



## The impact of open educational resources (OERS) as educational tool for emerging technologies in the agriculture sector

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### ABSTRACT

Textbooks account for a significant chunk of college student's tuition costs, which are a vital part of their education. Web-based teaching and learning have become increasingly popular due to the Internet's immense reach and the ease with which technology may be used. Hence, the study focused on the impact of Open Educational Resources (OERs) on emerging technologies in the agricultural sector. The paper utilized the descriptive-correlation method research design. The study uses closed-ended questions to collect data that helps draw objective conclusions that help derive patterns, respondents' traits, and behaviors on the impact of incorporating technologies. The survey questionnaire would be utilized to gather needed information as the basis for correlation analysis to determine the relationship between the use of Open Educational Resources and the respondents' academic performance. The Chi-Square test of Independence and Pearson correlation are the statistical tests used to analyze the significant association between students' academic achievement and their perception of the Internet. The paper revealed that OERs keep students interested and motivated. They earn higher grades, according to the study's findings. The students who choose to learn utilizing online tools such as OERs need self-motivation, self-sufficiency, and responsibility. The study emphasized proper orientation and training for students and how to best apply the information and knowledge they get through the Internet because it also allows them to engage in non-academic activities.

**KEYWORDS:** *online learning, technology adoption, learning modality, Internet, social media*

### 1 INTRODUCTION

In many higher education settings, textbooks are a critical component. Some instructors have experimented with replacing open educational resources (OERs) for commercial textbooks as their primary class content due

to increased textbook prices and overall higher education expenditures. Textbooks account for a large portion of college students' fees. Attempts should be made to reduce these costs as feasible, as this could help students succeed; this is especially true when high-quality Open Educational Resources (OERs) are publicly available as a free alternative to commercial textbooks. Furthermore, Loro et al. (2016) emphasized that the costs of creating a laboratory, maintaining an existing laboratory, and purchasing current equipment are only a few downsides.

Open Educational Resources, which include virtual laboratories and simulators, is thus a first and cost-effective solution to the challenge of bringing students closer to the corporate world. Butcher (2015) described Open Educational Resources (OER) as an educational resource that is freely available for educators and students. Furthermore, this includes curriculum maps, course materials, textbooks, streaming videos, multimedia applications, podcasts, and other materials designed for use in teaching and learning) without the need to pay royalties or license fees. The concept of Open Educational Resources (OER) has gained traction as a valuable educational tool. Using resources as a vital method of transferring content in educational courses is based on the idea of using resources as a necessary means of transferring information in educational courses because of the ease with which such materials may be conveyed over the Internet.

Web-based teaching and learning have grown in popularity due to the Internet's enormous reach and the simplicity of utilizing technology (Gilbert, 2015). Thus, the study assessed the impact of Open Educational Resources (OERs) as an educational tool for emerging technologies in the agricultural sector. The study incorporates various Open Educational Resources as an educational tool relevant to emerging and advanced technologies, particularly in the agricultural sector. Lessons and activities, such as online learning materials, helpful Internet sites, social media, and online video sharing services, were integrated among the lessons. Furthermore, the study's findings would establish whether or not OERs may help engaged students improve their academic performance.

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Figure 1. Conceptual Framework of the Study  
Pedagogy (Knowles et al., 2014), Community of Inquiry (Garrison et al., 2010), Connectivism (Siemens et al., 2017), and Online Collaborative Learning (Harasim, 2017) are all critical in order to understand how students learn.

