

What happens later in the inverted class?

Bertha Alice Naranjo Sanchez, (bnaranjo@ups.edu.ec), *UNIVERSIDAD POLITECNICA SALESIANA, CARRERA DE SISTEMA, Robles 107 y Chambers, GUAYAQUIL, ECUADOR.*
Carlos Alberto Martínez Briones, (cmartinezb@ups.edu.ec), *UNIVERSIDAD POLITECNICA SALESIANA, CARRERA DE SISTEMA, Robles 107 y Chambers, GUAYAQUIL, ECUADOR.*
Mario Humberto Ramírez Díaz, (mr Ramirezd@ipn.mx), *INSTITUTO POLITECNICO NACIONAL, CICATA, Av. Luis Enrique Erro S/N, CIUDAD DE MEXICO, MEXICO.*

Abstract

The way to carry out the methodology highlighted as an inverted class takes as a reference the guide of classes illustrated in video. Where students get the sessions to develop, reaching a qualitative methodology that uses collaborative analysis and own communications to investigate the improvement of student learning in the categories: hard work / performance, inconvenience, product and complacency. The teaching is developed to what the student innovates and not as what the teacher builds. This implies the complement of dynamic methods in the instruction.

Classes are intended for students to persevere in cognitive tasks such as solving problems, analyze cases or develop projects, cognitive tasks (reading, listening, and seeing) are performed externally.

Keyword: inverted class, cognitive tasks, and dynamic methods.

1. INTRODUCTION

The classes in which this system has been carried out, the effects are imminent: the student evaluations have progressed outstandingly in all the subjects. The most amazing thing is that:

Questions in class reach excellent levels of thought.

There is great teamwork among the students that go from one group to another, dealing as they are concerned.

The willingness to understand has been accentuated, framed in a context, have correspondence with the real world.

It is a challenge for the students, they resemble each other and argue. They go to those who know less, handle the material as their own and instruct one another without being sued.

It goes beyond what the curriculum requires, studying more than the usual structure.

Students pass from passively attending to learning with active style.

2. Inverted class

The inverted class transmits the understanding belonging to the students. Individualize education for each one.

It increases the responsibility of the students, who appreciate being integrated into the common project in which everyone contributes and in which the class is presented to develop their knowledge and to collaborate, and not to receive a master class passively.

3. How to transform an Inverted Class?

Determine which class archetype you want to transform.

Select what technology to use and with what intention

Place and disseminate the videos

Realization of the video

Monitor students to examine their videos

Find more conveniences to modify and optimize the class

Use of the cell phone

Use of blog

4. Presentation and discussion of results

In this research, the arithmetic means of the ratings were calculated, the interaction between the inverted class and the use of the platform was carried out, as well as the statistical analysis ANOVA

	WITHOUT CELLPHONE	WITH CELLULAR
NO INVERTED CLASS	10,7	12
WITH INVERTED CLASS	13,7	15,3

Table 1. Arithmetic means of the courses

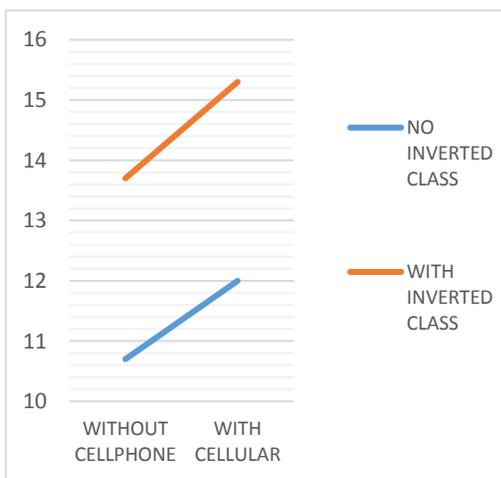


Figure 1: Interaction between inverted class and educational platform

ANOVA Summary					
Source	SS	df	MS	F	P
Rows	268.83	1	268.83	19.93	<.0001
Columns	55.31	1	55.31	4.1	0.0448
r x c	2.32	1	2.32	0.17	0.6808
Error	1834.51	136	13.49		
Total	2160.97	139			

Table 2. Anova statistical analysis

5. Conclusion

This technique makes the instruction more suggestive and decisive

Free time to dissipate those hesitations, schedule exercises.

It gives greater prominence to the student, greater interaction in class, thanks to online platforms and the very smartphones that all students carry today in their pockets.

1. REFERENCES

[1] AREA MOREIRA. M. (2000) what does the Internet bring to pedagogical change in higher education? In Pérez, R (coord.) Multimedia networks and virtual designs. Proceedings of the III International Conference on Communication, Technology and Education. Oviedo University.

[2] LITWIN, E. (2001) "Higher education and new technologies: the Argentine experience". Presentation presented at the international technical meeting on the use of information technologies at the advanced level of advanced education. Seville.

[3] REMEDI EDUARDO (1993) Construction of the methodological structure. In Alfredo Furlan and others. Contributions to the didactics of higher education. UNAM - Mexico.