CLASSE21: EDUCATORS' ACCEPTANCE OF TECHNOLOGY-ENHANCED CLASSROOM USING THE UTAUT MODEL

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ABSTRACT

Classe21, a technology-enhanced classroom in Mauritius, has given rise to a new vision of technology as a global, interactive, hands-on, and dynamic pedagogical tool through which students can develop new learning experiences and 21st-century skills. Understanding why educators accept or reject technology integration in classrooms has been one of the most challenging issues in studies of technology acceptance models. Numerous factors need to be taken into consideration before ICT innovations can be successfully introduced, adopted, and diffused through secondary schools in Mauritius. The purpose of this study was to seek the acceptance level of an innovative technology-enhanced classroom branded as Classe21 among educators in secondary schools based on the construct presented by the UTAUT Model. One hundred and seventeen questionnaires were distributed to educators in three state secondary schools in which the Classe21 project was being implemented. The data was analysed using SPSS to get the descriptive statistics and AMOS to find the coefficient correlation. The findings showed that there is significant positive influence between the UTAUT constructs performance expectancy ($\beta=0.633$, $p<0.05$), social influence ($\beta=0.392$, $p<0.05$) and facilitating conditions ($\beta=0.344$, $p<0.05$) on behavioural intention with the value of $R^2=0.72$. Performance expectancy, social influence, and facilitating conditions factors showed that 72% of the teachers have behavioural intention to use Classe21. Performance expectancy proved to have the biggest influence on behavioural intention. Therefore, most educators perceive that Classe21 would be useful to improve their job performance, boost lesson delivery, and enhance 21st-century skills of learners. The relationship between effort expectancy and behavior intention was insignificant ($\beta=0.185$, $p>0.05$). Our findings provide a practical reference for educational institutions and policymakers involved in designing technology-enhanced classrooms such as Classe21 for implementation in secondary schools.

Key words: Technology, Classe21, Mauritius, UTAUT, Quantitative

INTRODUCTION

Classe21, an innovative space to infuse 21st-century skills in learners, is a technology-enhanced classroom where each learner has access to a tablet PC and the educator can provide instruction to the whole class or part thereof via a laptop. The laptop and the tablet PCs contain a classroom management system (CMS) to enable monitoring and exchange of information among all the devices via a Wi-Fi hotspot. The whole ecosystem, hardware, software, virtual environment, and physical layout intends to provide a whole range of creative and collaborative options that will yield in new teaching and learning patterns. The project is being implemented in three state secondary schools in Mauritius and one in Rodrigues. The classrooms are also equipped with several interactive whiteboards.

It is generally accepted that technology has the potential to enhance teaching and learning and provide students with learning experiences that other strategies cannot provide. Furthermore, the increasing affordability of computing in general, the availability of the internet, laptops, projectors and tablet technology, has made technology integration more commonplace and compelling (Lekawael, 2017). The emergence and rapid evolution of new technologies are shaping the knowledge highway in which people are communicating, collaborating, operating, and forming social constructs. These technologies are shaping the way people think, work, and live. This is especially true of our youngest generations, those entering classrooms, soon to be leaving them to integrate the workforce and society-at-large.

Indeed, the young digital generation is one of the main users of technology, considered as driven achievers, highly dependent on technology, and have high expectations of ICT integration in classrooms. This young generation surfing on the digital wave has been completely normalized by digital technologies; it is a fully integrated aspect of their lives. Furthermore, Sanders (2015) has outlined five primary reasons that influence students' decisions to deal with technology for learning. These are: (1) students want to learn at comfortable speed; (2) students want to interact with more people than only with their classmates; (3) students are used to having technology at their fingertips; (4) students feel empowered when working with technology and (5) students already have technological gadgets with them.

Demirbilek (2009) argued that technology would help enhance 21st-century skills, namely critical thinking and problem-solving skills, creativity, collaboration, and communication. Lux et al. (2017) claimed that the introduction of new curricula based on

real-world problems brought by technology has provided scaffolding and tools to enhance learning, thus resulting in the unprecedented transformation of schools and classrooms. Underpinned by constructivist theories, this shift in learning approach has helped to expand learners' responsibilities as they sought to construct their knowledge within a more fulfilling and meaningful context and consequently stimulate their understanding of the subject (Gregory, 2012).

