ESSAY STANDARD 3
Developing and Applying Resources and Organizational Structures to Ensure Sustainability

Conforming to its strategic planning initiatives, CETYS University has attempted to develop and align resources in support of its goals as well as to maintain a financially stable, secure, and permanent institution.

The leadership administrative structure has been enhanced, investments have been made in the infrastructure of the there campuses, and additional academic and technology resources have been allocated in an effort to enhance the quality of services and academic experiences for our students.

CETYS University's mode of operation has always been based on institutional initiatives and educational goals.

FACULTY AND STAFF

CFR 3.1
The institution's formally approved statements of purpose and operational practices are appropriate for an institution of higher education.

The organizational structure of each campus is comprised of four functional areas: one is academic in nature and the other three are primarily administrative and support the academic function of the campus. Depending on the campus' size, each is vested with appropriate and sufficient qualified personnel to perform its various functions, thus ensuring the efficiency and effectiveness of educational delivery and institutional operations.

At the system-wide undergraduate level, CETYS University operates with 474 employees, including full-time and part-time faculty. Service (staff), executive, and management employees are considered administrative personnel. (DT 4.1)

In terms of its academic mission, the institution has sufficient and professionally qualified academic personnel to achieve institutional and educational objectives (Basic Statistics 2005), enounced by its Philosophy:

To succeed in having a faculty corps composed of individuals who are excellently prepared in their specialized fields, with a high commitment to improvement, and who are not only convinced of the aforementioned principles, but who also possess the capacity to impart them to every one of their students.

As the tables show, in 2005-2 (second quarter), the institution had 386 undergraduate professors under different categories (full-time FT, part-time PT, Full Time Administrator FA and lecturers), and a total of 2,301 undergraduate students in all.

Campus Mexicali had 182 professors and 1,105 students in 12 majors; Campus Tijuana had 138 professors and 885 students in 12 majors; and Campus Ensenada had 66 professors and 311 students in 9 majors. The Graduate College had 66 professors and 1043 students in 23 Master's programs and 2 Doctoral programs during the quarter of October-December 2005.

FACULTY	2005-2		
Undergraduate	MXL	TIJ	ENS
T.C.	33	23	8
DP/PC	6	3	2
MT	4	8	2
Asig	139	104	54
Total Full time/Par time	182	138	66

Graduate			
	MXL	TIJ	ENS
T.C.	9	11	1
DP/PC	1	2	2
Asig	16	17	7
Total Full time/Part time	26	30	10

Student Population 2005-2				
LEVEL	MEXICALI	TIJUANA	ENSENADA	TOTAL
Undergraduate	1105	885	311	2301
Graduate	531	390	122	1043
Master's	514	377	117	
Doctoral	17	13	5	
TOTAL	1636	1275	433	3344

Personnel entrusted with maintenance and care taking of the physical facilities such as janitors, technicians, assistants, groundskeepers, and guards are considered service employees.

Administrative and management personnel include coordinators, supervisors, specialized professionals, technicians, auxiliaries, secretaries and other general assistants. By executive personnel we refer to directors at the first and second levels of hierarchy, such as academic directors and campus department directors.

CFR 3.2
The institution demonstrates that it employs a faculty with substantial and continuing commitment to the institution.

To effectively and efficiently ensure that the institution has a professionally qualified faculty corps, CETYS University has a formal Recruitment, Selection, Hiring and Orientation process for both undergraduate and graduate faculty.

In 2005-2, of the 386 professors who taught classes at the undergraduate level, 100% held at least a bachelor's degree and more than 40% a graduate degree.

Of the 66 professors teaching in Masters Programs, 100% held a master's degree and more than 35% a doctorate. For doctoral programs, all professors hold doctoral degrees. Although the University is committed to increasing the percentage of faculty with masters and doctoral degrees, individuals with such qualifications continue to be scarce in Mexico.

The Graduate Educational Model is based on a strategy of "professional education" given that generally 100% of graduate students are employed and enrolled part-time; therefore, emphasis is placed on application and problem-solving. The Graduate Model is supported by full-time professors from CETYS University and by adjunct professors from other domestic and foreign institutions, and each professor teaches in his/her specialization and respective discipline.

Plan 2010 defines faculty standards, such as the number of class hours taught by a full-time professor, and establishes goals such as a ratio of 30-40 students per professor. The institution expects to achieves these standards and goals over time, as the development plan progresses.

