Digital competences in Teachers of initial police-training in Honduras

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Abstract: This study aimed to determine the pedagogical competencies for initial police training in the National Police Academy in La Paz, Honduras. Methodologically, it is a quantitative approach study in which surveys were applied to a group of 43 civilian and police teachers to collect the data. As a result, three dimensions point out: digital competence, mastery of skills, and low interest in getting trained and familiarized with virtual platforms. In the first one, it does not exist a significant difference reflecting that teachers have a downward development in digital competencies; the second one remembers the low-interest teachers have in developing digital competencies; and the third one recalls that there is a significant difference in which civilian teachers have a teaching advantage within the institution and other organizations.

Key words: Competence, Technology, Interest

1. Introduction

Initial police training in Honduras is subject to two processes, formal and non-formal learning. The first one is held at the National Police Academy of Honduras (ANAPO by its Spanish initials) and the second one at the Technical Police Institute (ITP by its Spanish initial). ANAPO and ITP are key points for teachers who aim to develop modern and digital skills since, with globalization and technology arrival, the public sector is facing updates and modernization, which leads governments to integrate digital tools into their implemented plans (Ramirez, 2012).

That said, technological management is based and founded on applying it to public administration, aiming to contribute to the use of digital tools, which must be focused on the general management's productivity and efficiency and the management of specific tasks in each governmental entity (CEPAL, 2011).

2. Theotherical background

The National Police of Honduras has achieved technological advances as part of institutional modernization, improving the police education system since public institutions

require tools to manage and optimize processes that integrate a global vision in providing services (Rada, Chaverra, Morante, & Mosquera, 2011).

Office Technology, Google Workspace, and virtual platforms are based on procedures that serve as a tool to organize, present and manipulate general information (Gonzales G, 2003). In other words, it allows an organized standardization from any computer or mobile device (Bravo - Acuña, 2012).

3. Method

This study is quantitative of correlational scope for its potential association between variables (Ramírez & Zwerg-Villegas, 2012). An electronic survey was developed, whose Cronbach alpha is .960 >0, a high value to measure the phenomenon expressed from 25 reactors, applied to 43 teachers using a convenience sample (Hernández, 2021), where subjects are chosen according to the researcher's convenience, a Likert Scale was used, consisting of five options to evaluate the competencies domain.

4. Results

According to the results of the research 56% of teachers teach subjects based on non-formal education, while 44% focus on formal education (DES, 1996), Interestingly, 36% of these educators have postgraduate degree studies, enabling them to offer classes to formal and non-formal education programs which sheds light on teachers' varying backgrounds and qualifications in the education system (Poder Legislativo, 2017).

Table 1
Digital competence domain

Type of teacher	N	Mean	Deviation tip	Error típ. Of mean	T Value Sig. Bilateral*
Civilian teacher	17	3.6692	.77396	.18771	0.54 > 0.05
Police teacher	26	3.1704	.82462	.16172	

Table 1 shows that variances are not equal, even though means represent slightly different levels; in its bilateral significance, the T-test takes over no equal variances.

Table 2
Interest in training digital skills among civilian and police teachers

Tye of teacher	N	Mean	Deviation tip	Error típ. Of mean	T Value Sig. Bilateral*
Civilian teacher	17	3.9559	1.05043	.25477	0.43 > 0.05
Police teacher	26	4.1827	.83832	.16441	

Table 2 shows the inequality of variances, which reflects no significant difference in the interest in training technological competencies by civilian and police teacher.

Table 3
Virtual platforms familiarity

Type of teacher	N	Mean	Deviation típ.	Error típ. Of the mean	T Value Sig. Bilateral*
Civilian teacher	17	3.6176	.85749	.20797	0.020 < 0.05
Police teacher	26	2.8269	1.15276	.22607	

According to Table 4, the variances seem equal, which indicates that civilian teachers are indeed honing their teaching skills within the institution, among other institutions. On the other hand, police teachers need to get more acquainted with virtual platforms in the police educational system in Honduras.

