



## Verification of the need to improve the management of student education records in higher education and university establishments using the computer tool (Case of finalist students from the Teachers' Training College of Lubumbashi, 2020- 2021 edition)

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### Abstract

The purpose of the article is to verify the need to integrate the computer tool in the management of the tuition files of the finalist students in order to improve the performance in this matter.

In terms of socio-demographic data, it has been shown that the administrative staff responsible for controlling schooling was mainly made up of agents holding a bachelor's degree, male, aged over 55, with a seniority of more than 15 years and experiencing enormous difficulties in handling the computer tool.

With regard to the computer equipment made available to them, the results of our investigations showed that the said equipment was both dilapidated and insufficient. In addition, our study highlighted network equipment.

The analysis of the files of the finalists of the first cycle and the second cycle during the academic year 2020-2021, made it possible to note that 72.2% of the files checked represented the first cycle and the remaining 27.8% related to the second cycle. By comparing the number of complete files checked with that of incomplete files of the finalists, the results obtained indicated that the incomplete files, because of the absence of the State diploma and/or the graduate, represented 91% in license and 75.4% at the graduate level.

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**Keywords:** using the computer tool, student education records, finalist students

### 1. Introduction

Before enrolling in a Higher and University Education Establishment (HUE), new students learn about the various admission requirements. Among these conditions, there is in particular the one which stipulates that no one is admitted to the first year of the HUE graduate course unless he holds a State diploma or an equivalent qualification (CPE-USU, 2005) <sup>[6]</sup>.

Despite the legal texts that govern HUE in our country and to which each institution complies (MINESU, 2019) <sup>[2]</sup>, it often happens that during the local schooling control in our Establishments we can realize the non-existence of some important documents such as the State diploma in the files of certain finalist students. This causes the search for said documents and in some cases the operation does not lead to the expected result. This state of affairs highlights the difficulties of schooling control in our HUE establishments where the use of computers is not optimal.

Given that, as Alain-Marie (2006) <sup>[1]</sup> very well said, our personal, even professional life, now requires this computer tool. The university administration of developing countries, like ours, cannot improve its plural performance without mastering this tool. This encourages the adoption of new practices through staff training in IT (Romain P, 2018) <sup>[10]</sup>. There is no alternative.

It is in this way that many of the countries of the world have increased the efficiency of their higher education system. Among them, we can cite the USA, Korea, China, Japan, the United Kingdom, Germany and France (Hyun-Chong Lee, 2005)<sup>[4]</sup>. Here, the difficulties to which we have just alluded do not exist and the schooling control takes place very quickly. Added to this is the fact that the cumbersome delivery of diplomas to finalists is no longer a problem in these countries.

In the context of this study, we were particularly interested in the education service of the ISP of Lubumbashi in the DRC. This article focuses on the facilitators of the Ministry of Higher and University Education (HUE) and the students and particularly the staff members of the Teachers' Training College of Lubumbashi responsible for controlling schooling. It begins by identifying resource persons and IT equipment. Then he presents the inventory of the controlled schooling files.

The purpose of the article is to verify the need to integrate the computer tool in the management of the tuition files of the finalist students in order to improve the performance in this matter.

**2. Methods**

To concretely achieve the objective thus defined, we resorted to the method of systemic analysis supported by the techniques of documentary analysis, interview and observation and to process the data collected, we used Microsoft Excel software. 2016. In addition, the observation of local school control scenarios with resource persons was carried out through interview.

**2.1 Study Sites and Sampling**

Our surveys targeted the Teachers' Training College of Lubumbashi which currently has 31 promotions of finalist students, 16 in the 1st cycle and 15 in the 2nd cycle of study, divided into 3 sections: Letters and Human Sciences (LSH), Technical Studies (ES) and Exact Sciences (ES).

The collection of information relating to the schooling control concerned 978 people, divided into two categories: 16 members of the administrative staff and 962 finalist students, in the three aforementioned sections.

