Coastal Bend COLLEGE

Nursing and Allied Health

Program Review

Equipment and Technology Needs

2021-2022

Introduction

Coastal Bend College actively participates in data-informed decision making throughout the institution. Each AA, AS, and AAS programs submit a comprehensive review for a three-year cycle. This report contains the Equipment and Technology sections of all program reviews submitted within the academic year. Both sections are extracted from the many programmatic report narratives and provided to various stakeholders such as Physical Plant and Information Technology Services to assist in departmental and college-wide improvement planning. These results should be used to inform existing planning within these departments and open the dialogue amongst the institutional to align program needs with Strategic Plan 2025.

The program information found herein are from the following programs who conducted their Program Reviews during the 2021-22 academic year:

- [Dental Hygiene](#)
- [Health Information Management](#)
- [Professional Nursing](#)
- [Radiological Technology](#)
- [Vocational Nursing](#)

Dental Hygiene

Program Manager: Laura Lynn Southerland

Technology

a. Overview

The Dental Hygiene Department currently has 49 laptop computers assigned to the department. We have created a database with equipment purchase year and life expectancy so that we can develop a schedule to replace aging equipment. Lap-top computers constantly need attention with network issues. Several pieces of clinical equipment need replacing/repairing.

b. Strengths

The laptops are allowing the students to utilize electronic charting for their patients. Electronic dental records have become very popular in the dental setting. The new software helps the students organize treatment plans and utilize insurance codes for procedures which will better prepare them for work after graduation.

c. Areas for Improvement

Our department has been having a lot of problems with the Wi-Fi. It is unpredictable and seems to not work at various times. Since our patient records, panoramic radiographs, and intraoral x-rays are all digitalized, it becomes a big issue in clinic when the students are treating patients.

d. Future Direction and Budget Implication

Digital impressions are becoming very popular in the dental community for a multitude of reasons. Digital impressions will increase student's knowledge, experience, and better prepare students for clinical practice. They will also be able to capture the patient's mouth before and after they clean to illustrate the difference. They will be able to capture the patient's mouth each recall illustrating the changes to the patient's mouth over time. The different images of a patient's mouth can be printed and sent to dentist for further treatment. No other dental hygiene programs in South Texas currently have a digital impression machine and instruct their students on proper use. The 3D printer will be used to print models of patient's teeth so that whitening trays may be fabricated.

Incorporating lasers and completing certification course for instructors will allow students to not only become certified to use lasers but will also allow them to use lasers in clinic under direct supervision to increase their experience. The department will also be able to offer certification course to other dental professionals.

The additional education and training in both of these fields will increase our graduates' ability to obtain jobs at a higher pay rate upon graduation

Budget chart: ITEM Cost

ITEM	Cost
2 Digital Impression machines	$84,638.00
1 7-year parts & service repair plan	$33,432.00
1 3D printer	18,020.00
6 Diode lasers	$29,970.00
11 Laser Instructor Certification course	$3,025.00
Total	$139,115.00

Equipment & Facilities

The dental hygiene program has three classrooms, on in the James R. Dougherty, Jr. Dental Technology building and two in the George F. Elam building. The Dougherty, Jr. building classroom seating capacity of 38, Elam 107 has a capacity of 30, and Elam 140 has capacity of 32. Elam 140 and Dougherty 115 are equipped with an ELMO Document camera projector and a blackboard. Elam 140 has a white board present. All classrooms have a television. Elam 107 is also equipped with four model trimmers, two laboratory sinks, a four-lab engine station with dust collector, and four vacuum formers. This equipment is used during Dental Materials and Clinic III courses. Radiographic equipment in the Dougherty, Jr. building incudes four wall-mounted intraoral x-ray units, one panoramic unit, one NOMAD hand-held x-ray unit, photo sensitive phosphor radiographic plates, digital radiographic sensors, and a PSP plate digital scanner. In addition, thirty-two lap-top computers are used for patient treatment entries. AxiUm software is the cloud-based computer program used for clinical data.

