International Journal of Information and Communication Technology Research

http://www.esjournals.org

Does the Back Ground of Gaza Secondary School Webmasters affect the quality of School Websites?

Hassan M.M. Abuhassna , Shaffe Mohd Daud
University Putra Malaysia
43400 Serdang, Selangor,
Malaysia

ABSTRACT

School Webmastersmainduty is to understand the school website needs. Marcus (2000)Their focuses is to help schools provide their communities and constituents with timely and informative websites, Developing the functional architecture, implement intuitive navigation, write professional content, and design a custom website that reflects the school style and brand.(Hasley, 2010).Accordingly, a school website serves as an effective platform on which to publicize activities implemented for students, teachers, and other interested parties within the academe (Zaharim, 2000). An excellent school website can be built through cooperation between the school administrator and the webmaster; such cooperation facilitates the effective communication of information to students and other visitors of the website (Jurkowski, 2003).This study aims to describe the effect of the School Websites back ground of websites maintained by 40 secondary schools in the Gaza (Palestine) region. This study employs a descriptive survey that uses questionnaires that cover aspects of quality in the construction of a school website. The questionnaires are distributed to webmasters in secondary schools in Gaza through e-mail or post (for school websites that do not disclose their e-mail addresses). The websites used in this study are only those accessible to the public. All findings are collected and summarized to clearly describe the quality of the websites of Gaza schools.

Keywords: *School website management, Distance learning, website quality.*

1. INTRODUCTION

The Internet has expanded the classroom boundaries, and it has made available new opportunities for obtaining the various advantages of Web-based classes and other distance-learning approaches (adewale, ibam, alese, 2012).

Web 2.0 has developed new approaches such as providing learning and teaching opportunities that could not be done on a large scale before (Franklin, Harmelen, 2007).A supervisor (webmaster) manages the school website.(Piper, 2012). The webmaster ensures that the features of the website meet the needs of the school.classrooms (Hanbay, 2013) According to the Guidelines on the Governance Structure Committee Website/Portal by the Division of Information Technology of the Palestinian Ministry of higher Education(MOHE, 2008). An organization should have a governance committee that will regularly update the content of the school website. Compliance ensures that the construction of the school website follows best practices and standards-based websites(MOHE, 2008), Supervision of the school website is performed by an assigned teacher. This supervisory function involves expertise and requires considerable time. This situation occurs because teachers are burdened with a variety of tasks and significant teaching time. All teachers in addition to classroom teaching can conduct web-based learning. Teachers can then use the website of the existing school as a medium for teaching and learning(Reichow, Halpern, Steinhoff, Naples, and Volkmar, 2012).

School websites serve as effective channels for reporting the implemented school activities, because these websites can be accessed by students, teachers, and other interested parties (Yang, Liu, 2007). Parents can learn about the development of academic and co-curricular activities by browsing the website(Chambers, Threlfall, and Roper, 2012),Parents can contact teachers via e-mail through the school website. Klein, Myhill, Hansen, Asby, Michaelson, and Blanck (2003) suggestedthe relationship between parents and the school could be improved indirectly as well. Parents can no longer use the excuse of being busy when they fail to visit the school to talk about their children as they have online access to the school via the website. (Nurul Munirah Johari, 2011).

2. METHODS

This study focuses on secondary schools with websites registered in the Gaza Strip. Only 40 schools in the Gaza Strip have functioning websites. (The Internet was first used in Gaza in 1987 through Computer Palestinian Networks. The early users of the Internet in the region were the faculty and students of the Islamic University of Gaza.) Several other schools have websites, but are under construction or inaccessible. Therefore, the total population of this study is 40 school site supervisors.
The study is conducted in Gaza secondary schools with accessible websites, including those with websites accessible only within the school. Questionnaires are distributed to the site supervisors of these schools to collect data.

This study guides schools in identifying the needs and gaps in using ICT, especially websites, and describes the effective

management of school websites and their compliance with standard requirements.
This study aims to serve students as the center of the learning process by enhancing their interest in the entire process and to serve teachers by providing features that facilitate the learning of their students.

3. RESULTS

Difference between Teachers with and without ICT Background on Compliance with the Construction of School Websites

This section answers the sixth research question of "Is there a difference between teachers with and without ICT background on construction school websites in Gaza schools?" The analysis was performed on all aspects of compliance with the construction of school websites using global best practices, principles, and characteristics (i.e., mandatory basic features, additional features, and security measures).

