



## Analysis of the Relationship Between UTAUT Factors and Behavioral Intention to Use Google Classroom among Vocational High School Teachers

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### ABSTRACT

The implementation of competency-based learning in vocational high schools requires effective assessment and timely feedback to ensure that students achieve the competencies demanded by industry. However, assessment and feedback activities are still frequently conducted manually, resulting in administrative inefficiencies, delayed feedback, and difficulties in monitoring students' learning progress. Google Classroom provides an integrated digital platform that can facilitate assessment management and feedback delivery; however, its successful implementation depends on teachers' acceptance of the technology. Therefore, this study aimed to analyze the relationships between Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, and Behavioral Intention to use Google Classroom among vocational high school teachers. A quantitative descriptive-correlational research design was employed involving 98 teachers selected through purposive sampling from three vocational high schools in Surakarta, Indonesia. Data were collected using a questionnaire developed based on the Unified Theory of Acceptance and Use of Technology (UTAUT). The collected data were analyzed using IBM SPSS Statistics Version 27, employing descriptive statistics, the Kolmogorov-Smirnov normality test, and Spearman's Rank correlation analysis. The results revealed that all UTAUT constructs had positive and statistically significant relationships with Behavioral Intention. Performance Expectancy showed the strongest relationship ( $r_s = 0.694$ ,  $p < 0.001$ ), followed by Social Influence ( $r_s = 0.620$ ,  $p < 0.001$ ), Facilitating Conditions ( $r_s = 0.585$ ,  $p < 0.001$ ), and Effort Expectancy ( $r_s = 0.565$ ,  $p < 0.001$ ). These findings indicate that teachers' intention to use Google Classroom is primarily associated with perceived usefulness, followed by social support, facilitating resources, and perceived ease of use. The findings imply that vocational schools should strengthen teachers' digital competencies, improve institutional support, and ensure adequate technological infrastructure to promote the sustainable implementation of Google Classroom for assessment and feedback activities.

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### ■ INTRODUCTION

Vocational high schools are designed to prepare students with theoretical knowledge and practical competencies that correspond to workplace requirements. In this context, assessment and feedback are essential for monitoring competency attainment and helping students identify areas that require improvement. Timely feedback can support continuous learning and improve students' engagement with the learning process (Atikah & Amelia, 2024). Assessment in vocational education also extends beyond academic achievement because it evaluates practical

competence and readiness to perform occupational tasks (Jatmoko et al., 2025). Furthermore, feedback provided during assessment can strengthen learning outcomes and support students' self-regulated learning (Yan et al., 2021).

Despite their importance, assessment and feedback activities in vocational schools are often conducted through manual or partially digital procedures. Teachers may experience difficulties in organizing student submissions, recording performance, managing assessment documents, and providing timely feedback. Digital assessment systems can reduce these

administrative constraints by improving data management, efficiency, and transparency in educational evaluation (Maharani et al., 2025). They can also support more systematic assessment procedures and accelerate feedback delivery (Jatmoko et al., 2025).

The development of digital technology has created opportunities for educational institutions to improve teaching, learning, and assessment practices. Digital platforms provide flexible access to learning resources, facilitate communication and collaboration, and support more efficient educational management (Haleem et al., 2022). Educational institutions are therefore increasingly expected to adopt technologies that improve the quality of learning and support data-informed decision-making (Mastour et al., 2025). One relevant development is cloud computing, which enables centralized storage, real-time access, and collaborative activities across devices and locations (Mandailina, 2024).

Google Classroom is a cloud-based educational platform that integrates learning materials, assignment management, assessment, and feedback functions. Its features allow teachers to organize student work, monitor learning progress, and provide feedback within a single digital environment. Previous research has shown that Google Classroom can support classroom management, teacher-student communication, and the organization of digital learning activities (Piaralal et al., 2023). Its use has also been associated with students' interest in learning and participation in vocational education (Wardoyo et al., 2025). These characteristics make Google Classroom potentially valuable for managing assessment and feedback in vocational schools.

However, the implementation of Google Classroom is not always optimal. Teachers may encounter unstable internet connections, limited access to digital devices, insufficient technical support, and varying levels of digital competence. Infrastructure readiness and teachers' technological capabilities remain important challenges to technology integration in vocational schools (Hastutiningsih et al., 2025). Differences in institutional readiness, access to infrastructure, and technical support may also create disparities in Google Classroom utilization (Astari & Yulianto, 2025). Consequently, the availability of a digital platform does not automatically ensure its effective and sustained use.

