

Impact of IT Tools, Teachers, Students and Curriculum on the Performance of ESL Students: A Case Study of Girls' Primary

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Abstract— The study encompasses the research case study to check the impact of different important factors/ variables i.e. IT tools, Teachers, Students and Curriculum on the Learning of the students of ESL classes in the primary school of Kuwait. It is an extension of the study which was to check the impact of IT on ESL learning on the same students. Now the study is extended to the level where it will encompass a wider range of variables to check their impact. After the data was collected from the same students, the data was analyzed in the SPSS 21.0 for the impact of these variables in the dependent variable i.e. Learning of the ESL students. All the hypothesis were tested one by one and the results were then analyzed. The hypothesis results were almost the way they were predicted except only one i.e. teachers' method of teaching. The hypothesis was rejected because it is seen that the teachers were not given adequate training to use the IT tools in teaching and that is the reason why the teachers were unable to perform well. This study suggests that the teachers be imparted enough training to cope up with the coming trends and the students should also be provided with more subjects with same teaching technique. It is also suggested that the all the curriculum be developed keeping in mind the technology as it is easier to grasp knowledge with the help of technology then with the traditional techniques (Sallis, E., 2014). This will bring better results for the students and will help the education situation of any country.

Keywords— IT tools, teachers, curriculum, ESL Learning, Students, Kuwait, ICT.

I. INTRODUCTION

English is a global language and it is used for communication between people with different primary languages in most of the countries (Alexander, R. J., & Armstrong, M., 2010). Having said that, it is concluded by many researchers and statisticians that English is one of the most talked language in the world. According to some people, it is one of the three most talked languages in the world right now and the rank is increasing with the passage of time (Crystal, D., 2012). There can be many reasons behind this, but the foremost reason, according to researchers is the fact that technology which is being introduced today is mostly in this language (Lauder, H., Kounali, D., Robinson, T., & Goldstein, H., 2010).

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English as a secondary language is taken by many countries and Middle Eastern countries are no different. Countries like Kuwait, Oman, Saudi Arabia and United Arab Emirates has taken English Language very seriously and they are applying the language as their secondary language in their offices and in education system as well (Issawi, C., 2013).

English is being taught at the schools and universities in the Middle Eastern Countries (Chapman, D. W., & Miric, S. L., 2009) and it is really important to check the impact of different variables on the actual learning of English as Secondary Language in those countries, so that we could be able to check the impact and if the impact is not good, we could do something to make it better.

The factors like It tools is very important to be checked, whether they are making any positive impact or not. If the IT tools which are being used to teach the students about ESL. This whole study is about the impact of IT on ESL but taking in discussion the different variables which are involved in the process like IT tools, Teachers and the curriculum as well. This paper will check the impact of these variables closely on the understanding of the students of ESL classes. For example, it will check the impact of IT tools on learning of the ESL students, impact of teachers' understanding and ability to control the IT tools on learning of ESL students, the impact of IT bases curriculum on the learning of ESL students etc.

This study is a complete hypothesis based study, which will check different hypothesis through statistical tools and methods in the upcoming sections.

II. THEORETICAL BACKGROUND

Information technology is taking the world by storm with its inventions in all the walks of life. IT has changed the way we live and it is making it even further more towards making our lives easier and stress free. One of the very important field in which the information technology has made very good advancements, is in the field of education (Zeichner, K., 2010).

A. IT in Education Field

Information technology is making good leaps forwards towards making successful impact in the field of education. There are different tools and techniques which are helping the teachers and students in making the education system better, all over the world (Livingstone, S., 2012).

Many studies have shown that the IT tools or the ICT tools are making positive impact towards the betterment of the education system by introducing new tools and changing the way teachers used to teach at schools and the way students used to learn different things. The internet has changed everything and the students who used the internet in their learning are having higher grades than the students which are not, according to Kozma, R. B. (2008).

B. Successful Introduction of IT Tools in Education Field

There are different IT tools which are making our lives easier and the most important of them all is the computer. Computer has not only made our lives easier but also has made different discoveries and inventions possible which will make our lives even easier in the future.

