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Towards the development and validation of a framework for pedagogical competencies in Moroccan higher education: An exploratory study using the Delphi method

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Abstract: *The question of the professionalization of teachers and their pedagogical development has been the subject of numerous research projects in the educational sciences for more than twenty years, it seems more than ever topical in the context of the Moroccan university, a real engine of the economy and social cohesion which, under the constant pressure of the massification of its teaching staff making it difficult to structure university pedagogy (Romainville & Rege Colet, 2006), but also of the "new demands that the knowledge and knowledge society now addresses to its higher education" (Romainville, 2006, p. 4). 9), is undergoing a major change which is not without effect, in particular on the transformation of the conditions of practice of the university teaching profession and the organisation of its career, as well as on the relative distribution between research and teaching tasks. So shouldn't these university professors be given points of reference so that they become confirmed professionals in pedagogy? It is in this perspective that we conducted an exploratory Delphi study with 25 experts in higher education to develop and validate a framework of teaching competencies in higher education needed to exercise the profession of university professor in Morocco. The framework was established and validated in a consensual way during the various rounds, a convergence of answers was indeed identified thanks to the Delphi methodology. After three rounds, the rating change was minimal, so the results were considered stable.*

***Key Words*: Delphi method, University professor, professionalization, HRM, Teachning competencies framework.**

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1. INTRODUCTION

The university is made up of men and women who constitute its potential, strength and wealth. Allowing this potential to fully express itself requires attention, political priority, means, structures, in other words, management of the teaching resource. This presupposes, moreover, the recognition of the involvement of teacher-researchers in the various missions entrusted to them; this recognition finds, however, its limits in the definition of their statutes by the Moroccan public institution based mainly on the principle of professional bureaucracy.

Today, a trend is leading the public service to transform itself according to a competency-based approach and university teachers could be targeted by this trend. The main advantage of this approach is that it "depersonalizes" the recruitment, training and assessment process, that is, it focuses on the competencies required for the position or competencies that an individual should possess to inquire about his or her tasks and fulfill his or her function rather than on the quantitative or qualitative measure of the individual's ability to achieve the goals that have been set. Thus, assessment from a competency perspective should focus more on developing the required skills and perception becomes more developmental and less administrative, which would contribute to making feedback more accepted and used by the target individual (Brassard, 2009; Foucher, 2009). Therefore, the competency-based approach also allows for greater individual accountability since it focuses primarily, if not exclusively, on individual development. It is therefore perceived more as non-threatening (Brassard, 2015).

In Morocco, the absence of a reference frame of competences justifies the relevance of developing one, the teaching and research profession is changing, new tools are appearing, the student population is more numerous, more varied, more heterogeneous in its expectations and in its experience. It is therefore necessary to increase the motivation and involvement of these teachers in the life of the school, to adapt their teaching practices to changes in the university, work habits and mentalities, to assume their missions and the various aspects of their activity under good conditions, in order to be able to exercise their profession most effectively and therefore meet the requirements of the profession, society and students' expectations. The latter should be trained to become well-informed and deeply motivated citizens, with a critical mind, capable of analysing problems, seeking solutions to society's problems, applying them and accepting social responsibilities.

The objective of this study is to design a reference framework of pedagogical skills for Moroccan teacher-researchers whose main purpose is to "serve as a reference, a guide, to enable individuals to whom it is addressed to structure their professional development" (Nancy Brassard, 2012), insisting on their pedagogical skills which remain "the fundamental competence of a university level teacher's profile". He would simply like to place pedagogy at the heart of the teaching-learning processes in higher education institutions. Also, it could serve as a basis to guide human resources management activities such as: recruitment, training, evaluation, career management etc, and meet certain needs of the target individual. Among other things, it responds to the need for information, expression, progress and recognition, but above all to the enhancement and improvement of the attractiveness of the teaching and research profession at university.

These skills were the subject of an exploratory qualitative study using the Delphi technique whose main objective was to verify the relevance of the skills selected following our literature review with 25 Moroccan experts in the field of higher education; it thus made it possible to better define the pedagogical skills reference model that we are seeking to develop.

The remainder of the paper is organized as follows: the second section presents an overview of the selected literature review. The third section focuses on the methodology and context of the research. The fourth and fifth sections expand on the results of the Delphi survey and the discussion. The sixth section concludes.

2. RESEARCH INSIGHTS ON COMPETENCY FRAMEWORKS IN HIGHER EDUCATION

2.1 Concept of competencies reference frame:

A competency framework describes a particular combination of knowledge, skills and characteristics required to perform effectively in the organization. It serves as a human resource management tool for selection, training and development, evaluation and succession planning (Lucia and Lepsinger, 1999). The competency framework is a pyramid whose foundation is represented by inherent talents and incorporates types of skills and knowledge that can be acquired through training, effort and experience. Lucia and Lepsinger (1999) propose a specific set of behaviours at the head of their competency pyramid, which are the manifestation of all innate and acquired abilities.