There are two clinical areas in the James R. Dougherty, Jr. Dental Technology building: Clinic 1 with 16 units/chairs and 15 sinks, and Clinic II with 15 dental hygiene units/chairs and 15 sinks. There is a sterilization room, four radiographic rooms, and multiple storage cabinets are throughout the clinical areas. A dim room for digital radiographic plate scanning. A clean room houses cubbies of sterilized instruments for each dental hygiene student. Two documentation/locker rooms are available for students to update clinical entries into patient charts and to securely store personal items. Another room has been designated as the clinical supervising dentist office which also houses the CALs for student's clinic laptops. The department's Administrative Assistant's office, the Dental Hygiene Director's office, and reception area at the front of Clinic 1. Patient paper records are stored in a locked filing cabinet near the classroom in the James R. Dougherty, Jr. building. Patent records are scanned into the AxiUm software and destroyed. A waiting room capable of seating 27 people is at the entrance of the James R. Dougherty, Jr. building.

Built in 1973 and renovated in 1996, the James R. Dougherty, Jr. Building is fast becoming cramped and struggles to maintain accreditation standards dictated by CODA. Both clinical areas are of the open-bay design, while other community-college-based dental hygiene programs have individual treatment operatories that provide for patient privacy and reduce the risk of cross contamination by providing a physical barrier to possible splatter and aerosol contamination.

Most laboratory activities are conducted in the Elam 107 classroom. Clinical equipment consists of 33 dental hygiene units/chairs, five autoclaves, three ultrasonic units, one oven, 39 ultrasonic scaling units, one prophy-jet and one Air-N-Go Air Powder polisher, one intraoral camera, and 13 curing lights.

Through grants, the dental hygiene department has purchased several pieces of equipment:

Year   **Item**
- 2018   4 Pelton Crane dental chairs
- 2018   1 Vacuum former
- 2019   6 Pelton Crane dental chairs
- 2019   1 Acteon Air & Go air powder polisher
- 2019   1 Portable wall to isolate chairs for radiographs
- 2019   4 televisions mounted in clinic for improved instruction
- 2019   17 Dell laptops for student use in clinic
- 2020   2 Kavo Focus intraoral x-ray machines
- 2020   1 Air Techniques Provecta panoramic x-ray machine

In 2022, the Dental Hygiene Department purchased a digital sensor to expose intraoral radiographs.

In 2021 the Dental Hygiene Department purchased Axium, a new dental software that would allow the department to transfer majority of patient records to paperless. This software exposes students to electronic patient records and assists them in creating treatment plans and learning insurance codes for procedures.

The Dental Hygiene Department was also able to obtain a credit card machine in 2021 to streamline payment options for patients.

EQUIPMENT & TECHNOLOGY SUMMARY with REPLACEMENT TIMELINE

Item	Brand/Model #	SN	Purchase year	Replacement Cycle (years)
Curing Light	Litex 680A	6815590	2006	12
Curing Light	Dentamerica Litex 680A	6815573	2006	12
Curing Light	Dentamerica Litex 680A	6815574	2006	12
Curing Light	Dentamerica Litex 680A	6813809	2006	12
Curing Light	Dentamerica Litex 680A	6805179	2006	12
Curing Light	Dentamerica Litex 680A	6814376	2006	12
Curing Light	3MESPE Elipar S10	939112022389	2006	12
Curing Light	Benco Dental Soleil	70816064	2006	12
Curing Light	Henry Schein Curing Light	AB4595	2006	12
Curing Light	Henry Schein Curing Light	AB4434	2006	12
Curing Light	SDI Radii-cal LED Curing Light	32459	2006	12
Curing Light	Henry Schein Curing Light	AB2145	2006	12
Air Powder Polisher	Acteon Air-N-Go F101	308229041	2019	Est. 10
Prophy Jet	Prophy Jet 30	111-08910	2011	10
Vacuum Former	Vacuum Former A	105671	2008	15
Vacuum Former	The Machine-Vacuum Former 101	010663	2008	15
Vacuum Former	101	6	2008	15
Vacuum Former	Keystone Pro Form	PF180640	2019	15
Vibrator	Buffalo	96097	2006	15
Vibrator	Buffalo	126558	2006	15
Vibrator	Buffalo	89454	2006	15
Vibrator	Buffalo	125557	2006	15
Vibrator	Buffalo	126542	2006	15
Vibrator	Buffalo	89827	2006	15
Vibrator	Buffalo	126531	2006	15
Vibrator	Buffalo	126562	2006	15
Vibrator	Buffalo	95529	2006	15
Vibrator	Buffalo	126533	2006	15
Vibrator	Buffalo	95564	2006	15
Vibrator	Buffalo	126536	2006	15
Vibrator	Buffalo	95533	2006	15
Vibrator	Buffalo	126527	2006	15
Vibrator	Buffalo	126563	2006	15
Vibrator	Older grey one Model 6H	NO SN	2006	15
Vibrator	Older grey one Model 6H	No SN	2006	15
Grinder/Model Trimmer	Buffalo Power Rite C4C170DH8E	20561	2001	20
Grinder/Model Trimmer	Buffalo Power Rite C4C170DH8E	200846	2001	20
Grinder/Model Trimmer	Toolmaster-Whaledent TM-FCI	88064791	2001	20