The results presented in this study relate to the 2020-2021 academic year and the analysis concerned the following documents: certified copy of the basic diploma (State diploma), diploma/attestation of the 1st cycle for finalist students of the second cycle (license), civil status document, school record, points grid and prize list.

**2.2. Statistical analysis**

The data collected was analyzed using Microsoft Excel 2016 spreadsheet software. Some of the questions asked offered the resource persons a choice of answers, the number of which varied from four to six. The means obtained were subjected to univariate analyzes of variance (ANOVA) with the statistical software XLSTAT-Pro7.5. The independent variables were the studied variables and the need to integrate the computer tool in the management of the finalist students' education files constituted the dependent variable.

**3. Results and Discussion**

**3.1 Identification of resource persons**

Our first results gathered in Table 1 relate to the identification of the members of the administrative staff who made it possible to explain certain observations.

**Table 1:** Census of administrative staff members involved in school control at Teachers' Training College of Lubumbashi

Agent	Sex		Nombre	Age (Years)				Level of studies			IT Training officer	Seniority (Years)			Grade						Professionnel computer use		Interactive use of the internet														
	M	F		30-40	41-50	51-60	61-70	SD	GR	LIC		1-5	6-15	>15	DHS	DIR	HD	OAS I	OAB I	Age range (years)																	
																				30-40	41-50	51-60	61-70	71-80	81-90	>90	30-40	41-50	51-60	>60							
A1	1	0	1	0	0	1	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
A2	1	0	1	0	1	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	
A3	1	0	1	0	0	1	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	0	1
A4	1	0	1	0	0	1	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0
A5	1	0	1	0	0	1	0	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A6	0	1	1	1	0	0	0	0	1	1	0	1	0	0	0	0	1	0	1	0	1	0	1	0	0	1	0	0	1	0	0	1	0	0	0	0	0
A7	1	0	1	1	0	0	0	0	1	1	1	0	0	0	0	0	1	0	1	0	1	0	1	0	0	1	0	0	1	0	0	1	0	0	0	0	0
A8	1	0	1	0	0	1	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A9	1	0	1	0	1	0	0	0	1	0	0	1	0	0	0	1	0	0	0	1	0	0	1	0	0	1	0	0	1	0	0	1	0	0	1	0	0
A10	1	0	1	0	0	1	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A11	0	1	1	0	1	0	0	0	1	0	1	0	0	0	0	0	1	0	0	1	0	0	1	0	0	1	0	0	1	0	0	0	1	0	0	1	0
A12	1	0	1	0	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
A13	0	1	1	1	0	0	0	0	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
A14	0	1	1	1	0	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0
A15	1	0	1	0	0	1	0	0	1	0	0	0	1	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
A16	0	1	1	1	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Tot	11	5	16	5	4	7	2	2	12	2	5	4	7	3	3	1	7	2	3	3	1	3	3	2	5	3	1										
%	68,75	31,25	100	31,25	25	43,75	12,5	12,5	75	12,5	31,25	25	43,75	18,75	18,75	6,25	43,75	12,5	18,75	18,75	12,5	31,25	18,75	12,5	31,25	18,75	6,25										

Legend:

T: true, F: false, SD: State diploma, GR: graduated, LIC: licensed, CF: computer field, Director Head of Services, DIR: Director, HD: Head of Division, OAs: First Class Office Assistant, First Class Office Agent, A: Member of the administrative staff responsible for school control, EPQHUE: Education Project for the quality of Higher and University Education

It emerges from the analysis of this first table that the 16 members of the administrative staff in charge of schooling control were mainly holders of a bachelor's degree (75%), male (68.75%) and aged 60 years and more (43.75%). On the other hand, the most represented age category corresponds to the lowest rates of computer use at work (12.5%) and Internet use (6.25%). At the time, agents who had been hired for at least 15 years represented 43.75% of the total workforce. In terms of grades, the rate of Heads of Services and Directors is 37.5% and that of ATB1 is 43.75%. The low rate of computer use at work and Internet use could be explained by the majority presence of very old administrative staff members belonging to a generation of people very little attracted to efficient digital manipulation, who have worked for a long time without a computer tool and are finding it extremely difficult to adapt to the evolution of digital technology. These results corroborate those of Makumbu (2021)<sup>[8]</sup> operational manager of the EPQHUE project who found that older Congolese teachers had more difficulty integrating Information and Communication Technologies (ICT) in the transmission of their teaching units. Than young teachers, whereas in LMD the use of ICT is not an option, but an obligation.

