

**RESEARCH ARTICLE**

Engineering

# Teacher Professionalization and Training Management: What Job Reference(s) and Professional Skills in a Real Work Situation?

## Nueva Gestión Pública de las Escuelas AREF Casa-Settat: Limitaciones y Mejoras de Desempeño

Mohamed Choukrallah<sup>1</sup> | Mustapha Bassiri <sup>1,2</sup> | Said Belaouad<sup>1,3</sup> | Said Benmokhtar<sup>1,3</sup>

<sup>1</sup>Laboratory of Physical Chemistry of Materials, Ben M'Sik Faculty of Sciences, Hassan II University of Casablanca, Morocco.

<sup>2</sup>Multidisciplinary Laboratory in Education Sciences and Training Engineering, Normal Superior School (ENS) Hassan II University, Casablanca, Morocco.

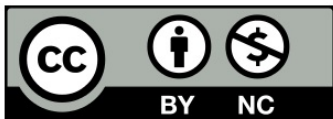
<sup>3</sup>Regional center for education and training Casablanca, Morocco.

**Correspondence**

Mustapha Bassiri

Email: [bassiri.mustapha@gmail.com](mailto:bassiri.mustapha@gmail.com)

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**Abstract.** Professionalization seems to have a positive impact in the construction of professional identity, in the sense that its process constitutes a powerful integrative vector for future teachers in the socio-professional context. The study would analyze the constraints that hinder this process of university professionalization at the ENS of Casablanca, among students of the third year "professional license: Teaching of physical education and sports" in a situation of pedagogical internship. Through a quantitative descriptive methodological survey approach based on a questionnaire designed through the literature review, we targeted a sample composed of 120 students – trainees (58% students / 42% students), 30 tutors in internship and 20 trainers. The variables evaluated are the hourly volume of internships, the teaching skills of student-trainees, the coordination between the actors in internships, the supervisory skills of tutors in internships, the modalities of training and socio-professional support. The data is analyzed by an analysis of variance. Our results showed the insufficient hourly volume devoted to the internship and the negative influence of the heterogeneity of skill levels between trainees (intragroup) on socio-professional construction, as well as the lack of coordination between internship actors and the lack of basic skills among trainees and tutors in internship in terms of teaching and supervision that hinders the process of professionalization and collective construction professionalizing. We retain through this study that professionalization is multifactorial in its process of operationalization. It is necessary to overcome all the constraints that hinder this approach for cost-effective and integrative training.

**Keywords:** Professionalization, Training, Internship, Professional competence.

## Resumen

La profesionalización aparentemente tiene un impacto positivo en la construcción de la identidad profesional, dado que su proceso constituye un poderoso vector integrador para los futuros docentes en el contexto socio-profesional. El estudio analizaría las limitaciones que dificultan este proceso de profesionalización universitaria en la ENS de Casablanca, entre los estudiantes del tercer año "Licencia profesional: Enseñanza de la educación física y el deporte" en situación de pasantía pedagógica. A través de un enfoque de encuesta metodológica descriptiva cuantitativa basada en un cuestionario diseñado a partir de la revisión de la literatura, nos dirigimos a una muestra compuesta por 120 estudiantes - practicantes (58% estudiantes / 42% estudiantes), 30 tutores en prácticas y 20 practicantes. Las variables evaluadas son el volumen horario de pasantías, las habilidades docentes de los estudiantes-practicantes, la coordinación entre los actores en pasantías, las habilidades de supervisión de los tutores en pasantías, las modalidades de formación y apoyo socio-profesional. Los datos se analizan mediante un análisis de varianza. Nuestros resultados mostraron el insuficiente volumen horario dedicado a la pasantía y la influencia negativa de la heterogeneidad de los niveles de habilidad entre los pasantes (intragrupo) en la construcción socioprofesional, así como la falta de coordinación entre los actores de la pasantía y la falta de habilidades básicas entre los pasantes. y tutores en prácticas en materia de docencia y supervisión que dificulta el proceso de profesionalización y construcción colectiva profesionalizante. Retenemos a través de este estudio que la profesionalización es multifactorial en su proceso de operacionalización. Es necesario superar todas las limitaciones que dificultan este enfoque para una formación rentable e integradora.

