**Correlational Analysis of YouTube Usage and Student Engagement among College Students in the Municipality of Bansalan**

**ABSTRACT**

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| --- |
| This study aims to examine the relationship between YouTube usage and student engagement among the college students in the Municipality of Bansalan. As YouTube continues to grow as a popular learning platform, it is essential to investigate its potential impact on student engagement and academic performance. This study employs a correlational research design where we seek to measure the association between these variables. Data will be collected through a self-designed survey questionnaire, which will be administered to a selected sample of college students. The results of this research will provide valuable insights into the role of YouTube in student engagement and its possible implications for academic success. |

*Keywords: Correlational Research, IT Skills, in Bansalan*

**1. INTRODUCTION**

* 1. **Background of the Study**

     In today’s technological era, advancements have significantly transformed various aspects of human life, including education. With the advancement in technology, there are a wide array of tools and platforms that help supplement learning. One such platform is YouTube, a widely known video-hosting website that offers a vast collection of educational content. Although YouTube is known mostly for entertainment, it has also been used for educational purposes.

     Many college students use YouTube as a supplementary learning tool, watching instructional videos and participating in discussions to enhance their understanding of various subjects. However, the extent to which YouTube influences student engagement remains unclear. Student engagement is a complex concept that includes motivation, participation, and academic performance. Although it is generally accepted that technologies may increase the efficiency of studies, its influence on student behavior and results requires further investigation.

    This study aims to bridge that gap by investigating how YouTube use within an educational framework relates to the motivation of students. Understanding this relationship could be beneficial to the teachers, policy makers, and students themselves, as they would know how to utilize YouTube as a channel to increase learning and interaction.

* 1. **Theoretical framework**

     Student engagement is consistently identified as a key predictor of learner outcomes within the online learning environment. However, there is limited guidance about using proactive strategies to improve engagement for low and non-engaged students: for example, by specifically employing course learning analytics and nudging strategies in courses to assist these students.  To explore how CLA and nudging can be used more effectively to engage students, the authors were informed by a 12-month research project, as well as by the theoretical perspectives presented by communication and critical literacies. These perspectives were applied to develop a conceptual framework which the authors designed to prioritise expectation management and engagement principles for both students and academics. It explains the development of the framework as well as the elements and key communication strategies it embodies. The framework contributes to practice by explaining and justifying the accessible, time-efficient, student-focused approaches that can be integrated simply into each course’s online learning pedagogy to support both academics and students’ engagement.

* 1. **Conceptual Framework**

**YouTube Usage**

How often the students uses YouTube

The type of content consumed on YouTube

**Engagement Level**

The students level of participation in class discussion and activeness

The quality and regularity of the student’s completed homework

The students performance om exams.

**Figure 1. Conceptual Framework of the study**

The conceptual framework of this study examines the relationship between YouTube usage and Student engagement among college students. YouTube usage serves as the independent variable and is analyzed through three dimensions: the frequency of usage, the amount of time spent on the platform, and the types of content consumed. These factors represent the varying ways students interact with YouTube, which may influence their academic behaviors and outcomes.

Student engagement, the dependent variable, is measured through three key indicators: participation in class discussions and activities, the quality and consistency of completed assignments, and performance on exams. This framework assumes that YouTube usage, depending on usage patterns and the type of content (e.g., educational vs. non-educational content), YouTube can have either a positive or negative impact on student engagement. By exploring these dimensions, the study aims to establish whether a correlational relationship exists and to identify the potential implications of YouTube usage on students' academic performance and participation.

* 1. **Research Question**

    The main purpose of this study is to aim at the correlation of Learning Technology and the Effectiveness of ICT Integration among SHS ICT students of St. Mary’s College of Bansalan Inc.

1. To what extent does the integration of ICT in senior high school ICT education contribute to student learning outcomes, particularly in terms of?