Pedagogy comes from the Greek word "paidagogia," where "paid" refers to a child and "agogos" refers to a person who serves as a guide (Knowles, 2014). Traditional Pedagogy, Holistic Pedagogy, and Blended Pedagogy are three fundamental pedagogic frameworks. Traditional pedagogy prioritizes a teacher's instructional role as a content expert responsible for transmitting knowledge, skills, and dispositions to students in a didactic style. In contrast, Holistic pedagogy invites pedagogy-as-art, which involves creativity, imagination, and emotion in teaching and learning practice and is less concerned with the setting, age, or stage, focusing on learner identity and transformation. Blended Learning Pedagogy is also known as Hybrid Learning since it combines online and face-to-face activities. In their evaluation of online learning studies, Hollis and Madill (2016) concluded that best practice occurs when technologies that promote interactions between students and between students and instructors are combined. Interactions between (a) learners and (b) instructors, (c) learners, and community-based partners are made more accessible by combining face-to-face learning with active learning assignments and online learning activities. It also encourages lifelong learning by expanding the ability to "find" material through online activities, promoting interactivity with a wide range of people, and increasing engagement (Goodyear et al., 2016). Garrison (2010) stated that online knowledge building is the result of collaborative effort among active participants in learning communities that reflect effective online instructional orchestration (teaching presence) and an encouraging collegial online context (social presence). The construct of teaching presence articulates the behaviors likely to lead to a productive Community of Inquiry by delineating task sets such as organization, design, discourse facilitation, and direct instruction. An online discussion that creates positive effect, engagement, and cohesion that sustains a functional collaborative environment is social presence. Downes (2009) defined connectivism as a learning philosophy for the digital age. Educators have recognized it because it claims to understand better and

manage teaching and learning using digital technologies.

Furthermore, connectivism was seen as a reflection of our fast-changing society. As technology advances, society becomes more complicated, socially connected, global, and mediated. According to Harasim (2012), online collaborative learning (OCL) is a philosophy that harnesses the Internet's capabilities to create learning environments that encourage collaboration and knowledge creation. For the Knowledge Age, OCL is a new learning theory that focuses on collaborative learning, knowledge creation, and the use of the Internet to change formal, non-formal, and informal education. In this type of education, students collaborate to define and promote shared knowledge of a topic, analyze concepts, solve problems, and develop explanations for various phenomena. Learning takes place through collaborative discourse in OCL models. Participants can co-create new information by exchanging challenges and solutions online, not restricted to communication and knowledge sharing (Kurucay et al., 2017).

The following legal foundations supported the study: First, the 2012 Paris OER Declaration, which was created by the World Open Educational Resource Congress (WOERC) and the United Nations Educational, Scientific and Cultural Organization (UNESCO) and was held in Paris, France, on June 20-22, 2012. Its goal was to raise awareness and use of OER, which contributes to social inclusion and lifelong learning and strengthens the development of OER policies. Second, the "Open Distance Learning Act," also known as Republic Act (RA) 10650, that aims to broaden and further democratize access to high-quality postsecondary education by promoting and promoting open learning as a philosophy of educational access. Open Distance Learning (ODL) for higher educational institutions (HEIs) and technical-vocational courses has the goal of providing accessible, high-quality education through the use of Open Educational Resources (OER) and learning materials delivered via print, audio-visual, electronic/computer, and virtual classrooms as well as face to face sessions in the Philippines under RA 10650. Third, the CMO No. 62 Series 2016 promotes ODL through tertiary education as a cost-effective, efficient, and effective approach for providing high-quality higher and technical education in the country. The law also supports using high-quality Open Educational Resources to enable universal access and knowledge transfer. A collaborative policy was then issued by the Philippines' Department of Education (DepEd), the Technical Education and Skills Development Authority (TESDA), the Commission on Higher Education (CHED), and the University of the Philippines Open Universities (UPOU) based on the legal underpinnings outlined above. The state promotes and supports the development and use of high-quality OER to ensure inclusiveness and equitable learning opportunities in both formal and non-formal education, from a

perspective of lifelong learning, towards an appropriate and efficient system of delivering quality education and the attainment of sustainable development in the country.

Learning can be transformed by technology in several ways. It can affirm and advance educator-student interactions, new methods of learning and collaboration, the closing of long-standing equity and accessibility gaps, and the adaptation of learning experiences to the needs of students to meet the requirements of all students.

Principles of learning apply to a wide range of technology. When adequately developed and implemented, technology, on the other hand, can accelerate, magnify, and disseminate the impact of solid learning concepts. Learning studies frequently create models and findings that evolve since the learning process is not observable.

