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Use of ICT in Classroom: An Enhanced Teaching-Learning Methodology

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Abstract

The purpose of this study is to identify the main factors that influence teaching-learning decision-making related to the educational use of ICT (Information and Communication Technologies) in technology-rich classrooms. The main focus is on teaching and learning across a range of subjects: Hospitality, tourism, hotel, modern foreign languages, music and science, integrating ICT into teaching and learning. A practice necessitates scholars to modify the way in which curriculum Content is delivered. The notion of change brings about advantages and perceived barriers by academics that are at the fore front of the institution. This paper provides a literature review analysing the advantages related to ICT integration into classroom instruction.

To conduct the study we will collect data of 150 teachers working in Hospitality & Hotel Management Universities/Institutes rich in educational technology. The specific questionnaire will be used that includes the five major factors to obtain information about the teachers' perceptions influencing the use of ICT in the classroom.

The result of the study will be identified and characterized on the basis of five factors that influence the educational use of ICT in these classrooms, In this study we call: utility and educational setting, teacher support, availability and access in the classroom, technological expertise and access outside the classroom.

These results may be useful for promoting further integration processes for ICT in the classroom, and also for focusing teaching-Learning content.

Keywords: ICT (Information and Communication Technologies), Teaching-Learning, Hospitality Education.

Introduction

The part of innovation has changed instructing and learning hones over the past 40 a long time in neighbourliness' instruction (Fotiadis & Sigala, 2015; Goh ruler& 2020; Sigala, 2013)

and moulded the plan of neighborliness educational modules (Goh et al., 2017). More importantly, Teaching-learning strategy is closely related with the neighborliness, Tourism &Administration students' by and large fulfilment and seen quality of their instructive encounters (Frawley et al., 2019; Kou & Liu, 2020). Joining innovation into guidelines hones moreover makes a difference in creating the students' capabilities to utilize and oversee mechanical patterns inside their working environment (Sigala, 2007). The exponential development and progresses of accessible ICT in classrooms gives critical openings for speakers to improve the students' learning encounters by planning more locks in, intelligently, student-centered guidelines practices that boost students' inspiration and learning results, whereas they diminish students' risky behaviours in classrooms (Sigala, 2013). Generally, the focal points of utilizing ICT in classroom educating incorporate: bringing genuine world encounters, allowing students to participate in cognitive exercises, giving understudies with individualized input, stimulating understudy intrigued, and streamlining the explore for and planning of substance materials.

In spite of the benefits of ICT, analysts have detailed the moo selection of ICT in classroom educating and conveyance due to different reasons such as moo self-efficacy and mechanical availability (Long et al., 2019). Investigate in neighbourliness and tourism education has for long inspected the variables deciding the selection of advances in teaching hones with the Innovation Appropriation Show (TAM) being one of the foremost predominant hypothetical devices for examining this wonder (e.g. Sigala & Christou, 2003). Inquire about has by and large concluded, and it is these days for the most part accepted that the adoption and utilize of innovations inside educational hones isn't a sole innovation problem (i.e. innovation accessibility, capabilities, costs and dangers). Instep, it may be a (Sigala, 2007) meaning that different variables related to the innovation per se but also to the instructors' socio-cultural setting (such as fear and resistance to alter, preconceived academic convictions, need of time and moo level of IT and educational competencies) impact the integration of advances inside classroom instruction.

Components like these avoiding the integration and best utilize of innovation inside classroom instruction cruel that numerous researcher's conclusion up utilizing innovations essentially for displaying, showing, putting away and conveying learning content. Rather than utilizing learning stages as a capacity and conveyance office, researchers got to be persuaded and prepared to exploit innovations for boosting dynamic, experiential and intuitively learning processes. This paper points to address this require by: to begin with, looking into the existing writing in order to recognize and examine the components avoiding researchers to completely misuse and integrate innovations into their classroom instruction; and after, that ways and providing educating tips that can direct and offer assistance scholastics to use advances into their teaching hones in an inventive way that goes past the straightforward digitization of their existing educating hones. Thus, the paper has viable suggestions, because it gives several hands-on tips about how educates can make best utilize of innovations into their hospitality instruction methods.