Table 4
Item, dimension, percentage, and their desegregated domain

	Domains	$\bar{X}$	%	$\bar{X}$ for dimensión	% for dimensión	$\bar{X}$ global	% global
Hardware	Smartphones as an access to virtual platforms in the educational process	3.19	64%				
	Tablets to improve the teaching- learning process through the use of educational APP	3.21	64%				
	Computers to strengthen skills related to educative developing content	3.72	74%				
	Interactive boards for developing programmed educative content	3.05	61%	3.50	70%		
	Mobile devices as an interactive source of reinforcement out of classes	3.51	70%				
	Audiovisual sources(projector) to develop curriculum spaces inside the classroom	3.90	78%				
	Storage devices (USB and hard drive) to keep educative content	4.07	81%				
Office automatio	Microsoft Word to plan curriculum space and making support documents	3.88	78%				
	Microsoft Excel to control curriculum space grades	3.79	76%	3.85	77%		
	Microsoft Power Point to make presentations for developing master classes	3.88	78%				
Suite de Google	OneDrive as archive storage cloud and classwork documents	3.21	64%				
	Google Drive as storage cloud of assigned classwork documents	3.37	67%			3.36	67%
	APP Google Docs for planning, developing and controlling curriculum spaces	3.05	61%				
	APP Google Sheets to students' grade control	2.98	60%				
	APP Google Slides for developing master classes	3.00	60%	3.02	60%		
	APP de Google books for giving instructions, checking and assigning students 'work	3.07	61%				
	APP de Google classroom for assigning and checking homework also for sharing literature	3.00	60%				
	APP Google Jamboard for topic conceptualization of curriculum spaces	2.51	50%				
P - virtuales	Chamilo Platform for making exams and cumulative tests	3.05	61%				
	Zoom platform for assigning and checking homework of curriculum space	3.26	65%				
	Webex Meet Platform for doing feedback and development of content	3.20	64%	3.10	62%		
	Google Meet Platform for developing content in real time	3.19	64%				
	Cisco Webex Platform for planning and developing of curriculum space	3.07	61%				

It is observed a better domain of the technology office and a moderate domain of other competences that require a collaborative work that incorporate other evaluation methods and the bidirectional interaction between teachers and students and teachers (Barrera & Guapi, 2018) the above could impact in the several communication strategies. (García, Martínez & González, 2015) in the educational field and development of contents.

5. Discussion

Digital tools like PCs, tablets and cellphones are becoming increasingly important and necessary for the achievement of the learning methods. With access to internet among students for treatment and handling the information that contribute with the acquisition of knowledge (Najera, 2014). Domain of digital competences have acquired more importance in the teacher's work, what requires skills and abilities, as well a theoretical background and practice respect to technologies and incorporation to didactics (Cruz & Rama, 2016). It cannot be ignored that higher education has incorporated increasingly digital tools, since 1980, representing a challenge to a significative growth in the access with equity, quality and pertinence in the higher education (Cruz & Rama, 2016).

6. Conclusions

The present study demonstrated that the self-perceived technological competences by the teacher personnel possess a global domain of 3.3 in a scale of 1-5 equivalent to a 67% accented in a higher domain in the use of office technology tools and use of hardware, not so in the handling of other competences.

Regarding to the differences among groups (police and civilian teachers or not uniformed personnel) it is observed that the domain in general and familiarity with virtual platforms is slightly higher in non-uniformed personnel, due to previous interaction in other educational environments, on the other hand the interest for reaching digital domains is more evident in police teachers as an answer to the conceptual and procedural gap.

The unbundle square by technological competences domain shows that it is required a higher effort in the domain of competences linked to on line tools like the google suit and virtual platforms, that are necessary for the development of educational remote experiences.

7. Limitations and future research

No limitation was encountered; however, it is considered convenient to carry out the study again within a period of time and to compare the evolution in terms of the competence's domain.

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