In education field, the tools like Projector, Touch board, Books database, iPads, Tablets, and other IT tools have made the education system better. It has not only made the learning easy for the students but also for the teachers as well. They can learn from different sources and can make their class even more productive as compared to what they did when they don't have any access to the IT world (Pinto, A., Selvaggi, S., Sicignano, G., Vollono, E., Iervolino, L., Amato, F & Grassi, R., 2008).

C. ESL in Middle East

English as Secondary Language is being taught at many levels and in many countries. To be a part of the learned and positive stream of the world, Middle Eastern countries are now making decisions which can make them grow better and take them to the path of success. Keeping this view in mind, they have introduced many new techniques and introducing ESL was one (Basturkmen, H., 2010).

The importance of learning English has increased significantly in the past decade. This can be seen in the fact that many Middle Eastern countries have now started to promote English as an official secondary language in their countries, especially after they started trading with the west (Al-Khatib, M. A., 2008). There has also been an increase in the number of Arab students who pursue higher degrees in Europe, the US, Canada, and Australia. Most of these programs offer English curriculum degrees. This makes it crucial for students to learn English beforehand, as part of their basic education (Durkin, K., 2008).

D. ESL and IT in Middle East

IT has taken over as a medium of instruction for education in many ways. The technology has improved the way teachers teach in the classroom. IT has not only improved the teaching of science and mathematics, but also has revolutionize the study of languages. In Middle East, the Sciences are taught with the help of ICT but languages are not taught in the same way. Traditional methods more often than not, still being used to teach languages, especially English (Schmitt, T. L. (2009). It is important to study why this is the case, why has technology not been adopted in language teaching in these settings? This answer can be there when we make some impact research on the topic and this is very much sure that the IT is

making positive impact (Archambault, L., Wetzel, K., Foulger, T. S., & Kim Williams, M., 2010).

E. Teacher's Understanding of IT Tools

It is really important for the teachers to have a good know how of the IT tools which they are going to use in their class. It is really important to suggest that if a country wants to improve the education system, they should invest in technology and add IT in their education field but we should keep in mind that the teachers should also be equipped with the use of the technology before we actually introduce them and go full scale (Seely Brown, J. (2008).

In short, teachers should be given training on the use of technology i.e. how to use the iPad, how to switch on the projector and how to troubleshoot if anything goes wrong (Senge, P. M., Cambron-McCabe, N., Lucas, T., Smith, B., & Dutton, J. (2012).

F. Students' Attitude Towards Using IT to learn ESL

Another important factor of using IT to teach the students any language or in this case English language is the student's attitude towards learning the IT tools. It is possible that students are not willing to learn the new technology and they cannot just learn it because of their past experiences. According to Reed, H. C., Drijvers, P., & Kirschner, P. A. (2010), students' attitude toward learning IT tools as a different subject is very encouraging but it is very discouraging when they see the students' attitude when the new technology is used as a helping material to teach them the technology. So, it should be kept in mind that students be first taught the technology and then implement the teaching method to teach the ESL.

G. Students' Exposure of IT Tools Before the Introduction of IT Tools to Teach ESL

It is an IT era and it is supposed that almost everyone in the world has the exposure of IT and computers in their lives because of its popularity, but this is not the case. There are places in the world where the people have no access to internet and they don't even know how to use the mobile phone or a simple computer (Thompson, M., 2008).

But in the case of this very study, the researchers are a bit fortunate that the students and the teachers of the selected area have some exposure to the technology already and they were able to grasp the knowledge which were given to them.

H. IT Based Curriculum

It is very difficult to teach the curriculum through technology if it is not made, keeping in mind the technology i.e. if the curriculum is built to be taught through traditional methods, it is difficult to use the technology to teach the same curriculum but if it is made to be taught through technology, it is easier to use technology to teach it and to learn it (Lee, C. B., Chai, C. S., Teo, T., & Chen, D., 2008).

In our case, the curriculum is a bit older and it was not made keeping in mind the IT based way of teaching. So, this is going to be a bit difficult for the teachers to teach and for the

students to grasp the knowledge. This is a hypothesis which will be tested here as well.