Benefits of ICT in Hospitality Education

Firstly, the utilize of ICT in neighbourliness instruction makes a difference to extend understudy engagement and inspiration for investing more time and exertion into their learning and educating obligations. ICT moreover tend to imbue more positive states of mind into students' learning behaviour (Sigala, 2002, 2013; Mejia, 2020). For illustration, through online discourse sheets, understudies have the opportunity to audit, refine and create their individual sees and information by sharing and arranging information and illustrations with their peers. Social constructivist instruction strategies (e.g. peer-to-peer learning gatherings) boost students' comprehension, retention and capacity to utilize and apply instructive substance in genuine hone as well as increases students' imagination (Huang, 2020; Sigala, 2013; Patiar et al., 2020). Online technologies have moreover been utilized for connecting and organizing neighbourliness understudies with industry experts for looking for counsel, headings and creating their authority aptitudes (Sipe & Testa, 2020). The integration of Data and Communication Innovation (ICT) into neighbourliness instruction brings a horde of benefits, essentially upgrading the learning involvement, making strides the operational proficiency of instructive educate, and superior planning understudies for the energetic neighbourliness industry. Here are a few key benefits of ICT in neighbourliness education:

Enhanced Learning Experience

1. **Interactive Learning Tools:** ICT provides interactive tools such as virtual tours, simulation games, and augmented reality experiences that can simulate real-life scenarios in the hospitality industry, making learning more engaging and effective.
2. **Access to Global Resources:** Students can access a wide range of digital resources, including online libraries, journals, and courses from leading hospitality institutions around the world, enriching their knowledge and perspectives.
3. **Flexible Learning Opportunities:** Online courses and webinars facilitate flexible learning schedules, allowing students to learn at their own pace and convenience, which is particularly beneficial for working professionals.

Improved Teaching Methodologies

1. **Dynamic Content Delivery:** ICT enables educators to use multimedia presentations, videos, and interactive modules to deliver content more dynamically, improving understanding and retention of knowledge.
2. **Real-time Feedback:** Tools like online quizzes and surveys can provide immediate feedback to students, helping them identify areas for improvement promptly.
3. **Collaboration and Communication:** Platforms like forums, social media, and video conferencing facilitate collaboration and communication among students and faculty, fostering a more engaging and interactive learning environment.

Industry-Relevant Skill Development

1. **Technology Proficiency:** As the hospitality industry increasingly adopts technology in operations, learning through ICT tools equips students with the digital skills necessary for modern hospitality environments.

2. **Management Software Training:** Exposure to property management systems (PMS), customer relationship management (CRM) systems, and other software used in the industry prepares students for practical, operational roles.
3. **Analytical Skills:** Through ICT, students can learn to analyze online customer reviews, feedback, and other data, essential for decision-making and strategic planning in hospitality management.

Operational Efficiency and Accessibility

1. **Cost Efficiency:** Digital resources and online courses can reduce the need for physical textbooks and classroom space, lowering the costs for educational institutions and students alike.
2. **Broader Reach:** Online programs can reach a global audience, providing educational opportunities to students who may not have the means or ability to attend traditional on-campus courses.
3. **Sustainability:** Digitalization of resources and virtual learning opportunities decrease the need for physical materials and campus visits, contributing to environmental sustainability.

Career Preparation and Industry Connections

1. **Networking Opportunities:** ICT facilitates connections with industry professionals and alumni through online platforms, webinars, and virtual job fairs, enhancing career opportunities for students.
2. **Real-World Applications:** Projects and case studies involving real-world scenarios prepare students for the challenges and demands of the hospitality industry.
3. **Innovation and Creativity:** Exposure to the latest trends and technologies in hospitality through ICT encourages students to think innovatively and creatively, essential traits for success in the industry.

