

School head and teacher's perceptions on the advantages and problems-encountered in the application of Google e-tools in the new normal setting: basis for a Gsuite learning and development program

Percepciones de directores y docentes sobre las ventajas y problemas de la aplicación de las herramientas electrónicas de Google en el nuevo escenario normal: base para un programa de aprendizaje y desarrollo de Gsuite

Percepções de diretores e professores da escola sobre as vantagens e problemas encontrados na aplicação das ferramentas eletrônicas do Google no normal: base para um programa de aprendizagem e desenvolvimento Gsuite

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ABSTRACT

In this difficult time like this what is required is a proactive, inclusive and transparent approach (Kerrissey and Edmonson 2020). Hence the use of various digital platforms and applications available in the web has become powerful and effective tools in delivering information, communication and varying tasks-on-hand. Hence, the digital world is becoming the people's workplace. This study was conducted based on the relationship of perceptions on the advantages and the problems encountered in using Google e-tools in the new normal setting. The respondents and locale of the study were the School Heads and Teachers of South Malungon District. The study found out that among the advantages, 9 school heads and 95 teachers strongly agreed that the Google applications enhances teaching-learning and improves efficient facilitation of academic and non-academic school reports in the distance learning program with a weighted mean of 4.61. On the other hand, the respondents mostly agreed that internet connectivity, intensified training-workshop must be taken into consideration to maximize the potentialities and opportunities in this time of digital era based on the assessment with the weighted mean of 4.44. The respondents' perceptions on the advantages and problems-encountered were correlated with the result of 0.726691 with the extent of relationship of "High Correlation". Based on the result, the GSUITE Program, a School Head and Teacher's Learning Development Program was designed as basis for quarterly monitoring and evaluation for the implementation of key areas to be enhanced.

Keywords: Gsuite, Google e-tools, perceptions, Development Program, problems-encountered, new normal setting

RESUMEN

En este momento difícil como este, lo que se requiere es un enfoque proactivo, inclusivo y transparente (Kerrissey y Edmonson 2020). Por lo tanto, el uso de varias plataformas digitales y aplicaciones disponibles en la web se ha convertido en herramientas poderosas y efectivas para brindar información, comunicación y diversas tareas disponibles. Por tanto, el mundo digital se está convirtiendo en el lugar de trabajo de las personas. Este estudio se realizó sobre la base de la relación de las percepciones sobre las ventajas y los problemas encontrados en el uso de las herramientas electrónicas de Google en el nuevo entorno normal. Los encuestados y el lugar del estudio fueron los directores de escuela y los maestros del distrito de South Malungon. El estudio descubrió que entre las ventajas, 9 directores de escuela y 95 profesores estaban totalmente de acuerdo en que las aplicaciones de Google mejoran la enseñanza-aprendizaje y mejoran la facilitación eficiente de los informes escolares académicos y no académicos en el programa de educación a distancia con una media ponderada de 4,61. Por otro lado, los encuestados estuvieron mayoritariamente de acuerdo en que la conectividad a internet, la capacitación-taller intensificada debe ser tomada en consideración para maximizar las potencialidades y oportunidades en esta época de la era digital con base en la evaluación con la media ponderada de 4.44. Las percepciones de los encuestados sobre las ventajas y los problemas encontrados se correlacionaron con el resultado de 0,726691 con el grado de relación de "alta correlación". Con base en el resultado, se diseñó el Programa GSUITE, un Programa de Desarrollo del Aprendizaje para directores y maestros de escuela, como base para el monitoreo y la evaluación trimestrales para la implementación de áreas clave a mejorar.

Palabras clave / Descriptores: Gsuite, herramientas electrónicas de Google, percepciones, programa de desarrollo, problemas encontrados, nuevo normal.