**Palabras clave:** Profesionalización, Formación, Prácticas, Competencia profesional.

## Resumen

AAD Self-Digested Learning es una estrategia de aprendizaje orientada al sujeto actor, capaz de reconfigurar sus recursos de forma autónoma y responsable. Esta última permite concebir el proyecto de acción personal y colectivo de manera consciente y resonada. ADA ofrece a los estudiantes adultos la oportunidad de planificar y gestionar sus recursos, colaborar con sus compañeros para desarrollar competencias culturales, metodológicas y tecnológicas. Sin embargo, la implementación de un enfoque centrado en AAD depende de la experiencia andragógica y pedagógica, mediante el manejo de la complejidad de la situación de enseñanza-aprendizaje desde el modelado y la personalización de una familia de situación de aprendizaje diferenciada y personalizada a las necesidades y estilos de aprendizaje de los estudiantes adultos.

Al mismo tiempo, las tendencias andragógicas actuales continúan pregonando el uso de un enfoque de aprendizaje para la reflexividad y la autogestión de proyectos de acción personal y colectiva. Identificar la familia de situaciones problemáticas de autogestión puede ayudar a los alumnos a adquirir estas habilidades. Sin embargo, la mayoría de los esquemas de formación académica privilegian los enfoques expositivos y magistrales en detrimento de los enfoques andragógicos, solicitando el poder de análisis, reflexión y gestión de los propios procesos de aprendizaje.

**Palabras clave:** profesionalización, Training, Internship, Professional competence.

## 1 | INTRODUCTION

The findings affirm that immersion internships are at the heart of university training from a professionalization perspective (Doublet, 2010) . The main mission of the actors responsible for supervising and supervising internships is to develop content and activities in practice settings [1]. This training system for students will be developed and implemented during the training course, it takes into account the new orientations of the Ministry for university vocational training (Reform of the Moroccan education system, strategic vision 2015-2030) . Alternance has been a permanent concern in the history of training systems [2]. Over the decades,

alternance training has largely developed at the heart of the professionalization process and its impact goes far beyond socio-professional learning [3]. Professionalization is intimately linked to the establishment of a business reference system focused on adapting to the world of work [4].

There are major differences between the academic context and that of the profession, which are not governed by the same rules and do not present the same issues. Collaboration between the different partners is difficult as long as the objectives are divergent. The internship is sometimes designed schematically, the conceptions of learning differ according to the trainers and tutors in internship. Thus, we note a discrepancy between the prescribed reference framework of alternance training and training activities in real situations of internship (Reform of the Moroccan education system, diagnosis of strategic vision 2015-2030). Our research would therefore focus on studying the constraints that hinder the process of professionalization; case of students of the professional license "Teaching of physical education and sports" at the ENS of Casablanca in a context of internship situation and construction of professional skills (qualifying high schools). Therefore, what are the main constraints that fight against the operationalization of the professionalization process for students at the end of the training course? To what extent are the actors in the sphere of supervision organized themselves to make the process of professionalization operational and profitable?

This study is aimed directly at trainee students, tutors in internship, trainers and pedagogical supervisors of the "EPS" department at ENS Casablanca in order to improve the path of professional training of trainee students and to accompany future laureates by trying to master the different concepts and activities of accompaniment / and or reflective professionalization to the learning of the trade. In this perspective, we make the following assumptions:

- A1: The lack of inter-stakeholder coordination and the breakdown of collaboration and standardization of internship modalities hinders the process of professionalization.
- A2: The style of socio-professional support adopted by the training institution (ENS) neglects the foundations of integrative alternation.
- A3: The lack of mastery of professional coaching skills by tutors in internship obstructs the process of accompaniment and reflective professionalization to the learning of the trade.