Recent evidence further indicates that digital transformation in vocational education remains uneven. Differences in digital competence, institutional support, and

technological readiness continue to shape teachers' ability to integrate digital platforms into assessment and feedback practices (Hastutiningsih et al., 2025; Astari & Yulianto, 2025). Teachers' acceptance of online learning platforms is also related to the institutional and technological environment in which they work (Wannapiroon et al., 2021). Understanding teachers' intentions to use Google Classroom is therefore necessary for developing sustainable digital assessment practices in vocational education.

The Unified Theory of Acceptance and Use of Technology provides an appropriate framework for examining technology acceptance. UTAUT proposes that Behavioral Intention is associated with four main constructs: Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions (Venkatesh et al., 2003). Performance Expectancy refers to the perceived benefits of technology for improving work performance, while Effort Expectancy concerns its perceived ease of use. Social Influence refers to encouragement from important individuals or professional groups, whereas Facilitating Conditions refers to the technical and organizational resources available to support the use of technology (Venkatesh et al., 2003).

The applicability of UTAUT has been demonstrated in various educational settings. Its constructs have been associated with technology adaptation in flipped-classroom environments (Agyei & Razi, 2022), acceptance of blended learning among vocational students (Li et al., 2022), and intention to use e-learning platforms among secondary-school learners (Haripin & Warsono, 2024). Research specifically examining Google Classroom has also identified Performance Expectancy as an important construct associated with Behavioral Intention (Alotumi, 2022). Similarly, the principal UTAUT constructs have been found to be relevant to the acceptance of Google Classroom in online learning environments (Ramdani & Priyanto, 2024).

Although previous studies have examined Google Classroom adoption, many have treated it as a general learning or communication platform. Comparatively less attention has been directed toward teachers' acceptance of Google Classroom specifically for assessment management and feedback delivery in vocational secondary education. This issue is important because technology integration in vocational schools remains affected by disparities in digital competence, institutional support, and technological readiness

(Hastutiningsih et al., 2025; Astari & Yulianto, 2025). The UTAUT framework remains relevant for examining these individual, social, and organizational considerations (Altalhi, 2021), while previous Google Classroom research has particularly emphasized perceived usefulness and facilitating conditions (Bervell et al., 2022). Accordingly, this study examines the relationships between the four UTAUT constructs and teachers' Behavioral Intention to use Google Classroom for assessment and feedback activities.

In light of this research gap, the study addresses four research questions. RQ1: To what extent is Performance Expectancy related to vocational high school teachers' Behavioral Intention to use Google Classroom for assessment and feedback activities? RQ2: To what extent is Effort Expectancy related to their Behavioral Intention? RQ3: To what extent is Social Influence related to their Behavioral Intention? Moreover, RQ4: To what extent are Facilitating Conditions related to their Behavioral Intention? Answering these questions is expected to extend the application of UTAUT to assessment and feedback practices in vocational secondary education and provide practical guidance regarding institutional support, infrastructure provision, technical assistance, and teacher professional development.

## ■ **METHOD**

### **Research Design**

This study employed a quantitative approach with a descriptive-correlational research design. Quantitative research is a systematic method for examining relationships among variables using numerical data and statistical analysis (Candra Susanto et al., 2024). The descriptive component was used to examine vocational high school teachers' perceptions of Google Classroom's use for assessment and feedback activities. In contrast, the correlational component was intended to determine the relationships between the constructs of the Unified Theory of Acceptance and Use of Technology (UTAUT) and teachers' Behavioral Intention to use Google Classroom (Bervell et al., 2022).

The variables examined in this study consisted of four independent variables and one dependent variable. The independent variables were Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), and Facilitating Conditions (FC), whereas Behavioral Intention (BI) was the dependent variable. The conceptual framework of the study was developed based on the UTAUT model proposed by Venkatesh et al. (2003),

which posits that users' behavioral intention to adopt technology is influenced by perceived usefulness, perceived ease of use, social influence, and facilitating conditions.

This study examined the relationships between the four UTAUT constructs and teachers' intention to use Google Classroom for assessment and feedback activities. Since the purpose of the study was to identify the strength and direction of relationships among variables rather than to establish causal effects, a correlational design was considered appropriate.

### **Participants and Sampling Technique**

The participants in this study were vocational high school teachers from three public vocational schools in Surakarta: SMK Negeri 2 Surakarta, SMK Negeri 5 Surakarta, and SMK Negeri 6 Surakarta. The selection of the research location was based on the consideration that these schools have implemented digital technology in the learning process, including the use of Google Classroom, making them relevant to the focus of this study. A purposive sampling technique was applied using specific criteria: teachers with experience using Google Classroom and access to digital devices and internet connectivity.