With regard to age and seniority, two categories represented in each case 75% of the subjects surveyed, the first being the oldest people (43.75%) and the youngest, those whose age oscillates between 30 and 40 years (31.25%). In the second

case, the same percentages, 43.75% and 31.25%, corresponded respectively to the oldest and youngest subjects in the career. These findings are identical to those of the OMS (1993)<sup>[9]</sup> and those of Thomas Genty (CSA, 2018)<sup>[12]</sup> based on the equipment and its use.

We have identified a relationship between the rate of computer use at work and Internet use and age and seniority [ $F(4.1879)=9.0$ ;  $p<0.001$ ]. Former and older agents do indeed have great difficulty using computers and the internet.

The results in Table 1 show more men than women. Our survey concerned 5 administrative staff (that is 31.25% and 11 administrative staff (that is 68.75%). It is good to encourage girls to go to school. It would also be better for them to take management studies. Administration and school inspection training to compensate for this lack of female presence. These results corroborate those of Kasanya *et al* (2022)<sup>[7]</sup> who had found that the proportion of female chemistry teachers in the science option in Lubumbashi schools was higher. Lower than that of male teachers that is 40.0% against 60% of male teachers.

### 3.2. IT equipment and user offices

Secondly, we were interested in counting the different offices in which the 16 members of the administrative staff concerned by this study work as well as in the inventory of the computer equipment available in each of these offices.

**Table 2:** Census of computer equipment in the five offices concerned by the schooling control

Services	Agent				Active IT equipment							
					Computer				Imprim./photocop			
	M	F	Tot	Tot	Seniority (years)		Tot	Seniority (years)		Tot	Seniority (years)	
					<5	>5		<5	>5		<5	>5
Academic Secretariat	2	0	2	1	0	1	1	1	0	0	0	0
Coordination of Academic Services	1	0	1	1	0	1	0	0	0	0	0	0
Registration and education	4	3	7	2	0	2	0	0	0	0	0	0
Academic affairs	3	1	4	1	0	1	0	0	1	0	0	0
Archives et Diplomas	1	1	2	0	0	0	0	0	0	0	0	0
Tot	11	5	16	5	0	5	1	1	1	0	0	0
%	68,8	31,2	100	100	0	100	100	100	100	0	0	0

A reading of Table 2 indicates horizontally that there is no IT equipment in the Archives and Diplomas Department. Similarly, vertically, it highlighted the total absence of network equipment in all the offices concerned by the schooling control.

With regard to the presence of other computer equipment, this table shows that the 5 computers available at the office of the Academic Secretariat, at the Coordination of Academic Services, at the Registration and Education Department and

at the Academic Affairs Department have seniority of more than 5 years. In addition, we identified two printers/copiers: one of the same age available at the Academic Affairs Department and another less than 5 years old at the Secretariat.

In table 3 below are gathered two types of data, namely: the number of finalist students in the 1st cycle by section, by sector and by gender as well as the status reports of the student files checked during the academic year 2020-2021.

### 3.3. Inventory of checked school records

**Table 3:** Number of finalist students checked in the 1st cycle and the status of their files at the ISP in Lubumbashi during the year 2020-2021

Section	Option	Number of students checked in the first cycle			Inventory of checked records							
					Complete			Incomplete				
		M	F	Tot	M	F	Tot	ME	M	F	Tot	
Literature and Human Sciences	EAC	49	45	94	22	16	38	SD	27	29	56	
	FAL	36	27	63	2	5	7	SD	34	22	56	
	FT	4	4	8	1	1	2	SD	3	3	6	
	HSS	7	3	10	0	0	0	SD	7	3	10	
	s/tot	96	79	175	25	22	47	128	SD	71	57	128
Technical Studies	DM	13	8	21	0	0	0	SD	13	8	21	

