. No pretester stated that they experienced difficulty accessing the site utilizing their CELA username and password. The pretesters that received new CELA usernames and passwords all stated that, using them, they were able to access the survey without problem. As mentioned earlier, all those who did not complete the survey were unable to do so because of time constraints.

Responding to questions five and six, all interviewees stated that the AIS was worthy of their time and efforts and that it would be an important resource for the academic community to have. Several used the word, "potentially," when stating their responses and added that changes would need to be made before the survey would be worthy of their time and efforts. When asked exactly what changes they had in mind, they stated that it needed to be shorter and take the place of the LAAB annual report." However one pretester remarked that: "this is an important goal for all schools to realize, and I believed in this database system from the beginning and I knew it was going to take patience and work for us administrators to complete."

CHAPTER 4

CONCLUSION

Implications on higher education in landscape architecture

Looking ahead the most cogent argument to be made for ensuring the success and relevance of the Academic Information System is to incorporate completely the LAAB questions into the survey and enable users to generate their required LAAB annual report through the AIS survey. Negotiations to see if this is possible are currently underway with Leighton of LAAB. What is being sought from the AIS team is a for AIS survey takers to simply push a button at the end of the survey which would produce a complete LAAB annual report ready to be sent to LAAB. What LAAB seeks is that their questions retain their original integrity as they are being incorporated into the AIS survey. This merger is the single greatest opportunity that the AIS has of becoming widely used and accepted. It is difficult to imagine academic administrators pressed for time voluntarily taking the lengthy and complex AIS survey after having finished completing the LAAB annual report.

The second implication would be the establishment of the CELA website as a resource for all those in need of data on academic units that teach landscape architecture. It would worthwhile to study the feasibility of inviting other schools who are not members of CELA to participate in the AIS. CELA currently has no members

in the European Union, Asia or South America. At the very least the participation of the academic units at some level and the publishing of basic data would help establish the future AIS home page as a resource for general information in academic units. This would help CELA realize their stated goal "to encourage, support and further education in the field of landscape architecture specifically related to teaching, research, scholarship, and public service… to encourage and support scholarship and scholarly activities among faculty and students concerned with landscape architecture education."

Questions generated by this thesis

1. How can the AIS survey be reduced in length and still retain its effectiveness as a self-analysis and comparative tool?

   Many of the pretesters indicated that the length of the survey was the largest hindrance they faced when taking the test. Almost all were unable to complete the survey due to the length and complexity. The goal of trying to make the survey as stream lined and user-friendly as possible would be helped by narrowing the focus of several categories (budgets for example) and requiring more answers in the yes / no format. However, the risk to demeaning the quality of the data gathered is obvious and studies would need to be undertaken to find the correct balance where pretesters would be able to complete the entire survey in a given time frame (say two hours) and yet still submit enough data to provide the system with the complexity and depth of data that will make it useful.

2. Can the AIS survey officially take the place of the LAAB annual report?

   This is the key to the future of the Academic Information System. Currently talks are under way with the Landscape Architectural Accreditation Board and the possibility of this merger looks imminent. LAAB had long sought to put its questionnaire online and the AIS provides them with the structural online platform to do so. What would be the ideal situation for both would be to enable participants to finish the AIS survey and have a copy of their LAAB annual report extracted from their answers and sent of digitally to LAAB headquarters is Washington D.C. This would benfit all involved not least of whom would be the test taker who would effectively be doing two things at once: both the AIS data entry required to participate in the AIS data analysis and the LAAB annual report required of all accredited schools to be submitted once a year.

3. What data generated by the survey can be made available to the general public on the CELA website?

   It appears that the AIS survey will collect a vast amount of valuable data on the education of landscape architects. Which of these data may be made available to the public to help them in a search for an appropriate school for their son or daughter or themselves while not compromising the integrity of the more sensitive data that stakeholders have entered. Research could focus around which data, if made public,

would put participants at unease or make them even the slightest bit reluctant to complete the survey. Research could focus as well on those data that could be published anonymously.

4. How can the qualitative data generated by the AIS survey be used as a comparative resource?

The questions such as the nature of a schools studio culture and how the teach and define design must be answered with essay style responses. Is there a way these responses could be analysied and transformed into charts and graphs? The possibility exits with keywords and other test analysis software that may pick up themes throughout the various replies of participants. Some of the questions would yield the most insightful data and provide a clear picture into the themes and priorities of educators. Over a period of years the data that could be generated from these data could prove extremely revealing as to how current and relevant schools are in today's rapidly changing world.

5. What are the perceived and actual benefits to academic administrators participating in the survey?

Many of the participants to the study may want to know exactly what their benefits would be if the choose to embark upon the process of filling out the survey year after year. Would it be possible to provide them with sample products showing them the data analysis that could be made available to the them if they choose to participate fully in the survey.