In line with the above-mentioned benefits of technology in education, emphasis should be given to teachers' role in promoting technology integration. Undoubtedly, the new environment brought by technology has changed their role from knowledge transmitter to learning facilitator, knowledgeable guide, and knowledge navigator. This new role requires teachers to gear their mind-sets towards embracing a paradigm shift and restructure their pedagogical processes to suit the new technological environment. Technologies act as a catalyst that provides multidimensional ways of facilitating communication and interaction between teachers and students. The integration of technology in the classroom will help teachers create lessons that provide opportunities for students to construct their knowledge and improve problem-solving skills through simulation, manipulation, mind-mapping, guided discovery, and creative expression (Eickelmann and Vennemann, 2017)

Even though ICT shows this potential, the implementation of ICT in schools seems to develop slowly and is far from reaching its target. Despite all the efforts, many countries are facing a similar problem whereby the teachers are not maximizing the usage of the technology provided. Chai et al. (2011) reported that teachers use ICT infrequently and more for information transmission rather than the promising benefits mentioned above. Some of the barriers to more holistic implementation are lack of access, resistance to change, lack of time, lack of training, and lack of technical assistance. Lack of training includes both technical training and pedagogical approaches. Research findings have also indicated that heavy workload, time-consuming, inadequate support, insufficient feedback, poor working conditions, and uncompensated work has decreased teacher motivation toward integrating technology in the classroom (Phelps & Maddison, 2008; Roland, 2010). Türel and Johnson's study (2012) revealed that technical problems could also become a major barrier for teachers. These problems include low connectivity, virus attack, and equipment failure.

It is argued that ICT does not improve learning per se, and will not make any difference simply by being used (Higgins, 2003). There are many factors influence the seamless use of ICT in classroom teaching and learning. Teachers need sufficient ICT skills to implement the technology and to have a high confidence level to use it in a classroom setting. Besides, teachers require insight into the pedagogical role of ICT, to enable meaningful usage in their instructional process (Hennessy et al., 2005). As an agent of educational change, teachers must be prepared to accept the paradigm shift in learning and teaching because of technology integration (Avidov-Ungar & Shamir-Inbal, 2017). Furthermore, technical support should be provided and continuous professional development in ICT should be conducted from time to time. In short, all parties must cooperate to infuse technology in the teaching-learning process (Roblin et al., 2018).

Classe21 is a new technology integration initiative developed to facilitate teaching and learning interactions using interactive whiteboards, laptops, tablet PCs and various software. Educators' acceptance of technology integration in lessons and use of innovative techniques to infuse 21st century skills in learners is a vital step to ensure the successful implementation of Classe21 in secondary schools. Thus, it is important to understand and identify the necessary factors that influence educators' acceptance of Classe21. This study aimed to contribute empirical evidence of the effects of the four UTAUT factors, namely performance expectancy, effort expectancy, social influence, and facilitating conditions which lead to behavioural intention and usage-related satisfaction of Classe21. The research findings expected to provide a reference for educational institutions and decision-makers to identify how implementing new technologies and the resulting innovative pedagogies affect educators' intentions and usage. Hypotheses connecting the four factors and moderating effects of age, gender, teaching experience and post-graduate qualification in education/technology were tested. The research questions to address the research purpose were as follows:

- *To what degree do educators believe that using Classe21 will enhance performance?*
- *To what extent do educators perceive Classe21 as relatively easy to use?*
- *To what level do rectors, students, and colleagues influence educators' intention to use the Classe21 for teaching?*
- *To what extent do facilitating conditions influence educators to use Classe21 for teaching?*

BACKGROUND AND HYPOTHESES

TECHNOLOGY ACCEPTANCE THEORIES

Successful integration of technology in schools primordially depends on the acceptance and diffusion of the used educational technology (Stols et al., 2015; Ekman et al., 2015). Technology acceptance models can be used to assess and gauge teachers' behavioural intentions and determine the factors that most positively influence teachers' likelihood to adopt the technology. Since the 1980s, several information-technology acceptance theories have been proposed (Table 1) to explain technology adoption behaviours. These models gained popularity and have been used in several studies exploring technology adoption practices.