* Academic Performance
* Technical Skills Development

1. What are the most effective ICT tools and resources used in senior high school ICT education?

* Academic Achievements
* Students Engagement and Motivation
* Innovation and Creativity

1. What are the key factors that influence the effectiveness of ICT integration in senior high school ICT education, including teacher training, access to technology, curriculum design, and student motivation?
   1. **Null Hypothesis**

**Ho1**:  There is no significant correlation between YouTube usage and student engagement among college students in the Municipality of Bansalan.

* Academic Performance
* Technical Skills Development
* Digital Literacy

**Ho2:** There is no significant difference in the level of ICT education in terms of:

* Academic Achievements
* Student Engagement and motivation
* Innovation and Creativity

**Ho3:** There is no significant relationship between ICT Senior High School students in St. Mary’s College of Bansalan Inc.

**Ho4:** YouTube usage does not significantly improve English Language proficiency among Senior High School Students in St. Mary’s College of Bansalan Inc.

**2. methodology**

**2.1 Research Design**

     This study will utilize a correlational research design to determine the relationship between YouTube usage and student engagement among college students in the Municipality of Bansalan. A correlational research design is appropriate for this study as it allows the researcher to measure the strength and direction of a relationship between YouTube usage and student engagement without manipulating any variables.

**2.2 Research Locale**

**Figure 2. Research Locale**

     The study will be held at the Municipality of Bansalan, Davao del Sur, Philippines. The municipality was chosen as the research locale because it has a growing college student population and is increasingly accessible to technology, especially the internet and social media platforms such as YouTube.

**2.3 Participants of the Study**

     The target population for this study will be college students enrolled in various courses in institutions of higher learning within the Municipality of Bansalan. A random sampling technique is appropriate to pick up a representative sample of students. A statistical formula to determine the sample size will be applied to take into consideration factors such as population size, among other factors.

**2.4 Sampling Techniques**

     In this research, we will use classified random sampling to ensure that we will accurately represent the diverse groups within the college student population in the Municipality of Bansalan. Actually, organizing the population based on specific characteristics gives us the ability to randomly choose participants from each subgroup. This method allows collecting detailed information across various demographic categories, enhancing the reliability of our results. We will use the approach of Doc. Buladaco in his study wherein we will choose 200 respondents. This approach will help us to examine diverse segments of the population with unique patterns of usage of social media and different awareness levels concerning data privacy.

**2.5 Statistical Treatments**

     The descriptive statistics will give insight into the demographic characteristics of the respondents, usage habits on YouTube, and their engagement levels as students. As an example, it can determine which types of content they most consume, frequency of use, and average YouTube usage time per day. Relating statistics such as Pearson's correlation coefficient will be used to explore the relationship between YouTube usage and student engagement. The strength and direction of the correlation will be interpreted, if any, which would therefore establish whether higher levels of YouTube usage are associated with higher or lower levels of student engagement

**2.6  Data Collection Procedure**

     In this study, after gathering information we will use an online platform that is the google form in order to collect data. The participants will be invited to answer and complete the survey, only those chosen participants of Municipality Bansalan will be selected to take part in the survey. Using Google form is one easy tool, which lets us share our online surveys, thus making it a convenient way of collecting and gathering the data. The responses of the participants will be securely stored and kept confidential, and it will only be used academically.

.**2.7 Ethical Considerations**

     The research instrument employed a quantitative approach using a self-administered questionnaire to assess student perceptions. The questionnaire consisted of five-point Likert scales (Strongly Disagree to Strongly Agree) to measure variables including:

YouTube Usage: Perceived usefulness, behavioral intentions, user attitude, and perceived ease of use.

Level of Engagement: Behavioral, cognitive, and emotional engagement.

The questionnaire was designed to gather data from college students at St. Mary's Bansalan School. Data analysis involved descriptive statistics (mean, standard deviation), correlation analysis (Pearson-r), and multiple regression analysis to determine the relationship between YouTube usage and student engagement.