Research could be done to determine how much product is necessary to be generated in order for administrators to participate.

6. Do academic units rely on the AIS as a self-evaluation tool?
7. Do academic units rely on the AIS as a comparative tool?
8. How reliable is the data entered; can the AIS detect numerical or typographical errors?

One concern the LAAB team had throughout the development process was the reliability of the data entered. Research could be done to determine if the AIS website would be able to detect obvious errors as well as how questions (and answers) can be structured in order to eliminate the potential for errors.

9. What data could be made available to students researching landscape architecture academic units?

    It appears that the AIS survey will collect a vast amount of valuable data on the education of landscape architects. Which of these data may be made available to the potential students to help them in a search for an appropriate school for themselves while not compromising the integrity of the more sensitive data that stakeholders have entered. Research could focus around which data, if made public, would put participants at unease or make them even the slightest bit reluctant to complete the survey. Research could focus as well on those data that could be published anonymously.

10. Can these data contribute to the LAAB accreditation process?

    This is the key to the future of the Academic Information System. Currently talks are under way with the Landscape Architectural Accreditation Board and the possibility of this merger looks imminent. LAAB had long sought to put its questionnaire online and the AIS provides them with the structural online platform to do so. What would be the ideal situation for both would be to enable participants to finish the AIS survey and have a copy of their LAAB annual report extracted from their answers and sent of digitally to LAAB headquarters is Washington D.C. This would benefit all involved not least of whom would be the test taker who would effectively be doing two things at once: both the AIS data entry required to participate in the AIS data analysis and the LAAB annual report required of all accredited schools to be submitted once a year.

11. How secure do academic administrators feel upon entering sensitive data? Are there any questions they are unwilling to answer due to perceived security threats?

APPENDIX A

QUESTIONS DEVELOPED BY CELA TEAM IN 2007 AND INCORPORATED INTO ONLINE SURVEY ON CELA WEBSITE

Regarding Name of Your Academic Unit

* 1: What is the formal title by which your academic unit is identified?
(Remember, academic unit refers to your department or program)

* 2: What is the exact name of your university or institution?

* 3: What is the level of your university or institution according to the Carnegie ratings?

Regarding Administration and Organizational Structure

1: What is the name of the school/college/division in which your academic unit is housed?

2: How many deans, associate deans or assistant deans are in your school/college/division?

3: What is the title of the person to whom do you (as chair, head or director) report?

4: What is the title of the person to whom your dean (or the person to whom you report) reports?

5: Do changes to the organizational structure of your academic unit require external approval?
(Organizational structure refers to status, title, administration, structure and the like)

6: When was the last time the organizational structure of your academic unit was changed?

7: When was the last time the organizational structure of your school/college/division was changed?

8: How many administrators are in your academic unit? (Associate director, assistant chair and the like)

9: Does your academic unit have control over its own budget?

Regarding Alumni

1: How does your academic unit maintain contact with alumni (please explain briefly?)

2: Does your academic unit actively organize alumni activities?

3: Does your academic unit actively organize alumni activities (please explain briefly?)

4: How many alumni does your academic unit have?

5: Do you regularly survey your alumni?

* 6: Please tabulate the activities of your graduates during the last full academic year.

Present Occupation	Male	Female	Total
Advanced study and research			
Teaching			
Government practice			
Landscape design/build			
Volunteer service			
Other			
Unknown			

Regarding Budgets

* 1: What were the total amounts spent in your academic unit for full-time faculty members' salaries in the following academic years?

2008-09	
2007-08	
2006-07	
2005-06	
2004-05	

* 2: What were the total amounts spent by your academic unit for adjuncts?

2008-09	
2007-08	
2006-07	
2005-06	
2004-05	

* 3: What were the total amounts spent by your academic unit for supplies? Please include benefits, FICA and other salary related costs where appropriate.

2008-09	
2007-08	
2006-07	
2005-06	

2004-05	

* 4: What were the total amounts spent by your academic unit for computer hardware and software?

2008-09	
2007-08	
2006-07	
2005-06	
2004-05	

* 5: What were the total amounts spent by your academic unit for equipment?

2008-09	
2007-08	
2006-07	
2005-06	
2004-05	

* 6: What were the total amounts spent by your academic unit for maintenance?

2008-09	
2007-08	
2006-07	
2005-06	
2004-05	

* 7: What were the total amounts spent by your academic unit for travel?

2008-09	
2007-08	
2006-07	
2005-06	
2004-05	

* 8: What were the total amounts spent by your academic unit for libraries?

2008-09	
2007-08	
2006-07	
2005-06	
2004-05	

* 9: What were the total amounts spent by your academic unit for telephones?

2008-09	
2007-08	
2006-07	
2005-06	
2004-05	

10: What were the total amounts spent by your academic unit for internet connections?