## 2 | CONCEPTUAL FRAMEWORK

### 2.1 | Definition of professionalization

According to the strategic vision of the reform of the Moroccan education system (2015-2030), professionalization is defined as a set of strategies, measures and action leading to the transformation of a professional activity into an organized, recognized profession that produces specific goods or services. Social rules governing the profession and defining its requirements in terms of its exercise and its products [5]. To better understand this notion and its interest as a finality, we take up the interpretation of [6]. For him "professionalization" hides three different meanings. The second is of particular interest to us. It concerns "the professionalization of actors, in the sense of both the transmission of knowledge and skills (considered necessary to exercise the profession) and the construction of a professional ». Professionalization is therefore a process of training individuals in the contents of an existing profession [7]. Training a professional then goes through stages aimed at the construction and/or acquisition of elements such as knowledge, knowledge, abilities, skills [8].

### 2.2 | Criteria for professionalization

Doublet (2010) considers seven criteria that confirm that an individual is professionalized:

1. It takes relevant initiatives in complex and evolving situations.
2. It follows the evolution of the state of the art of the trade.
3. It anticipates and does not let slip any important dimension of the problem situation.
4. It implements relevant professional practices, mobilizes appropriate resources.
5. It cooperates effectively and calls on the necessary external resources.
6. He draws lessons from experience to transpose and transmit.
7. It acts in accordance with a service ethic.

### 2.3 | Ways of professionalization

To arrive at the result of "professional", I would take [9] which shows six possible ways of "professionalization". Stating them in this work will make it possible to find a common path involving all the actors, it being understood that the actor automatically concerned is the student because he is the actor of his professionalization.

The first way is the way of "logic of" It takes place in a professional situation (for example in internship) which is generally known. But when it presents a new character, the individual adjusts his behavior accordingly often unconsciously. Each time this new situation takes place, the individual will reproduce or amplify this behavior.

The second way is "the logic of reflection and" The individual makes a change of behavior during the realization of a new task, in a conscious way, by the reflection he leads in the action. The third way is the "logic of reflection on » Individuals retrospectively analyze the action to better understand it. Through this awareness of his actions, in particular through the analysis of practices, he builds "knowledge about action". The fourth way is the « of reflection for » It is a phase of early reflection in order to foresee a change in action. The fifth way is the "of cultural translation in relation to". In this case, a third party, usually the tutor, accompanies the action and helps to transmit his knowledge while forcing to see the action differently.

The sixth way of professionalization is « logic of integration ». In this situation, the individual uses more documentary resources, readings, knowledge, exercises to develop his abilities. It is therefore a path not turned on the action itself, of the individual but on the theory.

Professionalization is therefore the process expected of the path(s) that the student-intern will take to become a professional. The two notions come together in this process: (to be) to train is to acquire skills to professionalize through the action that is done in internship and the reflection that is brought by the theory (Integrative Alternation) [10].

### 2.4 | Pedagogical dimension of professionalization

[11] conceives of professionalization as a construction of professionalism through contact with reality, its constraints, its problems and its learning in the field. Beyond that, the pedagogical dimension considers places and methods of professionalization [12]. This dimension therefore consists in analyzing the modalities of construction of the determinants of professionalism or competence and aims at the invention of new modes of training that allow the acquisition of all dimensions of competence and cognitive and socio-emotional schemes [13]. It is a question of constructing a complex real representation and a relational interaction and a representation of oneself [14]. There is a structural link between the concept of professionalization and that of competence, as Fernagu-Oudet (2010) puts it the "professionalization-competence couple". For [15] professionalization is the set of actions that transform an individual into a professional able to play a role in complex professional configurations. It should be noted in this sense that the different dimensions and strategies covered by professionalization appear and complement each other as know-how is no longer sufficient to make individuals more professional. Thus, the evolution of conceptions of professionalization leads us to consider that the op-

positions inherent in the definition of professionalization pose in particular the problem of the nature of the knowledge to be acquired: knowledge acquired in training opposed to professional know-how, general knowledge aimed at versatility against those aimed at specialization [16]. In this register, professionalization carries a double constraint of scientific validity and usefulness to society. Thus, professionalization varies according to the disciplines and the diversity of epistemological profiles/regimes involved. This is how two visions of professionalization coexist while opposing each other within the European university area. They are often described as "academic" and "professional":

The academic conception concerns a general training of the individual, based mainly on essentially descriptive scientific knowledge resulting from "fundamental" research and aimed at the exercise and access to the profession. This option seeks adaptation, versatility, even innovation before immediate technical efficiency and specialization. For [17] there are three opposing and even clashing dimensions in the conceptions of professionalization: research, training and exercise and access to the profession.

