

The study used a questionnaire and students' scores in speaking and writing for each semester they belong to. The questionnaire was utilized to survey students' style of using the internet and it was distributed to students in classes with the help of their teachers.

Students' scores in speaking and writing were used to measure the impact of both informal and formal learning on students' progress. The lists of scores were taken from the administration of every university after being authorized by the dean of each faculty.

All the data was filled in the statistical software SPSS (the Statistical Package of Social Sciences) and were analyzed according to the nature of each variable.

3. Results and Discussion

3.1. Effect of Informal Learning on the Choice of the Internet Contents

It was assumed that the nature of the use of internet (for formal learning or informal learning) determines the impact on students' learning and progress. Respondents were asked about the types of platforms they access and the nature of their use of the internet. They were to choose between three types of platforms including audiovisual platforms, interactive platforms and text platforms.

In this context, a chi-square test was run so that we can compare the counts and the expected counts and see the relationships between the nature of the use of internet and the platforms students access more often.

Table .1.
Chi-square test Crosstabulation for the use of different internet platforms

		Informal	Formal	Total	
Interface: Audiovisual, Interactive, Text	Audio-visual	Count	124	7	131
		Expected Count	95.0	36.0	131.0
		% within Interface	94.7%	5.3%	100.0%
Interac- -tive	Interac- -tive	Count	108	15	123
		Expected Count	89.2	33.8	123.0
		% within Interface	87.8%	12.2%	100.0%
Text	Text	Count	29	77	106
		Expected Count	76.9	29.2	106.0
		% within Interface	27.4%	72.6%	100.0%
Total		Count	261	99	360
		Expected Count	261.0	99.0	360.0
		% within Interface	72.5%	27.5%	100.0%

The crosstabulation table demonstrated that in 131 respondents who browse the audiovisual platforms, 124 of them prefer informal learning, while only 7 of them favor the formal learning. The expected counts were 95.0 for the informal learning and 36.0 for the formal learning. To understand how the results turned out, we compared the counts with the expected counts in order to analyze how the counts departed from the conventional ones.

For the audiovisual platforms, more students accessed them for informal learning compared to the expected counts, whereas only 7 were expected to prefer formal learning compared to the counts with 36.0.

In the interactive platforms crosstabulation, the expected counts for informal learning were 89.2, while the counts displayed 108. In other words, the counts were greater than the expected counts. Besides, the crosstabulation demonstrated that the expected counts were greater than the counts for formal learning (33.8 in the expected counts Vs. 15 in the counts).

In the text platforms crosstabulation, the results demonstrated that the expected counts for informal learning were 76.9 while the counts were 29. Also, the expected counts for the formal learning were 29.2 compared to higher the counts with 77.

When we did the subtraction in all the results obtained, we found that more students access the audiovisual platforms for informal learning than expected, and fewer browse them for formal learning than expected. Similarly, more respondents access the interactive platforms for informal learning than expected. However, fewer students browse the text platforms for informal learning than expected, and more use them for formal learning than expected.

The audiovisual platforms and interactive platforms were accessed more for informal learning, while the text platforms were accessed more for formal learning. For informal learning via connectivity, 94.9% accessed the audiovisual platforms, 87% accessed the interactive platforms, and only 27% accessed the text platforms. In the same way, for formal learning, 72.6% accessed text platforms, 5.3% accessed audiovisual platforms, and 12.2% accessed the interactive platforms. Since the proportions were significantly different, the results were significantly different, and then the relationship of association did exist.

In the same context, to track the significance of the relationship between both variables, a chi-square test of significance was used.

Table. 2.
Chi-square test Results for the use of different platforms

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	155.04 ^a	2	.000
Likelihood Ratio	153.23	2	.000

Linear-by-Linear Association	125.64	1	.000
N of Valid Cases	360		

a. 0 cells (0%) have expected count less than 5. The minimum expected count is 29.15.

The results Chi-Square test showed the following form $\chi^2(1, N= 360) = 155.04, P= 0, 000$. This meant that there was a significant relationship between the type of use of the internet and the platforms.

A test of symmetric measures was run to analyze the degree of the impact of the informal use of internet on the choice of the platforms according to Cramer’s V standard.

Table. 3.
Chi-square Symmetric Measures for informal learning on the internet

		Value	Approx. Sig.
Nominal by Nominal	Phi	.656	.000
	Cramer's V	.656	.000
N of Valid Cases		360	

Since the platforms variable contained three categorical groups and the use of the internet variable contained two categorical ones, the analysis could go further to measure the effect size standard. The table of the symmetric measures showed a result of 0.656. When compared it to the Cramer’s V standard, which has three levels of the effect size: small = 0.10, Medium = 0.30, and large = 0.50, we could see that the effect size was large at 0.656.

The results displayed a large effect size between the two variables. View the Chi-square tables and the results obtained, we accept the assumption which stated that there is association between the nature of the internet use and the types of platforms accessed, which causes variance of the positive impact on speaking and writing. To put it another way, when students use the internet for informal learning, they tend to access audiovisual platforms or interactive platforms. However, when they use the internet for formal learning, they incline towards text platforms. Thus, students’ usage behavior affects achievement in speaking and writing.