## 2 MATERIALS AND METHODS

In this study, the researcher utilized the descriptive-correlation method research design. This methodology best describes the characteristics of the variables under study and attempts to identify associations between them. It attempts to collect information, statistically analyze it, and test if an association between variables exists. This study will describe the relationship between Open Educational Resources (OERs) as an educational tool and the academic performance of students taking up higher electronics, particularly in emerging technologies that introduce sophisticated technologies relevant to the agricultural sector. Descriptive research mainly uses observational methods; thus, the researcher cannot control the nature and behavior of the variables under study. Since most descriptive research methods use closed-ended questions to collect data, it helps draw objective conclusions about the respondents. Descriptive research helps in deriving patterns, traits, and behaviors of respondents. It also aims to understand respondents' attitudes and opinions about certain information. With the help of statistical analysis provided by descriptive research methods, the researcher can understand the trends in data over time. This method determines these predictors and academic performance interplay, which aims to increase academic performance in the respondents' learning process using relevant OERs. Using correlation analysis, the researcher can summarize the relationship between variables into a correlation coefficient, describing the relationship of the variables in terms of strength and direction. With this number, the researcher will quantify the relationship between the variables under study.

### Instruments and Tools

The researcher used a survey questionnaire as an instrument for the study. The survey questionnaire would

be utilized to gather needed information as the basis for correlation analysis to determine the relationship between the use of Open Educational Resources and the respondents' academic Performance. This information would include the respondent's profile, such as the age and gender, parent's highest educational attainment, occupation, number of siblings, and combined family income. Furthermore, information about the use of the Internet of the respondents provides baseline data as to the type of Internet connectivity the respondents have, the devices used to access the Internet, the purpose of accessing the Internet, the activities involved in using the Internet, and the time spent of using the Internet. Data gathered were treated statistically using weighted mean, frequency count, and simple percentage formula.

Information on the level of the respondents' academic performance was based on the grades of the respondents in the Second Semester of the Academic year 2018-2019. These grades are computed based on the university's approved guidelines. The grades comprised Performance, including Practical Examinations and Projects; Class Standing, which includes Quizzes and Graded Oral Participation; Term Examination, which includes Midterms and Final theoretical written exams on the competencies required. The Chi-Square test of Independence and Pearson correlation was utilized to determine the significant association between students' academic achievement and their perception of the Internet.

### Open Educational Resources (OERs)

UNESCO's Forum on the Impact of Open Courseware on Higher Education in Developing Countries coined the term "open supply of educational resources, facilitated by information and communication technologies, for non-commercial consultation, use, and adaptation by a community of users" in 2002. OER was created to allow anybody to create free, universally accessible educational materials that might be used for teaching or learning (Hilton, 2016). From complete courses, open access journals to lecture material, references and readings, simulations, experiments, and demonstrations, to syllabi, curricula, and teacher's manuals, OER encompasses a wide range of learning objects and free applications (Piedra et al., 2015)

The study then used the following Open Educational Resources (OERs). In the teaching-learning of Electronics Technology disciplines, these OERs are particularly useful for various coursework and simulation exercises.

### *PhET Interactive Simulations*

Free interactive simulations are available through the University of Colorado Boulder's PhET Interactive Simulations project, launched in 2002 by Nobel Laureate Carl Wieman. Students are engaged through an intuitive,

game-like environment where they learn through exploration and discovery in PhET simulators based on substantial education research.

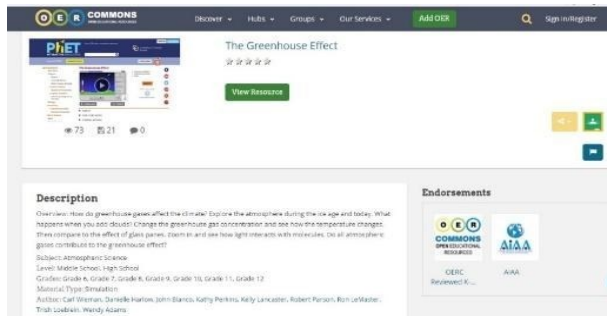


Figure 1. Interactive Simulation on Greenhouse Effect

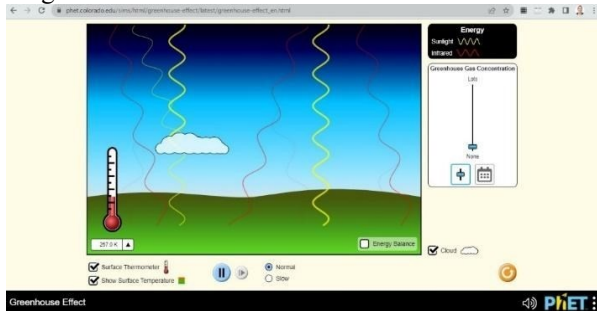


Figure 2. Real time interactive simulation on Greenhouse Effect where relative information can be varied.

