ALUMNI CENTER
ANNUAL REPORT
2022 - 2023

KETA SENIOR HIGH

TECHNICAL SCHOOL

KETASCO

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OVERVIEW

Introduction

The maiden edition of the Alumni Center Annual Report chronicles detailed report about the center since its conception from April 1, 2022 through May 31, 2022, as well as the condition of the facility for the 2022-2023 academic year.

The center serves different group of users in the academic ecosystem of Keta Senior High Technical School – hereinafter referred to as KETASCO. The category of users includes the staff, management and the general student body. The conduct, performance and the outcome of the Elective ICT paper during the 2022 WASSCE examination underscores the crucial timing and importance of the establishment of the Alumni Center.

Contents

The Origin

The harbinger of the Alumni Center was made manifest in the lead up to the 2018 West African Senior Secondary Certificate Examination (WASSCE) when Mr Isaac Dzidzienyo, the current headmaster solicited for support for computers for the ICT Laboratory. The headmaster appealed to the old students especially the North American branch to come to the aid of the school by way of procuring some computers for the ICT center. This advocacy yielded favourable result as the KETASCO ALUMNI OF NORTH AMERICA(KANA) took up the initiative and donated ten sets of desktop computers to the ICT center to aid in the conduct of the 2018 WASSCE ICT practical examination and to support teaching and learning activities.

The KETASCO ALUMNI OF NORTH AMERICA(KANA) further took it up as a project to provide an ultra-modern ICT center for the school. The project commenced under the leadership of **Doctor Gadagbui** and **Professor John Dogbey** who prior to the project were both domiciled in the United States of America. Professor Deegbey had to come down to Ghana to personally superintend over the execution of the project. The dedication and commitment with which he executed the alumni center project was exemplarily exceptional. Day and night Professor Dogbey together with his younger brother Mr Theodore Deegbey – also an old student - worked their socks off just to put up an edifice befitting the status of their alter mata.

In his inaugural speech, Professor Dogbey chronicled the benefits students stands to derive from leveraging on the ICT resources available at the Alumni Center and how they can also use these ICT tools to improve the learning of other subjects. He further underscored the importance of setting up

the Resource Center as a separate section of the Alumni Center to enable students to have access to international examinations such as SAT and TOEFL.

Goals

The vision of the founders of the Alumni Center is captured in the following objectives:

➢ to provide students and staff with a vast array of information technology resources needed to promote learning.

➢ to enhance the classroom teaching with Internet based real time online researchable study environment for the students and also the staff.

➢ incorporate latest softwares, hardware and networking solutions to provide state of the art service to all the stakeholders of the computer lab in the school.

➢ provide training and guidance to students and staff in I.T and Computers and in Technology.

➢ provide an environment conducive for E-learning and research.

➢ keep all the computer hardware and software and other items in good working condition.

➢ to provide training and build capacity of the department to enable them to mount, deliver and assess student in international examinations such as SAT, TOFL etc.

Access

The Alumni Center from Monday to Friday between 7:00 AM to 5:00 PM to the staff, school management and the student populations. The teaching staff is permitted to use the facility to complement their lessons in terms of preparation of Teaching and Learning materials or to

demonstrate abstract concepts to their learners. Staff can equally use the center to facilitate their own research activities. It is instructive to state that the usage of the Alumni Center by the school management, staff, students and the general norms that govern the usage of any school facility are not mutually exclusive.

The facility is open within the normal contact hours between 7:00 AM to 3:00 PM. Normal academic work spans between 7:00 AM to 3:00 PM. Prospective students who intend to use the Lab for personal research and other course work are encourage to do so immediately after close of school, thus between 3:00 PM to 5:00 PM. This directive is to enable both staff and students who desire to use the Lab for extra work would have ample time outside the normal contact hours.