	MASTI	23	33	56	1	2	3	SD	31	31	62	
	HT	0	10	10	0	0	0	SD	10	10	20	
	HOT	1	15	16	0	3	3	SD	12	12	24	
	CM	72	120	192	24	50	74	SD	70	70	140	
	NT	53	22	75	19	7	26	SD	15	15	30	
	CAS	30	20	50	0	0	0	SD	20	20	40	
	s/tot	192	228	420	44	62	106	314	SD	148	166	314
	Exact Sciences	AVETS	8	0	8	3	0	3	SD	5	0	5
BC		17	9	26	3	1	4	SD	14	8	22	
CP		14	3	17	3	2	5	SD	11	1	12	
PESM		9	0	9	1	0	1	SD	8	0	8	
GEM		15	4	19	3	1	4	SD	12	3	15	
MCS		7	3	10	1	0	1	SD	6	3	9	
MP		10	1	11	0	0	0	SD	10	1	11	
IT		0	0	0	0	0	0	0	0	0	0	
Phys		0	0	0	0	0	0	0	0	0	0	
s/tot	80	20	100	14	4	18	82	SD	66	16	82	
Tot		368	327	695	83	88	171	524	SD	285	239	524
	LHS	54,9	45,1	100	14,3	0,0	14,3	40,6	40,6	45,1	85,7	
	TS	45,7	54,3	100	10,5	14,8	25,2	35,2	35,2	39,5	74,8	
	ES	80,0	20,0	100	14,0	4,0	18,0	82,0	66,0	16,0	82,0	

LHS: Literature and Human Sciences, TS: Technical Studies, ES: Exact Sciences, EAC: English-African Culture, FAL: French-African Languages, FT: French-Latin, HSS: History-Social Sciences, DM: Design and Multimedia, MASTI: Management and Administration of Schools and Training Institutions, HT: Hospitality and Tourism, CM: Computing Management, NT: Networks and Telecommunications, CAS: Commercial and Administrative Sciences, AVETS: Agro-Veterinary Sciences, BC: Biology-Chemistry, CP: Chemistry-Physics, PESM: Physical Education Sports Management, GEM: Geography and Environmental Management, MCS: Math-Computer Science, MP: Math-Physics, IT: Info-Technology, Physics, SD: State diploma, SE:missing element.

From this third table of results, several interesting observations emerge, among which we can note the following:

1. The highest and lowest numbers of finalist students correspond respectively to the technical studies section (420/695) and to the exact sciences section (100/695), so that 60.7% and 14.4% respectively of the total workforce.
2. The number of complete files is far lower than that of incomplete files at the level of each of the three sections: 171/695 (24.6%) in the first case and 524/695 (75.4%) in the second case.
3. All cases of incomplete files are characterized by the absence of a single document, the state diploma.

The inadequacy and dilapidation of the computer equipment available in the offices of the personnel responsible for

controlling schooling could be explained by the limited means of the establishments of Higher Education and University and the low subsidy that the government makes available to them. Logically, this state of affairs causes heaviness in the search for documents involved in the control of student education. Therefore, it is not surprising to find in the various services under study the manual operation supplanting the digital operation and the absence of telematics infrastructure. Here too, our considerations agree with those of the literature relating to the investigations carried out by TH Beguin and J-M. Reber (Neuchâtel, 2003)<sup>[11]</sup> on the one hand and Francisco Marmolejo (OCDE, 2007)<sup>[3]</sup> on the other. In these data from previous investigations, it is shown in particular that higher and university education was struck by a remarkable insufficiency of computer equipment.