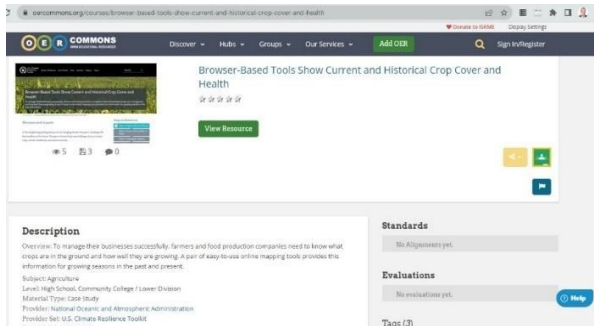


Figure 3. Emerging Technology: Browser Based Tools relevant to the Agricultural Sector

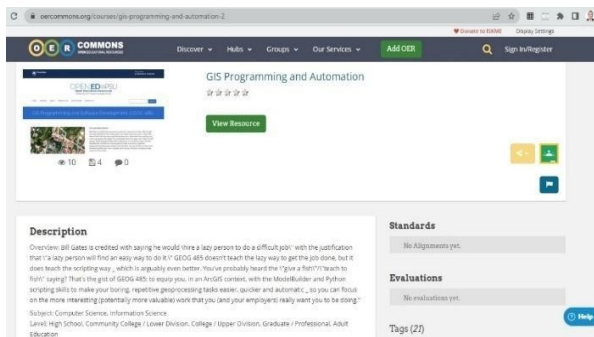


Figure 4. Emerging Technology: GIS Programming and Automation relevant to the Agricultural Sector  
*MERLOT Virtual Labs India*

With the aid of MERLOT Virtual Labs India, students

will try out a range of Virtual Labs. Virtual Labs provides a variety of engineering and technology virtual laboratories. Students could grasp circuit architectures and test communication circuits before fabrication if they had a real-world representation of different laboratory applications. Simulations and virtual labs provide a more conducive atmosphere for testing and practice, as they protect students from the dangers and the possibility of causing damage to equipment and components. Video lectures and conversations have been offered to understand different theories better.

### Respondents

In order to choose the respondents for this study, simple random sampling was used. The most basic technique of sampling is simple random sampling. The researcher selects a group of people (a sample) to analyze from a wider group of people (a population); because each person is chosen randomly, everyone in the population has an equal chance of being included in the sample.

The researcher chose 50 Electronics Technology students of Cebu Technological University to participate in the study. Consent was also sought after gathering essential information on the respondents' academic performance, which would be used in the study's analysis.

### 3 RESULTS AND DISCUSSION

Wong et al. (2015) indicated that the three most important predictors of Internet usage were education level, age, and income level.

Based on the data, the study's responses were around 54 percent male and 46 percent female; approximately 66 percent of those aged 17 to 19, 28 percent of those aged 20 to 23, and 6% of those aged beyond 23 years old are under the age of 23. When students are exposed to the Internet, their age and gender may impact their academic performance. According to Dev, one of the personal characteristics associated with the discrepancies in academic achievement and motivational functioning is gender (2016).

Table 1 also revealed that 40 percent or 20 of the respondents' parents finished their elementary education. In addition, only 10% of the respondents' parents graduated from high school, while the other 10%, or 5 of the respondents' parents, did not. Only two of the respondents' parents, or 4% of the respondents' parents, were enrolled in college. However, some of them did not complete or get a college degree in some cases. Only one of the respondent's parents has a college diploma or 2% of the respondent's parents. Students' success in online learning largely depends on their parents' success. According to Crede et al. (2015), parents' education significantly impacts their children's academic achievement. Educated parents can better offer their

children more cultural and social capital to help them thrive in school. They went on to say that by providing various forms of capital to their children, more educated parents may be able to motivate their children better to succeed in school. People with a low level of education often lack the Internet literacy skills needed to use the Internet and have low motivation to adapt the Internet to their lives since their awareness of the different resources and services that the Internet can provide is low (Wong et al., 2015).