Integration

ICT in education improves engagement and knowledge retention: When ICT is integrated into lessons, students become more engaged in their work. Based on this premise, the ICT department collaborated seamlessly with other faculties to incorporate ICT resources in their lesson planning, delivery and assessment. This is because technology provides different opportunities to make it more fun and enjoyable in terms of teaching the same things in different ways. As a consequence of this integration, students are be able to retain knowledge more effectively and efficiently.

Rules and Regulations

The following are the rules and regulations put in place to maintain the safety of the equipment in a clean and orderly environment.

- ❖ All bags and cardigans shall be left outside.
- ❖ Food, water and beverages are prohibited in the Lab.
- ❖ Installations or coping of files onto or from the computers without authorization of the instructors are prohibited.
- ❖ Students using the computer Lab after school are required to sign in and sign out.
- ❖ Both staff and students are prohibited from attempting to repair or tamper with any Lab equipment.
- ❖ Changing the settings (screensaver, wallpaper, themes etc.) of any computer is prohibited.
- ❖ The use of personal storage media or devices such as pen drives, CD, DVD, MP3/MP4 players etc. can only be allowed with prior permission.
- ❖ Relocating any equipment from its original location is prohibited.
- ❖ Those who intend to use the Lab for practical work or for personal projects shall do so immediately after school.
- ❖ No one shall take anything out of the lab without permission
- ❖ Playing of games, watching movies and playing of music are prohibited in the lab.
- ❖ Do not switch on any Computer without authorization.
- ❖ No item is allowed into the lab without authorization.

❖ Derogatory Comments and Noise making is prohibited in the Lab.

❖ Work quietly so as not to disturb other people.

Equipment

The inventory of items in the Alumni Center are as follows:

ITEM	BRAND	QUANTITY	CONDITION
Air conditioner	LG	4	Good
Book	Refer to database	Refer to database	Good
Ceiling fan	LENOVA	5	Installed but not operational
Chair	Customized	90	Good
Face plate	-	64	35 Good 29 Bad
HDMI to VGA adapter	-	1	Good
IMAC	APPLE	4	Good
Keyboard	**BRAND**	**QUANTITY**	**CONDITION**
	AMAZON	8	Good
	DELL	52	Good
	HP	1	Good
	LENOVO	2	Good
	LOGITECH	1	Good
	MICROSOFT	4	Good
Laptop	**BRAND**	**QUANTITY**	**CONDITION**
	ACER	1	Screen damaged
	APPLE(MACBOOK)	3	Keyboard & battery issues
	DELL	1	Weak battery
	LENOVO	2	1 Weak battery
Electric bulb	Focus	8	Good
Monitor	**BRAND**	**QUANTITY**	**CONDITION**
	DELL	51	One faulty from shipment
	HP	4	Good
	SAMSUNG	1	Good
Mouse	**BRAND**	**QUANTITY**	**CONDITION**
	AMAZON	16	Good
	DELL	46	Good
	LOGITECH	3	Good
Network interface card	-	11	Good
Router	**BRAND**	**QUANTITY**	**CONDITION**

	SYSLINK	1	Good
	TP-LINK	1	Good
Server	CUSTOMISED	1	Good
Switch	**BRAND**	**QUANTITY**	**CONDITION**
	LINKSYS	1	Good
	NETGEAR	1	Good
	TP-LINK	1	Good
Projector	NEC	1	Good
Projector lamp	NEC	1	Brand new
Socket	CUSTOMISED	81	Good
Sound bar	DELL	3	Good
System unit	DELL	60	1: labelled backup and cannot be updated 5: experiencing power issues
Table	Customized	45	Good
Television	Samsung (65 inches)	1	Good

About five of the system units are exhibiting pre-boot error**: "Invalid Configuration Information**"
The error is received at the **Power On Self-Test (POST)**. Below is the screen of the error.

Below are a few troubleshooting tasks that were carried out to resolve the problem:

1. checked the CMOS
2. run basic hardware diagnostics
3. reset the system time and date

Three of the systems responded to treatment but two of the systems are still showing the same symptoms. It a BIOS problem because once the F1 key is pressed the boot sequence is normalized.