Grinder/Model Trimmer	Handler CFC170J218-31-582	100075-02	2001	20
Sterilizer	M – 11 Autoclave Sterilizer	V517875	1980	7
Sterilizer	M – 11 Autoclave Sterilizer	V525603	1979	7
Sterilizer	M – 11 Autoclave Sterilizer	V126358	1982	7
Sterilizer	M – 11 Autoclave Sterilizer	V381110	1981	7
Sterilizer	M – 11 Autoclave Sterilizer	V904363	2005	7
Intraoral Camera	Sopro 717 Intraoral Camera	63729	2013	7
Ultrasonic Scaler	Dentsply Bobcat Pro	130-44475	2018	10
Ultrasonic Scaler	Dentsply Bobcat Pro	130-44473	2018	10
Ultrasonic Scaler	Dentsply Bobcat Pro	130-44478	2018	10
Ultrasonic Scaler	Dentsply Bobcat Pro	130-44479	2018	10
Ultrasonic Scaler	Dentsply Bobcat Pro	130-36909	2017	10
Ultrasonic Scaler	Dentsply Bobcat Pro	130-37138	2017	10
Ultrasonic Scaler	Dentsply Bobcat Pro	130-42714	2018	10
Ultrasonic Scaler	Dentsply Bobcat Pro	130-25800	2017	10
Ultrasonic Scaler	Dentsply Bobcat Pro	130-44471	2018	10
Ultrasonic Scaler	Dentsply Bobcat Pro	130-44468	2017	10
Ultrasonic Scaler	Dentsply Bobcat Pro	130-32099	2017	10
Ultrasonic Scaler	Dentsply Bobcat Pro	130-44474	2017	10
Ultrasonic Scaler	Dentsply Bobcat Pro	130-36907	2017	10
Ultrasonic Scaler	Dentsply Bobcat Pro	130-25799	2017	10
Ultrasonic Scaler	Dentsply Bobcat Pro	130-44476	2018	10
Ultrasonic Scaler	Dentsply Bobcat Pro	130-42727	2018	10
Ultrasonic Scaler	Dentsply Bobcat Pro	130-42711	2018	10
Ultrasonic Scaler	Dentsply Bobcat Pro	130-42712	2018	10
Ultrasonic Scaler	Dentsply Bobcat Pro	130-34773	2017	10
Ultrasonic Scaler	Dentsply Bobcat Pro	130-25396	2017	10
Ultrasonic Scaler	Dentsply Bobcat Pro	130-42715	2017	10
Ultrasonic Scaler	Dentsply Bobcat Pro	130-44469	2018	10
Ultrasonic Scaler	Dentsply Bobcat Pro	130-42708	2011	10
Ultrasonic Scaler	Dentsply Bobcat Pro	130-44472	2018	10
Ultrasonic Scaler	Dentsply Bobcat Pro	130-42713	2018	10
Ultrasonic Scaler	Dentsply Bobcat Pro	130-42716	2018	10
Ultrasonic Scaler	Dentsply Bobcat Pro	130-37530	2011	10
Ultrasonic Scaler	Dentsply Bobcat Pro	130-37139	2011	10
Ultrasonic Scaler	Dentsply Bobcat Pro	130-42709	2018	10
Ultrasonic Scaler	Dentsply Bobcat Pro	130-36902	2011	10
Ultrasonic Scaler	Dentsply Bobcat Pro	130-34579	2011	10
Ultrasonic Scaler	Dentsply Bobcat Pro	130-25798	2011	10
Ultrasonic Scaler	Parkell D560 Turbo Sensor/30	200922	2002	10
Ultrasonic Scaler	Parkell D560 Turbo Sensor/30	207063	2002	10