III. RESEARCH METHODOLOGY

A. Conceptual Model

As this is a model based study, the conceptual model of the study is as under:

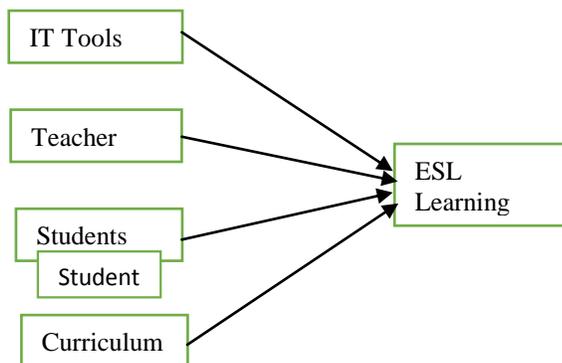


Fig 1: Conceptual Model

B. Hypothesized Model:

The hypothesized Model of the study is as follow:

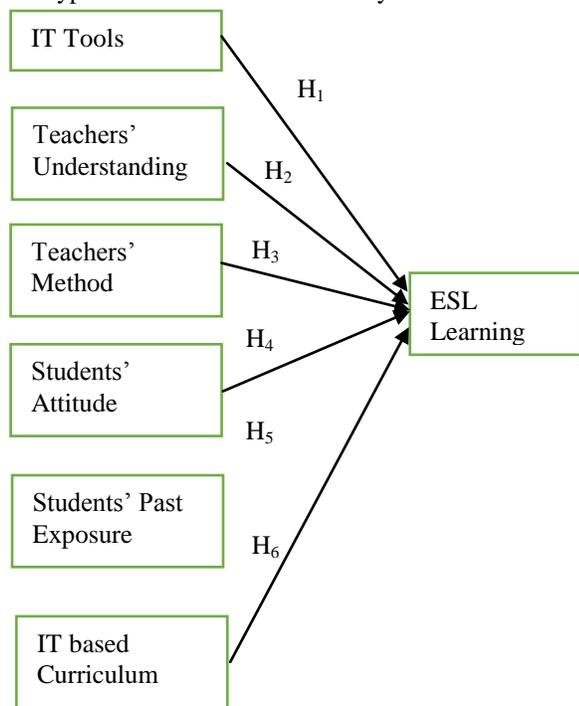


Fig 2: Hypothesized Model

C. Hypothesis

In this study, the following hypothesis will be tested to check the impact:

- H1: IT tools has a positive impact on the Learning of the students of ESL classes.
- H2: Teachers' understanding of the IT Tools has a positive impact on the Learning of the students of ESL classes.

- H3: Teachers' method of teaching has a positive impact on the Learning of the students of ESL classes.
- H4: Students' attitude towards learning through IT Tools has a positive impact on the Learning of the students of ESL classes.
- H5: Students' past exposure towards IT tools has a positive impact on the Learning of the students of ESL classes.
- H6: IT based curriculum has a positive impact on the Learning of the students of ESL classes.

D. Dependent Variable

The dependent variable of the study is "Students' ESL Learning".

E. Independent Variables

Following were the independent variables for the study:

- IT Tools
- Teachers' understanding of IT Tools
- Teachers' method of teaching
- Students' attitude towards learning
- Students' past exposure to IT
- IT based curriculum

F. Selection Method

Schools for the collection of data were selected on convenience based sampling technique. The students were selected at Random based sampling technique.

G. Sample Size

Sample size for the study was 100. 100 girls student of Primary schools of Kuwait were taken as a sample.

H. Data Collection Tool

Questionnaire was the data collection tool. Once the data was collected with the help of questionnaire from the students, it was analyzed to check the impact of different variables on SPSS 21.0.

It was a 5-point Likert Scale questionnaire.

I. Questionnaire Items

Total numbers of questionnaire items were 21.