2008-09	
2007-08	
2006-07	
2005-06	

2004-05	

* 11: What is the total approved budget for your academic unit in the current academic year? (2007-2008)

12: What is the total amount of money awarded to students from the following sources during the last full academic year? (please complete only those that apply to your academic unit)

Undergraduate teaching assistantships	
Graduate teaching assistantships	
Undergraduate research assistantships	
Graduate research assistantships (sponsored by your institution)	
Graduate research assistantships (sponsored by outside sources)	
Other (Please specify)	

Regarding Collaboration with Other Academic Units

1: In what ways does your academic unit participate with other academic units on campus? (please describe briefly)

2: In what ways does your academic unit participate with other academic units off-campus? (please describe briefly)

3: With which other academic areas does your academic unit collaborate? (please specify briefly)

4: Does your academic unit host an annual event to which neighboring academic units are invited?

5: Approximately how many times per academic year do landscape architecture professionals speak at your academic unit? (including service as lecturers, jurists, critics and the like)

v6: Approximately how many times per academic year do professionals from fields related to landscape architecture speak at your academic unit? (including service as lecturers, jurists, critics and the like)

7: Are events with guest speakers advertised?
- o Yes
- o No

Regarding Continuing Education, Professional Development and Certification Courses

Note: Please rely on your own definitions of the three categories of courses.
1: Does your academic unit offer continuing education courses in landscape architecture?
- o Yes
- o No

2: Does your academic unit offer professional development courses in landscape architecture?
- o Yes
- o No

3: Does your academic unit offer certification courses in landscape architecture?

- o Yes
- o No

Regarding Curriculum

1: How many total credits are required to graduate in your curriculum?

Undergraduate	
Graduate	
Doctoral	

2: How many elective credits are required to graduate in your curriculum?

Undergraduate	
Graduate	
Doctoral	

3: How many total credits in design studios are required to graduate in your curriculum?

Undergraduate	
Graduate	
Doctoral	

4: How many total credits in construction technology are required to graduate in your curriculum?

Undergraduate	
Graduate	
Doctoral	

5: How many total credits in plant identification are required to graduate in your curriculum?

Undergraduate	
Graduate	
Doctoral	

6: How many total credits in landscape architecture theory are required to graduate in your curriculum?

Undergraduate	
Graduate	
Doctoral	

(The following questions do not refer to the use of email, word processing and the like)
7: How many total credits in computer applications (teaching Photoshop, G.I.S., AutoCAD and the like) are required to graduate in your curriculum?

Undergraduate	
Graduate	
Doctoral	

8: How many total credits integrating computer applications (applying Photoshop, G.I.S., AutoCAD and the like) are required to graduate in your curriculum?

Undergraduate	
Graduate	
Doctoral	

9: Are there any design studios in which the use of computers is prohibited?

- o Yes
- o No

10: In your opinion, is there an area (or areas) in the body of knowledge of landscape architecture for which your academic unit is particularly known?

- o Yes
- o No

11: What, if any, are the areas of specialization or foci in your curriculum?

Undergraduate	
Graduate	
Doctoral	

Regarding Degrees Offered

* 1: Which degrees does your academic unit offer? (Please check all that apply.)

- o BS in environmental design or planning, accredited
- o BS in environmental design or planning, non-accredited
- o BSLA, non-accredited
- o BLA, accredited
- o BLA, non-accredited
- o First professional MSLA, accredited
- o First professional MSLA, non-accredited
- o First professional MLA, accredited
- o First professional MLA, non-accredited
- o Post professional MSLA, accredited
- o Post professional MLA, accredited
- o Post professional MLA, non-accredited
- o Doctoral degree in environmental design or planning
- o Doctoral degree in landscape architecture
- o Candidacy status, Bachelor's level
- o Candidacy status, Master's level
- o Other (please specify)

Regarding Development

1: Does your academic unit have a development officer assigned to it?

- o Yes
- o No

2: Do you share your development officer with another academic unit on campus?

- o Yes
- o No

3: Does your academic unit have endowments dedicated to landscape architecture?

- o Yes
- o No

4: If yes, what was the total amount of endowed principal in your academic unit for each of the following years?

2008-09	
2007-08	
2006-07	
2005-06	
2004-05	
2003-04	

5: How much money from your academic unit's endowments was applied to student financial support such as scholarships, fellowships and the like?

2008-09	
2007-08	
2006-07	
2005-06	
2004-05	
2003-04	

6: What is the total amount of money awarded to students from the following sources during the last full academic year (please complete only those that apply to your academic unit?)

Endowed scholarships	
One-time or occasional scholarships	
Endowed fellowships	
One-time or occasional fellowships	

7: To what other uses do the funds of your endowment go (please specify?)