Ultrasonic Scaler	Parkell D560 Turbo Sensor/30	207062	2002	10
Ultrasonic Scaler	Dentsply Bobcat Pro	130-11633	2011	10
Ultrasonic Scaler	Dentsply Bobcat Pro	130-42710	2018	10
Ultrasonic Scaler	Piezo	307359038	2017	10
Ultrasonic Scaler	Piezo	307359035	2017	10
Sensor	Schick CDR Elite (size 2)	528188	2013	5
Sensor	Schick CDR Elite (size 1)	S-S32036	2015	5
Sensor	Schick	S28138	2013	5
Sensor	Schick 33	UL26979	2015	5
Sensor	Schick CDR Elite (size 2)	UL26753	2015	5
Sensor	Schick 33	UL26869	2015	5
Panoramic x-ray	Air Techniques ProVecta S-Pan	1973500206	2020	20
Intraoral x-ray unit	Gendex GX 770 Model 46-404600G 1	770-1039144FP	1989	12
Intraoral x-ray unit	Gendex GX 770 Model 46-404600G 6	770-1293180DP	1996	12
Intraoral x-ray unit	Dental Kavo Focus IO, 69 In	F43294	2020	12
Intraoral x-ray unit	Dental Kavo Focus IO, 69 In	F44391	2020	12
Portable x-ray unit	Kavo Dental Nomad Pro2	1007641	2020	12
X-ray Scanner	Scan X Digital System	4958	2012	15
Dental Unit	Pelton & Crain	CBC-F1459	2018	20
Dental Unit	Pelton & Crain	CBC-F1468	2018	20
Dental Unit	Pelton & Crain	CBC-F3019	2018	20
Dental Unit	Pelton & Crain	CBC-F3020	2018	20
Dental Unit	Pelton & Crain	CBC-F1467	2020	20
Dental Unit	Pelton & Crain	CBC-F3018	2020	20
Dental Unit	Pelton & Crain	CBC-F3017	2020	20
Dental Unit	Pelton & Crain	CBC-F3016	2020	20
Dental Unit	Pelton & Crain	CBC-F1466	2020	20
Dental Unit	Pelton & Crain	CBC-F3015	2020	20
Dental Unit	Pelton & Crain	CBC-F1469	1996	20
Dental Unit	A Dec	1944	1996	20
Dental Unit	A Dec	1948	1996	20
Dental Unit	A Dec	1997	1996	20
Dental Unit	A Dec	1996	1996	20
Dental Unit	A Dec	1994	1996	20
Dental Unit	A Dec	1947	1996	20
Dental Unit	A Dec	1946	2006	20
Dental Unit	A Dec	1945	2006	20
Dental Unit	A Dec	1943	2006	20
Dental Unit	A Dec	1942	2006	20
Dental Unit	A Dec	1941	2006	20

Dental Unit	A Dec	1938	2006	20
Dental Unit	A Dec	1939	2006	20
Dental Unit	A Dec	1940	2006	20
Dental Unit	A Dec	1964	2006	20
Dental Unit	A Dec	1963	2006	20
Dental Unit	A Dec	1962	2006	20
Dental Unit	A Dec	1961	2006	20
Dental Unit	A Dec	1960	2006	20
Dental Unit	A Dec	1963	2006	20
Laptop computer	Surface Pro 4	006584563053	2019	5
Laptop computer	Surface Pro 4	020235263253	2019	5
Laptop computer	Surface Pro 4	010978363253	2019	5
Laptop computer	Latitude 3590	15369726350	2019	5
Laptop computer	Surface Pro 4	020355663253	2019	5
Laptop computer	Surface Pro 4	005449663053	2019	5
Laptop computer	Surface Pro 4	023338263053	2019	5
Laptop computer	Surface Pro 4	022950363053	2019	5
Laptop computer	Surface Pro 4	027282762853	2019	5
Laptop computer	Surface Pro 4	021362760953	2019	5
Laptop computer	Surface Pro 4	007208463053	2019	5
Laptop computer	Surface Pro 4	15384361753	2019	5
Laptop computer	Surface Pro 4	043172462853	2019	5
Laptop computer	Surface Pro 4	020342362853	2019	5
Laptop computer	Latitude 3590	6635676494	2019	5
Laptop computer	Surface Pro 4	27256662853	2019	5
Laptop computer	Inspirion 15 5000 Series	34636607246	2016	5
Laptop computer	Latitude 3590	34911731918	2019	5
Laptop computer	Latitude 3590	9689265038	2019	5
Laptop computer	Inspirion 15 5000 Series	6687470414	2016	5
Laptop computer	Latitude 3590	7300384526	2019	5
Laptop computer	Latitude 3590	20267160014	2019	5
Laptop computer	Latitude 3590	12470289230	2019	5
Laptop computer	Latitude 3590	7700599694	2019	5
Laptop computer	Pro Windows i5	6047210126	2016	5
Laptop computer	Latitude 3590	41561191694	2019	5
Laptop computer	Inspirion 15R-5521	16243790437	2008	5
Laptop computer	Inspirion 15 5000 Series	28418668814	2016	5
Laptop computer	Inspirion 15R-5521	13983027301	2008	5
Laptop computer	Inspirion 15R-5521	7936409701	2008	5
Laptop computer	Inspirion 15R-5521	26318127205	2008	5
Laptop computer	Inspirion 15R-5521	35025256549	2008	5