J. Analysis Tools/ Instruments

To check the validity of the instrument i.e. questionnaire, the Cronbach's alpha was used. After it is checked for validity, a full-scale distribution of the instrument was done and the data collected was analyzed through regression analysis

IV. ANALYSIS

After receiving the data from the data collection tools, there are different instruments which are used for analysis. The analysis as under

A. Reliability Analysis

To do the study, the questionnaire was developed and it is really important to check the reliability of the items which are used to make the questionnaire. There are 21 items in the questionnaire. To do the reliability analysis, The Cronbach's alpha is done. The results are as under:

TABLE I
CRONBACH'S ALPHA

Result obtained using the Cronbach's Alpha test	Cronbach's Alpha Based on Standardized Items	Number of Items
.912	.934	21

The above results show that the Cronbach's Alpha is 0.934, which is in the excellent zone. This means that the items which are included in the questionnaire are extremely reliable and are

very well connected with each other. We can use the questionnaire for the study without any hesitation.

B. Regression Analysis

Regression Analysis tell you which Hypothesis to accept and which to reject. So in order to check whether the hypothesis which we made are accepted or rejected, we need to do the complete regression analysis of all the hypothesis one by one. We can also check the complete statement as well i.e. to check whether our study has been rejected or accepted as a whole.

• **H1: IT tools has a positive impact on the Learning of the students of ESL classes:**

To check the hypothesis, we run the regression analysis on the data which we received and following are the results:

TABLE II
MODEL SUMMARY

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.491	.185	.183	.18697	1.818

The model summary shows that the R square value is 0.185 which means that the It tools have a 18.5% effect on the learning of the ESL students, which is very high. We need to

check the Anova of it, so that we could check whether this effect has any significant effect on the learning or not. The Anova results are as under:

TABLE III
ANOVA^A

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	10.614	6	1.769	50.603	.000b
Residual	114.836	3285	.035		
Total	125.449	3291			

The above table shows the value of p or Sig. is 0.000 which is way below 0.05, so it is in a significant level. The results show that we accept the Hypothesis that IT tools have a positive impact on the learning of students of ESL classes.

• **H2: Teachers' Understanding of the IT Tools has a Positive Impact on the Learning of the Students of ESL Classes.**

Following is the Model summary for the second hypothesis i.e. Teacher's understanding of IT tools has a positive impact on the learning of the students of ESL classes:

TABLE IV
MODEL SUMMARY^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.561a	.105	.103	.13577	1.618

The model summary shows that the R square value is 0.105 which means that the Teachers' understanding of the IT tools have a 10.5% effect on the learning of the ESL students. We need to check the Anova of it, so that we could check whether this effect has any significant effect on the learning or not. The Anova results are as under the table.

The above table shows the value of p or Sig. is 0.080 which is way above 0.08, so it is not in a significant level. The results show that we reject the Hypothesis. We will say that the Teachers' method of teaching has no impact on the learning of the students of ESL classes.

TABLE VII
ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	10.614	6	1.709	43.603	.080b
Residual	99.233	3105	.035		
Total	109.439	3111			

- **H4: Students’ attitude towards learning through IT Tools has a positive impact on the Learning of the**

students of ESL classes.

The model summary of this hypothesis is as under:

TABLE VIII
MODEL SUMMARY^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.330a	.188	.190	.01533	1.823

The model summary shows that the R square value is 0.188 which means that the students attitude towards learning through IT tools have a 18.8% effect on the learning of the ESL students, which is very high. We need to check the Anova

of it, so that we could check whether this effect has any significant effect on the learning or not. The Anova results are as under:

TABLE IX:
ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	3.614	6	1.743	43.603	.000b
Residual	109.233	3105	.035		
Total	112.439	3111			

The above table shows the value of p or Sig. is 0.000 which is way below 0.05, so it is in a significant level. The results show that we accept the Hypothesis that students’ attitude towards learning through IT Tools have a positive impact on the learning of students of ESL classes.

- **H5: Students’ Past Exposure towards IT tools has a Positive impact on the Learning of the Students of ESL Classes.**

The model summary is as under:

TABLE X
MODEL SUMMARY

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.030a	.021	.024	.01335	1.032

The model summary shows that the R square value is 0.021 which means that the students’ past experience towards IT tools have a 2.1% effect on the learning of the ESL students.