**Table 1. Respondents' Personal Profile**

Demographics	f	%
<b>Gender</b>		
Male	27	54.0
Female	23	46.0
Total	50	100.0
<b>Age</b>		
17 - 19 years old	33	66.0
20 - 23 years old	14	28.0
Above 23 years old	3	6.0
Total	50	100.0
<b>Parent's Highest Educational Attainment</b>		
College Graduate	1	2.0
College Level	2	4.0
Elementary Graduate	6	12.0
Elementary Level	20	40.0
High School Graduate	16	32.0
High School Level	5	10.0
Total	50	100.0
<b>Parent's Occupation</b>		
Administrative Staff	1	2.0
Baker	1	2.0
Fishermen	2	4.0
Farmer	5	10.0
Laborers	11	22.0
Production Workers	22	44.0
Marketing Staff	6	12.0
Office Clerk	1	2.0
Technical Staff	1	2.0
Total	50	100.0
<b>Combined Monthly Family Income</b>		
₱5000.00	26	52.0
₱10000.00	20	40.0
₱20000.00	1	2.0
₱25000.00	3	6.0
Total	50	100.0

Respondents' parents, which take 44% are production workers, while the other 22 percent are plain laborers, as reflected in Table 1. About 12% of the respondents' parents work as marketing staff for well-known supermarkets in the city. Three parents work for the local government's administrative staff, office clerks, and technical staff. The majority of workers stated they were paid the minimum wage. According to the data, 52 percent of the respondents have a combined household income of 5,000 pesos, according to the table. The remaining 40% of respondents have a combined family income of 10,000 pesos. Only 2% of the people polled have a combined household income of 20,000 pesos. The remaining 6%, on the other hand, are estimated to have a combined family income of 25,000 pesos. Low income is

mainly determined by one's education level (Wong et al., 2015). They went on to say that individuals with little money cannot afford to buy and maintain computers, connect to the Internet via broadband, or learn how to use the Internet through training or education.

According to the table, 58 percent of the respondents use Pesonet (a Wi-Fi-enabled peso device) to access various online OERs. Mobile data was used by 22% of the respondents. Only 20% of the poll respondents have Wi-Fi at home to stay connected. One of the essential factors in a student's ability to fully utilize the various OERs available online is their ability to access the Internet. To fully engage in online education, they must have a constant internet connection. The absence of a stable Internet at home, according to Gilbert (2015), is the most common problem mentioned by most respondents when accessing online resources.

The data revealed that most of these respondents use Pesonet while accessing the Internet; the table showed that 34% use Smart Phones when accessing the Internet. Regarding those who have access to home Wi-Fi, 36% of respondents use a personal or desktop computer. Then, 30% of the respondents use laptops to access the Internet. The sorts of devices used to access the Internet are crucial; the type of devices used to access online resources impacts the reliability of a stable Internet connection. When more devices are used, they are linked to more Internet behaviors and outcomes (van Deursen, 2018).

The table also revealed that 36 percent of the respondents often access the Internet for school activities. These school activities comprised but were not limited to researching topics related to their school assignments, finishing activities, and watching tutorials online. The other 36 percent mainly use the Internet for Video Streaming or Video Lectures, such as YouTube or those provided by online courseware. However, the respondents also revealed that they access valuable OERs primarily to watch videos related to their lessons. The other 28 percent may access the Internet for Open Libraries.

Finally, the table showed that 30 percent of the respondents access the Internet Almost Constantly during the day. These respondents who may access the Internet almost constantly have a Home Wi-Fi connection. The other 30 percent that used Smart Phones thru Pesonet access, where they comfortably watch videos online or access social media, may have access to the Internet several times a day. The remaining 40 percent may have to use the Internet just about once daily. These respondents revealed that financial constraints had limited them in accessing the Internet more often. They emphasized that they may only access the Internet for OERs when necessary to finish schoolwork activities. According to de Freitas et al. (2015), the digital revolution and the increased broadband availability have opened new avenues for creating and delivering educational

content. They went on to say that online learning has given us ready access to a wide range of digital media-rich content and that mobile learning has recently given us the ability to learn from anywhere and at any time.

Table 2. Respondents' information related to its Internet use to access OERs.