The conception of a professionalizing perspective requires a more specific training built on rather prescriptive knowledge (technical knowledge or applied sciences) aimed more directly at the exercise and / or access to the profession.

The process of professionalization is used to describe the processes by which a person obtains a professional qualification through initial training, and then develops in a work situation, skills that will allow him to:

## 2.5 | Criteria for professionalization

Doublet (2010) considers seven criteria that confirm that an individual is professionalized:

1. Implement more effectively the capacities acquired through initial vocational training.
2. Acquire complementary and essential professional skills to cope with real work situations.

In this case, the term professionalization is taken as a synonym for vocational training (professionalizing). This process that we have just described has been regularly disrupted because there is a gap between the prescribed work as it is taught through training and the actual work performed (Internship situation).

To measure the different factors of the study, we recommended a mixed methodological survey approach mobilizing both quantitative and qualitative methods, through a questionnaire and focus groups that aim to better understand and identify the main constraints that hinder the operationalization of professionalizing practice, these measuring instruments are intended for students – trainees; internship tutors and trainers. The aim is for these key actors to present feedback on their internship experiences with a view to identifying strengths and weaknesses as well as lessons learned from this professional experience. The study was conducted after the end of the pedagogical internship period between March and April 2021, through a questionnaire with the targeted sample. In addition, the results are presented by means, frequencies, percentages through an analysis of variance.

### 2.5.1 | Sampling and participant characteristics

**TABLE 1** Distribution of the study sample by number (%), age and institution of belonging.

		Number	%	Age	Specialty / Sector	Institution of belonging
Sample	Students-trainees	120	70,6	[20 – 23 years]	EPS	ENS from Casablanca(3rd year)
	Internship tutors	30	17,6	[26 – 60 years]	EPS	Provincial Directorate HAY HASSANI (Qualifying High School)
	Trainers	20	11,8	[42 – 60 years]	EPS	ENS from Casablanca

The sample is composed of 120 students – trainees (70.6%) of the 3rd year professional license "Teaching EPS" at the ENS of Casablanca aged 20 to 23 years; 30 tutors in internship (17.6%) of the provincial direction HAY HASSANI (AREF Casablanca – Settat) aged from 26 to 60 years; 20 trainers of the ENS of Casablanca aged 42 to 60 years.

The questionnaire targeted six axes composed of a set of items to analyze and to understand the main constraints that hinder the operationalization of professionalizing practice: Effect of the hourly volume of the internship, effect of the heterogeneity of levels between trainees, effect of trainees' teaching skills, effect of coordination between trainees, effect of supervisory skills of tutors in traineeship, effect of socio-professional support methods.

A focus group was conducted with the help of a structured discussion with trainers and tutors in internship according to the axes and questions of the study. The information gathered made it possible to validate and deepen the analysis of the different pillars of professionalization and the constraints that hinder the success of its process of building professional skills. The measuring instruments were validated by six trainers from ENS (UH2C) and six PE pedagogical inspectors from AREF Casablanca – Settat.