1. Global Best Practices

For the compliance aspect of global best practices, a closed question answerable by Yes or No was used to determine the differences in the crosstab analysis, chi-square usedtocompare observed data with data we would expect to obtain according to a specific hypothesisand to determine the significant association between 2 categorical variables (such as : gender and race), in this case it was used to differentiate between the teacher with ICT background and the teacher without such a back ground, Results of the analysis are shown in Table 1

Table 1: Differences between Teachers with and without ICT Background on Global Practices

No	Variables	Frequency (f)				Total %	X^2 (df)	*p* value
		ICT Background		No ICT background				
		Yes %	No %	Yes %	No %			
1	School information	16 (42.1)	2 (100.0)	22 (57.9)	0 (0.0)	40 (100.0)	2.573 (1)	0.109
2	Search service	14 (51.9)	4 (30.8)	13 (48.1)	9 (69.2)	40 (100.0)	1.576 (1)	0.209
3	Customer feedback	17 (54.8)	1 (11.1)	14 (45.2)	8 (88.9)	40 (100.0)	5.389 (1)	0.020
4	School calendar	13 (56.5)	5 (29.4)	10 (43.5)	12 (70.6)	40 (100.0)	2.903 (1)	0.088
5	Customer support (help)	8 (57.1)	10 (38.5)	6 (42.9)	16 (61.5)	40 (100.0)	1.283 (1)	0.257
6	Customer support (problem solving)	4 (66.7)	14 (41.2)	2 (33.3)	20 (58.8)	40 (100.0)	1.339 (1)	0.247
7	Customer support (navigation)	11 (61.1)	7 (31.8)	7 (38.9)	15 (68.20	40 (100.0)	3.432 (1)	0.064

X^2 = chi-square

Table 1 shows the crosstab analysis of global best practices. In" Customer feedback "there is a significant difference between teacher with ICT back ground and teacher without because p = 0.209, which is < 0.05, However Teachers with ICT background were more compliant than teachers without ICT background. Indirectly, teachers with ICT background dominated this study. The table shows a statistically significant association between customer feedback and ICT background.

2. Basic Principles

The compliance aspect of the basic principles in the construction of school websites was analyzed using independent *t*-tests

(independent *t*-test) to observe the differences between teachers with and without ICT background. Before doing t test, the normality distribution test of data was applied. Results of the analysis are shown in Table 2

Table :2 Independent Sample *t*-test of the Basic Principles of Teachers with and without ICT background

Variable (compliance with the basic principles)	N	M (SD)	Mean difference	t	df	*p* value
ICT background	18	3.37 (0.30)	0.067	0.826	38	0.414
Without ICT background	22	3.30 (0.20)				

$\alpha = 0.05$

Based on the independent samples *t*-test shown in Table 2,no significant differences were found in the level of mean compliance with the basic principles of teachers with and without ICT background.

There is no significant differences ($p > 0.05$) in the level of compliance. Test results meet the assumption of homogeneity of variance between teachers with and without ICT background on the compliance with the basic principles. The t-test findings show that the basic principles are not statistically significant ($t = 0.826$, $df = 38$, $p > 0.05$), indicating no significant difference in the level of compliance with the basic principles of teachers with and without ICT background.

3. Mandatory Basic Features

To analyze aspect of mandatory basic features, a closed question answerable by Yes or No was used to determine the difference in crosstab analysis. Results of the analysis are shown in Table 3.

Table 3: Difference between Teachers with and without ICT Background on Basic Mandatory Features