<b>Media Profile &amp; Engagement</b>	<b>f</b>	<b>%</b>
<b>Type of Internet Connectivity</b>		
Home Wi-Fi	10	20.0
Mobile Data	11	22.0
Pesonet	29	58.0
Total	50	100.0
<b>Kinds of Devices Used</b>		
Personal/Desktop Com	18	36.0
Smartphone	17	34.0
Laptop	15	30.0
Total	50	100.0
<b>Types of OERs accessed</b>		
Video Streaming	18	36.0
Open Libraries	14	28.0
Simulation Sites	18	36.0
Total	50	100.0
<b>Number of Times of Using the Internet</b>		
About Once a Day	20	40.0
Several Times a Day	15	30.0
Almost Constantly	15	30.0
Total	50	100.0

According to the table, 62 percent of respondents strongly agree that using OERs makes it easier to accomplish their coursework. A large amount of information, tutorials, and online materials available through OERs, according to the respondents, helped them finish and make school work easier. Although the remaining 38% of respondents agree, some of the respondents' navigation issues when accessing the OERs prevent them from working efficiently on their homework. Loveland (2016) underlined that students might access a wide range of information needed for school assignment completion if they use internet resources correctly, with a mean of 3.62.

According to the table, 64 percent of respondents strongly agree that when it comes to finishing their

coursework, they prefer to use OERs over textbooks. The OERs, according to the respondents, provide a wide range of e-books (electronic books), interactive videos, and online materials to help students better grasp their classes and complete their assignments. The other 36% agree that OERs have much to offer compared to textbooks. However, these respondents did consider that being unable to use the Internet for OERs, especially during a power outage, and having an intermittent Internet connection may make it difficult for them to do their coursework.

According to the table, 58 percent of respondents strongly agree that using the Internet for schoolwork makes school more exciting and enjoyable. According to the respondents, interactive films, online materials, and game-like educational tools, according to the respondents, assist them in understanding their courses and keep them involved. They can better explore the various lessons that have been assigned to them by watching online videos. Students can utilize the Internet to access a wide selection of educational materials that teach them how to tackle a variety of academic difficulties and how to be more engaging and entertaining. According to the data, 56% of respondents strongly agree that the Internet helps them better grasp the class. Sixty-eight percent of those polled said that accessing the Internet would benefit their schoolwork. The respondents reaffirmed that video tutorials and the vast online library of e-books, interactive education videos, and applications help them improve their skills and make the lessons more doable for each class. Students will be more engaged and personal in their online assignments if virtual worlds are used.

Although roughly 44% believe that using the Internet will help them better grasp the class, they cannot agree more because of navigation issues and a lack of knowledge of the best websites to visit and use for classwork.

Whether students feel that OERs significantly influence their learning is a factor to consider. OERs make it simpler to accomplish coursework, according to a mean of 3.62. Students prefer to use OERs rather than textbooks to complete their tasks, with a mean of 3.64. Using OERs for coursework makes education more exciting and enjoyable, with a mean of 3.58. Using OERs helped students better grasp the class, according to a mean of 3.56. Finally, a mean of 3.68 indicates that having access to OERs would improve students' educational outcomes. The students universally agree that adopting OERs enhances their academic success compared to the mean scores, which vary from 3.26 to 4.0. Students' usage of OERs was found to positively influence their academic achievement, as it helped them do their schoolwork more efficiently.

Table 3. Level of Respondents' Perception about the use of OERs.

Respondents' Perceptions	f	%	Mean
<b>OERs Makes School Work Easier to Complete</b>			
Agree (3)	9	38.0	3.62
Strongly Agree (4)	31	62.0	
Total	50	100.0	
<b>Prefer the use of OERs instead of textbooks to complete school work</b>			
Agree (3)	8	36.0	3.64
Strongly Agree (4)	32	64.0	
Total	50	100.0	
<b>Using OERs for schoolwork makes school more interesting and fun.</b>			
Agree (3)	21	42.0	3.58
Strongly Agree (4)	29	58.0	
Total	50	100.0	
<b>Using OERs helps the students understand class better.</b>			
Agree (3)	22	44.0	3.56
Strongly Agree (4)	28	56.0	
Total	50	100.0	
<b>Having access to OERs is helpful in regards to schoolwork.</b>			
Agree (3)	16	32.0	3.68
Strongly Agree (4)	34	68.0	
Total	50	100.0	

Based on the records of their respective professors, Table 4 indicated that 62 percent of the students in the Electronics Technology course were able to get an Outstanding mark in their major subjects. Simultaneously, 38 percent of respondents received a Very Satisfactory rating. Using OERs for coursework and activities, most students could achieve an Outstanding grade in their Electronics Technology course, according to a mean of 4.62. According to Ghavifekr et al. (2015), technology-based teaching and learning outperform traditional classrooms in terms of effectiveness. In addition, it was underlined that using ICT tools and equipment will help teachers and students create a more engaging and effective learning environment.