Alumni Center Database Management Software (KANApp)

In line with prudent management of the Alumni Center a software has been design and developed to streamline the day to day running of the center. The core functions of the system are:

- ❖ Capturing and inputting data on all equipment in the center into a database

- ❖ Processing data

- ❖ Querying the system for information

- ❖ Retrieving information from the system

- ❖ Updating the information in the system

- ❖ Archiving the data

  The system was designed in-house to incorporate key modules that are customizable to the needs of the center. The first version of the software was trialed using data collected from the Alumni Center. The system is web based to enable major stakeholders to have easy access to the system from anywhere in the world. The current version is hosted of a free server. There are plans to host the application on a paid server which is permanent. The following are samples of the user interface.

The User Interface of the Alumni Center Application

Login page

Dashboard

KANA COMPUTER LAB

KEYBOARD	⌄	VIEW	BACK

ALUMIN CENTER

ITEM	BRAND	QUANTITY	CONDITION
KEYBOARD	AMAZON	8	In good condition
KEYBOARD	DELL	52	In good condition
KEYBOARD	HP	1	In good condition
KEYBOARD	LENOVO	2	In good condition
KEYBOARD	LOGITEC	1	In good condition
KEYBOARD	MICROSOFT	4	In good condition

sample result

KANA COMPUTER LAB

ID	
Item Name	
Brand	
Quantity	
Condition	

Add	Update	Remove	Back

updates module
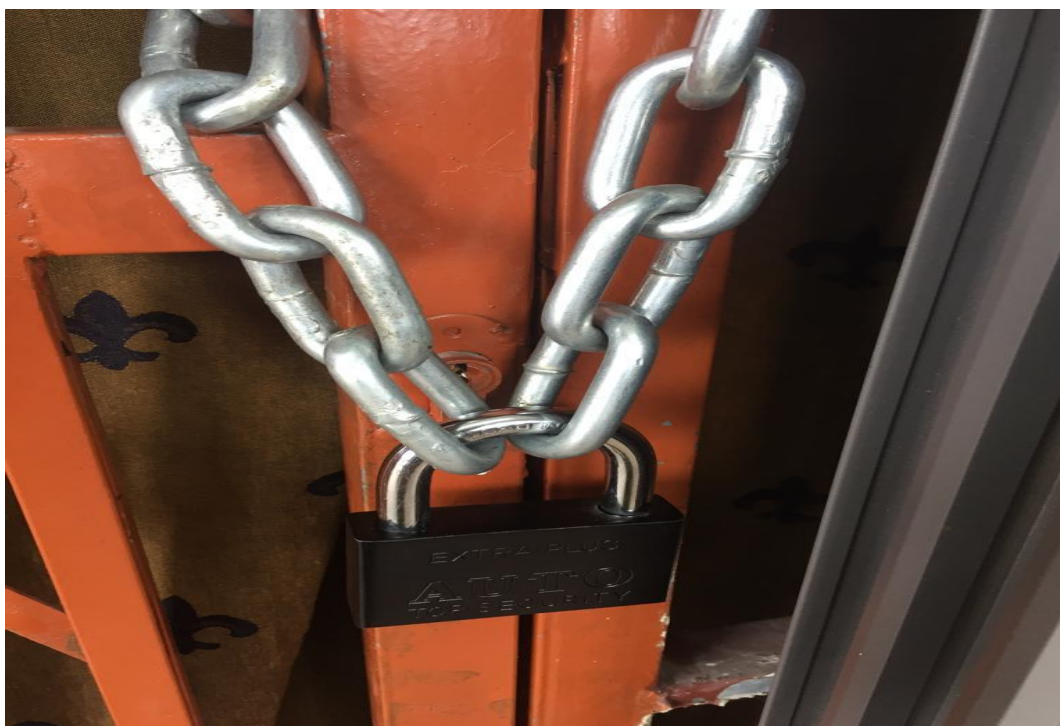
Secutity and Safety

As part of the design and setup of the center, there are three main entrances or doors to the Lab. Each door is conposed of a sliding glass door and metallic burglur proof embedded into the concrete frame. Both the burglar proof and the sliding door have protective locks that are secured with keys. There are eight windows that provide adequate ventilation to the Lab. The windows are also secured with burglar proofs and sliding glasses. Issues of security are taken seriously to protect the safety of the center and to safeguard the huge investments that has gone into putting up the Lab.