Objective of the Study

The most objective of this consider is to identify and characterize the most variables that a specific gather of instructors see as favoring institutional integration of the instructive utilize of ICT. We are going on examining a particular sort of instructors who instruct in classrooms characterized by a tall accessibility and availability of ICT for instructing and learning, and a tall level of skill in their utilize among the instructors.

Method

Participants

The sample in this research study is intentional, and consists of 278 teachers (94 from Hotel & Hospitality education, 91 from Tourism education and 93 from Management education) from eight educational institutes who completed a questionnaire designed for the study about

the introduction of ICT in Educational Institute, produced by Sigalés, Mominó, Meneses & Badia (2009).

Sample of participating teachers

Educational Institute									
	1	**2**	**3**	**4**	**5**	**6**	**7**	8	Total
Hotel & Hospitality education	19	24		12	23			16	94
Tourism education	19	26		12	19			15	91
Management education			32			30	19	12	93
Total	**38**	**50**	**32**	**24**	**42**	**30**	**19**	**43**	278

Approximately three quarters of the participants were women (72%), with a mean age of 41 years old (SD = 9.83). Half of the teachers (46.9%) had a diploma, 39.9% had a degree and 13.3% had master's or doctoral studies. Most of the teachers (89.6%) were State employees, with a mean experience as teachers of 16.45 years (SD = 10.62) and 8.98 years (SD = 8.82) of work in academic management at the same institution. An 70.3% of the teachers felt they had integrated ICT in the classroom as part of a common priority at their institution, 84.2% of the teachers had been regular Internet users for more than three years, 87% go online at least 2-3 times a week, 84.2% had received training in the last three years on subjects related to educational use of ICT, and 86.4% of them rated the usefulness of this training as high or very high.

Instruments: data collection

The scale of factors related to the educational use of ICT was designed based on the literature review, and consisted of 22 items that included statements about the availability of resources, support, facilities and barriers to ICT use for educational purposes in teaching activities (see table 3). The response scale was a Likert type, with 5 alternatives: 1, strongly dis-agree; 2, quite disagree; 3, neither agree nor disagree; 4, quite agree; 5, strongly agree. The instructions accompanying the scale specified that the teacher always had to answer based on their experience, their school, the students they teach and the subject they teach.

Procedure

The teachers also provided information about their personal and professional characteristics, including sex, age, level of education, teaching experience, and their educational level and the subject they teach.

Data Analysis

In order to achieve the objectives of this research, we conducted an exploratory factor analysis with the items on the scale of factors related to the educational use of ICT. Principal component analysis revealed a multidimensional structure composed of five factors (KMO = 0.824 and a significant Bartlett's test, $p<.001$), which explains an acceptable total variance of 61.19%. To determine the possible correlation between the factors, a non-orthogonal solution

with oblique rotation (Oblimin with Kaiser Normalization) was calculated. Since positive correlations were obtained between the factors ranging between 0.162 and 0.344, the application of an orthogonal solution was ruled out.

A arrangement of investigation of fluctuation (ANOVA) tests were too conducted to look at the contrasts between instructors in kindergarten, essential and auxiliary instruction. To that conclusion, the entire scores for each figure were calculated, including together the fractional scores of their component things and dividing by the number of things to preserve the first scale of reaction and encourage elucidation. We connected Levene's test to test the ANOVA suspicion almost the homogeneity of changes between the bunches (Glass, Peckham & Sanders, 1972). In the event that the test is factually critical, it can be concluded that the suspicion of homogeneity of fluctuations does not hold, and as such it is fundamental to utilize an alternative test to the F test. In this case we utilize the Welch adjustment, which may be a test for both the disappointment of this as-sumption and unequal bunch sizes (Tomarken & Serlin, 1986).