8: Is your academic unit currently engaged in or planning a capital campaign?

- o Yes
- o No

<u>Regarding Enrollment and Applications</u>

1: What was the total number of applications received by your academic unit in each of the following academic years?

	Undergraduate	Graduate	Doctoral
2008-09			
2007-08			

2006-07			
2005-06			
2004-05			
2003-04			

2: What was the total number of applicants admitted in each of the following academic years?

	Undergraduate	Graduate	Doctoral
2008-09			
2007-08			
2006-07			
2005-06			
2004-05			
2003-04			

3: What was the total number of applicants who enrolled in each of the following academic years?

	Undergraduate	Graduate	Doctoral
2008-09			
2007-08			
2006-07			
2005-06			
2004-05			
2003-04			

4: What is the most common reason cited by applicants for not enrolling in your academic unit after being accepted? (Please list no more that five.)

5: Is there an enrollment cap for your incoming classes?

- o Yes
- o No

6: What is the total enrollment capacity in your academic unit?

Undergraduate	
Graduate	
Doctoral	
Don't know	

<u>Regarding Faculty Members</u>

1: Is the MLA degree recognized as a terminal degree where faculty credentials are concerned at your institution?

- o Yes
- o No

2: How many faculty members in your academic unit hold any of the following degrees?

BLA MLA Doctoral	

Professors	
Associate professors	
Assistant professors	
Instructors/lecturers (tenure track)	
Part-time/adjunct faculty members (non-tenure track)	

3: What other degrees do your part-time faculty members hold?
(please list the degrees only)

4: What other degrees do your full-time faculty members hold?
(please list the degrees only)

5: How many total years of academic practice do your full-time faculty members have?

6: How many total years of academic practice do your part-time/adjunct faculty members have? (teaching a minimum of one academic credit per academic year, for pay, is considered part-time teaching)

7: How many total years of non-academic (private or public) experience do your full-time faculty members have?

8: How many total years of non-academic (private or public) experience do your part-time/adjunct faculty members have?

9: Does your academic unit have a 'professor in practice' (or equivalent) classification?

10: What is the approximate average age of faculty members in the following categories?

11: What is the average age of faculty members who are on tenure-track in your academic unit?

12: How many total credit hours of studios were taught by part-time/adjunct faculty members in the last full academic year?

13: How many total credit hours of non-studio courses were taught by part-time/ adjuncts in the last full academic year?

14: How many of your full-time faculty members graduated from your academic unit?

15: How many of your part-time/adjunct faculty members graduated from your academic unit?

16: How many of your faculty members are registered landscape architects?

Professors	
Associate professors	
Assistant professors	
Instructors/lecturers or other tenure track ranks	
Part-time/adjunct faculty members or other non-tenure track ranks	

Regarding International Activities

1: How many of your faculty members are involved internationally in landscape architecture (referring to regular on-going interaction with programs, colleagues or activities abroad for at least the last three consecutive years?)

Professors	
Associate professors	
Assistant professors	
Instructors/lecturers (tenure track)	
Part-time/adjunct faculty members (non-tenure track)	
Other, please specify	

2: How many of your faculty members hold degrees from universities outside of the United States?

Professors	
Associate professors	
Assistant professors	
Instructors/lecturers (tenure track)	
Part-time/adjunct faculty members (non-tenure track)	
Other, please specify	

* 3: How many of your students are citizens of countries outside of the United States?

Undergraduate	
Graduate	
Doctoral	

4: How many of your faculty members have traveled abroad during the following years?
Professors

	Number	Country/Countries
2008-09		
2007-08		
2006-07		
2005-06		
2004-05		
2003-04		

Associate Professors

	Number	Country/Countries
2008-09		
2007-08		
2006-07		

2005-06		
2004-05		
2003-04		

Assistant Professors

	Number	Country/Countries
2008-09		
2007-08		
2006-07		
2005-06		
2004-05		
2003-04		

Instructors/lecturers (tenure track)

	Number	Country/Countries
2008-09		
2007-08		
2006-07		
2005-06		
2004-05		
2003-04		

Part-time/adjunct faculty members (non-tenure track)

	Number	Country/Countries
2008-09		
2007-08		
2006-07		
2005-06		

2004-05		
2003-04		

Others

	Number	Country/Countries
2008-09		
2007-08		
2006-07		
2005-06		
2004-05		
2003-04		

Regarding Organizational Structure

1: What is the title of the primary administrator of your academic unit?

- Director
- Chair
- Head
- Dean
- Other (Please Specify) _____

2: What is the total student-to-faculty (full time equivalent) ratio in your academic unit (for example 120 to 10?)

Undergraduate	
Graduate	
Doctoral	

3: What is the average student-to-faculty (full time equivalent) ratio for your design studios (for example 15 to 1?)