RESUMO

Neste momento difícil como este, o que é necessário é uma abordagem proativa, inclusiva e transparente (Kerrissey e Edmonson 2020). Assim, o uso de várias plataformas digitais e aplicativos disponíveis na web tornaram-se ferramentas poderosas e eficazes na entrega de informações, comunicação e tarefas variadas. Assim, o mundo digital está se tornando o local de trabalho das pessoas. Este estudo foi realizado com base na relação de percepções sobre as

vantagens e os problemas encontrados no uso das ferramentas eletrônicas do Google no novo cenário normal. Os entrevistados e o local do estudo foram os diretores e professores das escolas do distrito de South Malungon. O estudo constatou que, entre as vantagens, 9 diretores de escolas e 95 professores concordaram fortemente que os aplicativos do Google aprimoram o ensino-aprendizagem e facilitam eficientemente os relatórios escolares acadêmicos e não acadêmicos no programa de ensino a distância com média ponderada de 4,61. Por outro lado, a maioria dos respondentes concordou que a conectividade com a internet, a intensificação do treinamento-oficina deve ser levada em consideração para maximizar as potencialidades e oportunidades neste momento de era digital com base na avaliação com a média ponderada de 4,44. As percepções dos respondentes sobre as vantagens e problemas encontrados foram correlacionadas com o resultado de 0,726691 com o grau de relação de “Alta Correlação”. Com base no resultado, foi concebido o Programa GSUITE, um Programa de Desenvolvimento da Aprendizagem de Diretores e Professores de Escola como base para monitoramento e avaliação trimestral para a implementação de áreas-chave a serem aprimoradas.

Palavras-chave: Gsuite, Google e-tools, percepções, Programa de Desenvolvimento, problemas encontrados, novo cenário normal

1. INTRODUCTION

Google e-tools is one of the most reliable and powerful tools in the e-world. It was first launched in 2006 and rebranded as GSuite in 2016. Google tools refers to Gmail, Calendar, Drive, Docs, Sheets, Slides, Meet and many more. These are the programs made available by Google Inc.

These powerful apps can truly make the workloads of School heads and teachers lighter. But many are still not adept to ICT particularly the Google Apps.

The Department of Education initiated Google Certification Training Program for Open Educational Resources (OER), National Core Leaders, Volunteers and DepEd TV Teacher Broadcasters under the Educational Technology Unit (ICTS-Edtech) with OUA Memo 00-1220-0196. The said program will empower public school teachers to be Google-Certified Educators (Level 1 & Level 2). This will create a pool of qualified trainers for Google Apps in Education. One of the GCE qualified trainers, a passer is Richel B. Baste, the researcher.

The global COVID-19 pandemic has had huge disruptive effects on our normal lives of people in all walks of life. School heads and teachers continue to face new normal education challenges and all aspects in education.

According to the District Principal-In-Charge of South Malungon District, Fernie L. Cabanalan, most School Heads are not familiar with the digital applications such as Google as shown in his survey that 16 out of 24 or 66.7% of the school heads were not adept in using Google e-tools. There were problems raised in collecting, disseminating and receiving of information and data gathering which is more important in this new normal setting.

But no matter what may possibly hinder our educators and school heads to perform their tasks they are most ready to accept the challenge in delivering what is expected of them, they may be a teacher or a school head.

Innovation, Intervention, and Strategy

The teachers and the schools head will benefit the GSUITE Learning and Development Program for instruction and facilitation of school reports. The content of the Program has intensified virtual or limited face to face training-workshop which involves innovations and teaching strategies to maximize the potentialities that Google e-tools could offer. The trainings will be held by batch through ICT in-charge of the schools so that health protocols will be observed.

The researchers conducted School Learning Action Cell in Malungon Central Elementary School SPED Center for the utilization of Google e-tools. One of the researchers also used interactive activities (quizzes and games) using Google slides and Forms in her classroom observation 1 with the rating of perfect score of 7 and positive feedbacks coming from 3 observers (1 School Head and 2 Master Teachers).

An offline Learning Management System using Moodle and Edmodo as online LMS with contextualized interactive games/quizzes and school online library card was created to supplement the innovations and training-workshop made by the researchers.

The researcher aim to determine the relationship of School Heads and Teacher's Perceptions on the Advantages and Problems-Encountered in the Application of Google e-tools in the New Normal Setting of South Malungon District.