**Table 4:** Number of finalist students checked in the 2nd cycle and the status of their files at the ISP in Lubumbashi during the year 2020-2021

Section	Options	Number of students checked in the second cycle		Inventory of checked records									
				Complete				Incomplete					
		M	F	Tot	M	F	Tot	Missing elements		M	F	Tot	
Literature and Human Sciences	EAC	14	14	28	0	0	0	SD	GD	14	14	28	
	FAL	19	18	37	1	0	1	SD	GD	18	18	36	
	FT	2	1	3	0	0	0	SD	GD	2	1	3	
	HSS	7	1	8	0	0	0	SD	GD	7	1	8	
	s/tot	42	34	76	1	0	1	75	SD	75	GD	41	34
Technical Studies	DM	0	0	0	0	0	0	AUCUN	AUCUN	0	0	0	
	MASTI	13	5	18	1	1	2	SD	GD	12	4	16	
	HT	0	0	0	0	0	0	0	0	0	0	0	
	HOT	2	6	8	0	0	0	SD	GD	2	6	8	
	CM	35	22	57	5	5	10	SD	GD	30	17	47	
	NT	14	8	22	0	0	0	SD	GD	14	8	22	
	CAS	12	10	22	0	0	0	SD	GD	12	10	22	
s/tot	76	51	127	6	6	12	115	DE	115	GD	70	45	115
Exact Sciences	AVETS	5	1	6	2	0	2	SD	GD	3	1	4	
	BC	16	3	19	2	0	2	SD	GD	14	3	17	
	CP	9	1	10	1	0	1	SD	GD	8	1	9	

	PESM	5	0	5	0	0	0	SD	GD	5	0	5		
	GEM	3	3	6	0	0	0	SD	GD	3	3	6		
	MCS	5	3	8	2	1	3	SD	GD	3	2	5		
	MP	6	0	6	1	0	1	SD	GD	5	0	5		
	IT	0	0	0	0	0	0	0	0	0	0	0		
	Phys	4	0	4	2	0	2	SD	GD	2	0	2		
	s/tot	53	11	64	10	1	11	53	SD	53	GD	43	10	53
Tot		171	96	267	17	7	24	243	SD	243	SD	154	89	243
%	LHS	55,3	44,7	100	1,3	0,0	1,3	53,9		98,7	53,9	44,7	98,7	
	TS	59,8	40,2	100	4,7	4,7	9,4	55,1		55,1	55,1	35,4	90,6	
	ES	82,8	17,2	100	15,6	1,6	17,2	82,8		82,8	67,2	15,6	82,8	

Legend: GD= Graduate diploma.

In addition to the observations already made in the table relating to finalist undergraduate students, the files of undergraduate students are supplemented by two particularities below:

1. In all incomplete files, there is absence of State diplomas and Graduat;
2. The overall rates of incomplete bachelor's files (243/267, or 91%) are far higher than those recorded for the graduate (524/695, so that 75.4%).

To enable us to detect the origin of the absence of State diplomas and/or Graduat in the files of the majority of finalists submitted to our investigations; we were interested in the years during which the diplomas found in the complete files had been delivered to their bearers after having completed the humanities and/or the first cycle.

Since the normal duration of graduate studies is three years, we considered the period from the year 2000 to the year 2018. The results recorded are recorded in Tables 5 and 6.

### 3.4 Chronological overview of basic diploma editions

**Table 5:** Breakdown by section, sector, gender and year of issue of state or basic diplomas available in complete undergraduate files in 2021

Faculty	Option	Sex	Number	Years of edition																		
				2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000
Literature and Human Sciences	EAC	M	22	5	6	1	0	1	2	0	1	0	2	1	0	0	1	1	0	0	1	0
		F	16	7	5	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0
		s/tot	38	12	11	2	0	1	2	0	1	0	4	1	0	0	1	1	0	0	2	0
	FAL	M	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		F	5	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		s/tot	7	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	FT	M	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		F	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		s/tot	2	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	HSS	M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		s/tot	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
tot	M	25	7	6	1	0	1	2	0	2	0	2	1	0	0	1	1	0	0	1	0	
	F	22	10	8	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0	
	s/tot	47	17	14	2	0	1	2	0	2	0	4	1	0	0	1	1	0	0	2	0	
Technical Studies	DM	M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		s/tot	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	MASTI	M	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		F	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		s/tot	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	HT	M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		s/tot	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	HOT	M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		F	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		s/tot	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	CM	M	24	7	10	4	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	
		F	50	26	20	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	
		s/tot	74	33	30	7	0	1	0	2	1	0	0	0	0	0	0	0	0	0	0	
	NT	M	19	5	6	4	0	1	0	0	1	2	0	0	0	0	0	0	0	0	0	
		F	7	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		s/tot	26	10	8	4	0	1	0	0	1	2	0	0	0	0	0	0	0	0	0	
CAS	M	9	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	F	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	s/tot	12	10	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		