## 3 | RESULTS AND DISCUSSION

### 3.1 | Effect of the hourly volume of the internship

**TABLE 2** Sufficiency of the hourly volume of the internship.

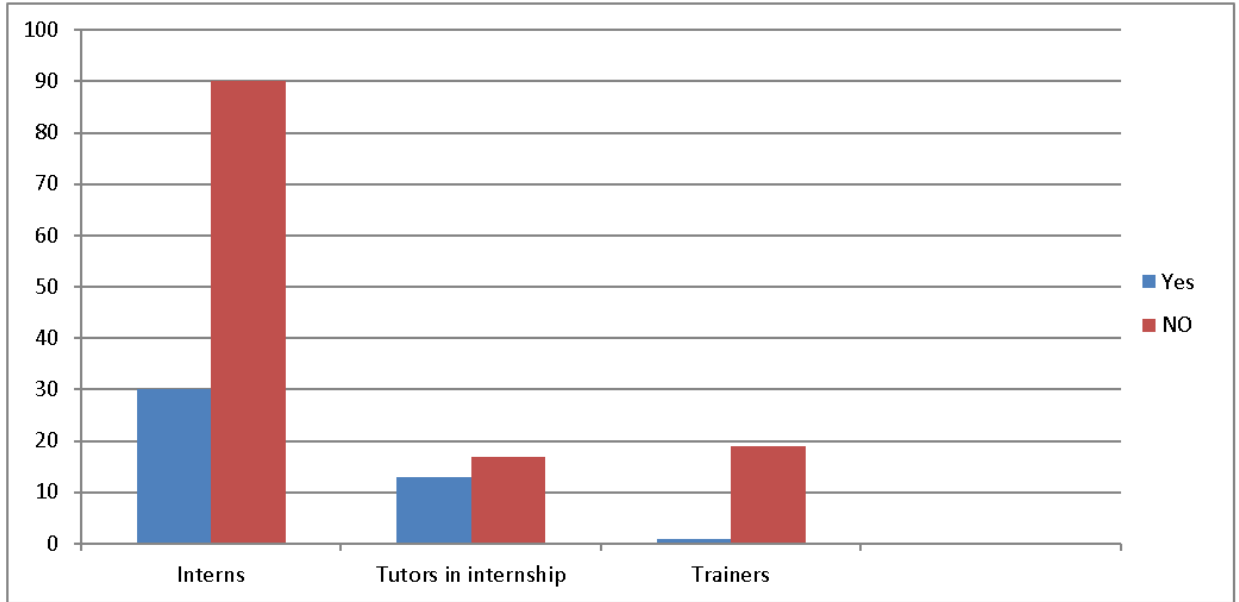
		Categories of actors in internship							
		Interns		Tutors		Trainers		Total	
		N	(%)	N	(%)	N	(%)	N	(%)
Sufficient hourly volume	Strongly disagree	100a	83,3%	15a	50%	2b	10%	117	68,8%
	Disagree	20a	16,7%	11a	36,7%	9a	45%	40	23,5%
	No opinion	0	0,0%	9a	13,3%	0	0,0%	9	3,8%
	Tend to agree	0	0,0%	0	0,0%	9a	45%	9	3,8%
	Totally agree	0	0,0%	0	0,0%	0	0,0%	0	0,0%

"a and b. Significant difference between categories."

It emerges from our study that there is a significant harmonization between the actors in internship concerning the sufficiency of the hourly volume of the implementation of professional activities. Indeed, trainees (100%) and tutors in internship (86.7%) confirmed the inadequacy of the hourly volume of the internship, as well as 55% of trainers approve of this result which hinders the operationalization of the professionalization process.

These results are in line with the research conclusions of several authors concerning the need to adopt an integrative alternation approach based on reflective practice throughout training sessions with an overlap between the hourly volumes of professional activities and theoretical situations for a real regulation and construction of professional skills (Doublet, 2010).

### 3.2 | Effect of heterogeneity of levels between trainees



**FIG. 1** Intensity of negative influence of skills heterogeneity between trainees.

Reviews of the literature indicate that too much heterogeneity of skills in an internship group can cause a subgroup of "Competent" students and marginalization of other members, this approach can fight against equity and equal opportunities in the paradigm of professionalization and knowledge construction – professional acting [4].

The results of our study confirm the presence of this professional constraint which they show that there is a consensus between the three actors in internship (75% of trainees / 60% of tutors in internship / 95% of trainers) regarding the negative influence of the heterogeneity of skills between students – trainees on equality and equity in the construction of professional skills.