**2.8 Ethical Considerations**

     To carry out the study while maintaining the Ethical standards, we follow several steps that protect the rights and confidentiality of participants. First, we request a permission letter to seek approval to conduct the study. After obtaining their consent, we use the google forms link to distribute the survey. Furthermore, we ensured respect for the schedule of classes of the participants by asking them to answer the survey only during leisure time.

**3. RESULTS AND DISCUSSIONS**

**Table 1. Level of YouTube Usage**

|  |  |  |  |
| --- | --- | --- | --- |
| **YouTube Usage** | **n** | **SD** | **Descriptive Equivalent** |
| Perceived Usefulness | 4.56 | 0.402 | Strongly Agree |
| Behavioral Intentions | 4.43 | 0.682 | Strongly Agree |
| User Attitude | 4.40 | 0.516 | Strongly Agree |
| Perceived Ease of Use | 4.36 | 0.561 | Strongly Agree |
| Overall | 4.44 | 0.423 | Strongly Agree |

     Table 1 shows the level of YouTube usage. Mean was utilized to assess the level of YouTube usage as perceived by the students. Result reveals that the overall mean score is 4.44 with standard deviation (SD) 0.423 and a descriptive equivalent of strongly agree. These results indicate that students perceive their YouTube usage as significantly high.

     Further, among the indicators YouTube usage, perceived usefulness got the highest mean score of 4.56 with SD of 0.402 and descriptive equivalent of strongly agree. This is followed by behavioral intentions, user attitude, and perceived ease of use with mean scores of 4.43 (0.682), 4.40 (0.516), and 4.36 (0.561), respectively, all have descriptive equivalents of strongly agree.

**Table 2. Level of Engagement**

|  |  |  |  |
| --- | --- | --- | --- |
| **Level of Engagement** | **n** | **SD** | **Descriptive Equivalent** |
| Behavioral Engagement | 4.48 | 0.518 | Strongly Agree |
| Cognitive Engagement | 4.42 | 0.495 | Strongly Agree |
| Emotional Engagement | 4.57 | 0.470 | Strongly Agree |
| Overall | 4.49 | 0.416 | Strongly Agree |

     Table 2 shows the level of engagement of the students. Mean was utilized to assess the level of engagement as perceived by the students. Result reveals that the overall mean score is 4.49 with standard deviation (SD) 0.416 and a descriptive equivalent of strongly agree. This implies that the level of engagement is very high as perceived by the respondents.

     Further, among the indicators the level of engagement, emotional engagement got the highest mean score of 4.57 with SD of 0.470 and descriptive equivalent of strongly agree. This is followed by behavioral engagement and cognitive engagement with mean scores of 4.48 (0.518) and 4.42 (0.495), respectively both have descriptive equivalents of strongly agree.

**Table 3. Correlation the Level of YouTube Usage and Level of Engagement**

|  |  |  |
| --- | --- | --- |
|  | **Level of Engagement** | **Decision** |
| Level of YouTube Usage | 0.663  (<0.001) | Reject Ho |

     Table 3 shows the correlation between the level of YouTube usage and the level of engagement as perceived by the respondents. Pearson-r was utilized to investigate if YouTube usage significantly correlated with the level of engagement of the respondents. Result reveals that there is a strong positive monotonic correlation between the level of YouTube usage and the level of engagement as perceived by the respondents (r=0.663, n=200, p=< .001). The results indicate a strong positive correlation between YouTube usage and student engagement, suggesting that increased YouTube usage is likely associated with higher student engagement levels.

| **Table 4. Significant Influence of YouTube Usage to the Level of Engagement** | | | | | | | | | |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Predictor** | | **Estimate** | | **SE** | | **t** | | **p** | | **Decision** |
| Intercept |  | 1.3251 |  | 0.2604 |  | 5.09 |  | < .001 |  |  |
| Perceived Usefulness |  | 0.2423 |  | 0.0707 |  | 3.42 |  | < .001 |  | Reject Ho |
| Behavioral Intentions |  | 0.0408 |  | 0.0405 |  | 1.01 |  | 0.316 |  | Accept Ho |
| User Attitude |  | 0.2362 |  | 0.0570 |  | 4.15 |  | < .001 |  | Reject Ho |
| Perceived Ease of Use |  | 0.1928 |  | 0.0460 |  | 4.19 |  | < .001 |  | Reject Ho |
| R= 0.684, R2= 0.456, F= 42.80, *p= <.001* | | | | | | | | | |  |