Laptop computer	Inspirion 15R-5521	26680924261	2008	5
Laptop computer	Inspirion 15R-5521	29220503653	2008	5
Laptop computer	Latitude 3590	27494547662	2019	5
Laptop computer	Latitude 3590	13197796238	2019	5
Laptop computer	Latitude 3590	28742362382	2019	5
Laptop computer	Latitude 3590	36952745294	2019	5
Vacuum System	Bison-3	BN0811132	2006	12
Vacuum System	Bison-3	BN1009112	2010	12
Compressor	Baldor HPAMC100DD	AMC100DD960916266	1995	15
Radiograph Mannequins	DXTTR	3608	1995	25
Radiograph Mannequins	DXTTR	2653	1995	25
Radiograph Mannequins	DXTTR	379	1995	25
Radiograph Mannequins	DXTTR	3621	1995	25
3 Plaster traps	Nevin?	None	2005	12
Lab Drill	Rotex Electric Handpiece	83576	2004	10
Lab Drill	Rotex Electric Handpiece	7821062	2004	10
Lab Drill	Rotex Electric Handpiece	82948	2004	10
Lab Drill	Rotex Electric Handpiece	83578	2004	10
Lab Drill	Rotex Electric Handpiece	84317	2004	10
Lab Drill	Rotex Electric Handpiece	83542	2004	10
Lab Drill	Rotex Electric Handpiece	84331	2004	10
Lab Drill	Rotex Electric Handpiece	83594	2004	10
Lab Drill	Rotex Electric Handpiece	64024	2004	10
Lab Drill	Rotex Electric Handpiece	64026	2004	10
Lab Drill	Rampower Lab Drill Rotex 780	84301	2011	10
Lab Drill	Rampower Lab Drill Rotex 780	64026	2011	10
Lab Drill	Litex Electric Handpiece	7821047	2011	10

Health Information Management Program

Program Manager: Naomi Reyna

Technology

a. Overview
We do not have any special technology currently that students need for coder training

b. Strengths

c. Areas for Improvement
Students will need 3M software program (included in V-Lab), this an electronic "codebook" that assist in choosing codes by using a "tree" of terminology. This 3M software will also provide students with encoder experience that will help students in their job search. This technology is also a CAHIIM Standard 15 Learning Resources requirement. The 3M software program has been added as required resources and will be utilized in the Fall 2022.

d. Future Direction and Budget Implication
AHIMA provides V-Lab, a real-world practice to theory and strengthen student's career prospects. This offers students the opportunity to become career-ready with virtual practice experience. This V-Lab will be required this Fall 2022. This software will cost the student $85.00 for a one- year subscription. With the software being added to the book list, students will be able to use their financial aid to purchase the required software.