CFR 3.3
Evaluation practices are aligned with institutional purposes.

The *General Statute* of Sistema CETYS Universidad, and with greater detail the *General Handbook on Faculty Responsibilities and Remuneration,* establishes the responsibilities and activities of each faculty member.

The point system presented in the *General Handbook on Responsibilities and Faculty Remuneration* is used to evaluate each full- and part-time faculty member's annual performance, as well as the performance of researchers, in ten areas. Raises and salary increases are based on these evaluations.

For all adjunct and lecturer faculty, a salary scale has been established with four possible categories based on three criteria: academic level, professional experience, and teaching experience.

For all faculty, the evaluation system includes several components such as: a self-evaluation, a performance evaluation scale used by the School's Dean, and a student evaluation questionnaire. All results are computed and calculated based on the Evaluation and Retribution System for Professors -SERP, the system employed to assess classroom outcomes for all professors. This system also serves as a financial incentive for outstanding performance by the faculty.

Students, through an evaluation questionnaire, also participate in the evaluation process.

Executive personnel are evaluated each semester through what is known as the "360º evaluation", where several evaluators assess an individual's performance. Evaluators range from superiors to subordinates and to peer colleagues at the same hierarchical levels. Administrative personnel are evaluated exclusively by those to whom they report.

The Dean of School and the Associate Academic Director, with the approval of the Academic Director, may recruit and select personnel who will work during the semester as either faculty or academic support staff. To this end, they plan for the resources necessary for upcoming semesters.

CFR 3.4
The institution develops sufficient activities to improve teaching and learning consistent with its educational objectives and institutional purposes.

To maintain the quantity and the quality of the faculty, the institution has designed an orientation process and has established a faculty development plan. At the start of each semester, an orientation program for new faculty addresses
issues such as the educational model, CETYS' philosophy, rules and regulations, the evaluation system, teaching support services, library services, etc.

Once the professor has joined the institution, he/she has access to the *Faculty Development Plan* which includes general knowledge and a series of workshops on specific skills that a CETYS professor must possess, such as the use of information technologies, the use of the English language, up to date pedagogical competencies, etc. An example of these activities is a training course on Learning Centered Education where four modules are studied, each focussed on complementing a specific area.

A Student and Faculty Center on all 3 campuses provides additional support in areas such as the design of learning strategies, study techniques, preparation of didactic material, managing a class; in Tijuana and Ensenada this unit is identified under the name of CEA, and in Mexicali it is DAPA Center.

FISCAL, PHYSICAL, AND INFORMATION RESOURCES

CFR 3.5
Fiscal and physical resources are effectively aligned with institutional purposes and educational objectives.

The financial stability of Sistema CETYS Universidad is established in the Statutes of the Instituto Educativo del Noroeste, A. C. (IENAC).

Under this legal framework, it is the Association's responsibility to operate the University with healthy economic and financial stability that allows it to meet its purpose. This includes raising the necessary resources and applying them efficiently through budgets forming part of financial planning, and infrastructure, equipment, fiscal and human resources requirements included in the institutional planning set forth in the *2010 Plan*. Therefore, the institution operates through its own statutes, establishing in Chapter Seven, paragraph three, matters pertaining to financial resources. Results detailed in the appendix, resulting from the analysis of Financial Statements from 2000-2005, clearly demonstrate the institution's financial stability.

Liquidity Analysis**.** An increase in the amount of working capital, as well as a decrease in its short-term liabilities is reflected over time, thus representing better liquidity and the strengthening of financial stability.

Account receivables have been maintained at practically the same levels, but if we add revenues and their increase, a greater efficiency in collecting receipts is reflected. Available cash also demonstrates a growth tendency, thus reflecting healthy financial operations.

Overall, financial statements indicate good liquidity with a tendency for improvement seen over time.

Financial Leverage Analysis**.** A low relationship between debt and per *peso* was found, demonstrating a non-dependence on external resources for funding operations. To this, we add the fact that debt is represented by deferred revenues, thus making the risk of insolvency very low.

Net-Worth Analysis: the institution has maintained sustainable growth in students and academic programs, a positive response to fundraising campaigns, non-dependence on bank loans, a decrease in accounts to be collected, collections efficiency and good administrative control of revenues and expenditures. Therefore, financial statements demonstrate an increase in Operations Funds, Educational Grants, Loans and Scholarship Funds.

