SECONDARY SCHOOL FEMALE TEACHERS' SELF-EFFICACY IN THE USE OF SOCIAL MEDIA FOR INSTRUCTION IN KOGI STATE

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Abstract

Social media has appeared as a fairly recent tool that offers new educational possibilities. This study examined secondary school female teachers' self-efficacy in the use of social media for instruction. 255 female teachers from the Western Senatorial District of Kogi State participated as samples for the study. The research was a descriptive research of the cross-sectional survey type. Three hundred female teachers were sampled using random sampling method. The sample was stratified based on qualification and experience. Questionnaire was used to gather the data for the study. The instrument was validated by three educational technology expert. A test re test reliability was carried out and the two scores were correlated using Pearson Product Moment Correlation Coefficient, the value obtained was 0.88 Research questions were answered using mean scores and percentages while the hypotheses were tested using t-test statistical analysis. The findings of the study showed that: female teachers are less proficient in carrying out most activities on social media. The hypothesis tested showed there was no significant difference between qualified and unqualified female teachers in their self-efficacy to use social media for instruction. Also, there was no significant difference between experienced and less experienced female teachers' in their self-efficacy It was recommended amongst others that female teachers' should be trained on the use of social media for instruction to enhance their self-efficacy in the use of social media for instruction.

Keywords: Social Media, Self-efficacy, Qualification, Years of Experience

Introduction

Social media are tools that enable and encourage informal conversation, dialogue, collaborative content generation, and the sharing of information. Social media is a component of the web 2.0 which was officially coined in 2004 by Dale Dougherty. However, no individual has been credited as the founder of Web 2.0. By the time it was coined, Web 2.0 was already being used without any name (Anderson, 2007). Web 2.0 also referred to as new media technologies which encompasses a wide variety of web-related communication technologies, such as blogs, wikis, online social networking, virtual worlds and other social media forms. Olashina (2011) described Web 2.0 as a perceived second generation of web development and design that facilitates communication, secure information sharing, interoperability, and collaboration on the World Wide Web.

It is an interaction among organizations, communities and individual in which they create, share and/or exchange information or ideas between ((Tony, Asta, Minna, and Sirkka, 2008; Kietzmann & Kristopher, 2011). Social media is a Web-based and mobile applications that allow individuals and organizations to create, engage and share new user-generated or existing content in digital environments through multi-way communication (Deil-Amen, Rios-Aguilar, Davies & Gonzales, n.d). Social media as defined by Bryer and Zavatarro (2011) are technologies that facilitate social interaction, make possible collaboration, and enable deliberation across stakeholders. Social media technology has appeared as a fairly recent tool that offers new educational possibilities, many of them still to be discovered, but it also generates new perils (Olga, 2013).

These technologies include blogs, wikis, media (audio, photo, video, text) sharing tools, networking platforms (including Facebook), and virtual worlds (Bryer & Zavatarro, 2011). Social media are classified into six categories by Kaplan and Haenlein (2010) as: Collaborative projects like Wikipedia; Blogs and micro-blogs like Twitter; Content communities e.g. YouTube and Daily Motion; Social networking sites e.g. Facebook; Virtual game-world like World of War-Craft; Virtual social worlds e.g. Second-life.

Mainstreaming a gender perspective is essential in assessing the implication of any development program, project or policy on men and women as this holds true of the modern ICT (Panth, 2011). Gender is a factor in every aspect of formal, non-formal and informal education and has an impact on all participants: learners, teachers and administrators (Green, 2009). Hence, gender gap has reduced over the past years, presently, a greater number of females than males have used internet and Web 2.0 technologies (Yukselturk & Bulut, 2009). Girls were discovered to use social media applications such as Facebook and Instagram to communicate with friends, upload photos and edit their own profiles on a social networking site. On the contrary, boys were revealed to upload more movies/music and post more messages on blogs and fora like the Twitter (Apestaartjaren, 2010).

Identifying factors explaining ICT use is seen as a way of answering the question why some teachers embrace the use of technology with students in classrooms and others do not. These factors are often technology-related teacher characteristics, such as teachers' self-efficacy, intention to use, attitudes among others. Self-efficacy is a person's belief in his or her ability to succeed in a particular situation. It is the belief in one's capabilities to organize and execute the courses of action required to manage prospective situations (Bandura, 1982). Users with low level of confidence and self-efficacy are less likely to use social media and other technologies and will typically believe that technology is difficult to use (Cazares, 2010).