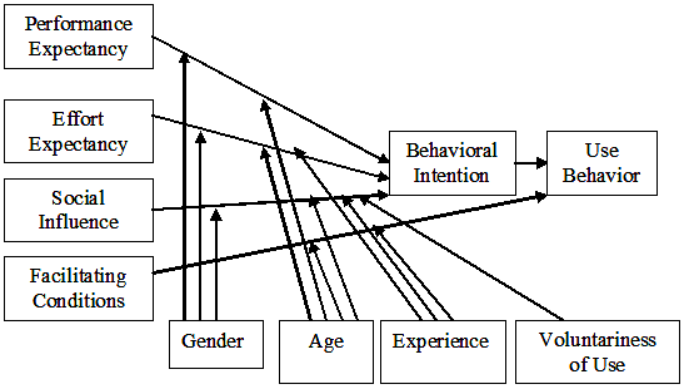
Table 1: Information-technology acceptance theories

Information-technology acceptance theories	References
Theory of Reasoned Action (TRA)	Fishbein and Ajzen, 1975
Theory of Planned Behaviour (TPB)	Ajzen, 1985
Social Cognitive Theory (SCT)	Bandura, 1986
Technology Acceptance Model (TAM)	Davis, 1989; Davis et al., 1992
Technology, Organization, and Environment framework (TOE)	Tornatzky & Fleischer, 1990
Model of PC Utilization (MPCU)	Thompson et al. 1991
Motivational Model (MM)	Davis et al., 1992
Combined-TAM-TPB model	Taylor and Todd, 1995
Innovation Diffusion Theory (IDT)	Rogers, 1995

The UTAUT model

In 2003, Venkatesh et al. developed the Unified Theory of Acceptance and Use of Technology (UTAUT) by combining variables found in existing eight models (TRA, TPB, TAM, MM, C-TPB-TAM, MPCU, IDT, and SCT) into four main determinants of behaviour and four moderating factors. The framework aims to explain and predict use behaviour or monitor changes in the factors that affect technology use behaviour through time. According to the model, performance expectancy, effort expectancy, social influence, and facilitating conditions are the four core determinants of behavioural intention or user behaviour on the acceptance of the technology. Gender, age, experience, and voluntariness of use are the four moderators, which have no direct influence on the intention or the use of technology but have indirect effects on cognitive behavioural factors (Figure 1).

Figure 1. UTAUT model (Venkatesh et al., 2003)



One reason for its popularity is that this model more accurately predicted technology acceptance, and accounted for about 70 % of the variance in behavioural intentions, a major improvement when compared with previous models such as the Technology Acceptance Model (TAM), which accounted for a maximum of 40 % of the variance in behavioural intentions (Venkatesh et al., 2003). The UTAUT model focuses on four key constructs; three of which are based on intentional beliefs (i.e. performance expectancy, effort expectancy, and social influence) and the fourth, which examines the extent to which external conditions affect the individual (i.e., facilitating conditions). According to the model, these constructs are hypothesized to affect positively other constructs such as behavioural intentions, shown to be an important predictor of technology adoption (Venkatesh et al., 2003).

DESCRIPTIONS OF CONSTRUCTS IN THE CONTEXT OF CLASSE21

The descriptions of the four key UTAUT constructs in the context of this study as well as a summary of findings from previous research are given below.

Performance expectancy – The extent to which an individual believes using Classe21 will help him or her to attain benefits in job performance. It means that educators believe they will not only find the available technologies useful but that as a result, they will accomplish their tasks in a more timely and effective manner. Previous research has shown performance expectancy to be the strongest predictor of behavioural intentions (Venkatesh & Davis, 2000; Wang & Wang, 2009).