We need to check the Anova of it, so that we could check whether this effect has any significant effect on the learning or not. The Anova results are as under:

TABLE XI
ANOVA^a

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.230a	.221	.226	.01335	1.890

The above table shows the value of p or Sig. is 0.000 which is way below 0.05, so it is in a significant level. The results show that we accept the Hypothesis that students’ past exposure towards IT Tools have a positive impact on the learning of students of ESL classes.

The model summary is as under:

The model summary shows that the R square value is 0.221 which means that the It based curriculum have a 22.1% effect on the learning of the ESL students. We need to check the Anova of it, so that we could check whether this effect has any significant effect on the learning or not. The Anova results are as under:

- **H6: IT based Curriculum has a Positive impact on the Learning of the Students of ESL Classes.**

TABLE XII
MODEL SUMMARY^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.230a	.221	.226	.01335	1.890

The model summary shows that the R square value is 0.221 which means that the It based curriculum have a 22.1% effect on the learning of the ESL students. We need to check the Anova of it, so that we could check whether this effect has any significant effect on the learning or not. The Anova results are as under:

TABLE XIII
ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	5.614	6	1.443	32.603	.000b
Residual	112.245	3105	.035		
Total	117.439	3111			

The above table shows the value of p or Sig. is 0.000 which is way below 0.05, so it is in a significant level. The results show that we accept the Hypothesis IT based curriculum have a positive impact on the learning of students of ESL classes.

V. DISCUSSION

As explained earlier, it is really important to check whether the system, which is introduced, is making enough for the betterment of the society or the people around or not. So, when we talk about IT introduction in the teaching of ESL learning in Kuwait, we need to check certain variables to see whether it is working or not, and if it is working, which of the variables are making more impact and which are not making any impact. To keep this in mind, the study was brought up in Primary schools of Kuwait and the results were encouraging.

From the study, we could be able to see that the IT tools have made good progress in the learning abilities of the students of ESL classes. The students are more active and showing good results.

The study has not only seen the impact of IT tools but also the teachers' understanding and their method of teaching through the It tools. The results of the study have shown that the teachers' understanding is making a positive impact but their way of teaching is not helping the cause. This may be because of the training. They have not been given enough training of how to teach through the IT tools. They understand the concept and they understand the IT tools well, but they are unable to teach with their help. Which is one of the areas of concern for the higher authorities. They should work on this, in order to get full benefits from the technology in coming years.

Another important variable is the students. The students are the real benefactors of the technology introduction to teach the ESL and they are the one who should be getting the advantage. The study focused on their attitude and their past exposure of the technology. The results are very encouraging as the students' attitude is very positive in learning from the new technology and the past exposure is also helping them in learning ESL through technology. The study can suggest, keeping in mind the current trend of the students learning, that different subjects be taught to them using the technology because they are getting good results after being taught with the help of technology (McCabe, D. L., Feghali, T., & Abdallah, H., 2008).

Curriculum is also taken as a variable to check the impact. The IT based curriculum has a positive impact in teaching the students through the IT. The impact is not only positive but it is very significant which is very encouraging. The study suggests that the higher authorities be making the entire curriculum on the base of IT so that the technology can be used for teaching all the subjects.

VI. CONCLUSION

In the backdrop of different studies on this subject all over the world, this study takes the spotlight on the Middle East and especially on the primary school of Kuwait. Kuwait is one of the countries where ESL is taking huge leaps and it is really important to make it as efficient as possible. To make the learning efficient and effective, the introduction of technology was a step taken by the authorities and to see whether it paid off or not, this study was conducted. The study encompasses four important variables i.e. IT tools, Teachers, Students and curriculum. All hypothesis were made and checked after collecting the data with the help of questionnaires. 100 students were chosen for the questionnaire and the data received was put in SPSS 21 for the analysis. The regression analysis shows encouraging results as almost all the hypothesis were accepted except one i.e. teachers' way of teaching through the IT tools. The only reason why this hypothesis was not accepted is that the teachers were not given any proper training to teach through the IT tools. If proper training is imparted in the teachers and some investment is made in this department, the results could be extremely encouraging. The study suggests an extensive training to the teachers on how to use the IT tools and how to actually teach by using the technology.

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