Results

Factors affecting the educational use of ICT in IE-TIC institute

Application of exploratory factorial analysis reveals a factorial structure composed of 5 factors affecting the educational use of ICT in technology-rich classrooms, which are presented in Table 2.

Table 2: Mean, standard deviation, explained variance and Cronbach's alpha of the five factors identified

Factors	Mean (SD)	Explained variance	Cronbach's alpha
Factor 1: Utility and educational setting of the ICT.	3.67 (0.57)	29.89%	0.85
Factor 2: Teacher support in the use of ICT.	4.11 (0.59)	10.83%	0.84
Factor 3: Teacher's self-perceived expertise in the educational use of ICT.	3.91 (0.66)	7.75%	0.73
Factor 4: Availability and access to ICT in the classroom.	4.43 (0.52)	6.51%	0.76
Factor 5: Access to ICT outside the classroom.	3.55 (0.90)	6.21%	0.77
Total	3.97 (0.46)	61.19%	0.88

The two variables that clarify the most noteworthy sum of change are figure 1 “Utility and instructive setting of the ICT” (M=3.67, SD=0.57) and figure 2 “Support for the instructor within the utilize of ICT” (M=4.11, SD=0.59). Teachers’ scores were higher in Calculate 4 “Availability and access to ICT within the classroom” (M=4.43, SD=0.52) and calculate 2 “Support for the educator within the utilize of ICT” (M=4.11, SD=0.59). By differentiate, the

most reduced scores were gotten in calculate 5 “Access to ICT exterior the classroom” (M=3.55, SD=0.90). Each figure appeared an satisfactory reliability, with Cronbach's alpha extending from 0.73 to 0.85.

We presently show the in general factorial table gotten, which empowers us to characterize the particular substance of each of the five variables identified.

Table 3: Factorial loads of factors related to the use of ICT in technology-rich classrooms (Oblimin rotation with Kaiser Normalization)

Items	1	2	3	4	5
ICT improve the quality of my students' learning in the subject that I teach.	**0.83**	0.16	0.16	0.25	0.07
ICT can help me to improve my achievement of the educational goals with my students that I set myself.	**0.81**	0.24	0.09	0.30	0.28
The teaching and educational resources that ICT provide are well suited to the way I usually teach my subject and to the way I organize work with my students.	**0.78**	0.14	0.40	0.27	0.26
Students using ICT as a tool for study and learning obtain better results at institute.	**0.74**	0.11	-0.03	-0.19	0.30
The type of communication and relationships established with students using ICT are interesting for my subject.	**0.71**	0.17	0.31	0.35	0.29
The characteristics of the information that can be accessed using the Internet are well adapted to the needs of my subject.	**0.65**	0.29	0.40	0.17	0.31
When I need to, I can easily find teaching support and advice about digital resources and ways of using the ICT in my subject.	0.25	**0.84**	0.13	0.32	0.18
I am satisfied with the support that my school receives from the education authorities in terms of the educational use of ICT.	0.11	**0.80**	-0.01	0.33	0.10
I am satisfied with the support that I receive from the managers of the school in terms of the educational use of ICT.	0.31	**0.79**	0.14	0.37	0.32
The range of training which I can access to learn about how to use ICT for teaching and/or learning in the subject I teach is sufficient and of high quality.	0.15	**0.70**	0.44	0.23	0.26
There is currently a wide range of training for learning to use ICT available.	0.12	**0.61**	**0.51**	0.24	0.28
In my school I am given sufficient technical support in the use, updating and implementation of the ICT	0.26	**0.59**	0.11	**0.58**	0.24