Specifically, this study aims to answer the following questions:

1. What are the School heads and teacher's perceptions on the advantages of using Google e-tools in the new normal setting in terms of:
 - 1.1 Advancement of Students' Learning;
 - 1.2 Facilitation of Academic and Non-Academic Reports; and
 - 1.3 Efficiency of Information-Dissemination in New Normal Education?
2. What are the problems-encountered by the respondent's in using Google e-tools in terms of the following:
 - 2.1 Ease of Access;
 - 2.2 Internet Connection; and
 - 2.3 Availability of ICT Resources and Training?
3. Is there any relationship on the perceptions of School Heads and Teachers on the advantages of Google e-tools in the new normal setting to the different problems they encountered?
4. Based on the results of the study, what teachers' ICT Intervention Program can be developed?

The researcher aimed to determine the underlying inputs such as the perceptions of the school heads and teachers on the advantages of the Google e-tools in the new normal setting, and the problems they encountered in using Google applications.

Furthermore, the researcher processed the gathered information in order to find out the extent of the relationship between the abovementioned variables.

Having understood the inputs and the extent of the relationship the researchers designed the **GSUITE** (Google School Utilization and Integration for Teachers Empowerment) **Program** as output in order to resolve the existing concerns of school heads and teachers.

2 THEORETICAL FOUNDATION

The global COVID-19 pandemic has had huge disruptive effects on our normal lives of people in all walks of life, especially both among students and teachers alike (Bayno, 2020). He further stressed that "the impact of closed schools and children stuck at home with little or no access to learning, the effect has been generally devastating".

Work from home arrangements and the skeletal work force at school where minimal physical contact of teachers are strictly observed during the pandemic become some of the new and tough challenges that school heads have to face. As Brett Henebery, an Australian educator, put it, necessity created a renewed sense of collaboration, shared resources and mentoring (Henebery, 2020).

In difficult time like this what is required is a proactive, inclusive and transparent approach that does not downplay information or delay a response (Kerrissey and Edmonson 2020). Hence the use of various digital platforms and applications available in the web has become powerful and effective tools in delivering information, communication and varying tasks-on-hand. Hence, the digital world is becoming the people's workplace.

One of the most patronized web platforms today is the Google. Google provides various apps such as Gmail, Calendar, Hangouts and a lot more. Another powerful tool in the digital world today is the Google Workspace, formerly known as G Suite. It is a collection of cloud computing, productivity and collaboration tools, software and products developed and marketed by Google (Wikipedia).

Because of the different apps incorporated in G Suite, it has become one of the reliable, effective and powerful tools being used by some teachers in order for teaching and instruction to continue even when it is done remotely or virtually. Furthermore, for some school heads the G Suite becomes the "virtual office" where the conduct of faculty meeting, making and submission of reports are done. These are just some of the bright stuffs which G Suite offers.

Google has made it exceptionally easy to utilize their multitude of tools which allows educators and students to connect ((Egan, 2018). Indeed, gaps are bridged through the use of G Suite.

3 METHODS

This study utilized the research and development method of research. It developed a GSUITE Learning and Development Program. This study aims to impart some good points to other related researches and there is no conflict of interest. The respondents of the study were the school heads and teachers in South Malungon District. The research instrument used is an online survey questionnaire through Google Form and virtual interview using Google Meet. The results were analyzed and interpreted using weighted mean. The items included on the questionnaire were raised using the following five-point scale or the Likert scale:

Scale	Description
4.50 – 5.00	Strongly Agree
3.50 – 4.49	Agree
2.50 – 3.49	Undecided
1.50 – 2.49	Disagree
1.00 – 1.49	Strongly Disagree

To determine the relationship of respondents' perceptions on the advantages and problems-encountered in the application of Google e-tools, the researchers used Pearson r. In interpreting the result for the correlation r, the researcher used the following tables below.

Correlation Coefficient	Degree or Extent of Relationship
± 1.00	Perfect Correlation
± 0.91 to ± 0.99	Very High Correlation
± 0.71 to ± 0.90	High Correlation
± 0.41 to ± 0.70	Low or Slight Correlation
± 0.01 to ± 0.20	Negligible Correlation
0.00	No Relationship

This study was conducted during the School Year 2020-2021 specifically on the 3rd Week of April. The researchers used the convenient sampling and the statistical treatment.

4 RESULTS AND DISCUSSION

The tables below were the school heads and teachers' perception on the advantages and problems-encountered on the application of the Google e-tools in the new normal setting based on their self-evaluation.