During the first semester vacation of the current academic year,the school management picked up credible intelligence to the fact some criminals were planning to burglarize the center. Upon hearing this news, the headmaster detailed additional security personnels to take control of the center and further directed that steps are taken to upgrade the locking mechanism of the center. It was decided that the all the doors should be augmented with blockchains and padlocks. In addition, security lights have been installed in front of the Lab.

Blockchain with padlock

Special Award and Recognition

The Alumni Center could not have come at a better time, because it proved to be the missing piece in the jigsaw as the **KETASCO Coding Club** prepared for the 2022 annual Science Technology Engineering and Mathematics(STEM) competition. The club was formed to provide extra curricular activities for students who have interest in computing and learning how to write codes and develop software. The sponsors of the club provided Raspberry Pi devices that serve as a single board computer to enable students write codes and programs. KETASCO entered the competition with a project known as **SECURITY SURVEILLANCE SYSTEM.** But due to the menace of COVID-19, project presentations had to be done online. Thanks to the Alumni Center, we were able to present and defend the project successfully and came out as the Volta Regional Championss and also emerged as the runners up to PRESEC, Legon in the coding category. We are hoping to go one step further this year by winning the ultimate price.

Resource Center

The resource center is an integral part of the Alumni Center with the view to providing the avenue for students who aspires to acquire training and to write international examinations such as the Standardized Aptitude Test (SAT), Test of English as a Foreign Language (TOEFL) etc. To this end plans are far advanced to make sure this dream becomes a reality. All the necessary hardware is in place saved for the software components, the curriculum, the content, the qualified personnel and the legal framework to be established for the programme to take off.
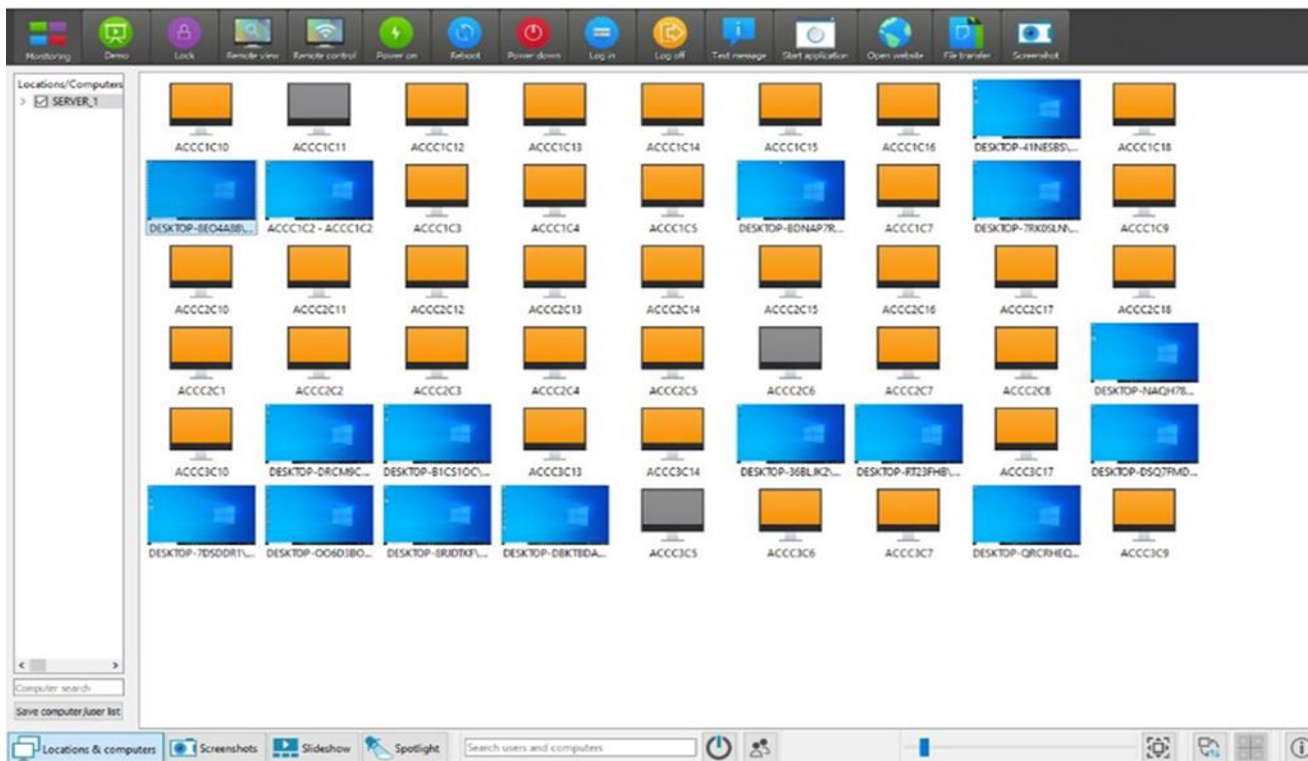
Network