that I use regularly.					
My expertise in the educational use of ICT enables me to exploit the potential of ICT for teaching and learning activities in my subject to a large extent.	0.33	0.15	**0.87**	0.23	0.33
My expertise in the educational use of ICT enables me to easily use the programs and applications that are commonly used at my Institute.	0.23	0.20	**0.86**	0.22	0.17
The availability of Internet-connected computers in my school facilitates frequent use of ICT with my students.	0.31	0.26	0.25	**0.76**	0.11
The availability of Internet-connected computers in the classroom where I usually teach my subject helps me to be able to use ICT regularly.	0.28	0.12	0.15	**0.73**	0.20
I have easy access to programs and other computer applications that are useful for my subject.	0.31	0.40	0.16	**0.71**	0.22
The characteristics of my school in terms of the layout and use of spaces facilitate use of ICT with students.	0.35	0.31	0.12	**0.68**	0.27
The speed and quality of the Internet connection with which I can work with my students is sufficient for my needs.	-0.04	0.33	0.03	**0.54**	-0.01
My students can access materials and course content outside classroom hours using ICT.	0.25	0.15	0.14	0.19	**0.85**
When I need to, I can easily communicate with my students using ICT from my Institute.	0.29	0.25	0.13	0.33	**0.76**
Most of my students can access the Internet and other digital resources from their homes.	0.13	0.16	0.23	-0.05	**0.67**

The Essential factor, which we called utility and instructive setting of ICT, comprises 6 things. This figure covers two complementary perspectives. To begin with, it reflects the teachers' discernment of the convenience of ICT for learning, either to progress its quality (thing 15) or to get superior school comes about (thing 22). At the same time, it highlights the convenience of ICT for the teacher's educating in terms of progressed accomplishment of their instructive objectives (thing 12), adjusting well to the sort of instructing embraced by the instructor (thing 19), to the sort of instructive communication between the educator and the understudies (thing 18), and to the sort of data to which get to is craved (thing 14). The moment figure, which we called back for the teacher within the utilize of ICT, too incorporates 6 things. These are the help gotten in carrying out their educating with ICT, in educational (thing 08), mechanical (thing 03), and educator preparing terms (things 11 and 17). This figure moreover reflects the back and acknowledgment they get from the directors of the school (thing 04) and the instruction specialists (thing 10). The third calculate recognized is related to the teacher's self-perceived ability within the instructive utilize of ICT and incorporates two things. It is related to both the utilize of computer programs and

applications (thing 09) and to the instructive utilize of these ICT (thing 13). It moreover incorporates is the preparing accessible for learning to utilize ICT (thing 11), which is consistently related to the improvement of expertise of this nature. The fourth calculate, assigned as accessibility and get to ICT within the classroom, covers five things. It incorporates three complementary perspectives: availability, access and specialized support. The primary perspective includes the accessibility of computers associated to the Web within the school (thing 01) and within the classroom (thing 05), and the dissemination and utilize of spaces (thing 07). Two angles are clearly critical for instructors in terms of access: the speed and quality of Web association (thing 06) and ease of get to program that's valuable for their subject (thing 02). At last, this figure moreover envelops specialized back for the setup and upgrading of ICT (thing 03). In conclusion, the fifth calculate recognized, called get to ICT exterior the classroom comprises of three things. This figure incorporates a arrangement of needs related to the teacher's capacity to communicate with understudies through ICT at school (thing 16), understudies having get to materials and substance exterior of lesson hours (thing 20), and get to the Web and other computerized assets at home (thing 21).

Differences in the factors affecting the educational use of ICT between educational levels in IE-TIC schools.

Table 4 shows the significant differences in some of these five factors in a comparison of the responses from teachers grouped according to the educational level of their workplace (Hotel & Hospitality, Tourism or Management education).