Table 1: Advantages of Google Applications

Table 1.1 Advancement of Students' Learning, Google applications...		MEAN SCORE	DESCRIPT ION
1	enhances teaching-learning process with the use of e-learning tools such as; Google Slides, Google Meet, Google Classroom Google Docs, Google Sites, Google Forms	4.59	Strongly Agree
2	improves learners' engagement in participation and performance using google applications in acquiring learning and attending classes during this time of pandemic.	4.70	Strongly Agree
3	converge and integrate ICT strategies and innovations using google applications as supplementary to SLM/LAS and other learning materials.	4.63	Strongly Agree
4	enhances professional growth of teachers using strategies utilizing google applications for instruction in the distance learning program offered in this time of crisis.	4.67	Strongly Agree
5	enhances the development of learning resources from reliable educational websites.	4.54	Strongly Agree
6	enables teachers to learn through creating, just as they gain hands on knowledge and understanding through interactive workshop with the use of google applications tools in communicating, editing, computing, and collaborating.	4.54	Strongly Agree
Weighted Mean		4.61	Strongly Agree

In the table 1.1, the respondents strongly agreed that Google e-tools enhances teaching and learning process with the mean score of 4.61. Furthermore, one of the respondents who participated in the online interview attested with her statement that *"Nakatutulong ang google meet in this pandemic lalo na walang face to face"*. It is helpful to students especially in terms of online learning classes.

Table 1.2 Facilitation of Academic and Non-Academic Reports; Google e-tools		MEAN SCORE	DESCRIPT ION
1	allows easy access of learning materials online using Google Drive.	4.67	Strongly Agree
2	allows immediate passing of reports using reliable websites.	4.65	Strongly Agree
3	facilitates the easy receipt and electronic copy and fast submission of school and office reports.	4.63	Strongly Agree
4	allows very large data of information and documents of the school and stored for future reference.	4.67	Strongly Agree
5	allows for the fast retrieval of information as basis in making quick decision and fast retrieval of information.	4.61	Strongly Agree
6	reduces paper works to the minimum as all the information is stored in the google drive.	4.67	Strongly Agree
7	easy collection of non-academic reports in a time bound manner.	4.63	Strongly Agree
8	totally cuts transportation cost in one's effort to acquire information from one place to another.	4.72	Strongly Agree
Weighted Mean		4.66	Strongly Agree

The table 1.2. shows that Google Applications allows easy access, reduces paper works and cut's transportation cost in acquiring information in this time of pandemic with the respondents' average mean of 4.66 with the description of "Strongly Agree". Moreover, a teacher who participated in the online interview saying that "Having Google drive and other e-tools, mas napadali na ang pagsend ng reports online". Google Apps cuts down the challenges in handling academic and non-academic reports.

Table I. 3 Efficiency of Information Dissemination; Google e-tools		MEAN SCORE	DESCRIPT ION
1	improves the quality services in sharing of information.	4.63	Strongly Agree
2	ensures greater transparency and efficiency that can help overcome unbridled discretion and dishonesty by providing improved services in a time bound manner.	4.54	Strongly Agree
3	allows greater control over the processes in making letters to community-related works and quick implementation of government policies from time to time.	4.54	Strongly Agree
4	reduces the chance of leakage of classified information.	4.46	Agree
5	allows high accuracy and correctness of disseminated information.	4.57	Strongly Agree
6	allows easy access to large files of information and documents stored with security features to avoid discrepancies of government policies and issuances.	4.54	Strongly Agree
7	allows speedy and high response and quick sending of information.	4.61	Strongly Agree
Weighted Mean		4.56	Strongly Agree

The table 1.3 shows how Google Applications contributed significant improvements and allows speedy and high response in the information dissemination which has the description of "Strongly Agree" with and weighted mean of 4.56.