### 3.3 | Effect of trainees' teaching skills

Our study showed that there is a significant agreement between the judgment of tutors in internship and trainers in terms of students' mastery of teaching skills – trainees whose mastery of the following skills it found to be insufficient:

- Methodological skills (74% of evaluation actors)
- Communication skills (58% of evaluation actors)
- Technological skills (84% of evaluation actors)

In general, the results of our study are in line with the research findings. carried out in certain French-speaking countries, of which they explained more that the professional skills frameworks of teachers – trainees

require a set of didactic, pedagogical, methodological, communicational and technological skills in order to mobilize them in situations - problems - professional [1]. Therefore, the implementation of an engineering of a basic training device for students is a professional requirement, with the aim of perfecting the process of professionalization.

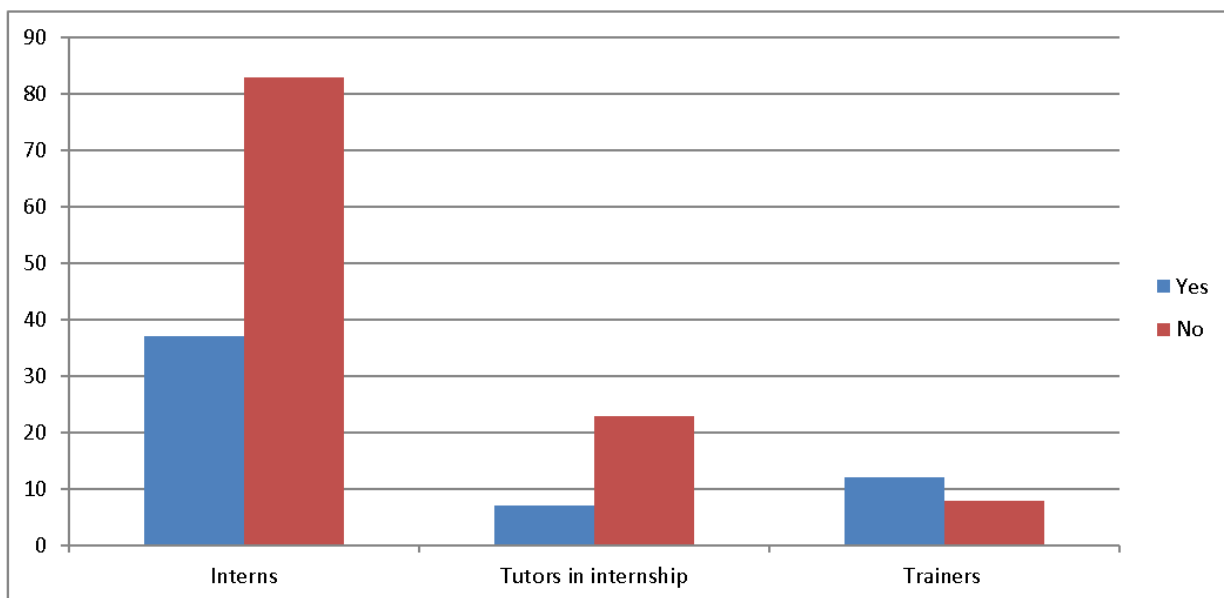
**TABLE 3** Sufficiency of the hourly volume of the internship.

			Evaluation of actors in internship					
			Tutors		Trainers		Total	
			N	(%)	N	(%)	N	(%)
Mastery of teaching skills (Trainees)	Didactic skills	Yes	10a	33,3%	15b	75%	25	50%
		No	20a	66,7%	5b	25%	25	50%
	Pedagogical skills	Yes	25a	83,3%	18a	90%	43	86%
		No	5a	16,7%	2a	10%	7	14%
	Methodological skills	Yes	7a	23,3%	6a	30%	13	26%
		No	23a	76,7%	14b	70%	37	74%
	Communication skills	Yes	11a	36,7%	10a	50%	21	42%
		No	19a	63,3%	10b	50%	29	58%
Technological skills	Yes	3a	10%	5a	25%	8	16%	
	No	27a	90%	15a	75%	42	84%	

a and b. Significant difference between categories

### 3.4 | Coordination effect between actors in internship

The results of some surveys have shown that the operationalization and efficiency of the professionalization process is based on the harmonization and conjunction of efforts between the various actors in internship around a framework of professional skills extended to the conceptualization of a praxeological training program for stakeholders in the socio-professional field to unify supervision and training activities.