Table 4: Differences in the perception of factors depending on the level of education: Hotel & Hospitality (HE), Tourism (TE) and Management education (ME) (n = 278)

Factors	HE (n=94) Mean (SD)	TE (n=91) Mean (SD)	ME (n=93) Mean (SD)	Levene's test	ANOVA
Factor 1: Utility and educational setting of the ICT.	3.62 (0.43)	3.67 (0.56)	3.71 (0.69)	8.656*	W = 0.640
Factor 2: Teacher support in the use of ICT.	4.15 (0.55)	4.17 (0.51)	4.01 (0.67)	2.497	F=2.298
Factor 3: Teacher's self-perceived expertise in the educational use of ICT.	3.97 (0.66)	3.89 (0.65)	3.88 (0.67)	0.178	F=0.518
Factor 4: Availability and access to ICT in the classroom.	4.57 (0.40)	4.48 (0.44)	4.25 (0.64)	13.007*	W = 8.109*
Factor 5: Access to ICT outside the classroom.	3.16 (0.88)	3.40 (0.86)	3.99 (0.77)	0.915	F=22.266*
Total	3.93 (0.40)	3.98 (0.42)	3.97 (0.46)	2.312	F=0.348

*, p = 0.000

As can be seen, there are significant differences between the three educational levels in factors 4 and 5. First, teachers place significant value on factor 4 (availability and access to ICT in the classroom): Hotel & Hospitality teachers place most value on this factor, followed by tourism teachers. Second, there were also significant differences in teachers' responses to factor 5 (access to ICT outside the classroom), but in this case the order is reversed: management education teachers give responses with significantly higher scores than those of tourism teachers, who give higher scores than hotel & hospitality teachers.

Discussion and Conclusions

In technology-rich regulation environment, where the instructing staff has progressed computerized mastery and with moderately simple get to, the issues that show up to have the foremost impact on the instructive utilize of ICT are not those of an entirely mechanical nature. Instructors especially appreciate the value of the innovation for their destinations. This calculates makes by distant the greatest commitment to clarifying the fluctuation. In their decision-making, instructors' esteem to begin with, the degree to which innovation acts as a lever to progress their students' quality of learning, and to what degree its utilize fits in with the educating strategies and curricular aptitudes they need to develop.

This priority seems to form sense within the kind of founded we are examining, and places us at a modern wilderness within the examination of the components favouring the school integration of ICT. Having overcome the obstruction of asset accessibility and basic digital preparing for instructors, the keys to understanding advance within the forms of integration of ICT lie within the nature of educating and learning exercises. These exercises regularly present difficulties in terms of accommodating ICT with more far reaching instructive hones (Coll, Rochera &Colomina, 2010; Ertmer, 2005; Zhao straight& To the moment well-positioned calculate within the clarification of the fluctuation is related to the discernment of bolster gotten. Having innovative assets and an progressed level of computerized ability does not degrade from the require for bolster. Instructors esteem the significance of accepting specialized help in situ and nonstop preparing, inside a setting of organization bolster for instructive development. The joining of computerized advances into instructive hone requires long and complex forms that request tall levels of vitality (Brinkerhoff, 2006; Zhao straight& To the Moreover, even in spite of the fact that the instructors within the section of establishing dissected have tall levels of computerized ability and are prepared with broad mechanical assets, they still accept that these variables impact decision-making, but to a lesser degree.

In a technology-rich environment, the proportions of understudies per accessible computer or the unimportant accessibility of a association are not adequate parameters. Instructors progressively tend to rate the useful accessibility of these resources more highly. Qualitative angles in this manner ended up more critical: the quality and speed of associations, the versatility and suitability of computerized assets for instructive needs, and the accessibility of program and other particular assets for the different zones or subjects.

Something similar is genuine of with advanced expertise. Most of the instructors within the populace dissected accept that they have adequate techno-pedagogical skill to oversee the resources accessible in their schools. Be that as it may, as said over, they still consider it fundamental to get back. This apparent contradiction recommends that these teachers are considering inventive challenges with ICT that have not however emerged in their establishing, and for which they don't feel that they have adequate preparing.