Self-efficacy has a great effect on teacher's use of ICT. Self-efficacy is defined as a belief in one's own abilities to perform an action or activity necessary to achieve a goal or task (Bandura, 1997). In real meaning, self-efficacy is the confidence that an individual has in his/her ability to do the things that he/she strives to do. Thus, teachers' confidence refers both to the teachers' perceived likelihood of success on using ICT for educational purposes and on how far the teacher perceives success as being under his or her control (Rice & Costa, 2007). Self-efficacy theory has been used in research concerned with individuals' intentions to use information technology. An individual's perception of their ability to competently use computers is defined as computer self-efficacy, which is concerned with the judgment of what can be done in the future (Player-koro, 2012). It refers to judgments of ability to apply skills to broader tasks, such as promoting education. Thus, computer self-efficacy does not refer to component skills such as using a specific software feature or booting up a computer, but to judgments of the ability to apply one's skills when using technology for broader tasks (Compeau & Higgins, 1995). According to Embi (2007), computer self-efficacy is the measure of a user's confidence to use, understand and apply their computer knowledge and skills.

Rice (2003) found five broad categories of teacher attributes that appear to contribute to teacher quality, competence and self-efficacy. These attributes are teacher's experience, preparation programs and degree, type of certification, coursework taken in preparation for the profession and teachers own test scores.

Statement of the problem

At this digital age, teaching, learning and various educational activities should revolve around social media. In this vein, a teacher or lecturer, can create a Facebook page, which he regularly updates and post assignments, tutorial questions, suggestions for further reading and receive feedback from the students (Adeyanju, 2012). Female participation in social media sites is on the increase though not for educational purposes, but to socialize. Douglas (2011) stated that, social Web is now ruled by oestrogen where women make up over half of all social media users. The most popular social networks like Facebook, Twitter and YouTube are adapted by some teachers for educational purposes. Although, these

social platforms are known worldwide, they still carry a degree of mistrust for some parents and educational institutions (Laura, 2013).

Various study has been conducted on teachers use of social media for instruction such as the study by the Babson Survey Research (2013) which found out that college faculty members have become sophisticated consumers of social media, matching different sites to their varying personal, professional and teaching needs. However, none of these studies known to the researcher focused on female teachers' self-efficacy in the use of social media for instruction especially in Nigeria. This study is therefore seeking to determine female teachers' self-efficacy in the use of social media for instruction.

Purpose of the Study

The main purpose of this study was to determine secondary school female teachers' self-efficacy in the use of social media for instruction in Kogi State. The study specifically;

1. determined the female teachers' self-efficacy in the use of social media,
2. examined the influence of female teachers' qualification on their self-efficacy in the use of social media,
3. examined the influence of female teachers experience on their self-efficacy in the use of social media

Research Questions

1. How well can female teachers use social media for instructional purpose?
2. Does female teachers' qualification influence their self-efficacy in use social media for instruction?
3. Does female teachers' experience influence their self-efficacy in use social media for instruction?

Research Hypotheses

The following hypotheses were formulated and tested

Ho_1 There is no significant difference in the self-efficacy of qualified and non-qualified female teachers in the use of social media for instruction;

Ho_2 Ho_3 There is no significant difference in the self-efficacy of experienced and less experienced female teachers in the use of social media for instruction.

Methodology

This study is a descriptive research of the cross-sectional survey type. A researcher-designed questionnaire was used to collect information from female teachers' on their self-efficacy and intention towards use social media for instruction. The total population for this study was all Secondary School female teachers in Kogi State. The target population for this study was all 928 female teachers in senior secondary schools in Western Senatorial District of Kogi State. The western senatorial district was purposively sampled because it has the highest number of female teachers. A total of 255 female teachers were sampled using random sampling method. The sample was stratified based on qualification and experience. A total of 146 qualified female teachers were sampled and 109 unqualified female teachers. Also, 153 had teaching experience of five years and above, while 102 had teaching experience of below five years.