Generation of Operational Earnings Analysis: To ensure that it generates operational earnings, the institution has established an institutional budget resulting from financial planning that derives from institutional planning. Additionally, the institution follows a set of guidelines for the design of annual budgets. Income generation during the years examined demonstrates increases, which when tied to operational expenses, lead to operative earnings with a growth tendency, thus reflecting a healthy financial administration allowing for infrastructure investment of these earnings.

CFR 3.6 & 3.7
The institution holds or provides access to information resources and information technology resources are sufficient in scope and quality to fulfil its educational purposes.

All modern educational institutions must ensure access to information and information technology resources for its students and faculty for the sufficient and pertinent support of instruction and learning activities so that educational programs are delivered with quality; but also to support the administrative areas and their decision making for planning and budgeting purposes.

Currently, two departments work in collaboration and coordination to achieve the best possible use of information technology: the Information Center (library) as a provider of access services to sources of information, and the Computer and Telecommunications Department, as a technical assistant in providing the necessary means so that the library and schools may offer excellent services.

Information Resources: Sistema CETYS Universidad is equipped with a centrally located library on each of its three campuses. The Policies for Library Services establish that library facilities are open to the following groups: students, faculty, administrative employees and the general public, Monday through Friday from 7 a.m. to 9 p.m., and on Saturday from 9 a.m. to 2 p.m. Catalogue services and access to databases are available 24 hours a day through the Internet.

Libraries are staffed by experienced and knowledgeable personnel in the field of library science. The University employs a total library staff of 19 on the three campuses: 3 in Ensenada, 8 in Mexicali and 8 in Tijuana, all of whom receive ongoing professional training in order to continue to offer efficient and high quality service.

Sistema CETYS Universidad libraries hold over 62,000 works (DT 5.1), accessible to all students from any campus, through interlibrary loans. Additionally, the digital library offers access to different data bases, including EBSCO (Business Source Premier, Regional Business News), Legal, Inversionista -Investor, OECD and Thomson Gale (Business and Company Resource Center, Education database, Expanded Academic ASAP, Engineering Database, etc.)

At the end of each semester, a survey is given to all students to measure satisfaction levels. Results from the last study performed in May 2006 showed that 85% of students describe the libraries as "Excellent" or "Good", and only 12% as "Average", which leads us to conclude that the service provided to the students is clearly meeting their needs.

The Libraries are responsible for acquisitions, processing, organization and dissemination of information sources, both in print and electronically, solicited by professors for supporting current courses and programs offered by CETYS University.

Academic Directors and library personnel meet at least two months prior to the beginning of the academic semester and discuss information resource requirements for each of the courses to be offered.

Institutional agreements exist with the National Institute for Statistics, Demographics and Geography (INEGI: Instituto Nacional de Estadística, Geografía e Informática) and the Import-Export Bank of Mexico (BANCOMEXT: Banco Nacional de Comercio Exterior), as CETYS Universidad is part of its network of information services, thus ensuring access to recent national publications in statistics and foreign trade.

Additionally, interlibrary lending agreements have been signed with other regional public and private educational institutions, making their holdings fully available to our students and faculty.

We have undertaken a study of several private and public universities in the region comparing enrolment and library holdings. The findings are presented in the following table.

Type	Level	University	# Books	# Stud
Private	UG/G	TBC - Tijuana	2,200	350
State	UG/G	UTT - Tijuana	8,014	1,239
Private	UG/G	UIA - Tijuana	36,000	1,150
Private	UG/G	Xochicalco-Ens	5,156	1,083
Federal	UG/G	CICESE- Ens	26,000	1,500
Private	UG/G	CETYS-Sistema	62,000	3,344

Information Technologies. The University provides to the educational community (professors, students, administrative and executive personnel) current, relevant, and high quality information technology and electronic communications services which respond to the nature, the requirements and the level of the institution's academic programs.

The following services are provided and administered by the Information and Telecommunications Department: Internet access, Blackboard Platform, electronic mail, institutional web site, FTP, video-conferences, WI-FI, access to satellite signals (Edusat, ITESM System, and C Band) and internal cable television access.