Undergraduate	
Graduate	
Doctoral	

* 4: Please tabulate the number of faculty members specifically assigned and budgeted to your academic units.

	08/09	07/08	2006/07	2005/06	2004/05	2003/04
Professors						
Associate professors						
Assistant professors						
Instructors/lecturers						

(tenure track)						
Adjunct professors/part time/						
faculty members (non-tenure						
track)						
Guest faculty members /speakers						
Year-long appointments						
One semester appointments						
Speakers						
Endowed positions						

* 5: Please complete the following information regarding speakers, critics or jurists who visited your academic unit during the last full academic year.

Regarding Practicum's and Internships

1: Does your academic unit have formal relationships with offices of practice to provide any of the following (please check as many as necessary?)

- o Practicum
- o Internships
- o Mentoring
- o Other
- o Please Specify:

2: Do students receive academic credit for this participation?

- o Yes
- o No
- o Sometimes (please specify)

Regarding Promotion and Tenure

1: Does your academic unit have its own procedures for promotion and tenure?

- o Yes
- o No
- o Procedures are being established.

2: In what year were procedures for promotion and tenure first adopted for your academic unit?

3: In what year were your procedures for promotion and tenure last modified?

Regarding Research

1: What is the total amount of research funding (all categories) sought or proposed-on in the following academic years?

2008-09	
2007-08	
2006-07	
2005-06	
2004-05	
2003-04	

2: What is the total amount of research funding (all categories) captured in each of the following academic years?

2008-09	
2007-08	
2006-07	
2005-06	
2004-05	
2003-04	

Regarding Registration and Licensure

1: Do you track the licensure status of your alumni?

- Yes
- No

2: Does your state licensure board regularly report the pass/fail rates of your alumni?

- Yes
- No

If Yes, what is the average length of time after graduating that your alumni become licensed?

3: How many undergraduate alumni passed all sections of the licensure exam on the first attempt?

	Do not know	Do not have and undergraduate curriculum	Licensing board does not report results
2008-09			
2007-08			

2006-07			
2005-06			
2004-05			
2003-04			

4: How many graduate alumni passed all sections of the licensure exam on the first attempt?

	Do not know	Do not have and undergraduate curriculum	Licensing board does not report results
2008-09			
2007-08			
2006-07			
2005-06			
2004-05			
2003-04			

Regarding Student Accomplishments

1: During the last full academic year, how many students received financial assistance (scholarships, fellowships, assistantships and the like?)

Undergraduate	
Graduate	
Doctoral	

2: During the last full academic year, what was the total amount awarded to students (including scholarship salary, fringe benefits, travel support and so on?)

Undergraduate	
Graduate	

Doctoral	

3: What was the total number of students who entered design or research competitions in each of the following academic years?

2008-09	
2007-08	
2006-07	
2005-06	
2004-05	
2003-04	

4: During the last full academic year, how many students entered design or research competitions sponsored by your institution?

Undergraduate	
Graduate	
Doctoral	

5: During the last full academic year, how many students entered local design or research competitions?

Undergraduate	
Graduate	
Doctoral	

6: During the last full academic year, how many students entered state design or research competitions?

Undergraduate	
Graduate	
Doctoral	

7: During the last full academic year, how many students entered regional design or research competitions?

Undergraduate	
Graduate	
Doctoral	

8: During the last full academic year, how many students entered national design or research competitions?

Undergraduate	
Graduate	
Doctoral	

9: During the last full academic year, how many students entered international design or research competitions?

Undergraduate	
Graduate	
Doctoral	

10: During the last full academic year, how many students entered other design or research competitions? (Please name the competitions.)

Undergraduate		
Graduate		
Doctoral		

11: During the last full academic year, how many students received recognition for local design or research competitions?

Undergraduate	
Graduate	
Doctoral	

12: During the last full academic year, how many students received recognition for state design or research competitions?

Undergraduate	
Graduate	
Doctoral	

13: During the last full academic year, how many students received recognition for regional design or research competitions?

Undergraduate	
Graduate	
Doctoral	

14: During the last full academic year, how many students received recognition for national design or research competitions?

Undergraduate	
Graduate	
Doctoral	

15: During the last full academic year, how many students received recognition for international design or research competitions?

Undergraduate	
Graduate	
Doctoral	

(This section refers to extra curricular accomplishments by students.)
16: How many of your students are current members of your student ASLA chapter?

Undergraduate	
Graduate	
Doctoral	

17: How many of your students are current members of national ASLA?

Undergraduate	
Graduate	
Doctoral	

18: How many of your students have engaged in pro bono projects or service learning activities during the last full academic year?

Undergraduate	
Graduate	
Doctoral	

19: How many of your students have engaged in service-learning projects or service learning activities during the last full academic year?