No	Variables	Frequency (f)				Total (%)	X^2 (df)	*p* value
		ICT Background		No ICT background				
		Yes %	No %	Yes %	No %			
1	The statement "Official Website"	8 (44.4)	10 (45.5)	10 (55.6)	12 (54.5)	40 (100.0)	0.004 (1)	0.949
2	"School's official logo of the government"	9 (50.0)	9 (40.9)	9 (50.0)	13 (59.1)	40 (100.0)	0.331 (1)	0.565
3	School's official logo	14 (48.3)	4 (36.4)	15 (51.7)	7 (63.6)	40 (100.0)	0.457 (1)	0.499
4	"Introduction of the school"	10 (45.5)	8 (44.4)	12 (54.5)	10 (55.6)	40 (100.0)	0.004 (1)	0.949
5	Policy of the school	8 (42.1)	10 (47.6)	11 (57.9)	11 (52.4)	40 (100.0)	0.123 (1)	0.726
6	Customers charter	2 (25.0)	16 (50.0)	6 (75.0)	16 (50.0)	40 (100.0)	1.616 (1)	0.204
7	A map of the site (site map)	4 (30.8)	14 (51.9)	9 (69.2)	13 (48.1)	40 (100.0)	1.576 (1)	0.209
8	Domain (.gov.my)	9 (47.4)	9 (42.9)	10 (52.6)	12 (57.1)	40 (100.0)	0.082 (1)	0.775
9	Copyright	12 (54.5)	6 (33.3)	10 (45.5)	12 (66.7)	40 (100.0)	1.800 (1)	0.180
10	Privacy policy	9 (42.9)	9 (47.4)	12 (57.1)	10 (52.6)	40 (100.0)	0.082 (1)	0.775
11	Security policy	8 (47.1)	10 (43.5)	9 (52.9)	13 (56.5)	40 (100.0)	0.051 (1)	0.822

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($n = 40$), X^2 = chi-square

Table 3 shows the crosstab analysis of the mandatory basic features. Teachers with ICT background were more compliant than teachers without ICT background. Indirectly, this study was dominated by teachers without ICT background "chi-square "was used to differentiate between the teacher with ICT background and the teacher they don't,. For the aspect of mandatory basic features (questions 12 to 17), analysis was conducted using independent test and the normality of distribution was tested as below. Results of the analysis are presented in Table 3.

Table 4: Independent Sample *t* Test of Mandatory Basic Features of Teachers with and without ICT Background

Variable (Mandatory for Schools Website)	**N**	Mean (SD)	Mean difference	t	df	*p* value
ICT background	18	3.29 (0.36)	-0.021	-0.188	38	0.852
Without ICT background	22	3.31 (0.36)				

$\alpha = 0.05$

Based on the independent sample *t* test in Table 4.12.there is no significant differences ($p > 0.05$). These test results meet the assumption of homogeneity of variance between teachers with and without ICT background on the mandatory basic features. No significant difference was found in the mean value of mandatory basic features of school websites between teachers with and without ICT background ($p > 0.05$).
This result indicates no difference in the level of compliance with mandatory basic features between teachers with and without ICT background

4. Additional Features

Additional features at the level of compliance of construction sites were analyzed using the independent sample *t* test (independent *t* test) to determine the difference between teachers with and without ICT background. Results of the analysis are shown in Table 4

Table 4: Independent Sample *t* Test for Additional Features of Teachers with and without ICT Background

Variable (Additional features)	**N**	M (SD)	Mean difference	t	df	*p* value
ICT background	18	1.93 (0.18)	0.042	0.624	38	0.536
Without ICT background	22	1.89 (0.23)				

$\alpha = 0.05$

Based on the independent sample t-test in Table 4, there is no significant differences ($p > 0.05$) in the mean additional features between teachers with and without ICT background. This result demonstrates no significant difference in the level of compliance with the basic principles of teachers with and without ICT background.

5. Security Measures

For the measure aspect, compliance with safety measures in the construction of websites was analyzed using the independent *t* test (independent *t* test) to identify the differences between teachers with and without ICT background. Table 5 shows the results of the analysis.

Table 5: Independent Sample *t* Test for the Steps Safety between Teachers with and without ICT Background

Variable (Security measures)	N	M (SD)	Mean difference	T	df	*p* value
ICT background	18	3.38 (0.25)	-0.072	-0. 868	38	0.391
Without ICT background	22	3.46 (0.26)				

$\alpha = 0.05$

Based on the independent sample t-test shown in Table 4.14, there is no significant differences ($p > 0.05$) on the level of compliance. These results meet the assumption of homogeneity of variance between teachers with and without ICT background in compliance with security measures. The *t* test findings indicate that the security measures are not statistically significant ($t = -0.868$, $df = 38$, $p > 0.05$). This result shows no difference in the security measures between teachers with and without ICT background.

4. CONCLUSION

Based on results obtained from the analysis, Gaza secondary schools shows in global best practices. In" Customer feedback"there was a significant difference between teacher with ICT back ground and teacher; However Teachers with ICT background were more compliant than teachers without ICT background. Indirectly, teachers with ICT background dominated this study. the second component, the level of mean compliance with the basic principles of teachers with and without ICT background. Results show that there is no significant differences ($p > 0.05$) in the level of compliance. Test results meet the assumption of homogeneity of variance between teachers with and without ICT background on the compliance with the basic principles.