Equipment and Facilities

a. Overview
All courses for Health Information Management are all taught online, so there is no need for equipment

b. Strengths

c. Areas for Improvement

d. Future Direction and Budget Implication

Professional Nursing

Program Manager: Loana Hernandez

Technology

a. Overview
Nursing students use technology in multiple aspects of their education:
- Assessment Technologies Institute (ATI) – provides instruction modules, remediation, and NCLEX exam preparation modules
- Elsevier Adaptive Quizzing (EAQ) – computerized resource that provides NCLEX exam type questions that are aligned directly to the textbook for that particular course.
- Classroom in Beeville have 30 desks with computers incorporated into the desks.
- Lifesize is used for students to have virtual meetings with faculty
- Instructor has a HoverCam Pilot teaching station to deliver instruction to students

b. Strengths
30 new computers in classroom for face-to-face instruction, allowing students to stay in classroom for exams and other activities such as studying, completing assignments, and taking notes

c. Areas for Improvement
none

d. Future Direction and Budget Implication
none

Equipment & Facilities

a. Overview
Nursing lab in Beeville is spacious with the following furniture/equipment:
- 5 hospital beds (1 new)
- 4 mid-fidelity manikins (purchased summer 2020)
- 1 low-fidelity manikin
- 1 functional headwall
- 1 Venipuncture Training Aid Four Vein
- 1 Catheterization and Enema Task Trainer
- 1 Teaching Torso
- 1 Intramuscular Inj. Simulator
- 1 Inject-Ed XL pad
- 1 Wound Care Model
- 1 PVC Hamper
- 6 Overbed Table
- 1 Birthing Simulator
- 1 Fetal Monitor System
- 1 Casualty Simulation Kit Deluxe Moulage
- 1 Loaded Medication Cart
- 1 Advanced Injection IV simulator Arm
- 1 PVC Linen Cart Large 3-Shelf with Mesh Cover
- 1 Geriatric IV Arm
- Medication Dispensing system (non-functioning)

Simulation Lab:
- 1 Hospital Bed
- High-Fidelity manikin
- Crash Cart
- Patient Monitor
- Infusion pump

Classroom models:
- Heart and Lung Model
- Skeleton with Stand
- Kidney Stone Model
- Urinary Standing Model
- Pregnancy Pelvis Model with Removable Fetus
- Human Digestive System Model
- Human Brain Model
- Classic Heart Model
- Ostomy Care Model
- Unisex Torso Model

b. Strengths
Have recently received new manikins and equipment

c. Areas for Improvement
Medication dispensing system is non-functioning, hospital beds need updating to mirror what is seen in local hospitals, lacking high-fidelity manikin, lacking infant manikin, lacking IV infusion pumps, only have 1 headwall, lacking camera system to record students' skills as they are working with the manikins, lacking sharps containers/and gloves holders and hand sanitizer dispensers to mimic hospital rooms

d. Future Direction and Budget Implication
Make nursing and simulation labs resemble the hospital environment that students will be working in at clinical and in the workforce. This will prepare the students for clinical and improve the success and retention of students.

Purchase of AI high-fidelity manikin, OB high-fidelity manikin, neonatal or infant high-fidelity manikin for simulation lab. Purchase medication dispensing system, 5 IV infusion pumps, camera system for each bed (including simulation lab), 7 headwall systems, 6 hospital beds, bedside work station, ekg machine, cardiac monitors for each bed in simulation lab, ventilator, defibrillator, baby incubator, baby warmer, and accessories needed for equipment.

Radiologic Technology

Program Manager: Virginia Wall

Technology

Overview
At the forefront of medical technology, Radiology continues to grow and expand technological applications. The program has remained technologically advanced in its equipment available to students. The students have access to two digital imaging suites and a portable radiographic machine that is fitted to produce digital images. Renovations were completed and ready for student use at the beginning of the Fall 2021 semester. A portable x-ray machine was donated to the program and is not in working order; grant funds will be utilized to replace old batteries. The program currently has laptops for student use; only a few are utilized, most students use their own.

Strengths
Digital upgrades were added to all laboratory equipment in 2020. Two digital x-ray panels with two computer setups allow for simulation to occur resembling radiographic equipment currently used in hospital and clinic settings. Laptops are available for student use. The program utilizes online learning programs integrated into didactic course work geared toward registry preparation. An online platform is utilized for clinical competency recording and clinical education monitoring. Two large television screens used for PowerPoint presentations are available in the classroom. A classroom computer is connected to the televisions and available for instructor use.