All the computers in the Lab are connected to three different network switches. These separate switches are then connected to each other making it a Local Area Network. Cuttently, the network is not controlled by a dedicated network server that runs a network operationing system. One of the computers in the network is being used as a server to manage access and the usage of the rest of the network infrastructure. There is an open source softeware known as **VIRTUAL EYE ON NETWORK (VEYON)** which is being deployed to manage the operation of the Lab.

The individual computers are connected to the general network through ports on the face plates that are mounted on network trunkings. Out of a total number of 64 ports, only 35 of them are functioning properly. This was realised during a diagnostic assessment that was performed at the Lab a few weeks after the Lab became operational. Below is the interface of the VEYON Network operating system.

VEYON Network Monitoring System

Internet Access

Currently there is no Internet connectivity at the center. Notwithstanding, plans are far advance to procure permanent Internet Service for the center. The occasional Internet access in use at the center is provided at my own instance for use by the students and some staff which the school reimburses. Students and staff who need credible and important access to the Internet are assisted to have access.

Repair and Maintenance

Best practice depicts that routine works must be done in order to make sure that items and equipment are kept running smoothly. Even regular checks and maintenance is not enough to prevent some items from experiencing wear and tear as a result of constant friction. A case in point is the constant opening and closing of the sliding doors at the main entrances of the Lab. The rollers beneath the sliding doors intermittently get broken down as a result of frequent usage resulting from the sheer number of the students that patronize the center. When this happens, it becomes practically impossible to either open or close the doors. This usually calls for repairs or replacement of the rollers.

Other items that were repaired or replaced are:

- ❖ ACER laptop charger - replaced
- ❖ ACER LED screen - yet to be repaired and replaced
- ❖ DELL laptop charger – replaced
- ❖ LENOVO laptop keyboard – one key got removed and is yet to be repaired

Pending Tasks

- ❖ Server installation and configuration

- ❖ Ceiling fan installation completion

- ❖ Indoor light switches replacement

- ❖ Faulty network ports and cable replacement

- ❖ Completion of the Resource Center

Lease Policy

In line with the policy directives of the Alumni Center, any department that requires any item or equipment as a Teaching and Learning Resource or to support academic work are permitted to apply officially for such items for their usage and are to return same promptly and in good condition once they are done using them.