Table 2: Problems and Issues Encountered

Table 2.1 Ease of Access; Google Applications, Google Applications....		MEAN SCORE	DESCRIPT ION
1	does not allow quick access to communication offline.	4.28	Agree
2	does not provide technical assistance to the users in accessing files from one place to another.	4.30	Agree
3	has restrictions and limits the users in accessing private files.	4.26	Agree
4	has limited applications which can access files offline.	4.33	Agree
5	has no help desk or technical assistance to users offline.	4.24	Agree

6	has no offline applications to access in downloading, uploading, sending and receiving files.	4.28	Agree
Weighted Mean		4.28	Agree

The table 2.1. Shows that most of the respondents' assessment agreed that Google e-tools does not allow users in accessing files and utilize the tools offline with an average mean of 4.28. Likewise, the teacher-respondents of the interview saw a problem in terms of ease of access with his statement that *"walang offline apps si google especially when working in distant places with low internet connection"*. With this, Google Apps has limited usage to offer.

	Table 2.2 Teachers' problem in terms of internet connection in using google e-tools	MEAN SCORE	DESCRIPT ION
1	needed high internet connectivity to access applications needed for school and office works.	4.61	Strongly Agree
2	needed high internet connectivity to access applications needed for teaching and learning in working at school and at home.	4.52	Strongly Agree
3	has no offline applications to access files from the drive.	4.56	Strongly Agree
4	requires availability of internet connection for the usage of google applications.	4.52	Strongly Agree
5	does not provide technical assistance and trainings to access offline mechanisms.	4.30	Agree
6	fail to create reliable website for help and support mechanism offline.	4.30	Agree
Weighted Mean		4.47	Agree

The table 2.2 shows that the respondents agreed that Google e-tools needed high internet connectivity in accessing the files and to maximize the usage of Google e-tools with the mean of 4.47. One of the respondents during the interview attested that *"Sa amin kasi, Internet connectivity is one of the problems we encountered especially in far flung areas and places with weak signals po"*. Having this problem is one of the big challenge in using Google Apps.

	Table 2.3 Availability of ICT Programs and Training of Google e-tools	MEAN SCORE	DESCRI PTION
1	delays the teacher's time to decide which ICT tool is most appropriate/ effective for a certain google e-tools.	4.35	Agree
2	compounds the predicament of unskilled teachers in using ICT resources to access Google e-tools.	4.37	Agree
3	does not provide technical assistance and training in effective and efficient usage of the Google applications for instruction, facilitation of school reports and information dissemination.	4.54	Strongly Agree
4	requires intensive ICT programs and trainings to easy access and utilization of Google e-tools	4.37	Agree
Weighted Mean		4.41	Agree

The table 2.3 above shows that the respondents experiencing difficulties in using basic skills in utilizing google applications because it requires skills and proficiency in ICT. Resources and substantial trainings/webinars for instruction and facilitation of school reports were one of the requirement to maximize the potentialities brought by Google which has a weighted mean of 4.41 with the description of “Agree”. Also, one of the respondents said that “*Kailangan ko talaga ng proper training when it comes to the use of Google apps*”. Thus, having intensive training-workshop in the application of Google e-tools must be given emphasis.

To determine if there is any significant relationship between the School heads and teacher’s perceptions on the advantages and problems-encountered in the application of Google e-tools in the new normal setting, the researchers calculated the Pearson r.

Table 3
Relationship of Respondents’ Perceptions on the Advantages and the Problems-Encountered

	Correlation Coefficient (Pearson r)	Degree or Extent of Relation
School Heads and Teacher’s Perceptions on the advantages and problems-encountered in using Google e-tools	0.726691	High Correlation

Based on the result of the correlation ($r= 0.726691$), there is a high correlation between the School heads and teacher’s perceptions on the advantages and the problems-encountered on the application of the Google e-tools in the new normal setting. It implies that as the advantages increases, the problems-encountered also increases and it has greatly affects the utilization of the Google Applications in working at school and at home.

Based on the result of the study, the researcher found out that the School heads and teachers need an intensive training on the use of different Google applications and to equip teachers’ proficiency in ICT.

ACTION PLAN

Based on the result of this study, this action plan was drawn:

Title: **GSUITE (Google School Utilization and Integration for Teachers Empowerment) Learning and Development Program**

Rationale: The researcher will be having a **GSUITE Learning and Development Program** for the School Heads and teachers to achieve the following objectives:

- A. To inculcate the importance of Google e-tools in the 21st Century skills.
- B. To enhance school heads and teachers’ skills in utilizing Google e-tools with an integration of enhanced ICT interventions;
- C. To equip the school heads and teachers the skills in developing offline Learning Management System, interactive quizzes/games & enhanced ICT interventions (Contextualized/Localized).