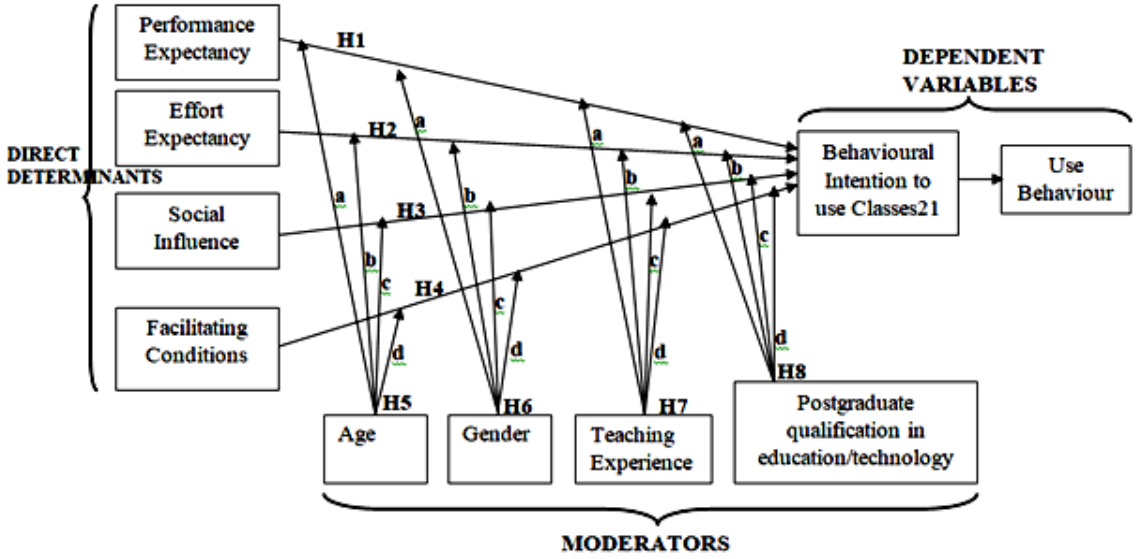
Effort expectancy – The degree of ease that educators associate with using the new technology-enhanced classroom. It is related to the perceived ease of using technology in Classe21 and its associated features.

Social influence – The extent to which educators perceive that important others believe that they should use Classe21. This relates to the impact influential persons such as rectors, colleagues or students have on an educator's propensity to adopt the available technologies.

Facilitating conditions - The degree to which an educator believes that organizational and technical structure exists to support the use of Classe21. This factor measures the extent to which educators believe Classe21 provides the necessary support for technology integration. This construct also measures whether teachers believe they have the knowledge and the resources necessary to adopt the technology.

Based on the UTAUT theoretical framework with slight modification, this research explored whether the four key constructs were significant predictors of educators' behavioural intentions to adopt Classe21 and subsequent use behaviour. Furthermore, the moderating effects of age, gender, teaching experience and post-graduate qualification in education/technology were also considered. The model used in this study is shown in Figure 2.

Figure 2. The UTAUT model for adoption of Classe21



HYPOTHESES

Hypothesis 1: Performance expectancy (PE) has a positive effect on educators' intention to use Classes21
Hypothesis 2: Effort expectancy (EE) has a positive effect on educators' intention to use Classes21
Hypothesis 3: Social influence (SE) has a positive effect on educators' intention to use Classes21
Hypothesis 4: Facilitating conditions (FE) has a positive effect on educators' intention to use Classes21
Hypothesis 5a-d: Age has a moderating effect on the positive effects of PE, EE, SI, and FCs on behaviour intention
Hypothesis 6a-d: Gender has a moderating effect on the positive effects of PE, EE, SI, and FCs on behaviour intention
Hypothesis 7a-d: Teaching experience has a moderating effect on the positive effects of PE, EE, SI, and FCs on behaviour intention
Hypothesis 8a-d: Postgraduate qualification in education/technology has a moderating effect on the positive effects of PE, EE, SI, and FCs on behaviour intention

RESEARCH METHODOLOGY

SAMPLE

The survey sample consisted of 117 educators from three state secondary schools in Mauritius where the Classe21 project was implemented. Participation in the study was voluntary and anonymous.

INSTRUMENTS

The study employed a quantitative survey research methodology. The questionnaire used consisted of three sections based on the constructs defined in our modified UTAUT model. The field-testing of the questionnaire was conducted during June 2019 and necessary changes were made based on the comments received. The final data collection was made in July 2019. Section I of the questionnaire was designed to capture the demographic profile of the sample and included the items age, gender, subject area, teaching experience, and postgraduate qualifications. Section II focused on educators' usage of technological devices (personal and in class) and ICT competency. Section III contained 18 questions based on the four UTAUT constructs. All the variables were measured using a five-point agreement Likert scale (from 1 – strongly disagree to 5 – strongly agree).