### **Research Instrument and Data Collection**

The sample size in this study comprised 98 vocational high school teachers with experience using Google Classroom for teaching and learning activities. To ensure that the sample size was statistically adequate, an a priori power analysis was conducted using G\*Power version 3.1.9.7. The selected test family was Exact, and the statistical test was Correlation: Bivariate normal model, which is commonly used to estimate the minimum sample size required for correlation analysis. The analysis was performed using a medium effect size ( $\rho = 0.30$ ), a significance level ( $\alpha$ ) of 0.05, a statistical power ( $1 - \beta$ ) of 0.80, and a two-tailed test, following Cohen's recommendations. The analysis indicated that the minimum required sample size was 84 participants (Kang, 2021). Therefore, the sample size of 98 teachers exceeded the recommended minimum and was considered sufficient to provide adequate statistical power. Although the final hypothesis testing employed Spearman Rank correlation because the collected data did not satisfy the normality assumption, the G\*Power analysis was conducted using the bivariate correlation model, the standard procedure for determining the minimum sample size in correlation studies.

**Table 1.** Research instrument blueprint

| Variable                | Indicators                                                                        | Items     |
|-------------------------|-----------------------------------------------------------------------------------|-----------|
| Performance Expectancy  | Perceived usefulness, work efficiency, productivity improvement                   | 6         |
| Effort Expectancy       | Ease of use, ease of operation, clarity of interaction                            | 6         |
| Social Influence        | Influence of colleagues, school leaders, and institutional support                | 4         |
| Facilitating Conditions | Availability of infrastructure, internet access, and technical support            | 4         |
| Behavioral Intention    | Intention to continue using, future usage plans, main learning platform intention | 6         |
| <b>Total</b>            |                                                                                   | <b>26</b> |

Data were collected using a structured questionnaire developed based on the Unified Theory of Acceptance and Use of Technology (UTAUT) model proposed by Venkatesh et al. (2003). The questionnaire was designed to measure respondents' perceptions of Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, and Behavioral Intention toward using Google Classroom for assessment and feedback activities. The questionnaire employed a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The Likert scale was selected because it is widely used in educational and behavioral research to measure attitudes, perceptions, and intentions (Jebb et al., 2021). The questionnaire consisted of indicators representing each construct in the UTAUT model. The research instrument blueprint, including the variables, indicators, and number of questionnaire items, is presented in Table 1.

Data collection was conducted through an online questionnaire distributed to teachers who met the inclusion criteria. Prior to participation, respondents were informed of the study's objectives and assured that their responses would remain confidential and be used solely for research purposes.

### Validity, Reliability, and Data Analysis

Before data analysis, the research instrument was tested for validity and reliability to ensure that it accurately measured the intended constructs and produced consistent results. Validity testing was conducted using Pearson Product–Moment correlation to examine the relationship between each questionnaire item and the total score of its respective construct. Pearson Product–Moment

correlation was employed at this stage because the purpose of the analysis was to evaluate the validity of each questionnaire item within its construct, rather than to examine the relationships among the research variables. According to McGrath (2025), validity reflects the extent to which an instrument measures what it is intended to measure. An item was considered valid when its significance value was less than 0.05, and its correlation coefficient exceeded the critical value. The results indicated that all questionnaire items met the validity criteria and were therefore retained for further analysis. After the validity and reliability assessment, the normality of the data was examined using the Kolmogorov–Smirnov test. Since the data were not normally distributed ( $p < 0.05$ ), the relationships among the UTAUT constructs and Behavioral Intention were subsequently analyzed using Spearman's rank correlation, the appropriate nonparametric method.

Reliability testing was conducted using Cronbach's alpha to assess the instrument's internal consistency. Reliability refers to the degree to which an instrument produces stable and consistent results when administered under similar conditions (Setyaedhi, 2024). Although the questionnaire employed a five-point Likert scale, Cronbach's Alpha was selected because it remains one of the most widely accepted measures of internal consistency in educational and behavioral research using Likert-type instruments. A Cronbach's Alpha value of 0.70 or higher indicates good reliability and suggests that the instrument can be trusted to measure the intended constructs consistently (Setyaedhi, 2024). The reliability test results showed that all variables had Cronbach's Alpha values above the acceptable threshold, indicating

**Table 2.** Kruskal–wallis test results across age groups

| Variable                | H     | df | p-value | Decision        |
|-------------------------|-------|----|---------|-----------------|
| Performance Expectancy  | 2.512 | 3  | 0.473   | Not Significant |
| Effort Expectancy       | 4.360 | 3  | 0.225   | Not Significant |
| Social Influence        | 1.181 | 3  | 0.757   | Not Significant |
| Facilitating Conditions | 1.175 | 3  | 0.759   | Not Significant |
| Behavioral Intention    | 3.513 | 3  | 0.319   | Not Significant |

satisfactory internal consistency and supporting the instrument's reliability for subsequent statistical analyses.