A competency framework can be defined as a detailed description of the skills, characteristics and behaviours that an employee must master in the performance of his duties (Mansfield, 1996), Draganidis and Mentzas (2006) define the competency framework as "A narrative description of the competencies for a targeted job category, occupational group, division, department or other unit ofanalysis" (p. 55).

Competency identification is designed as a process to discover how competencies are needed for exemplary or successful performance. A competency framework or model is therefore a list of competencies resulting from the observation of satisfactory or exceptional performance in a specific situation (Draganidis and Mentzas, 2006). The competency framework is generally seen as a mechanism to link human resource development to organizational strategies. It can thus be a descriptive tool for identifying the knowledge, skills and behaviours required to ensure effective performance in a role to assist the organization in achieving its strategic objectives (Le Deist and aL, 2005, cited by Naquin and Bolton, 2006).

Having a competency framework is important because it identifies the competencies that employees need to develop to perform well in their current job or to prepare for other future roles. It can also be used to compare acquired skills to those required by individuals or the organization (Draganidis and Mentzas, 2006). By linking

individual competencies to the competencies desired by the organization, competency frameworks contribute to the success of training and development programs (Naquin and Holton, 2006).

Thus, instead of focusing on the work to be done, the notion of competence leads to a focus on the person as a whole, who is therefore seen as the author of a high performance. Individuals are no longer seen as people qualified for the jobs they do but as the people with the skills they need to mobilize (Lawler, 1994). The analysis of activities in terms of skills also makes it easier to identify proximity to jobs and to identify the employability of individuals within the company.

2.2 Development of competencies repositories

Competency models or repositories are an important component of the instrumentation accompanying the deployment of a competency approach. These instruments are the result of different approaches and have a variable content. This is illustrated by the following description. Notwithstanding its summary nature, it provides an overview of additional contributions relating to various issues inherent in the development of a competency framework:

1) The application of an information gathering approach, allowing to have the model or reference frame on solid bases;

2) Choosing a general or specific perspective to delimit the content of the model or repository;

3) The characteristics taken into account to constitute the skills reference frame;

4) The unit of reference which is considered, either the individual or the work, which is the basis of the model or reference.

As Tigelaar et al (2004) indicate, the development of competency frameworks for higher-education teaching is generally not based on an explicit theory or methodology. The process of their development is only specified in two of the cases identified here: Smith and Simpson (1995), and Tigelaar et al (2004). These authors used the DELPHI method which relies on the expertise of peers. This method consists of bringing together a panel of experts in a given field with the aim of submitting an object to them in order to build consensus on the issues submitted to them. Smith and Simpson (1995), for example, assembled a panel of university teachers who were considered experts to evaluate a competency framework they had previously developed. This reference framework contains, for each of its competences, a "consensus" rating, obtained following the evaluations during the expert meetings. In all other cases, there is an absence of an explicit methodology for the construction of repositories bearing on the teaching skills that academics must acquire.

2.3 The contribution of the work relating to the university teacher's reference frames of competencies:

The competencies of university teachers are mainly formulated within the framework of competency frames of reference. These standards are discussed at conferences specializing in university pedagogy, professional associations and university pedagogy centres. The bibliographical references examined in the table below therefore include all the work developed in this sense:

Table 1. University teacher competency frameworks

FRAME OF REFERENCE	OBJECT
HERSDA1 (1992)	7 pedagogical "macro-skills" divided into 47 competencies, formulated in the form of questions.
Smith et Simpson (1995)	34 "core" competencies of the university teacher.
AIPU Montréal (Parmentier, 1999)	10 skills classified into three dimensions: pedagogical, institutional and socio-professional.
Tigelaar et al. (2004)	134 competencies divided into 5 fields.
Higher Education Academy (2005)	17 skills divided into 3 dimensions
Theall et Arreola (2006)	24 competencies
Centre d'appui pour l'enseignement (2010)	67 competencies divided into 11 families
ÉNAP (Brassard, 2012)	10 competencies
RCFE (Réseau Roman de conseil de Formation et d'évaluation)	10 competencies

The competency frameworks presented in the table above record what is expected of the university teacher, usually in the form of affirmative, sometimes interrogative statements (HERSDA, 1992). The university teacher competency frameworks identified here are not standardized. They range from 10 competencies (Parmentier, 1999; Brassard, 2012) to 134 competencies (Tigelaar et al., 2004). The breakdown and categorisation of competences are carried out in an idiosyncratic manner with specific terminology. Each institution appears to have developed and adopted a model that has been defined according to its own needs.