When designing or updating academic programs, academic directors determine information technology requirements and in conjunction with the IT Department, they ensure that the necessary infrastructure and services are in place to respond to such requirements. As a result, a strategy for
the creation of general and specialized laboratories was developed, headed by the academic departments in Tijuana and Ensenada, and from IT in Mexicali.

All full-time and part-time faculty of Sistema CETYS Universidad have a computer in their office; 66% of the faculty members are equipped with a laptop computer.

At the system level, learning-support equipment is available in 49% of classrooms. This equipment consists of computers, multi-media projectors or televisions, Internet access and video recording systems. Additionally, lending services for portable equipment (such as multi-media projectors, laptop computers, photography and video cameras, recording systems for VHS and DVDs) are available from the libraries.

To enhance the learning process and the development of information literacy, we have included in each academic program specific courses that will support the students abilities to learn and research on his/her own. These courses are: Critical Thinking, Advanced Communication in Spanish, Advanced Communication in English, Research Methodology. A new information literacy tool was created by the Ensenada Campus' "Center for Virtual Writing" with the main objective of enhancing students' writing abilities.

In a more dynamic, flexible and interactive manner for both students and professors; the use of Blackboard platform provides the student community at CETYS University with a technological tool to support their education. Presently, Blackboard plays an important role in the academic review and updating of courses and programs.

Operating in Mexicali and providing support to the other two campuses, CETEME, the Educational Technology Center for Educational Improvement, is an important player in supporting the learning process. It allows CETYS faculty to obtain up-to-date training on educational technology and to strengthen their classroom use. This is achieved through individual and group training sessions and courses on current use of technology resources and informational meetings. Students on all 3 campuses have developed, as part of the generic profile in each academic program, abilities to search, analyze and apply information through various sources, navigating on the web, email interaction, downloading from the net audio-video files, search on specialized pages in the internet according to their academic program, and search data bases from libraries and research centers.

Also, it is a requirement for students to learn how to apply MS Office, electronic data sheets (XCEL), PowerPoint presentations, and how to process and convert data files into electronic files. All of these activities are directed to developing skills for project presentation by students in all academic programs.

To ensure a more efficient operation, the University has information support systems in four major areas: administration, academic, human resources, and financial.

ORGANIZATIONAL STRUCTURES AND DECISION-MAKING PROCESES

CFR 3.8

The institution's organizational structures and decision-making processes are clear, consistent with its purposes and sufficient to support effective decision making.

The organizational structure of Sistema CETYS Universidad is functional in nature, with lines of authority comprised of a President, two Vice-presidents, the President's Staff and a General Director for each of the three campuses.

Supporting evidence can be found in the *General Statute* of CETYS University, Chapter III.

CFR 3.9
The institution has an independent governing board which exercises appropriate oversight over institution integrity, policies and ongoing operations.

Sistema CETYS Universidad operates under the auspices of the Instituto Educativo del Noroeste, Asociación Civil (IENAC), founded in 1961, as a not-for-profit organization, which holds ownership of all institutional property and assets and by whom all personnel is lawfully employed.

An Executive Commission comprised of the Board President and 12 other associates is in charge of the association. Its main role is to appoint, evaluate and dismiss the President of CETYS, to review, and approve annual budgets, to manage the association's patrimony and to approve new academic program offerings by the University.

To facilitate its operation, IENAC is divided into chapters that operate for each of the campuses of Sistema CETYS Universidad (Tijuana, Mexicali, and Ensenada). These chapters are composed of associate and regular trustees from the geographic area where the campus is located. Each chapter must participate in the structuring of the operational budget, serve as a consultative body for appointing a campus general director, oversee the appropriate management of the Association by providing an annual report to the Executive Commission, establish and lead local committees and participate in state-wide committees.

IENAC committees work as consultative bodies to both the President and the Executive Commission and are functionally divided as follows: Educational Committee, Planning Committee, Nominating Committee, Financial Committee, Fundraising Committee, Pensions Committee and Communications Committee. State committees report directly to the Executive Commission. Also, these committees are mostly structured locally and seek to support projects in their own city and chapter, while also forming part of the state committee.

The Association has an Advisory Board, which is a consultative and supportive body comprised of all trustees, the President and representatives from the CETYS Alumni Association of Professionals (APEC: Asociación de Profesionistas Egresados del CETYS) from each chapter. This Board meets twice a year, at which time the members discuss and agree on recommendations to be made to the Executive Commission.