The collected data were analyzed using IBM SPSS Statistics. The analysis was conducted in several stages. First, descriptive statistics were used to summarize respondents' characteristics and describe the data's distribution using minimum and maximum values, means, and standard deviations. Since each construct comprised a different number of questionnaire items, the aggregate scores were converted to item-level mean scores for interpretation. The interpretation of the mean scores followed the five-point Likert scale categories proposed by Jebb et al. (2021): 1.00–1.80 (Very Low), 1.81–2.60 (Low), 2.61–3.40 (Moderate), 3.41–4.20 (High), and 4.21–5.00 (Very High).

Second, a normality test was performed using the Kolmogorov–Smirnov test to determine whether the data were normally distributed. The results of the normality test served as the basis for selecting the appropriate correlation analysis technique. If the data met the assumption of normality, Pearson's correlation would be applied. However, if the data were not normally distributed, Spearman's rank correlation would be used as a non-parametric alternative.

The normality test results indicated that the data did not meet the assumption of normal distribution. Therefore, Spearman's rank correlation was employed to examine the relationships between Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, and Behavioral Intention. Spearman Rank correlation is appropriate for ordinal data and non-normally distributed datasets because it measures the strength and direction of monotonic relationships between variables. The interpretation of correlation coefficients followed the criteria: 0.00–0.199 (very weak), 0.20–0.399 (weak), 0.40–0.599 (moderate), 0.60–0.799 (strong), and 0.80–1.000 (very

strong). Statistical significance was assessed at  $\alpha = 0.05$ .

## ■ RESULTS AND DISCUSSION

### Respondent Characteristics and Preliminary Analyses

The study involved 98 vocational high school teachers who had experience using Google Classroom, particularly for assessment and feedback activities. The respondents consisted of 51 female teachers (52.0%) and 47 male teachers (48.0%), indicating a relatively balanced gender distribution. In terms of age, 40.8% of the respondents were over 50 years old, 25.5% were 41–50 years old, 18.4% were 31–40 years old, and 15.3% were 30 years old or younger.

Descriptive analysis indicated that teachers aged 30 years or younger obtained slightly higher mean scores across the UTAUT constructs. However, descriptive differences do not necessarily indicate statistically significant differences. Therefore, a Kruskal–Wallis test was conducted to determine whether teachers' perceptions differed significantly across age groups. The results are presented in Table 2.

As shown in Table 2, no statistically significant differences were identified among the age groups for Performance Expectancy ( $H=2.512$ ;  $p=0.473$ ), Effort Expectancy ( $H=4.360$ ;  $p=0.225$ ), Social Influence ( $H=1.181$ ;  $p=0.757$ ), Facilitating Conditions ( $H=1.175$ ;  $p=0.759$ ), or Behavioral Intention ( $H=3.513$ ;  $p=0.319$ ). These findings indicate that teachers' perceptions of Google Classroom were relatively consistent across age groups. Consequently, age was not used as a primary basis for interpreting the relationships among the UTAUT constructs.

The respondents also differed in the duration of their Google Classroom use. The distribution of respondents according to usage duration is presented in Table 3. As shown in Table 3, most respondents had used Google Classroom for one to two years (61.2%), followed by six to twelve months (21.4%), zero

**Table 3.** Distribution of respondents based on duration of google classroom usage

| Duration    | Frequency | Percentage |
|-------------|-----------|------------|
| 0–3 months  | 10        | 10.2%      |
| 3–6 months  | 7         | 7.1%       |
| 6–12 months | 21        | 21.4%      |
| 1–2 years   | 60        | 61.2%      |
| Total       | 98        | 100%       |

to three months (10.2%), and three to six months (7.1%). This distribution indicates that most respondents evaluated Google Classroom based on sustained experience rather than initial exposure.

A Kruskal–Wallis test was subsequently conducted to determine whether perceptions of Google Classroom differed according to usage duration. The results are presented in Table 4. The results showed a statistically significant difference in Performance Expectancy across usage-duration groups ( $H=9.626$ ;  $p=0.022$ ). However, no statistically significant differences were found for Effort Expectancy ( $H=2.576$ ;  $p=0.462$ ), Social Influence ( $H=6.297$ ;  $p=0.098$ ), Facilitating Conditions ( $H=5.555$ ;  $p=0.135$ ), or Behavioral Intention ( $H=7.517$ ;  $p=0.057$ ). These findings suggest that the perceived usefulness of Google Classroom varied according to teachers' duration of experience. In contrast, perceptions of ease of use, social support, facilitating resources, and continued-use intention remained relatively consistent.