Ethical issues were taken into account, as participation in the survey was voluntary and the questionnaire anonymous. The research goals were also explained to the participants and it was made clear that the evaluation would be considered only for the current study and not for any purposes.

DATA ANALYSIS

The collected data were analysed using SPSS and AMOS. Descriptive analyses such as frequencies, means, standard deviations, and correlations were run to examine sample profile and to determine the extent of relationships among the variables. Secondly, a multiple linear regression analysis was conducted to explore the research questions posed regarding the extent to which the four constructs explain the variance in teachers' behavioural intentions to adopt Classe21. This relationship was examined with and without the inclusion of the proposed moderator variables age, gender, teaching experience and post-graduate qualification in education/technology.

RESULTS

DESCRIPTIVE STATISTICS

Table 2 shows the profile of the sample in this study. The majority of the respondents (41.0 %) were in the age group 30-39, followed by 32.5% in the age group 40-49 and 17.9% aged less than 30. Only 7.7% were in the age group 50-59 and 0.9% aged more than 60 years.

63.2% of the educators participating in the survey were female, a close approximation to the educators' population in the 3 different secondary schools involved in this study and also a reflection of the current gender trend in the Mauritian education system.

The sample included educators in all subject areas within the 3 schools. The majority of respondents were in the languages department (36.7 %), followed by social sciences (17.9%), mathematics (13.7%), science (11.7 %%), technology and computer science (8.6 %), the art department (8.6 %), and physical education (3.4 %).

In terms of teaching experience, there was no much difference in the different groups with 25.7% being in the range 1-6 years, another 25.7% in the range 7-12 years, 23.8% in the range 13-18 years, and the remaining 24.8% having greater than 18 years of teaching experience.

About one third (33.3%) of the respondents had a post-graduate diploma in education, 13.7% a masters degree in their subject area, 12% a masters degree in ICT, 8% a masters degree in education, 3.4% a masters in business administration while 29.1% had a first degree in their subject area as their highest qualification. Thus, the majority of respondents had adequate pedagogical and technological knowledge.

Table 2: Demographic profile of the respondents

Variables (n =117)	Group	Frequency	(%)
	<30	21	17.9
Age (years)	30 - 39	48	41.0
	40 - 49	38	32.5
	50 - 59	9	7.7
	60 or more	1	0.9
Gender	Male	43	36.8
	Female	74	63.2
Subject Taught	Mathematics	16	13.7
	Science	13	11.1
	Social Science	21	17.9
	Languages	43	36.7
	Technology Studies	10	8.6
	Arts	10	8.6
	Physical Education	4	3.4
Teaching Experience (years)	1 to 6	30	25.7
	7 to 12	30	25.7
	13 to 18	28	23.8
	19 to 24	21	18
	> 24	8	6.8
Post-Graduate Qualification	P.G.C.E	39	33.3
	M.Ed	8	6.8
	MSc ICT/Educational Tech	14	12.0
	MSc Subject area	16	13.7
	Others	8	6.8
	None	34	29.1

Table 3: Frequency of usage of technology (personal and for teaching purposes)

		Number	Percentage
Frequency of using computer, tablet, smartphone	Daily	97	82.9
	Weekly	12	10.3
	Monthly	5	4.3
	Never	3	2.6
Frequency of using ICT for teaching & learning	Daily	12	10.3
	Weekly	19	16.2
	Monthly	41	35.0
	Never	45	38.5

In terms of personal use, a majority of 82.9 % of the respondents were using a computer, laptop, tablet or smartphone daily, while 10.3% used these devices weekly and 4.3% monthly (Table 3). Thus, the study revealed that there was a high personal use of ICT devices amongst educators. However, 38.5% of the educators in the survey never used ICT in their class while 35% admitted using ICT in teaching monthly, 16.2% weekly and only 10.3% daily. This may due to a lack of ICT facilities in their schools. In this respect, the implementation of the Classe21 project aimed to solve the issue of a lack of technological facilities in the selected schools.