At last, it shows up that the plausibility of students' get to computerized substance and contact with educating staff exterior the classroom understudies is the slightest persuasive figure of those dissected. The opening up of classrooms by implies of computerized advances to rise above obstructions of space and time is one of the key imaginative variables within the joining of ICT in education. Its restricted significance in the teachers' discernments suggests that the utilize of the advances for this reason will be exceptionally limited. Typically maybe since the physical boundaries of schools are still exceptionally capable, indeed when they have sufficient computerized resources.

An examination of the factors perceived as vital for decision-making as respects the utilize of ICT within the organizing taking part in this investigate is of incredible intrigued. What the teachers at these institutes do and see gives us a few thought of the developmental patterns in the system as a entirety, to the degree that the accessibility of advanced assets is getting to be broad and instructors are getting to be competent in their utilize. In this modern setting, the instructive use of ICT depends more on the instructive projects and purposes sought after than the advanced assets. An audit of the educational modules and educational goals shows up to be vital in arrange to adjust them to unused social requests, and advance research on the forms of preparing and support for instructive advancement by means of ICT is moreover required.

Our research has a few limitations and suggestions for further study. It is imperative to note that it may be a inquire about, because it was constrained to gather information from eight organizing and 278 instructors. It moreover is an exploratory investigate, since members infer from all curricular regions and from all three school levels: kindergarten, essential and auxiliary instruction. We too need that, in spite of the fact that the factorial exploratory analysis has been valuable for distinguishing specific factors that influence teachers' utilize of innovations for instructing and learning in technology-rich classrooms, these distinguished variables cannot be connected in general to any kind of researcher teachers.

Past of the limits of this think about, assist investigate with a bigger test of instructors would be alluring in arrange to get information of a more extensive run of participants. To begin with, a more in-depth characterization of the components influencing the educational use of ICT might be conceivable in each education level and each subject range. Moment, encourage inquire about would permit us to way better get it the variables that influence the appropriation and use of specific sorts of learning innovations by established instructors. Such innovations can be computer-supported learning situations, computer-supported collaborative learning situations, or virtual classrooms, among others. Third, getting a bigger sample of instructors might make conceivable conducting more strong statistical analysis,

such as a factorial corroborative examination. At last, we accept that's essential to consider a modern region of research that recognizes not as it were the factors related to the recurrence of utilize of technology, but moreover the factors that impact the way in which innovation is utilized for instructing and learning purposes, especially in arrange to construct and keep up constructivist learning situations. In fact, getting more particular data around these variables may contribute to advance more inventive learning settings in classrooms.

References

Sipe, L. J., & Testa, M. (2020). A dynamic model of mentoring for hospitality leadership development.

Donnelly, D., McGarr, O., & O'Reilly, J. (2011). A framework for teachers' integration of ICT into their classroom practice. *Computers & education*, *57*(2), 1469-1483.

Goh, E., & Wen, J. (2021). Applying the technology acceptance model to understand hospitality management students' intentions to use electronic discussion boards as a learning tool. *Journal of Teaching in Travel & Tourism*, *21*(2), 142-154.

Salehi, H., & Salehi, Z. (2012). Challenges for using ICT in education: teachers' insights. *International Journal of e-Education, e-Business, e-Management and e-Learning*, *2*(1), 40.

Tomarken, A. J., & Serlin, R. C. (1986). Comparison of ANOVA alternatives under variance heterogeneity and specific noncentrality structures. *Psychological Bulletin*, *99*(1), 90.

Glass, G. V., Peckham, P. D., & Sanders, J. R. (1972). Consequences of failure to meet assumptions underlying the fixed effects analyses of variance and covariance. *Review of educational research*, *42*(3), 237-288.

Scrimshaw, P. (2004). Enabling teachers to make successful use of ICT.

Cubukcuoglu, B. (2013). Factors enabling the use of technology in subject teaching. *International Journal of Education and Development Using ICT*, *9*(3).

Mathayo, M. H. (2016). *Teachers' Experience on the use of ICT to facilitate Teaching: A case of Ilala District Secondary Schools* (Doctoral dissertation, The Open University of Tanzania).