Undergraduate	
Graduate	
Doctoral	

20: How many students in your academic unit are members of other professional or scholarly organizations? (Please name other organizations.)

Undergraduate	
Graduate	
Doctoral	

21: How many publications or creative works (2006-2007) have your students completed in the last full academic year? (Data for academic year are required)

2008-09	
2007-08	
2006-07	
2005-06	
2004-05	
2003-04	

Regarding Student Demographics

* 1: What is the total number of male students in your academic unit?

* 2: What is the total number of female students in your academic unit?

* 3: What is the number of Caucasian males in your academic unit?

* 4: What is the number of males in your academic unit from African descent?

* 5: What is the number of Hispanic males in your academic unit?

* 6: What is the number of Asian / Pacific males in your academic unit?

* 7: What is the number of Native American or First Nation males in your academic unit?

* 8: What is the number of other males in your academic unit?

* 9: What is the number of Caucasian females in your academic unit?

* 10: What is the number of females in your academic unit from African descent?

* 11: What is the number of Hispanic females in your academic unit?

* 12: What is the number of Asian / Pacific females in your academic unit?

* 13: What is the number of Native American or First Nation females in your academic unit?

* 14: What is the number of other females in your academic unit?

Regarding Student Academic Performance

1: What is the average grade point average (GPA) of students in your academic unit?
(Please calculate on the basis of the 4.0 grade point system)

Undergraduate	
Graduate	
Doctoral	
Cannot convert our system to the 4.0 GPA system.	

2: What is the average length of time, in years, it takes for a student to graduate from your academic unit?

Undergraduate	
Graduate	
Doctoral	

Student Recruitment

1: What methods (if any) does your academic unit employ to raise awareness of landscape architecture as an academic choice? (Please check all that apply.)

- o School visits:
- o Elementary
- o Middle
- o High school
- o Community college
- o Four year college or university
- o Advertisements:
- o Newspaper

- o Television
- o Radio
- o Magazine
- o Internet
- o Training/working guidance counselors:
- o High school counselors
- o Community college counselors
- o Four year college or university counselors
- o Other
- o Please Specify:

Regarding the History of Your Academic Unit

1: In what year was your academic unit established?

2: In what year (if applicable) did your curriculum or curricula achieve first full accreditation from the Landscape Architecture Accreditation Board (LAAB)?

Undergraduate	
Graduate	

3: In what year is your next accreditation scheduled?

Undergraduate	
Graduate	
Doctoral	

Regarding the Teaching of History

1: Are your courses in the history of landscape architecture taught by faculty members who hold landscape architecture degrees?

- o Yes
- o No

2: How many total credits of landscape architecture history are offered in your academic unit?

Undergraduate	
Graduate	
Doctoral	

3: How many total credits of landscape architecture history are required in your academic unit?

Undergraduate	
Graduate	
Doctoral	

Regarding the Teaching of Computer Technology

1: Are all of the computer skills required of students in your curriculum taught by faculty from your curriculum (as opposed to faculty from other academic units?)

Undergraduate	
Graduate	
Doctoral	

2: If you answered No to the previous question, approximately what per cent of the computer skills required of your students are taught outside of your academic unit?

Undergraduate	
Graduate	
Doctoral	

3: Are students in your academic unit required to own a lap top computer? (yes/no)

Undergraduate	
Graduate	
Doctoral	

4: Are faculty in your academic unit required to own a lap top computer?

- Yes
- No

5: Are all full-time faculty in your academic unit issued a computer?

- Yes
- No

6: Do faculty who are issued a computer have the choice of a lap top computer or a desktop computer?

- Yes
- No

Regarding the Teaching of Construction Technology

1: How many construction technology courses are taught in your academic unit?

Undergraduate	
Graduate	
Doctoral	

2: How many of the construction technology courses taught in your academic unit are required?

Undergraduate	
Graduate	
Doctoral	

3: In how many other courses are the principles and practices of construction technology are applied? (Please enter 0 if there are none.)

Undergraduate	
Graduate	
Doctoral	

4: Is the coverage of construction technology adequate in your curriculum? (yes/no)

Undergraduate	
Graduate	
Doctoral	

5: If you answered No to question 4, what suggestions do you have for improving the coverage? (Please use brief 1 to 3 word descriptions.)

Undergraduate	
Graduate	
Doctoral	

6: What are the primary software packages used in your academic unit to prepare construction documents? (Please list according to highest order of use.)