RELIABILITY ANALYSIS

The purpose of reliability analysis is to determine the extent of measurement without bias and ensures the consistency of the items in the instrument. Table 4 shows that the reliabilities of the five scales all exceeded the minimum recommended Cronbach's value of 0.70 (Henseler et al., 2009) indicating adequate internal consistency. The construct effort expectancy consisted of five items ($\alpha = 0.88$), performance expectancy consisted of four items ($\alpha = 0.93$), social influence consisted of three items ($\alpha = 0.88$), facilitating conditions consisted of three items ($\alpha = 0.74$) and behavioural intentions consisted of three items ($\alpha = 0.91$). Thus, the survey is acceptable and the respondents understood the items in the questionnaire.

Table 4: Reliability coefficients for the five UTAUT constructs

Constructs	Cronbach's Alpha
Effort Expectancy (EE)	0.88
Performance Expectancy(PE)	0.93
Social Influence (SI)	0.88
Facilitating Conditions (FC)	0.71
Behavioural Intention (BI)	0.91

DISCRIMINANT VALIDITY

The purpose of discriminant validity is to measure to what extent a construct is actually distinct from other constructs. It will test whether an item also measures another item. Discriminant validity can be assessed by calculating the Average Variance Extracted (AVE). The rule of thumb for AVE is that the variable should have more variance in its relevant construct than other variables in the model. According to Fornell & Larcker (1981), discriminant validity is achieved when the AVE of the variable is higher than the variance shared between the latent variable and other latent variables. This implies that the square root of the AVE should be greater than the values in the relevant constructs (i.e. correlation of two latent variables). The diagonal part of the table should be greater than the off-diagonal part. As seen in Table 5, the results meet the criteria, no association is found between the variables higher or equal to the square root AVEs of the two variables. Thus, all the variables are different from each other and our survey instrument satisfied the discriminant validity criteria.

Table 5: Discriminant validity analysis

Latent dimensions	PE	EE	SI	FC	BI
Performance Expectancy (PE)	**0.79**				
Effort Expectancy (EE)	0.28	**0.74**			
Social Influence (SI)	0.45	0.29	**0.81**		
Facilitating Conditions (FC)	0.29	0.22	0.54	**0.55**	
Behaviour Intention (BI)	0.54	0.14	0.32	0.30	**0.85**

Note: The shaded numbers in the diagonal row are the square roots of the average variance extracted. For adequate discriminant validity, the diagonal elements should be greater than the corresponding off-diagonal elements.

REGRESSION ANALYSIS

Regression analysis indicates the influence of performance expectancy, effort expectancy, social influence and facilitating conditions on behavioural intention. The results are summarized in Table 6.

Table 6: Regression analysis without and with moderation (dependent variable=BI)

Hypothesis	Path	Without moderation			Moderated by age			Moderated by qualification			Moderated by experience		
		β	*P*	Comments (*P*)	β	*P*	Comments (*P*)	β	*P*	Comments (*P*)	β	*P*	Comments (*P*)
H1	PE→BI	0.633	5.59E-16	**Accepted (≤0.05)**	-0.033	0.601	Rejected (≥0.05)	0.027	0.370	Rejected (≥0.05)	0.013	0.641	Rejected (≥0.05)
H2	EE→BI	0.185	0.059	Rejected (≥0.05)	0.086	0.117	Rejected (≥0.05)	0.022	0.414	Rejected (≥0.05)	0.050	0.034	**Accepted (≤0.05)**
H3	SI→BI	0.392	1.954E-05	**Accepted (≤0.05)**	-0.043	0.471	Rejected (≥0.05)	0.016	0.582	Rejected (≥0.05)	0.006	0.805	Rejected (≥0.05)
H4	FC→BI	0.344	8.359E-07	**Accepted (≤0.05)**	-0.048	0.367	Rejected (≥0.05)	-0.015	0.555	Rejected (≥0.05)	-0.009	0.695	Rejected (≥0.05)