CFR 3.10

The institution has a chief executive whose full-time responsibility is to the institution.

As the highest authority in Sistema CETYS Universidad, the President's main responsibilities are to ensure and oversee that the Mission of CETYS is achieved; to maintain contact with government authorities, educational institutions and all other external organizations; to formulate and present to IENAC the institutional development plan, implementation plans, academic, and physical and human infrastructure development programs, and corresponding annual budgets, as well as their evaluation systems; and to give annual reports and appoint and approve the appointment of full-time and part-time personnel.

Furthermore, in order to support his/her academic and administrative responsibilities, the President is assisted by the following staff:

Vice-President Administration and Finances, Associate Vice President of Academic Affairs, Director of Institutional Effectiveness, Director of Curriculum Development and Academic Assessment, Director of Institutional Development and Promotion, and the Business Administration and Engineering College Deans, and each campus' General Director.

CFR 3.11
The institution's faculty exercises effective academic leadership

Many channels of participation within the institution are available to the faculty; for example, they participate in curricular-development decisions, analyses for creating new academic programs, updating and restructuring of current programs, and bibliographic updating. Additionally, they contribute to the design, development and updating of the development system and evaluation of faculty, participate in institutional planning, serve as group coordinators, liaisons between the students and the administration, and many other activities. Guided by the Department of Curricular Development, such participation also takes place at the system-wide level, forming part of the body of experts who design courses.

Additionally, the faculty participates in technical, academic and curricular development committees.

Shared leadership with the students occurs through the CETYS Student Body Association (SAC: Sociedad de Alumnos del CETYS). This organization has been in existence for 40 years, beginning in Mexicali as a small gathering of interested individuals. Presently, annual elections take place for leadership positions.

The students' priorities change according to the individuals elected, nonetheless, all individuals must include in their work plan academic, social, athletic and cultural activities. This allows the involvement of students not only through student life, but also

through their leadership in other areas, by generating proposals that can directly or indirectly influence the institution.

In a similar manner, 30 years ago in Mexicali, the CETYS Alumni Association of Professionals (APEC) was formed. Two years later, a similar

association was created in Ensenada and in 1990 in Tijuana. The leadership perspective exercised by these associations at CETYS University focuses on making recommendations for strategic plans and academic programs, in addition to acting as a point of contact for alumni.

Conclusion

One of the greatest concerns of CETYS University is having the adequate infrastructure, personnel and facilities to effectively offer and respond to all of our academic programs and community needs.

State-of-the-art technology, a faculty corps that is competent and expert in its fields, equipment and facilities consistent with education centered on learning, as well as new pedagogical tools in that paradigm are presently top priorities of both the President and the Board for each of the campuses.

Graduate programs have grown at a rapid pace, under a design that carefully follows the professionalized model defined by the institution. Focused on the academic quality that we are committed to providing our students, the presence of external, expert faculty brought from internationally renowned universities has greatly enriched education in the graduate programs.

The financial stability of CETYS University has been achieved through many efforts that involve creating and offering innovative academic programs and meticulous care in providing services to its students. Financial stability has given the institution its identity and its sustainability. Strategic planning has established goals for incoming students whose achievement has allowed the institution to have an independent future and to continue its growth.

Based on the evidence we have presented for this standard, the institution is confident that it maintains its operations with the of human, physical, fiscal and information systems resources necessary for the achievement of its educational
objectives.

Recommendations:

1. Although the current number and type of faculty, both full-time and adjunct, are adequate and appropriate to meet current enrolment and other academic needs in

fulfilment of the institution's commitment to excellence, the number and type (e.g., academic preparation and credentials) of faculty will need to grow in order to both meet enrolment projections and continue to improve and enhance institutional academic quality, particularly at the graduate level (CFR 3.1)

2. Current information technology, including Internet access, is adequate for the present student body, employees, and staff. Still, the University will need to expand its information technology to both keep pace with the projected growth expected by 2010 and to keep pace with the rapidly changing needs and interests of both students and professors, as well as to remain current and keep pace with rapidly changing technological innovations (CFR 3.6, 3.7).

3. The planning undertaken by the libraries has resulted in the *Strategic Library Development Plan* that includes expanding collections on the three campuses and establishing greater access to the online collections of other university libraries in both Mexico and the United States as well as the improvement of the physical space and the development of library staff (CFR 3.6, 3.7).