Regarding Faculty Member Credentials

1: How many publications or creative works (all categories) have your faculty members completed in the last full academic year? [Data for current academic year required.]
Number of publications or creative works

	08/09	07/08	2006/7	2005/6	2004/5	2003/4
Professors						
Associate professors						
Assistant professors						
Instructors/lecturers (tenure track)						
Adjunct professors/part time/						
faculty members (non-tenure						
track)						
Guest faculty members /speakers						
Year-long appointments						
One semester appointments						
Speakers						
Endowed positions						

2: How many teaching awards have your faculty members received in the last full academic year?
Number of teaching awards

	08/09	07/08	2006/7	2005/6	2004/4	2003/4
Professors						
Associate professors						
Assistant professors						
Instructors/lecturers (tenure track)						
Adjunct professors/part time/						
faculty members (non-tenure						
track)						
Guest faculty members /speakers						
Year-long appointments						
One semester appointments						
Speakers						
Endowed positions						

3: How many service or service learning awards have your faculty members received in the last full academic year?
Number of service or service learning awards

	08/09	07/08	2006/07	2005/06	2004/05	2003/04
Professors						
Associate professors						
Assistant professors						
Instructors/lecturers (tenure track)						
Adjunct professors/part time/						
faculty members (non-tenure						
track)						
Guest faculty members /speakers						
Year-long appointments						
One semester appointments						
Speakers						
Endowed positions						

1: Does your academic unit have a formal process of job placement?
- Yes
- No

* 2: How many undergraduate alumni from the last full academic year are pursuing advanced study and research?
- Male
- Female
- We do not have undergraduate alumni.

* 3: How many graduate alumni from the last full academic year (2006-2007) are pursuing advanced study and research?
- Male
- Female
- We do not have graduate alumni.

4: What percentage of your students had obtained employment in landscape architecture within 6 months of graduating?

Regarding Studio Culture

1: Does your academic unit participate in cross-disciplinary studios?
Undergraduate Yes No
Graduate Yes No
Doctoral Yes No

Regarding Student Retention

* 1: How many degrees from your academic unit have been awarded to males in each of the academic years?

Undergraduate	
2007/08	
2006/07	
2005/06	
2004/05	
2003/04	
2002/03	
2001/02	

Gradutate	
2007/08	
2006/07	
2005/06	
2004/05	
2003/04	
2002/03	
2001/02	

Doctoral	
2007/08	
2006/07	
2005/06	
2004/05	
2003/04	
2002/03	
2001/02	

* 2: How many degrees from your academic unit have been awarded to females in each of the academic years?

Undergraduate	
2007/08	
2006/07	
2005/06	
2004/05	
2003/04	
2002/03	
2001/02	

Gradutate	
2007/08	
2006/07	
2005/06	
2004/05	
2003/04	
2002/03	
2001/02	

Doctoral	
2007/08	
2006/07	
2005/06	
2004/05	
2003/04	
2002/03	
2001/02	

3: Does your academic unit have policies or procedures addressing retention?

- o Yes
- o No

If Yes, briefly describe what the policies or procedures are.

4: Please complete the following table with regards to student retention and student graduation.

Undergraduate				
Academic Year	Number of new students enrolled in the following academic years	Number from column 1 who graduated on time	Number from column 1 who have not graduated on time	Number from column 1 who have not graduated
2007/08				

2006/07				
2005/06				
2004/05				
2003/04				
2002/03				
2001/02				

Graduate				
Academic Year	Number of new students enrolled in the following academic years	Number from column 1 who graduated on time	Number from column 1 who have not graduated on time	Number from column 1 who have not graduated
2007/08				
2006/07				
2005/06				
2004/05				
2003/04				
2002/03				
2001/02				

Doctoral				
Academic Year	Number of new students enrolled in the following academic years	Number from column 1 who graduated on time	Number from column 1 who have not graduated on time	Number from column 1 who have not graduated
2007/08				
2006/07				
2005/06				
2004/05				
2003/04				
2002/03				
2001/02				

5: For those students who failed to graduate, and therefore left your academic unit, how many ceased their academic pursuits for any of the following reasons? Please select the MOST correct answer for each student who failed to graduate.

- o Took jobs in the field
- o Took jobs outside the field
- o Personal/family situations
- o Failed promotion to upper academic level in your academic unit
- o Failed scholastically
- o Transferred to another academic unit within your university
- o Transferred to another university (in landscape architecture)
- o Transferred to another university (not in landscape architecture)
- o Others

Regarding Studios

1: Please list the names (with a 1-3 word descriptions) of all design studios in the sequence in which they are taught.
Please indicate if each is required (R) or elective (E).
Example: Studio 2; Three Dimensional Space; R
Design Studio Description Required/Elective

2: Please list the names (with a 1-3 word descriptions) of all other classes (nonstudios) in which design deliverables are required.
Please indicate if each is required (R) or elective (E).
Example: LARC 5331; Planning Design; R
Class Description Required/Elective

3: Where do students primarily work on studio assignments?

- at school
- at home
- both about equally
- do not know

4: How many students were enrolled in undergraduate studios in the following academic years?