Baranetz, E. (2013). How to enable successful use of ICT. *RevistaDidactica Pro…, revistă de teorieşipracticăeducaţională*, *80*(4), 9-15.

Tearle, P. (2003). Enabling teachers to use information and communications technology for teaching and learning through professional development: influential factors. *Teacher development*, *7*(3), 457-472.

Haydn, T. A., & Barton, R. (2007). Common needs and different agendas: How trainee teachers make progress in their ability to use ICT in subject teaching. Some lessons from the UK. *Computers & Education*, *49*(4), 1018-1036.

Schibeci, R., MacCallum, J., Cumming-Potvin, W., Durrant, C., Kissane, B., & Miller, E. J. (2008). Teachers' journeys towards critical use of ICT. *Learning, Media and Technology*, *33*(4), 313-327.

Bose, S. (2010). Enabling Secondary Level Teachers to Integrate Technology through ICT Integrated Instructional System. *Online Submission*.

Hodgkinson-Williams, C., Sieborger, I., &Terzoli, A. (2007). Enabling and constraining ICT practice in secondary schools: case studies in South Africa. *International Journal of knowledge and Learning*, *3*(2-3), 171-190.

Goktas, Y., Gedik, N., & Baydas, O. (2013). Enablers and barriers to the use of ICT in primary schools in Turkey: A comparative study of 2005–2011. *Computers & Education*, *68*, 211-222.

Badia, A., Meneses, J., &Sigalés Conde, C. (2013). Teachers' perceptions of factors affecting the educational use of ICT in technology-rich classrooms. *Electronic Journal of Research in Educational Psychology, 2013, 11 (3)*.

Goh, E., & Sigala, M. (2020). Integrating Information & Communication Technologies (ICT) into classroom instruction: teaching tips for hospitality educators from a diffusion of innovation approach. *Journal of Teaching in Travel & Tourism*, *20*(2), 156-165.

Choi, J. J., Robb, C. A., Mifli, M., & Zainuddin, Z. (2021). University students' perception to online class delivery methods during the COVID-19 pandemic: A focus on hospitality education in Korea and Malaysia. *Journal of Hospitality, Leisure, Sport & Tourism Education*, *29*, 100336.

Tondeur, J., Van Braak, J., Ertmer, P. A., & Ottenbreit-Leftwich, A. (2017). Understanding the relationship between teachers' pedagogical beliefs and technology use in education: a systematic review of qualitative evidence. *Educational technology research and development*, *65*, 555-575.

Christou, E., & Sigala, M. (2003, January). Internationalization of the tourism & hospitality curriculum: A comparative study in Greece and Great Britain. In *The Proceedings of 2003 EuroCHRIE Congress* (pp. 20-23).

Frawley, T., Goh, E., & Law, R. (2019). Quality assurance at hotel management tertiary institutions in Australia: An insight into factors behind domestic and international student satisfaction. *Journal of Hospitality & Tourism Education*, *31*(1), 1-9.

Sutherland, R., Armstrong, V., Barnes, S., Brawn, R., Breeze, N., Gall, M., ... & John, P. (2004). Transforming teaching and learning: embedding ICT into everyday classroom practices. *Journal of Computer Assisted Learning*, *20*(6), 413-425.

Ghavifekr, S., &Rosdy, W. A. W. (2015). Teaching and learning with technology: Effectiveness of ICT integration in schools. *International journal of research in education and science*, *1*(2), 175-191.

Jadhav, P., Gaikwad, H., & Patil, K. S. (2022). Teaching and learning with technology: Effectiveness of ICT integration in schools. *ASEAN Journal for Science Education*, *1*(1), 33-40.

Shah, S. S. (2022). Teaching and learning with technology: Effectiveness of ICT integration in schools. *Indonesian Journal of Educational Research and Technology*, *2*(2), 133-140.