Exact Sciences	tot	M	53	21	18	8	0	2	0	2	1	2	0	0	0	0	0	0	0	0	0		
		F	15	10	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		s/tot	68	31	22	8	0	2	0	2	1	2	0	0	0	0	0	0	0	0	0	0	
	AVETS	M	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	
		F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		s/tot	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	
	BC	M	3	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		F	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	
		s/tot	4	1	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	
	CP	M	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		F	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		s/tot	5	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	PESM	M	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		s/tot	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	GEM	M	3	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
		F	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		s/tot	4	1	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
	MCS	M	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
s/tot		1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
MP	M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	s/tot	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
IT	M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	s/tot	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Phys	M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	s/tot	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
tot	M	14	6	3	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0		
	F	4	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0		
	s/tot	18	9	3	3	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	0		
Tot	M	92	34	27	12	0	3	2	3	3	2	2	1	0	0	1	1	0	0	2	0		
	F	41	23	12	1	0	0	0	0	0	0	2	1	0	0	0	0	0	0	1	0		
	tot	133	57	39	13	0	3	2	3	3	2	4	2	0	0	1	1	0	0	3	0		
%	LHS	M	53,2	100	42,9	50	0	100	100	0	100	0	50	100	0	0	100	100	0	0	50	0	
		F	46,8	100	57,1	50	0	0	0	0	0	0	50	0	0	0	0	0	0	0	50	0	
	TS	M	77,9	100	81,8	100	0	100	0	100	100	100	0	0	0	0	0	0	0	0	0	0	
		F	22,1	100	18,2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	ES	M	77,8	100	100	100	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	100	0
		F	22,2	100	0	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0

It emerges from the examination of Table 5 that the State diplomas found in the complete files of the finalist graduate students during the year 2020-2021 concern several years of edition:

- In the Letters and Human Sciences section, there are eleven years (2001, 2004, 2005, 2008, 2009, 2011, 2013, 2014, 2016, 2017, 2018) out of nineteen considered.
- In the Technical Studies section, the number of years of publication of these diplomas amounts to six (2009, 2010, 2014, 2016, 2017, 2018) out of the total number of

nineteen years selected.

- Likewise, in the Exact Sciences section, only six years were identified (2001, 2008, 2012, 2016, 2017, 2018).

It is also interesting to note that in the three sections of the ISP of Lubumbashi (LHS, TS and ES), almost all of the State diplomas examined relate to the years 2016, 2017, 2018. These three years correspond 109 State diplomas out of the 133 examined, so that 82%.

**Table 6:** Breakdown by section, sector, gender and year of publication of the numbers of basic diplomas available in the complete files for the 2nd cycle in 2021

Faculty	Option	Sex	Number	Years of edition																		
				2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000
Literature and	EAC	M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		s/tot	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	FAL	M	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		s/tot	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
F	M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	



ET	M	50	100	0	50	0	0	0	0	0	0	0	0	50	0	0	0	0	0	0	
	F	50		0	50	0	0	0	0	0	0	0	0	0	50	0	0	0	0	0	0
SE	M	90,9	100	0	75	0	100	50	100	100	0	100	0	0	0	0	0	0	0	100	0
	F	9,1		0	25	0	0	50	0	0	0	0	0	0	0	0	0	0	0	0	0

As can be seen in Table 6, no graduate degree was recorded in the three sections (LSH, ET and SE) with regard to the files of finalist students for the year 2020-2021. On the other hand, the twenty-four basic diplomas (State diplomas) concern eight years (2016, 2014, 2013, 2012, 2011, 2009, 2008, 2001) and are distributed among these three sections as follows:

The LSH section is concerned by a year (2008) during which only one basic diploma was recorded, so that 4.2% of the total number (24) of diplomas inventoried in the license cycle.