The significant difference in Performance Expectancy indicates that teachers with varying durations of Google Classroom use perceived the platform's usefulness differently. This finding suggests that longer experience with

Google Classroom may contribute to stronger perceptions of its usefulness in supporting teaching, assessment, and feedback activities.

In contrast, no statistically significant differences were found for Effort Expectancy, Social Influence, Facilitating Conditions, or Behavioral Intention. These findings indicate that although teachers' perceptions of Google Classroom's usefulness differed with usage duration, perceptions of ease of use, social influence, facilitating conditions, and intention to continue using the platform remained relatively consistent across groups.

The predominance of teachers who had used Google Classroom for one to two years indicates that the platform has become relatively well established in the participating vocational schools. Consequently, respondents' evaluations are likely to reflect sustained classroom experience rather than initial impressions, thereby providing a more reliable basis for interpreting technology acceptance in assessment and feedback practices.

All instrument items were confirmed to be valid, as indicated by significance values below 0.05. Furthermore, reliability testing showed that all variables have Cronbach's Alpha values above 0.70, indicating good internal consistency and confirming that the instrument is reliable for further analysis (Setyaedhi, 2024). The detailed results of the reliability test are presented in Table 5.

All constructs obtained Cronbach's Alpha coefficients above the threshold of 0.70. Performance Expectancy achieved a coefficient of 0.813, Effort Expectancy 0.763, Social Influence 0.745, Facilitating Conditions 0.781, and Behavioral Intention 0.810. These results indicate satisfactory internal consistency across all constructs. Performance Expectancy had the highest coefficient, whereas Social Influence had the lowest; nevertheless, all values remained within the acceptable range.

Following the reliability assessment, descriptive statistics were calculated to summarize respondents' perceptions of the

**Table 4.** Kruskal–Wallis test results based on duration of Google Classroom usage

| Variable                | H     | df | p-value | Decision        |
|-------------------------|-------|----|---------|-----------------|
| Performance Expectancy  | 9.626 | 3  | 0.022   | Significant     |
| Effort Expectancy       | 2.576 | 3  | 0.462   | Not Significant |
| Social Influence        | 6.297 | 3  | 0.098   | Not Significant |
| Facilitating Conditions | 5.555 | 3  | 0.135   | Not Significant |
| Behavioral Intention    | 7.517 | 3  | 0.057   | Not Significant |

**Table 5.** Reliability test results

| Variable                | Cronbach's Alpha | Number of Items | Description |
|-------------------------|------------------|-----------------|-------------|
| Performance Expectancy  | 0.813            | 6               | Reliable    |
| Effort Expectancy       | 0.763            | 6               | Reliable    |
| Social Influence        | 0.745            | 4               | Reliable    |
| Facilitating Conditions | 0.781            | 4               | Reliable    |
| Behavioral Intention    | 0.810            | 6               | Reliable    |

UTAUT constructs and Behavioral Intention. The results are presented in Table 6. As shown in Table 6, all constructs were categorized as High. Effort Expectancy obtained the highest mean score per item ( $M=3.87$ ;  $SD=0.46$ ), followed by Performance Expectancy ( $M=3.83$ ;  $SD=0.49$ ), Facilitating Conditions ( $M=3.66$ ;  $SD=0.56$ ), Behavioral Intention ( $M=3.43$ ;  $SD=0.55$ ), and Social Influence ( $M=3.42$ ;  $SD=0.53$ ). These results indicate that respondents generally perceived Google Classroom as easy to use, useful, and adequately supported.

**Table 6.** Descriptive statistics

| Variable                | Mean | SD   | Category |
|-------------------------|------|------|----------|
| Performance Expectancy  | 3.83 | 0.49 | High     |
| Effort Expectancy       | 3.87 | 0.46 | High     |
| Social Influence        | 3.42 | 0.53 | High     |
| Facilitating Conditions | 3.66 | 0.56 | High     |
| Behavioral Intention    | 3.43 | 0.55 | High     |

To provide a more detailed overview of the distribution of respondents across the five interpretation categories, the percentages for each construct are presented in Table 7. As shown in Table 7, most respondents were classified in the High category for Performance Expectancy, Effort Expectancy, Facilitating Conditions, and Behavioral Intention. Social Influence showed a more balanced distribution between the Moderate and High categories. Behavioral Intention also contained a relatively substantial proportion of respondents in the Moderate category. Therefore, although teachers' perceptions were generally favorable, institutional encouragement and continued use intention could still be strengthened.