A researcher-designed questionnaire which had three sections was used to elicit response from the respondents. Section A had background information on the schools, respondents' qualification and years of experience. Section B had 10 items seeking information on teachers' self-efficacy towards the use of

social media for instruction with a Likert response mode of highly proficient, proficient and less proficient, while section E contained 8 items seeking the female teachers' intention to use social media for instruction which also had a Likert response mode of Likely, not likely and very unlikely. The instrument was validated by three educational technology experts. To achieve the reliability of the research instrument, the questionnaire was administered on 20 Senior Secondary School Teachers within Ilorin metropolis which are not part of the sample. After an interval of two weeks, it was re-administered to the same respondents. The two scores were correlated using Pearson Product Moment Correlation Coefficient, the value obtained was 0.88.

Data Analysis

All research questions were answered using mean and all hypotheses tested using inferential statistic of t-test

Research Question 1
How well do female teachers use social media for instructional purpose?

Table 1:
Teachers' Self-efficacy on the Use of Social media

S/N	Self-efficacy	Mean ($\overline{X}$)
1.	I can create a social media account	1.83
2.	I can log into my social media account.	1.99
3.	I can identify common icons on social media.	1.99
4.	I can send e-mails to my students using my social media	1.98
5.	I can upload course content using social media	1.98
6.	I can update my course content for my students using social media	1.92
7.	I can sign out of my social media account when not using it.	2.00
8.	I can use common icons on social media.	1.96
9.	I can create wiki where students can contribute thought and experience.	1.73
10.	I can proffer solution, in case of any challenge faced by the students during usage.	1.80
11.	I can create short instructional videos and share with my students.	1.85
	Grand Mean	1.91

Table 1 shows that item 7 which sought to know if female teachers can sign out of their social media account when not in use has the highest mean score of 2.00. The lowest mean score was 1.73 where respondents were asked if they could create wiki for students to contribute their thoughts which is less than the 2.50 decision mean score. The resulting mean score established that female teachers are less proficient in carrying out these activities.

Hypotheses Testing

H_{01} There is no significant difference between qualified and non-qualified female teachers' in their self-efficacy in the use of social media for instruction

Table 2:
Teachers' Self-efficacy based on Qualification

Qualification	No	$\overline{X}$	SD	df	t	Sig.(2-tailed)
Qualified	146	20.93	7.32			
				253	-.307	0.498
Non-qualified	109	21.21	6.99			

Table 2 indicates that t = -0.307, p = 0.498. That is, the result of the t- value of -0.307 resulting in 0.498 significance value was greater than 0.05 alpha level. This means that the stated null hypothesis, there is no significant difference between qualified and non-qualified female teachers on their self-efficacy in the use of social media for instruction was accepted.

H_{02}: There is no significant difference between experienced and less experienced female teachers' in their self-efficacy to use social media for instruction.

Table 3:
Teachers' Self-efficacy based on Experience

Experience	N	$\overline{X}$	SD	df	t	Sig. (2-tailed)
5years above	153	19.35	7.04			
				253	-4.85	0.095
Below5 years	102	23.61	6.61			

Table 5 indicates that t (225) = -4.85, p = 0.095. This was as a result of the t- value of -4.85 resulting in 0.095. The hypothesis, there was no significant difference in female teachers' teaching experience on their self-efficacy in the use of social media for instruction was accepted.

Discussion

Female teachers' self-efficacy in the use of social media was examined and if was found from the resulting mean score that female teachers are less proficient in carrying out activities like creating an account, logging in and out of social media account and so on. Necessary efforts should be made on the training and retraining of female teacher to become vast and highly proficient in the use of social media. The influence of female teachers' qualification and years of experience on their self-efficacy in the use of social media for instruction was examined. The result of the t-test shows that there is no significant difference between female teachers' qualification and their self-efficacy in the use of social media for instruction. These findings is in agreement with Oldfield (2010) that reported the reasons why ICT is either adopted or not in schools. There appears to be an interplay between individual factors such as teachers' lack of skills, insufficient training.

Conclusion

Necessary efforts should be made on the training and retraining of female teacher to become vast and highly proficient in the use of social media for instruction. Moreover, resources needed for smooth diffusion and adoption should be made available.

Recommendations

Female teachers' should be trained on the use of social media for instruction to enhance their competency; the Government, NGOs and individuals should also make available facilities needed to access social media, either by reducing the price or making it free of charge; Curriculum planners and developers should include in the curriculum the use of social media for instruction to enhance the self-efficacy of the female teachers

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