The ET section is concerned by two years (2008, 2016) during which 12 out of 24 basic diplomas were listed, so that 50%.

As for the SE section, seven years were noted (2001, 2009, 2011, 2012, 2013, 2014, 2016) during which 13 basic diplomas were recorded, so that 54.2%.

By examining the files of the finalist students of the first and second cycle of the academic year 2020-2021, we realized that at the level of the third graduate (tables 3 and 4), out of a total of 695 files only 171 (so that 24.6%) were complete. All the remaining 524 incomplete files (so that 75.4%) were characterized by the absence of a State diploma. Similarly, at license level, out of the 267 files processed, only 24 (so that 9%) were complete. Here, the missing elements were the State diploma and the graduate diploma that the Ministry of EPST and that of ESU deliver late. This could be explained by the virtual absence of digital operations and telematics infrastructures in public administration in general and the schooling control service in particular (Tables 5 and 6).

We have identified a relationship between the inadequacy and dilapidation of the computer equipment available in the offices of the staff responsible for controlling schooling and the delay in the delivery of diplomas by the Ministry of ESU [ $F(4, 1879) = 9.0; p < 0.001$ ].

The inadequacy and dilapidation of the computer equipment available in the offices of the staff responsible for monitoring education at the ISP in Lubumbashi actually contribute in one way or another to the delay in the delivery of diplomas. These results corroborate those of Wertsch (1994)<sup>[14]</sup> who observed that countries with a deficit in terms of digitization experienced delays in the delivery to the destination of the documents resulting from the certification evaluation.

#### 4. Conclusion

Our research entitled "Verification of the need to improve the management of student education records in ESU establishments using the computer tool (case of finalist students from the Higher Pedagogical Institute of Lubumbashi; Edition 2020-2021)" has the general objective of verifying the need to integrate the computer tool in the management of the tuition files of finalist students in order to improve performance in this area, we can retain in conclusion the points above.

In terms of socio-demographic data, it has been shown that the administrative staff responsible for controlling schooling was mainly made up of agents holding a bachelor's degree, male, aged over 55, with a seniority of more than 15 years. And experiencing enormous difficulties in handling the computer tool.

With regard to the computer equipment made available to them, the results of our investigations showed that the said

equipment was both dilapidated and insufficient. In addition, our study highlighted network equipment.

The analysis of the files of the finalists of the first cycle and the second cycle during the academic year 2020-2021, made it possible to note that 72.2% of the files checked represented the first cycle and the remaining 27.8% related to the second cycle.

By comparing the number of complete files checked with that of incomplete files of the finalists, the results obtained indicated that the incomplete files, because of the absence of the State diploma and/or the graduate, represented 91% in license and 75.4% at the graduate level.

This article has demonstrated that the lack of digitization is one cause among many others of the delay in the delivery of state diplomas, we believe that other researchers could determine the causes of the low rate of use of computers in the work and internet usage.

#### Hints

After incriminating the deficit in digitization, the delay in the delivery of state diplomas and some insufficiencies at the level of the ISP of Lubumbashi, we proposed to all the educational operators of our country to fight against the shortcomings noted in this study by promoting digitization and the permanent training of the administrative staff of the ESU Establishments.

We ask students not to forget to put themselves in order vis-à-vis the establishment because of certain academic events such as its conferment of academic degrees

Given the need to digitize the management of student education records in higher education establishments, we suggest that managers invest in advance in computer and telematics equipment likely to meet the functional needs of said establishments to control the operations of enrollment and schooling (MINESU, 2010). Which, with the help of the appropriate tools, will facilitate the management of student tuition files (MINESU, 2021).

We encourage girls to go to school and also to opt for studies in management, administration and school inspection training to compensate for the lack of female presence in the school control service.

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