Prior to examining the relationships addressed by the research questions, the data

distribution was assessed using the Kolmogorov–Smirnov test. All research variables produced significance values below 0.05, indicating that the data did not meet the assumption of normality. Therefore, Spearman's Rank correlation was employed to examine the direction and strength of the relationships between the four UTAUT constructs and Behavioral Intention. The complete correlation results are summarized in Table 8.

As shown in Table 8, all four UTAUT constructs had positive and statistically significant relationships with Behavioral Intention at  $p<0.001$ . The correlation coefficients ranged from 0.565 to 0.694, indicating moderate-to-strong relationships. Performance Expectancy demonstrated the strongest relationship, followed by Social Influence, Facilitating Conditions, and Effort Expectancy. The following subsections discuss each relationship separately, in line with the four research questions.

### Performance Expectancy and Behavioral Intention (RQ1)

Performance Expectancy demonstrated a strong positive relationship with Behavioral Intention ( $r_s=0.694$ ,  $p<0.001$ ). In response to RQ1, this result indicates that teachers who perceived greater performance benefits from Google Classroom tended to report stronger intentions to continue using the platform for assessment and feedback activities.

Among the four UTAUT constructs examined, Performance Expectancy produced the largest correlation coefficient. This finding indicates that the perceived usefulness of Google Classroom was most strongly associated with teachers' intention to continue using the platform. Teachers who considered Google Classroom beneficial for distributing assignments, organizing student submissions, recording assessment results, and providing timely feedback tended to demonstrate stronger Behavioral Intention.

**Table 7.** Distribution of respondents by score category

| Category  | Performance Expectancy (%) | Effort Expectancy (%) | Social Influence (%) | Facilitating Conditions (%) | Behavioral Intention (%) |
|-----------|----------------------------|-----------------------|----------------------|-----------------------------|--------------------------|
| Very Low  | 0.0                        | 0.0                   | 1.0                  | 0.0                         | 1.0                      |
| Low       | 0.0                        | 0.0                   | 5.1                  | 3.1                         | 4.1                      |
| Moderate  | 22.4                       | 15.3                  | 44.9                 | 29.6                        | 45.9                     |
| High      | 62.2                       | 69.4                  | 42.9                 | 50.0                        | 43.9                     |
| Very High | 15.3                       | 15.3                  | 6.1                  | 17.3                        | 5.1                      |

This relationship can be understood in relation to the practical responsibilities of vocational high school teachers. Assessment and feedback activities require teachers to manage numerous student submissions, document competency development, record grades, and communicate feedback efficiently. Google Classroom may therefore be perceived favorably when its features streamline these responsibilities, streamline administrative procedures, and support the timely completion of assessment-related tasks.

This finding is consistent with Alblooshi and Abdul Hamid (2022), Alotumi (2022), and Li et al. (2022), who emphasized the important role of perceived performance benefits in technology acceptance. It also corresponds with Bervell et al. (2022), who highlighted the role of perceived usefulness in Google Classroom acceptance. Nevertheless, because the present study employed a correlational design, this relationship should not be interpreted as evidence that Performance Expectancy directly causes Behavioral Intention.

#### **Effort Expectancy and Behavioral Intention (RQ2)**

Effort Expectancy demonstrated a moderate positive relationship with Behavioral Intention ( $r_s = 0.565, p < 0.001$ ). In response to RQ2, this result indicates that teachers who perceived Google Classroom as easier to learn

and operate tended to report stronger intentions to continue using the platform.

Ease of use is particularly relevant when teachers are required to manage multiple classes, assignments, assessment records, and feedback activities. A platform with clear functions and manageable interaction procedures may reduce the effort required to integrate technology into routine instructional activities.

Nevertheless, Effort Expectancy produced the smallest correlation coefficient among the four constructs examined. This does not mean that ease of use was unimportant. Rather, its relationship with Behavioral Intention was comparatively weaker than the relationships demonstrated by Performance Expectancy, Social Influence, and Facilitating Conditions. The finding suggests that teachers may place greater emphasis on the practical benefits of Google Classroom than on ease of use alone.

#### **Social Influence and Behavioral Intention (RQ3)**

Social Influence demonstrated a strong positive relationship with Behavioral Intention ( $r_s = 0.620, p < 0.001$ ). In response to RQ3, this result indicates that teachers who perceived stronger encouragement from colleagues, school leaders, and their professional environment tended to report stronger intentions to continue using Google Classroom.