The list below details the collection of items solicited for by different department:

ITEM	DEPARTMENT	RECEIVED	RETURNED	SIGNED	REMARK
DELL LAPTOP	BUSINESS	23/08/2022	30/08/2022	KLUTSEY DANIEL	Returned but with damaged charger
LENOVO	SCHOOL CLINIC	27/10/2022	Still in use at the school clinic	SCHOOL NURSE	Still in use at the school clinic
LENOVO LAPTOP	SCHOOL SECRETARIATE	04/06/2022	18/01/2023	ANYADI PEARL	Returned with one damaged key

Book Policy

There are different types of books and genres in the mini library at the resource center including Science Fiction, Textbooks, Monographs, Memoirs, Biography, Autobiography, Action, Adventure, Crime, Mystery, Documentary and Drama. Students are allowed to come to the Lab and use the books for research or for other academic work. Learners are permitted to sign up for books and return same after eight days. Those who are not able to finish with the books are allowed to apply for extension.

Conclusions

As we look forward to taking full advantage of the magnificent edifice that has been bestowed on the school, we pray for God's grace and strength for all those who mean well for KETASCO. To say the Alumni Center has come to fill a void created by so many years of lack of resources would not only be stating it mildly, it would amount to an absolute understatement. The center has been a huge blessing not only to the school but to the entire community and the municipality as a whole. I cannot chronicle all the praise and admiration the center has attracted from visitors both within and outside the KETASCO environment.

I cannot even begin to enumerate the number of students that are relishing the prospect of enrolling in the SAT and FOEFL project -Resource Center- once it is rolled out eventually. All these would not have been possible saved for visionaries such as Dr Gadagbui, Professor Dogbey and the entire Alumni of branch of North America who put aside their busy schedules and resources just to birth this awesome project.

I equally salute the gallant headmaster, Mr Isaac Dzidzienyo for his forward thinking and the ability to always look at the bigger picture. I know he means well for the school. He has a way of delivering every time the odds are stuck against him. I am optimistic that this is just the beginning of his greatness.

On behalf of the students, and the staff of the ICT Department, I wish to once again thank everyone that is linked directly and indirectly to this project. I believe it is a work in progress. I know if the vision and commitment with which this project was started can be sustained, then KETASCO is in for a sit at the table when it comes to IT infrastructure that can be leveraged to for the good of the school.

Recommendation

There are a few suggestions I would like to put forward for consideration.

1. **Lavatory:** work was started on an existing facility that served as a lavatory but was halted along the way during the construction of the Lab. Taking into consideration the number of students and staff that use the Center, I would like to suggest that the renovation work on the abandoned lavatory be completed so as to prevent walking long distances to places of convenience.
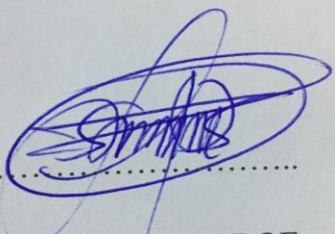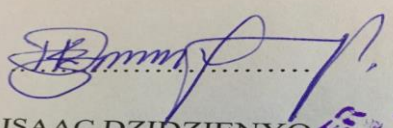

The abandoned lavatory project

2. **Uninterrupted Power Supply (UPS):** the aim is to allow the computers to keep running for at least a short time when the primary power source is lost. This provision is key due to the fluctuation in power and the unreliable nature of our electric power supply.

3. **Stable Internet:** the Lab needs Internet access for a lot of tasks such as research, information, coding, competitions just to mention but a few. The resource center would equally be running on Internet.

4. **Lighting System:** Dr Gadagbui paid a courtesy call to the Alumni Center in January, 2023 to familiarize with the center. He observed that the lighting in the center is not bright enough and advised that steps should be taken to upgrade the lighting system. This observation confirms management's concern on the matter. In all we are much grateful for all our benefactors and benefactresses.

ELVIS DAMIAN DOE

(COORDINATOR)

ISAAC DZIDZIENYO

(HEADMASTER)

A SCENE FROM THE ALUMNI CENTER