**FIG. 2** Degree of harmonization and coordination between internship actors.

In our study, the majority of trainees (68.3%) and tutors on internship (73.3%) confirmed the lack of inter-stakeholder coordination. This break in collaboration and standardization of internship modalities profoundly

hinders the logic of professionalization and construction of professional skills.

### 3.5 | Effect of the supervisory skills of tutors on internships

**TABLE 4** Evaluation of the supervisory skills of tutors in internship.

			Evaluation of actors in internship					
			Interns		Trainers		Total	
			N	(%)	N	(%)	N	(%)
Mastery of supervisory skills (Tutors)	Pedagogical engineering skills	Yes			4	20%	4	20%
		No			16	80%	16	80%
	Andragogic skills	Yes			4	20%	4	20%
		No			16	80%	16	80%
	Methodological skills	Yes	20a	16,7%	10b	50%	30	21,4%
		No	100a	83,3%	10b	50%	110	78,6%
	Communication skills	Yes	65a	54,2%	11a	55%	76	54,3%
		No	55a	45,8%	9a	45%	64	45,7%
Technological skills	Yes	92a	76,7%	13a	65%	105	75%	
	No	28a	23,3%	7a	35%	35	25%	

a and b. Significant difference between categories

The results of the study showed that there is a significant consensus between the judgment of trainees and trainers with regard to the mastery of professional coaching skills by tutors in internships, who have detected the lack of mastery of the following skills:

- Pedagogical engineering skills (80% of evaluation actors)
- Andragogic skills (80% of evaluation actors)
- Methodological skills (78.6% of evaluation actors)

The results of our study are in line with the conclusions of the literature reviews which confirm that the competency frameworks of the teaching professions require tutors on internships a set of skills to be built through continuous and solid training organized by the training institution for the mastery of the various concepts and activated of accompaniment and reflexive professionalization to the learning of the trade [18].

## 4 | EFFECT OF SOCIO-PROFESSIONAL SUPPORT ARRANGEMENTS

The internship modality in our socio-professional context is mainly based on a single closed session at the end of the training period, obviously a classic and juxtapositive form of application. While the modality of integrative alternation seems to be the most congruent to build socio-professional skills and develop a reflective professional practice because it requires an arsenal of trial and error followed by reflection on the results of the action (Practice - Theory - Practice), which requires a lot of time (throughout the period of university training) in the appropriation and regulation of knowledge - professional action (Doublet, 2010).

## 5 | CONCLUSION AND OUTLOOK

The purpose of this study was to question and investigate the epistemological, didactic and organizational problems that hinder the objectives of professionalization in the university training of students of the third

year "Professional License: Teaching PE" (Future Teachers) and to consider changes in training engineering and pedagogical engineering and to experiment a priori with its forms of professionalizing learning. In this regard, the study targeted six axes to analyze and understand the main constraints that hinder the operationalization of professionalizing practice: Effect of the hourly volume of the internship, effect of the heterogeneity of levels between trainees, effect of trainees' teaching skills, effect of coordination between actors in internship, effect of supervisory skills of tutors in internship, effect of socio-professional support arrangements. Professionalization is a powerful lever for socio-professional, personal and organizational development. The articulation and complementarity of theoretical academic training and the situation of practice of the profession is central to the management of the training of trainee teachers in its complexity. This reality also leads to stimulating the actors of training and professional situations to combine a logic of social trajectory with a logic of learning, as well as the construction of social legitimacy and professional identity. The constraints that hinder this process of professionalization challenge the pedagogical community – university (ENS de Casablanca / AREF) to improve the training system according to a collaborative approach between the professional partners (head of structure and professional tutor) and articulate the training systems with a partnership coordination of the two fields of activity, this logic of professionalization directly refers us to pose the the problem of the operationalization of the foundations of integrative alternance in university vocational training.

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