**Table 8.** Spearman's Rank correlation results

| Independent Variable    | Spearman's $r_s$ | p-value | Interpretation |
|-------------------------|------------------|---------|----------------|
| Performance Expectancy  | 0.694            | < 0.001 | Strong         |
| Effort Expectancy       | 0.565            | < 0.001 | Moderate       |
| Social Influence        | 0.620            | < 0.001 | Strong         |
| Facilitating Conditions | 0.585            | < 0.001 | Moderate       |

The use of technology in schools is not solely an individual decision. Teachers operate within professional and institutional environments in which school policies, leadership expectations, peer practices, and organizational culture may encourage the normalization of educational technology. Support from colleagues may also help teachers exchange knowledge, resolve operational difficulties, and build confidence in using Google Classroom for assessment and feedback. The strong relationship between Social Influence and Behavioral Intention suggests that continued use of Google Classroom may be reinforced by collective rather than exclusively individual strategies. School leaders can establish consistent digital-assessment policies, while peer mentoring and teacher communities can provide practical assistance to teachers who encounter difficulties.

This finding is consistent with Raza et al. (2021), who reported that social and institutional environments contribute to users' acceptance of learning management systems. The result therefore reinforces the importance of professional and organizational support in promoting technology acceptance among vocational high school teachers.

#### Facilitating Conditions and Behavioral Intention (RQ4)

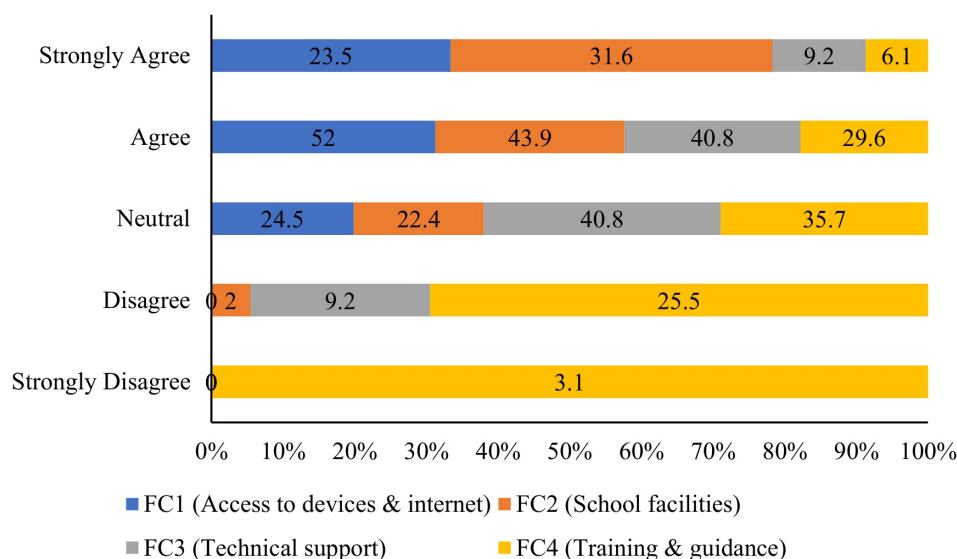
Facilitating Conditions demonstrated a moderate positive relationship with Behavioral Intention ( $r_s = 0.585, p < 0.001$ ). In response to RQ4, this result indicates that teachers who perceived greater availability of digital devices, internet connectivity, school facilities, technical

assistance, and training tended to report stronger intentions to continue using Google Classroom. To provide a more detailed description of this construct, the distribution of responses to the Facilitating Conditions indicators is presented in Figure 1.

As shown in Figure 1, access to digital devices and internet connectivity received the most favorable responses, with 75.5% of respondents selecting "Agree" or "Strongly Agree". School facilities received the same combined proportion of positive responses, although 22.4% of respondents remained neutral. These findings indicate that basic infrastructure was generally available to most participating teachers.

More varied responses were found for technical support and training. For technical support, 50.0% of respondents selected Agree or Strongly Agree, while 40.8% selected Neutral and 9.2% selected Disagree. Training and guidance represented the least favorable facilitating condition: only 35.7% selected Agree or Strongly Agree, 35.7% selected Neutral, and 28.6% selected Disagree or Strongly Disagree.

These response patterns indicate that the primary facilitating challenge was not merely access to devices or internet connectivity, but the limited consistency of technical assistance and training. Therefore, infrastructure provision should be accompanied by continuing professional development, practical guidance, and accessible technical support. This finding also corresponds with Bervell et al. (2022), who emphasized the importance of facilitating conditions in Google Classroom acceptance.