Areas for Improvement
The classroom computer that the program uses to display PowerPoint presentations is a screen mirroring system. This creates a problem when emails or Teams messages for the faculty members come on the screens. It would benefit the program to have a set up where they are able to make notes on screen or walk around the classroom rather than be restricted to a stationary set up. It would also benefit faculty to have the ability to annotate the PowerPoints on screen or project them onto a whiteboard. The program has begun researching projection options and is hoping to purchase with the 2021-2022 budget allotted for Instructional Supplies.

Future Direction and Budget Implication
A laptop or tablet with drawing capabilities to make notes on screen objects would benefit the program faculty. While attending the ACERT convention, the program was introduced to Platinumed, an online platform designed to handle competency tracking, scheduling, compliance reporting and online testing. It is much like Trajecsys, the current platform used for clinical education tracking, but with more updates, the ability to be used on phones as an application, and document tracking. It will reduce the cost to students by more than half from a fee of $150 for Trajecsys, to $66.50 for Platinumed.

Equipment & Facilities

Overview
In 2019 the program received a M.G. & Lillie A. Johnson Foundation grant and began construction on a second energized laboratory. The space allotted for the x-ray room was divided and a new overhead x-ray machine was added. Radiographic equipment is maintained by Ultimate Medical Services (UMS) and registered with the Texas Department of State Health Services (DSHS). A pull apart, half-transparent phantom model was also purchased with grant funds. The program utilizes two office spaces, one for the program director and one for the clinical coordinator. One classroom is utilized for 21 students and provides adequate space for instruction on the Beeville campus. The program is not offered on other campuses.

Strengths
The extra lab allows students to complete exams and spend more time in the laboratory setting. The bifurcated window allows faculty to visualize both rooms at once and instruct from one place. The sophistication of the lab offers students an opportunity to role play and position one another as in a real-life clinic setting. The phantoms provided to the students allow opportunities to practice radiographic exposures and perfect positioning techniques. The office spaces, classroom, and lab are close in proximity allowing access to all equipment and learning tools. A large printer is in the vicinity of the department. Public exposure surveys were completed to ensure radiation safety compliance by Dr. Morgan with Medikos, Inc., April 5, 2022.

Areas for Improvement
Faculty office chairs are worn and in need of replacement. After construction, parts in the new laboratories were left exposed. Carpets or coverings are needed to prevent injury. A service agreement to maintain the radiographic equipment was signed to protect only the one older x-ray laboratory. The program found there is no drop insurance on the expensive digital x-ray panels to prevent high costs of replacement in the future. The program currently has no formal way of keeping up with Food and Drug Administration (FDA) and DSHS requirements for x-ray operations. The portable machine donated to the program is not in working order. The two older phantoms need refurbishment or replacement parts. Both limbs on the transparent side of the new phantom were broken off when students began to use it. The pieces were returned to the manufacturer for repair in January 2022; they have yet to be returned to the program as of May 2022.

Future Direction and Budget Implication
The program has requested funds to purchase new office chairs in the budget for 2023. Remaining grant funds will be utilized to purchase carpet coverings and ensure safety is top priority in the radiology laboratories. The program sought out service agreements with many radiographic equipment providers. UMS, who installed the current equipment, remains the best choice as servicer. Contracts are prepared and ready to be signed for UMS to annually perform preventative maintenance (PM) and equipment performance evaluations (EPEs) on both x-ray rooms to ensure equipment compliance with state regulations. In 2021, the program was inadvertently charged quadruple the amount for the service agreement of $4,500 on the one, older x-ray room. The program paid $18,000 for the yearly agreement to UMS. The mistake was found, and the funds were returned. $20,000 were available to the program for the service agreement for the 2021-2022 fiscal year. In the Fall of 2021, the tube board in the newer x-ray room went out and the program was charged $1,915.22 for repair. A service/maintenance agreement for both radiographic rooms would cost the program $9,000 annually. A quote for digital panel drop insurance has been acquired. Replacement of a digital panel in the event of a drop and malfunction would cost the program between $20,000-$25,000. Drop insurance coverage has