3. 2. Effect of the Choice of Internet Platforms on Writing

A One-Way ANOVA statistical test was applied to analyze the impact of the factor variable, which is the type of platforms students’ access more often, on the dependent variable, which is the students’ writing. The test aimed at revealing if there were any statistically significant differences between the means of the three independent (unrelated) groups. The unrelated groups were divided according to the type of platform they access the most.

After analysis, the results were as the following.

Table .4.

One-Way ANOVA descriptive tables for students' writing and the type of platforms they access

	Sum of Squares	df	Mean Square	F	Sig.
B/w Groups	138.12	2	69.06	10.126	.000
Within Groups	2434.80	357	6.82		
Total	2572.93	359			

The one-way ANOVA demonstrated a significant P-value of 0.000. A p-value of this size drove us to track data in order to know where the difference lay. For this reason, a test of one-way ANOVA multiple comparison table was run to analyze if the means of the three unrelated groups were different.

Table .5.

Multiple Comparisons table for students' writing and the way they use the internet

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Audiovisual	131	10.28	2.78	.24	9.80	10.76
Interactive	123	9.48	2.65	.23	9.01	9.96
Text	106	11.04	2.32	.22	10.59	11.49
Total	360	10.23	2.67	.14	9.95	10.51
Fixed Effects			2.61	.13	9.96	10.50
Random Effects				.44	8.34	12.13

The tables showed that the difference between the three groups was significant. This means that the way students use the internet determines their performance in writing.

3.3. Effect of the Choice of Internet Platforms on Speaking

A One-Way ANOVA statistical test was used to analyze the impact of the factor variable, which is the type of platform that students' access more often, on the dependent variable, which is the students' speaking. The test aimed at revealing whether there were any statistically significant differences between the means of the three independent (unrelated) groups. The three groups were divided based on the type of platform they access the most: the group who had a higher access level to text platforms, the group who accessed interactive platforms mostly often, and the group who had more access to audiovisual platforms.

The univariate analysis of variance was deployed to see if any significance existed in the means differences between the three groups. After analysis, the results were as the following:

Table .6.

One-Way ANOVA Descriptive Table for the Students' speaking and the use of different internet platforms

	Sum of Squares	Df	Mean Square	F	Sig.
B/w Groups	531.94	2	265.97	22.83	.000
Within Groups	4158.82	357	11.64		
Total	4690.76	359			

The one-way ANOVA test demonstrated a significant P-value of 0.000. To put it differently, a p-value of this size drove us to track the data in order to know where the difference lay. In this way, to analyze if the means of the three unrelated groups were different, a multiple comparison one-way ANOVA test was run.

Table .7.

One-Way ANOVA Multi Comparison Table for the Students' Speaking and Internet Platforms

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Audiovisual	131	12.24	2.74	.23	11.77	12.72
Interactive	123	9.47	3.65	.32	8.81	10.12
Text	106	10.14	3.84	.37	9.40	10.88
Total	360	10.68	3.61	.19	10.30	11.05

Before reporting the results obtained in the table, I made sure that it included 360 subjects, and the groups in the N column were not balanced. Moreover, I verified that there were more than 10 subjects in each group. The table demonstrated that the means were different. The mean for the audiovisual group was 12.24, for the interactive group was 9.47, and for the text group was 10.14.

Similarly, to the tests run for writing, the tables showed that the difference between the three groups was significant. This means that the way students use the internet determines their performance in speaking.

3.4. Findings

Informal learning constitutes the new locomotive of education in general and language education in particular.

The style with which students use the internet determines the type of platforms on which they spend more time.

The internet has become the richest place for informal learning.

When students are online, they automatically learn new things either related to what they study at school or not.

Language skills, especially speaking, get too much positive influence from informal learning on the internet.

4 . Conclusion

In this paper, the study tried to answer a focal question, which is informal learning in the new era. It used a mixed method research to see the impact on students learning outcomes. The study considered that students' connectivity has become a crucial platform for informal learning. After analysis, the study revealed that the internet does provide a vivid atmosphere for informal learning and helps students develop their academic skills.

Implications

Teachers should redirect students' informal skills to enhance their performance in class throughout the incorporation of bridging activities.

Because M-technology cannot impact without the user's autonomy, teachers should increase extended take home activities and progressively free students' choices.

Teachers should allow students to use the internet in the classroom, as it is an excellent way to inspire them to speak better and write better. This could support independent learning and embrace the power that is already in the pocket of their students.

Teachers should redirect students' informal learning skills so that it is impactful in their achievement at university. This could go through thematic extensive activities which they have to respond to and bring to class.

Since a teacher usually teaches the same way for learners whose pace of learning and difficulties faced are unique, he/she should encourage personalized learning on the internet to adjust the differences. This could be done through collaborative teamwork as the majority work in isolation on their smart gadgets.

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