    Table 4 shows the significant influence of the YouTube Usage to the level of engagement. To investigate the significant influence, the research utilized linear regression. As shown in the table, among the indicators of YouTube usage, perceived usefulness, user attitude, and perceived ease of use made a unique significant contribution to the model and influence on the level of engagement of the respondents with p values of <0.001. It revealed further that 45.60% of the indicators of YouTube usage significantly influenced the level of engagement of the respondents and 54.40% is not part of the study under investigation.

**Scatter Plot**A screen shot of a graph

Description automatically generated

Image 1: Scatter plot showing You Tube usage

| Descriptives | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **N** | **Mean** | | | | **SD** | |
| PU1 |  | 200 |  | 4.65 |  | 0.556 | |  | |
| PU2 |  | 200 |  | 4.54 |  | 0.600 | |  | |
| PU3 |  | 200 |  | 4.57 |  | 0.638 | |  | |
| PU4 |  | 200 |  | 4.50 |  | 0.634 | |  | |
| PU5 |  | 200 |  | 4.54 |  | 0.625 | |  | |
| PU6 |  | 200 |  | 4.57 |  | 0.646 | |  | |
| BI1 |  | 200 |  | 4.43 |  | 0.760 | |  | |
| BI2 |  | 200 |  | 4.44 |  | 0.781 | |  | |
| UA1 |  | 200 |  | 4.47 |  | 0.672 | |  | |
| UA2 |  | 200 |  | 4.30 |  | 0.723 | |  | |
| UA3 |  | 200 |  | 4.34 |  | 0.746 | |  | |
| UA4 |  | 200 |  | 4.45 |  | 0.714 | |  | |
| UA5 |  | 200 |  | 4.42 |  | 0.719 | |  | |
| UA6 |  | 200 |  | 4.42 |  | 0.772 | |  | |
| PEU1 |  | 200 |  | 4.35 |  | 0.807 | |  | |
| PEU2 |  | 200 |  | 4.33 |  | 0.751 | |  | |
| PEU3 |  | 200 |  | 4.40 |  | 0.716 | |  | |
| PEU4 |  | 200 |  | 4.36 |  | 0.750 | |  | |
| PEU5 |  | 200 |  | 4.34 |  | 0.766 | |  | |
| PEU6 |  | 200 |  | 4.38 |  | 0.733 | |  | |
| BE1 |  | 200 |  | 4.44 |  | 0.761 | |  | |
| BE2 |  | 200 |  | 4.47 |  | 0.649 | |  | |
| BE3 |  | 200 |  | 4.55 |  | 0.608 | |  | |
| BE4 |  | 200 |  | 4.47 |  | 0.657 | |  | |
| BE5 |  | 200 |  | 4.47 |  | 0.769 | |  | |
| CE1 |  | 200 |  | 4.49 |  | 0.702 | |  | |
| CE2 |  | 200 |  | 4.38 |  | 0.706 | |  | |
| CE3 |  | 200 |  | 4.41 |  | 0.751 | |  | |
| CE4 |  | 200 |  | 4.40 |  | 0.702 | |  | |
| CE5 |  | 200 |  | 4.43 |  | 0.720 | |  | |
| CE6 |  | 200 |  | 4.37 |  | 0.784 | |  | |
| CE7 |  | 200 |  | 4.42 |  | 0.697 | |  | |
| CE8 |  | 200 |  | 4.45 |  | 0.670 | |  | |
| CE9 |  | 200 |  | 4.49 |  | 0.743 | |  | |
| EE1 |  | 200 |  | 4.50 |  | 0.657 | |  | |
| EE2 |  | 200 |  | 4.54 |  | 0.624 | |  | |
| EE3 |  | 200 |  | 4.55 |  | 0.616 | |  | |
| EE4 |  | 200 |  | 4.68 |  | 0.648 | |  | |
| Perceived Usefulness |  | 200 |  | 4.56 |  | 0.402 | |  | |
| Behavioral Intentions |  | 200 |  | 4.43 |  | 0.682 | |  | |
| User Attitude |  | 200 |  | 4.40 |  | 0.516 | |  | |
| Perceived Ease of Use |  | 200 |  | 4.36 |  | 0.561 | |  | |
| Behavioral Engagement |  | 200 |  | 4.48 |  | 0.518 | |  | |
| Cognitive Engagement |  | 200 |  | 4.42 |  | 0.495 | |  | |
| Emotional Engagement |  | 200 |  | 4.57 |  | 0.470 | |  | |
| YouTube Usage |  | 200 |  | 4.44 |  | 0.423 | |  | |
| Engagement |  | 200 |  | 4.49 |  | 0.416 | |  | |
|  | | | | | | | | |