been quoted at $4,320 per year for both digital panels with a $2,000 deductible. Dr. Morgan, physicist with Medikos, Inc., works alongside UMS to sign off on their EPEs. He utilizes a website to manage all required state and federal documentation needed to maintain compliance and has offered to provide the program his services at a discounted rate of $1,200 annually. He has suggested with this agreement, we utilize the website to educate the students on the requirements of radiation monitoring and requested the opportunity to do a presentation for the students as well. The program previously had no record of EPEs, or regulatory documentation as required, on site. Ultimate Medical will perform the EPEs yearly while performing the annual performative maintenance, Dr. Morgan will sign off on them and ensure all regulatory documentation is readily available and easy to retrieve. A quote has been acquired for the repair of the portable machine; the program plans to utilize grant monies for the replacement of worn batteries. The program will also utilize grant funds to repair older phantom models with refurbishment kits. Should grant funds allow, a stretcher and wheelchair for patient transportation will be purchased as well. An obsolescence plan does not currently exist. The equipment is fairly new, the program will focus on maintaining optimal operation and preserving value.

10-44260-1-65008 Operating Fund : Radiolo...
‹ Object View

FY2022 ⌄   ↪ Export ⌄
Budget Adjustment

Encumbrances

ⓘ   No transactions to view.

Actuals				$7,847.22
Document	Date	Description		Amount
V0053021	4/22/2022	Medikos Inc		$1,432.00
C000035977	4/19/2022	Ultimate Medical Services		-$11,584.78
V0047305	11/30/2021	Ultimate Medical Services		-$1,915.22
V0047305	11/5/2021	Ultimate Medical Services		$1,915.22
V0043423	9/2/2021	Ultimate Medical Services		$18,000.00

Technology

> a. Overview

* Appropriate up-to-date multimedia materials and technology are readily available and utilized in the training process.

Most of the audio/visual equipment (70" smart tv's, Computers, etc.) that are used in the classroom and Lab are permanent or shared between classes. Other equipment is stored in the equipment room and is shared by all classrooms and labs as needed. Labs and Library are also available to students if needed.

Documentation:

Multi-media devices used in the classroom include:

- Computers
- Tablets
- 70" Tv's
- Lab Scope (Zeus)
- Diagnostic Scan tools (zeus,appollo, solus)

All data Online is available to students on all computers and electronic devices in the Auto Service Department. The (All data) online version is updated immediately as new service data becomes available. The software provides service procedures, specifications, and estimating capability back to 1981 model years.

We are also partnered with local industry that can provide us with resources.

> b. Strengths

>> * We now have Technology (acquired through Perkins funding) that allows us to implement practices that industry leaders will use.

>> c. Areas for Improvement

>> * With automobiles evolving we must start the transition in Electronic Vehicles.

>> d. Future Direction and Budget Implication

>> * Faculty Member has been added as an apprentice by local Dealer (Aztec Chevrolet). This Will allow for Additional Professional development in the everchanging automotive industry.

Vocational Nursing

Program Manager: Loana Hernandez

Technology

a. Overview
Nursing students use technology in multiple aspects of their education:
- Assessment Technologies Institute (ATI) – provides instruction modules, remediation, and NCLEX exam preparation modules
- Elsevier Adaptive Quizzing (EAQ) – computerized resource that provides NCLEX exam type questions that are aligned directly to the textbook for that particular course.
- Classrooms at all 4 sites have 30 desks with computers incorporated into the desks.

b. Strengths
30 new computers in classroom for face-to-face instruction, allowing students to stay in classroom for exams and other activities such as studying, completing assignments, and taking notes

c. Areas for Improvement
none

d. Future Direction and Budget Implication
none

Equipment & Facilities

a. Overview

b. Strengths
We have continually updated equipment and manikins through various grants.

c. Areas for Improvement
Medication dispensing system is non-functioning, hospital beds need updating to mirror what is seen in local hospitals, lacking high-fidelity manikin, lacking infant manikin, lacking IV infusion pumps, only have 1 headwall, lacking camera system to record students' skills as they are working with the manikins, lacking sharps containers/and gloves holders and hand sanitizer dispensers to mimic hospital rooms, some manikins are in disrepair
Lacking comprehensive inventory list and obsolescence plan

d. Future Direction and Budget Implication
Make nursing and simulation labs resemble the hospital environment that students will be working in at clinical and in the workforce. This will prepare the students for clinical and improve the success and retention of students.
Purchase high-fidelity manikin, Purchase medication dispensing system, and IV infusion pumps.
Purchase needed parts and accessories to repair current equipment and train faculty on maintenance of equipment

Published by the
Office of Institutional Effectiveness & Research
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