Regression analysis showed the positive influences of performance expectancy (β=0.633, p<0.05), social influence (β=0.392, p<0.05) and facilitating conditions (β=0.344, p<0.05) on behavioural intention with the value of R^2=0.72. Performance expectancy proved to have the biggest influence on behavioural intention (β=0.633). However, effort expectancy (β=0.185, p>0.05) did not attain statistical significance. While testing the moderation effects of age on the relationships, all the P values were higher than 0.05. Therefore, the hypotheses H5a-d were all rejected. Due to a significantly lower number of male respondents (43) compared to females (74), the moderating effect of gender could not be evaluated as it resulted in a singular matrix error. Moderation effects of experience showed that teaching experience has a moderating effect on the positive effects of effort expectancy on behaviour intention (EE → BI). Therefore, hypothesis H7b was accepted. All the P values were higher than 0.05 when testing the moderation effects of a postgraduate qualification in education/technology on the relationships and thus hypotheses H8a-d were all rejected.

DISCUSSION

Several studies have shown that the major barrier of implementation of a new technology was the teachers' belief, as they are the person who implements the change in their teaching and learning process (Capan, 2012; Zhang, 2013; Dudeney, 2010). Thus, stakeholders must imperatively understand the factors that create barriers or influence the acceptance and use of technology-enhanced classrooms by educators. The results of this study highlight the important matters that should be considered by the stakeholders to improve Classe21 acceptance and usage by educators in secondary schools. The results showed that the UTAUT constructs performance expectancy, facilitating conditions, and social influence have a significant positive effect on the intention to use technology, whereas effort expectancy has an immaterial effect on the intention to use Classe21. Performance expectancy, social influence and facilitating conditions factors showed that 72% (R^2=0.72) of the teachers have behavioural intention to use Classe21. The significant positive effect of performance expectancy, facilitating conditions and social influence on the dependent variable highlights the driving forces and motivations of an educator to use Classe21. The higher will be the effect of these factors, the more are the chances that an individual will be inclined towards the use of technology.

Among the positive factors, performance expectancy proved to have the biggest influence on behavioural intention. This finding is parallel with Decman (2015), Nandwani & Khan (2016), Šumak & Šorgo (2016), Raman & Rathakrishnan (2018), and Chao (2019). Thus, most educators perceive that Classe21 would be useful to improve their job performance, boost lesson delivery, and enhance 21st-century skills of learners. Indeed, empowering students to discuss ideas and possible solutions, embarking them on project-based learning designed around real-world contexts, immersing students in a learning experience that allows them to tackle a problem and gain higher-order thinking skills from pursuing the solution is music to the ears of educators (Green & Hannon, 2007). There is a cry for educators to take the call and leverage the power of emerging technologies in Classe21 for instructional gain.

The present study found that effort expectancy (EE) is not a major determinant of intention to use Classe21 (BI). This result contradicts the findings of Tey & Moses (2018), Aliaño et al. (2019), and Chao (2019), who found a positive impact of EE on BI. Our results are therefore more consistent with Gruzd et al. (2012) and Radovan & Kristl (2017) who reported an insignificant impact of EE on BI. This may be because educators are not fully conversant with the modern technological environment provided by Classe21. Furthermore, teaching experience had a moderating effect on the positive effects of effort expectancy on behaviour intention. It indicates that as experience in designing lessons increases, teachers are more willing to accept and use Classe21. Thus, more hands-on trainings of educators are required to empower them to be at ease with the new digital environment and seamlessly create several technology-based lessons. For the successful implementation of Classe21, it is crucial for educators to easily manipulate the different technologies and infuse 21st-century skills in learners.

The determinants social influence and facilitating conditions are aligned with past studies (Venkatesh et al., 2012; Raman & Don, 2013). This finding implies that the people whom the educators perceived important in their lives play a vital role in their intention to use Classe21. The educators intend to use Classe21 because people, whom they perceived important, such as rectors, senior educators, colleagues, and students, were supportive and encouraging on their use of technology. Therefore, considering the positive effects of social influence, instilling a school culture that values the use of technology in teaching and learning will inspire educators to use Classe21. Hence, rectors, educators, and students of secondary schools should adopt a culture that

encourages the overall acceptance and integration of technology. A collaborative approach among all stakeholders for the implementation and acceptance of Classe21 will not only benefit the students but will construct an environment of social acceptance of technology throughout the institution. The recent trends of technology and social media in society nowadays are also to the benefit of technology integration in secondary schools that may be synergized to enhance the usage of technology.