(We are a undergraduate-only academic unit)	
2007/08	
2006/07	
2005/06	
2004/05	
2003/04	
2002/03	
2001/02	

5: How many faculty members (full time and part time) taught graduate studios in the following academic years? Please count a faculty member who taught more than one studio as ONE faculty member.

(We are a undergraduate-only academic unit)	
2007/08	
2006/07	
2005/06	
2004/05	
2003/04	
2002/03	
2001/02	

6: How many students were enrolled in graduate studios in the following academic years?

(We are a undergraduate-only academic unit)	
2007/08	
2006/07	
2005/06	
2004/05	
2003/04	

2002/03	
2001/02	

7: How many faculty members (full time and part time) taught undergraduate studios in the following academic years? Please count a faculty member who taught more than one studio as ONE faculty member.

(We are a graduate-only academic unit)	
2007/08	
2006/07	
2005/06	
2004/05	
2003/04	
2002/03	
2001/02	

Qualitative Questions for the Annual Report General Program Characteristics

1: Program Emphasis and Locale Description:

2: Significant Faculty Accomplishments:

3: Significant Student Accomplishments:

4: Compliance of Minimum Conditions for LAAB Accreditation.

5: Response to Previous LAAB Rev

APPENDIX B

LETTER TO PRETESTERS MAILED OUT ON FEBRUARY 2, 2008

CELA COUNCIL OF EDUCATORS IN LANDSCAPE ARCHITECTURE
ais academic information system

May 16, 2008

Professor ____, Chair

Dear Professor ___,

Thank you for agreeing to participate in the pretesting of CELA's Academic Information System (AIS) survey. As you know, this survey will eventually be sent to all landscape architecture administrators of CELA member schools. This survey and its resulting database will only be available to these administrators.

An email with a link to the site will be sent to you in the coming weeks. We are asking that you try to complete the survey within one month.

Thank you again and please email me any questions or concerns you may have.

Sincerely,

Lionel Plummer, Research Assistant
The University of Texas at Arlington
School of Architecture
601 W. Nedderman Drive
Arlington, TX 76019-0108

lionelplummer@gmail.com

REFERENCES

Archambeau A.A., (2003), A proposed strategy for the collection and use of academic data to support research and education in landscape architecture, The Library The University of Texas at Arlington

American Society of Landscape Architects, Canadian Society of Landscape Architects, Council of Educators in Landscape Architecture, Council of Landscape Architecture Registration Boards, Landscape Architectural Accreditation Board (Joint Committee), (2004). Landscape architecture body of knowledge report. Washington, D.C. : American Society of Landscape Architects

Burley, J. B. and Orland, Brian (2007) "Rankings or Ratings: A Landscape Architecture Horse Race or an Informational System." Design Intelligence 2007 annual report p.43

Landscape Architecture Accreditation Board. Accreditation procedures for programs leading to first-professional degrees in landscape architecture. 2003.

Landscape Architectural Accreditation Board, (2003). Self-evaluation report format for first-professional programs in landscape architecture, Washington, D.C.: Landscape Architectural Accreditation Board

Rojstaczer, Stuart. "College rankings are mostly about money", San Francisco Chronicle, September 3, 2001

Sasaki, H. Thoughts on education in landscape architecture. Landscape architecture, Winter, 1950, Vol. 40, No. 4, 158 – 160.

Swaffield, S. Social change and the profession of landscape architecture in the twenty first century. Landscape journal. 2002, 21:1, 183 – 189.

Taylor P.D. & Archambeau A.A. "The future of academic statistics: boon or bane?" Landscape Review Volume 9 (2), (2002), 86 – 103

Taylor, P.D. Personal communication, March – April, 2008.

Taylor, P.D. Unit effectiveness plan for the Program in Landscape Architecture. September, 2002.

Taylor, P.D. Self-evaluation report for The University of Texas at Arlington Program in Landscape Architecture. Prepared for the Landscape Architecture Accreditation Board (LAAB), October, 2002.

The Council of Educators in Landscape Architecture Constitution (2004) The Official Documents (Revised May 1999, February 2001,2004)

Thompson, Nicholas (2003): "The best, the top, the most." The New York Times, Education Life Supplement, August 3, 2003 p. 24

BIOGRAPHICAL INFORMATION

Lionel Plummer earned his undergraduate degree from Wilkes University in Wilkes-Barre, Pennsylvania in Fine Arts in 1998. From 2000 – 2004 he travelled extensively throughout Europe and learned Italian, French and Spanish fluently. He attended The University of Texas at Arlington from 2005 - 2008 earning his Masters in Landscape Architecture. Currently he works as a landscape architect with Mesa Design Group in Dallas, Texas where he resides. He is engaged to marry a fellow UTA alumni, Kim Somvongsiri, who is a practicing architect.