Objectives	In-charge	Strategies	Budget/Time	Success Indicators
<p>A. To inculcate the importance of Google e-tools in the 21st Century skills.</p> <p>-Google Mail</p> <p>-Google Drive</p> <p>-Google Docs</p> <p>-Google Sheets</p> <p>-Google Slides</p> <p>-Google Calendar</p> <p>-Google Meet</p> <p>-Google Classroom</p> <p>-Google Sites</p> <p>-Google Forms</p>	<p>PSDS, Open Educational Resources (OER) Trainer, Google Certified Educator (GCE) Trainer, Researchers, School ICT Coordinators, School Heads and Teachers</p>	<p>*Intensifying Training-Workshop on the application of Google e-tools</p> <p>-Reflections/ Monitoring and evaluation of the participants</p>	<p>5000.00</p> <p>June and July 2021</p>	<p>100% School Heads and teachers' participated</p> <p>via online or limited face to face training-workshop</p>
<p>B. To enhance school heads and teachers' skills in utilizing Google e-tools with an integration of enhanced ICT interventions;</p>	<p>PSDS, Open Educational Resources (OER) Trainer, Google Certified Educator (GCE) Trainer, Researchers, School ICT Coordinators, School Heads and Teachers</p>	<p>*Conduct series of virtual or limited face to face training-workshop on the utilization of Google e-tools</p>	<p>5000.00</p> <p>June and July, 2021</p>	<p>100% of the Schools Heads and Teachers utilized the Google e-tools in instruction and facilitation of school reports.</p>
<p>C. To equip the school heads and teachers the skills in developing offline Learning Management System, interactive quizzes/games & ICT enhanced interventions (Contextualized/Localized).</p> <p>-Class Records using excel</p> <p>-PowerPoint using hyperlinks</p> <p>-Video Editing for TVBI</p> <p>-Audio Editing for RBI</p> <p>-Electronic Story Books</p> <p>-Online/Offline Library Cards, and other School Forms</p> <p>-Making of offline school learning Management System</p>	<p>PSDS, Open Educational Resources (OER) Trainer, Google Certified Educator (GCE) Trainer, Researchers, School ICT Coordinators, School Heads and Teachers</p>	<p>* South Malungon District has offline portal on the instructional e-learning materials and safekeeping of e-forms for facilitation of school reports annually.</p> <p>-Giving awards and Recognition</p> <p>-Conduct monitoring and evaluation</p> <p>-Sharing and adopting of developed contextualized/ localized e-learning materials</p>	<p>Load Expenses</p> <p>3000.00</p> <p>Whole Year Round</p>	<p>Every schools developed their enhanced ICT interventions in instructional</p> <p>And facilitation of school reports using Google e-tools and offline</p>

5 CONCLUSION

With the results of the study, the following conclusions were drawn:

1. There are numbers considered among the behavioral competencies which are in the low level of practice. Teachers need to develop these competencies in using google applications in teaching and learning processes in the new normal education.
2. Among the skills competencies, to enhance school heads and teachers' skills in utilizing Google e-tools with an integration of enhanced ICT interventions should be done.

3. Among the low level of practices in both behavioral and skills competencies, to equip the school heads and teachers the skills in developing offline Learning Management System, interactive quizzes/games & ICT enhanced interventions should be aligned in the Annual Implementation Program (AIP) of the school and to be implemented to know the effectiveness of this program and basis new related researches.

With the following conclusions, the following recommendations were:

1. To develop behavioral competencies among teachers, they should be monitored and be given supervision or assistance with the different demands of the Department of Education. Their professionalism, ethics, outputs, self-management and innovations should be given attention. SLAC Sessions and other daily activities in the school should involve the development of such competencies.
2. To uplift the level of practiced among teachers in their skills competencies, school head must provide capability building through trainings or workshops. Teachers should also be exposed with different competent skills in both oral and written forms in accordance with DEPED Guidelines.
3. The Professional Development Plan developed for Teachers in which was based from the low level of practiced in both behavioral and skills competencies should be used by school head as a guide in developing his/her teachers to become fully equipped professionally.

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