**4. CONCLUSIONS AND RECOMMENDATIONS**

**4.1 Conclusions**

 The study identified a moderate positive correlation between YouTube usage and student engagement among college students in the Municipality of Bansalan. Students who utilized YouTube frequently, particularly for educational purposes, exhibited higher engagement in academic activities, including active participation in class discussions, consistent completion of homework, and better exam performance. This finding suggests that YouTube can serve as an effective supplementary tool to traditional learning methods. However, the study also noted potential downsides associated with excessive or non-educational use, emphasizing the importance of purposeful and targeted engagement with the platform.

Additionally, the analysis highlighted that the type of content accessed on YouTube had a significant impact on engagement. Students who used the platform to view tutorials, academic lectures, and educational resources demonstrated greater benefits compared to those who primarily consumed entertainment or recreational material. Notably, students showed higher engagement levels in class participation and exam performance compared to the regularity and quality of homework submissions. While YouTube enhances understanding and engagement, it may not replace traditional study habits.

The findings also revealed that YouTube usage accounted for 29.40% of the variance in student engagement. This indicates that while YouTube plays a meaningful role, other factors such as teaching methods, peer interactions, and personal motivation also influence engagement. The study highlights the potential of YouTube as a dynamic and interactive tool for enhancing academic engagement, while recommending a more strategic and deliberate approach to its use in educational contexts.

Further studies should explore how different types of YouTube content impact various learning styles and academic performance. Placing greater emphasis on the quality of content, balanced usage, and alignment with academic objectives could further enhance its effectiveness in supporting student development and engagement.

**4.2 Recommendations**

     Based on the correlational analysis of YouTube usage and student engagement among college students in the Municipality of Bansalan, we recommend the following:

1. Further Research: Conduct a longitudinal study to examine the causal relationship between YouTube usage and student engagement over time. This would help determine if YouTube usage influences engagement or vice versa. Consider investigating specific types of YouTube content and their impact on different learning styles.
2. Policy Development: Develop clear policies regarding appropriate technology use in the college setting, addressing the balance between academic productivity and recreational online activities.
3. Curriculum Integration: Explore integrating YouTube and other online video platforms into the college curriculum in a structured and purposeful manner. This could involve assigning specific educational videos as supplementary learning materials or using YouTube as a tool for collaborative projects.
4. Educational Interventions: Develop and implement educational interventions to help students utilize YouTube effectively for academic purposes. This could involve workshops or online resources teaching students how to identify credible educational content, manage their time effectively, and avoid distractions.

**COMPETING INTERESTS DISCLAIMER:**

Authors have declared that they have no known competing financial interests OR non-financial interests OR personal relationships that could have appeared to influence the work reported in this paper.

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