The third component, which is the mandatory basic features. There was no significant differences in the level of compliance with the mandatory basic features, the fourth component the mandatory basic features of school websites between teachers with and without ICT background there was no significant difference was found in the mean value.

This result indicates no difference in the level of compliance with mandatory basic features between teachers with and without ICT background, finally with the security measure aspect results show Based on the independent sample *t* test, there was no significant differences ($p > 0.05$) on the level of compliance. These results meet the assumption of homogeneity of variance between teachers with and without ICT background in compliance with security measures. The *t* test findings indicate that the security measures are not statistically significant ($t = -0.868$, $df = 38$, $p > 0.05$). This result shows no difference in the security measures between teachers with and without ICT background.

5. RECOMMENDATIONS

Among the suggestions that can help schools comply with the requirements is to provide courses meant for the schools' website supervisors. The Educational Technology Division of the Ministry of Higher Education can provide such courses, which can enable the supervisors to determine the appropriate format and content in accordance with the requirements.

In addition, the ICT background of the supervisors must be considered. Having the appropriate ICT background can help teachers update information associated with the school. If the school webmaster is just a computer technician, the delivery of school information updates may be slow, because he or she is not in charge of content and must wait for the inputs given by the teachers and supervisors. The findings of this study showed that all aspects of compliance factors with school website construction are at a moderate level, except additional features, which were in a low level. Furthermore, the survey with the site supervisors showed that secondary schools in Gaza do not comply with the important aspects during the construction of their respective schools' websites.

Future studies may want to examine the link between the supervisor and the school website, i.e., whether the school website supervisor is an ICT teacher or a school computer technician. Teaching experience can also be one of the factors to look at the compliance of construction sites.

REFERENCES

Adewale, S.O., ibam, O.E., alese, B.K. (2012) a web-based virtual classroom system model. *Turkish online journal of distance education*, 13(1), 1302 -6488.

Atan, H., Rahman, Z. A., Idrus, R.M. (2004). Characteristics of the Web-Based Learning Environments in Distance Education: Students' Perceptions of their Learning Needs. *Educational Media International*, 41(2), 103-110.

Chambers, G. N., Threlfall, J., Roper, T. (2012). Do Online Web Resources Help Professionals to Work More Effectively? A Case

Study Based on Three Sites. *Journal of Education for Teaching: International Research and Pedagogy*, 38 (4), 407-418.

Franklin, T., &Harmelen, V.H. (2007).*Web 2.0 for Content for Learning and Teaching in Higher Education*,Manchester, NH: University of Manchester.

Hanbay, O. (2013). Relationship between web-based learning times outside the classroom and academic achievement in German as a tertiary language by the students on vocational high schools. *Turkish online journal of distance education*. 14(1), 29-32.

Hill, G. M., Tucker, M., Hannon, J. (2010). An Evaluation of Secondary School Physical Education Websites, *Physical Educator*, 67(3), 114-127.

ICT Circular No. 1 of 2008; Information Technology and Communication: Ministry ofEducation, Retrieved 9 June 2013,Fromhttp://www.mohe.ps/

Jurkowski,O.(2003).,School LibraryWebsite Components, *Tech Trends*, 48(6), 56-60.

Klein, D., Myhill, W., Hansen, L., Asby, G., Michaelson,S., &Blanck,P. (2003). Electronic Doors to Education:Study of High School Website Accessibility in Iowa. *Wiley Inter Science*, 21, 27–49.

Liu, G.Z., Liu, Z. H., Hwang, G. J. (2011) Developing Multi-Dimensional Evaluation Criteria for English Learning Websites with University Students and Professors. *Computers & Education*, 56 (1), 65-79.

Marcus, A. (2000) *Cultural Dimensions and Global Web Design: What? So What? Now What?* California and New York: California Aaron Marcus and Associates, Inc.

Nurul Munirah Johari. (2011) Compliance with construction site supervisor school among secondary school website for Sabah, Unpublished Master Thesis, SerdangUniversity Putra Malaysia.

Piper, T. (2012), Using School Websites to Support Parent Engagement. *Leadership*, 42 (2), 36-38.

Reichow, B., Halpern, J.I., Steinhoff, T. B., Letsinger, N., Naples, A., Volkmar, F.R. (2012). Characteristics and Quality of Autism Website. *Journal of Autism and Developmental Disorders*, 42 (6), 1263-1274.