The facilitating conditions also play an important role in building intentions towards technology usage and are congruent with Radovan & Kristl (2017) and Gunasinghe et al., (2019). Ghavifekr & Rosdy **(**2015**)** indicated that providing teachers with appropriate and up-to-date ICT tools and facilities is essential in the success of technology-based teaching and learning. Thus, stakeholders must emphasize on providing a well-equipped and user-friendly environment in Classe21. School management should ensure that technology-enhanced classrooms such as Classe21 is well maintained and free of faulty devices - laptops, projectors, and tablets should in good working conditions. If there is a lack of technical assistance and no repair on it, teachers are not able to use the computer temporarily and the effect is that they will be discouraged because of fear of equipment failure (Türel & Johnson, 2012).

Furthermore, Ghavifekr & Rosdy **(**2015) argued that professional development training programs for teachers played a key role in enhancing students' quality learning. Accordingly, educators need to receive training and have the required technical and pedagogical knowledge to use Classe21 efficiently. In a study by Hennessy et al. (2005) in Canada, some teachers admitted that they were reluctant ICT users because they were worried they might get embarrassed because the students were more expert in technology usage. The study also pointed out that extensive training on the use of technology would help educators gain in-depth knowledge, feel highly confident and comfortable in using ICT, and reduce their anxiety (Hennessy et al. 2005). A feedback mechanism should also be established which would assist the school management to direct their efforts on solving the educators' tribulations effectively. Moreover, continuous technical support, guidance, and reliable network access would improve teachers' attitudes towards using the technology. To improve the individual self-efficacy of educators, resource persons from the Mauritius Institute of Education may also be involved in the User Acceptance Testing phase of implementation and act as mentors during the training sessions for other users.

CONCLUSION

The introduction of a new technology requires proper planning, policy-making, and on-going support. This study applied the UTAUT model for explaining the key factors affecting teachers' acceptance of technology-enhanced classroom branded as Classe21 in Mauritius. As a result, the most critical factors influencing teachers' acceptance and usage of the system were identified. The findings showed that there is significant positive influence between the UTAUT constructs performance expectancy, social influence, and facilitating conditions on behavioural intention. Performance expectancy proved to have the highest influence on behavioural intention. The relationship between effort expectancy and behavior intention was insignificant. However, moderation effects of experience showed that teaching experience has a moderating effect on the positive effects of effort expectancy on behaviour intention. This research provided novel empirical data and practical insights that could serve as a reference for policymakers and stakeholders to understand the acceptance and use of technology from the educators' point of view. The needs of the educators should be addressed, specifically fostering of teachers' performance expectancy, social influence, and facilitating conditions to strengthen technology adoption. Policymakers could invest in elevating teachers' technology competencies and readiness to embrace technology-enhanced classrooms such as Classe21 by providing useful and practical training. Indeed, training and motivating educators to make maximum use of technology forms a strong basis for consolidating educational technology enhancement such as Classe21.

The adoption of new technology is an ongoing and continuous process. More studies on the impact of technology-enhanced classrooms such as Classe21 to enhance the acquisition of 21st-century skills by students must be conducted. Other key issues underpinning digital technology must also be investigated to ensure optimum benefit from any new technology introduced in the Mauritian Education System. Methodologically, future researchers are encouraged to employ qualitative research methodology to obtain an in-depth view of the undergraduates' intention to use technology. Future investigations may also use other external variables and enlarge the scope of the study by including data from students in order to obtain their views on Classe21. Future studies may consider other potential analysis techniques such as Structural Equation Modelling.

Implications for practice or policy

- The introduction of new technology requires proper planning, a well-equipped and user-friendly environment, and on-going support.
- Policymakers need to consider investment in elevating teachers' technology competencies and readiness to embrace technology-enhanced classrooms such as Classe21 by providing useful and practical training.
- The motivational level of educators to use technology-enhanced classrooms can be enhanced by the support of people around them whom they consider important such as rectors, senior educators, colleagues, and students.

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