Table 4. Academic Performance of the Respondents when using the OERs

Grade of the Students	f	%	Mean
Very Satisfactory (4)	19	38.0	4.62
Outstanding (5)	31	62.0	
Total	50	100.0	

Schober et al. (2018) viewed correlation as a term describing the relationship between two or more variables. Table 5 indicated significant findings at a 5% significance level since the p-values were less than 0.05. The statistics revealed that all assumptions were satisfied because no cell had an anticipated count of less than 5. The findings also imply rejecting the null hypothesis and that students' use of OERs significantly impacts their academic achievement. According to Shahibi et al. (2017), the Internet makes it easier for students to find the information they need fast and efficiently. They say that students will be more driven to look for information on the Internet more frequently, which will impact their academic performance.

Table 5. The Relationship Between the Related Information About the Use of Internet of the Students and their Academic Performance using Chi-Square Test of Independence.

Information about the use of Internet	Chi-Square $\chi^2$	df	p value (.05 level of Significance)
Type of Internet Connectivity	15.300	2	.000
Kinds of Devices Used	7.208	2	.027
Types of OERs accessed	7.589	2	.022
Number of times of using the Internet	8.121	2	.017

Akoglu (2018) stated that correlation is a relationship between phenomena or things, as well as between mathematical or statistical variables, that tend to vary, be related, or occur in a way that is not predicted by random. The relationship between students' perceptions of using OERs and their academic performance was shown to be exceptionally strong in Table 6. A strong relationship between the variables was revealed by correlation values of 1, 0.958, 0.920, 0.883, and 0.876, respectively (Akoglu, 2018). According to the findings, there is a strong link between students' perceptions of the Internet and their academic achievement, implying that the null hypothesis should be rejected. The confluence of technology and education enhances the students' knowledge by making learning faster and simpler (Banica

et al., 2017).

According to the findings, most of the respondents utilize OERs for school activities most of the time. These school activities included researching topics relating to their school assignments, completing tasks, and watching online video tutorials. Furthermore, according to the study, most students use their smartphones for studying continuously throughout the day via a Home Wi-Fi Internet connection or Pesonet access, where they can comfortably view videos online or use social media. However, according to the study, students must have a constant Internet connection to engage appropriately and benefit from the various OERs offered online.

The study found that by utilizing a large amount of information, simulated exercises, tutorials, and online materials available on the Internet, OERs assist students in finishing and making coursework more manageable and more accessible for them to do. Students can better grasp their courses and keep involved by using several educational applications, such as e-books (electronic books), interactive videos, and game-like educational apps, which make their coursework much simpler.

Table 6. The Relationship Between the Level of Students' Perception about the use of Internet and their Academic Performance using Person r Correlation Analysis.

Level of Students' Perception about the use of OERs	Pearson Correlation	r	p value (.05 level of Significance)
OERs Makes School Work Easier to Complete	1.000		.000
Prefer the use of OERs instead of a textbook to complete school work	.958		.000
Using OERs for schoolwork makes school more interesting and fun.	.920		.000
Using OERs helps the students understand class better.	.883		.000
Having access to OERs is helpful in regards to schoolwork.	.876		.000

#### 4 CONCLUSIONS

Based on the cited findings, the researcher came to the following conclusions. Students can use the Internet to expand their educational opportunities and stay competitive in the ever-changing world of education. These Open Educational Resources, which include a wide range of electronic books, video streaming tutorials, and

interactive websites, are vital for keeping students interested in their academic duties and coursework.

On the other hand, students who want to learn online teaching methods must be self-motivated, self-sufficient, and responsible. Students could utilize the Internet to participate in non-academic activities if sufficient supervision and monitoring are not provided. Students' ability to understand what websites to visit and use the information and knowledge they receive may also be aided by adequate orientation and training.

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