**Figure 1.** Distribution of responses to facilitating conditions items

## Comparative Discussion and Practical Implications

A comparison of the four correlation coefficients shows that Performance Expectancy had the strongest relationship with Behavioral Intention ( $r_s=0.694$ ), followed by Social Influence ( $r_s=0.620$ ), Facilitating Conditions ( $r_s=0.585$ ), and Effort Expectancy ( $r_s=0.565$ ). All relationships were positive and statistically significant at  $p<0.001$ .

Descriptively, the coefficient for Performance Expectancy was 0.109 higher than that for Facilitating Conditions and 0.129 higher than that for Effort Expectancy. This pattern suggests that teachers' intention to continue using Google Classroom was more strongly associated with the platform's practical benefits than with the availability of infrastructure or ease of use alone. However, these numerical differences should be interpreted descriptively, as the study did not perform statistical tests to compare the coefficients.

The stronger relationship with Performance Expectancy can be understood in light of the task-oriented characteristics of vocational education. Vocational teachers are expected to monitor competency attainment, manage practical and theoretical assignments, document student performance, and provide timely feedback. A digital platform becomes valuable when it directly supports the completion of these responsibilities. In contrast, infrastructure and ease of use function primarily as enabling conditions; their presence supports adoption but may not, on its own, provide a sufficient reason for continued use. Social Influence also showed a strong relationship with Behavioral Intention, indicating that technology acceptance occurs within a professional and organizational context. Leadership encouragement, peer practices, institutional expectations, and opportunities for collaborative learning may strengthen teachers' confidence in integrating Google Classroom into their professional activities.

Overall, the findings support the UTAUT framework proposed by Venkatesh et al. (2003). In the context of vocational education, however, the findings demonstrate that perceived performance benefits and professional support have stronger associations with continued-use intention than ease of use and facilitating resources do. From a practical perspective, schools should demonstrate how Google Classroom can improve assignment management, assessment documentation, feedback delivery, and monitoring of student progress. Schools should also establish peer-

support mechanisms, ensure reliable internet access, provide responsive technical assistance, and organize regular training focused on authentic assessment and feedback practices rather than solely on basic platform operation.

## Study Limitations

This study has several limitations. Participant characteristics were limited to the information collected through the original questionnaire. Respondents were not classified according to whether they taught general or theoretical subjects or vocational and practical subjects. Information concerning the types of digital devices used and teachers' levels of computer proficiency was also not collected. Consequently, the study could not examine whether subject type, device availability, or computer proficiency were associated with teachers' Behavioral Intention. Future studies should incorporate these characteristics and consider stratified sampling to ensure adequate representation of teachers with different instructional responsibilities. Further research may also examine whether digital competence and device access moderate the relationships between UTAUT constructs and technology-use intention.

## CONCLUSION

This study demonstrates that Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions are positively associated with vocational high school teachers' Behavioral Intention to continue using Google Classroom for assessment and feedback activities. Among these constructs, Performance Expectancy showed the strongest relationship, indicating that teachers' continued-use intention is particularly connected with their perception that Google Classroom can improve the efficiency of assignment management, assessment documentation, and feedback delivery. Social Influence also showed a strong relationship, emphasizing the importance of encouragement from school leaders, colleagues, and the wider professional environment. Meanwhile, Facilitating Conditions and Effort Expectancy remained relevant as supporting factors that enable teachers to use the platform more consistently.

The findings extend the applicability of the UTAUT framework to vocational secondary education, where technology acceptance is closely linked to practical teaching responsibilities and institutional support. However, because the study employed a correlational design, the identified relationships should not be interpreted as evidence of direct

causal effects. Instead, the results indicate that technology-use intention develops through the combined presence of perceived performance benefits, manageable platform operation, social encouragement, and adequate supporting resources.

Based on these findings, vocational schools should adopt a structured evaluation and support strategy to implement digital platforms. Schools should periodically assess teachers' infrastructure and training needs, provide practical training focused on authentic assessment and feedback practices, establish responsive technical assistance mechanisms, and develop peer mentoring communities. Reliable internet access, adequate digital devices, and educational data packages or internet quotas should also be provided to reduce logistical barriers. These measures should be accompanied by regular monitoring of platform use so that institutional policies can be adjusted according to teachers' actual needs and implementation difficulties. Future studies should include subject type, device availability, and computer proficiency to provide a more comprehensive explanation of technology acceptance among vocational teachers.

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## ■ DISCLOSURE OF GENERATIVE AI AND AI-ASSISTED TECHNOLOGIES

During the drafting of this manuscript, the author(s) utilized ChatGPT for refining sentence structure, improving academic writing, and language editing, and Grammarly for proofreading and grammar correction. Following the use of these tools, the author(s) reviewed and revised the content as necessary and accept full responsibility for the final content of the article.

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