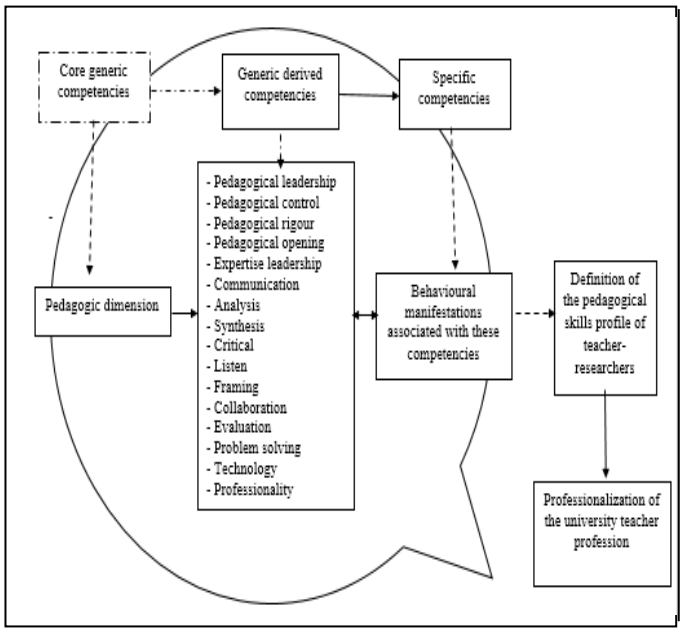
For our research, we drew on the two reference models for academic teaching competencies proposed by Parmentier (2005) and Brassard. N (2012) which appeared very useful to us because of their global representation of teaching and their general relevance as well as their approach to the Moroccan context. Using the

[1] HERDSA - Higher Education Research and Development Society of Australasia (1992). Challenging conceptions of teaching: Some prompts for good practice. Retrieved Sept. 2005 from http://www.herdsa.org.au/CCT.php

10 competencies defined by Parmentier and the university teacher competency profile developed by Brassard, N (2012) we continued our efforts to identify and reorganize competency dimensions and concepts in order to "exhaust" ideas relevant to teaching.

The basic model, illustrated in Figure 1 below, presents the chosen approach to our research problem. Each of the blocks of this model has been selected precisely.

Fig 1. Research Model



At the end of this review, two types of gaps appear in the literature in the field of academic skills development. The first concerns the definition of competences. Indeed, the literature is unsatisfactory on the following two questions:

- What teaching skills (in the strict sense) are academics required to develop?
- What methodology is used to construct the reference frames and define the competencies that we want teacher-researchers to acquire?

Further research should investigate these issues.

The questions that have emerged from the gaps in the literature make it possible to guide the structuring of a theoretical framework for the design of a reference framework for the pedagogical skills of academics in Morocco, a problem in this research. In the light of these elements, how can the Moroccan teacher-researcher be defined in terms of professional identity and teaching skills to be developed? What behavioural indicators will be used to judge the degree of achievement of each of these competencies?

3. RESEARCH METHODOLOGY AND CONTEXT

This work aims to identify the pedagogical skills necessary for the exercise of the profession of teacher-researcher in Morocco with a view to designing a reference framework of skills whose main objective is to serve as a basis for the professionalization of HRM practices (recruitment, training, career management, etc.), the enhancement and improvement of the attractiveness of the profession.

We are not seeking to determine an exhaustive list of these competencies but rather a list of those that are considered most relevant in the eyes of higher education experts in Morocco.

This research is similar to an analysis of the teaching and research profession in Morocco and is compatible with the approach suggested by Catano et al (2001) to identify the skills required for the exercise of various functions. It is also consistent with various studies conducted in Great Britain (Calveley, 2005; Maud, 2001; MSC in Winterton and Winterton, 1999; Roger and Philip, 1997; MCl in Berman Brown, 1994) and the United States (Boyatzis, 1982; Lucia and Lepsinger, 1999; McClelland, 1973; Parry 1996; Spencer and Spencer, 1993) in which competence is seen as a requirement that can be established as a result of an analysis of the outputs to be produced.

The objective of this work is to see if there is convergence in the responses of these experts. Intuitively the most suitable method for probing the existence of convergences in expert opinions would be to use the Delphi technique to better define and adapt the competency framework model that we developed following our literature review.

The degree of agreement or disagreement they express in relation to all the competences identified allows us to identify the existence of possible convergences in opinions. The Delphi method responds to this problem and allows a preliminary validation of the content of our skills list and its adaptation to the Moroccan context. The usefulness of this method and its origins will be presented in the following sections. We will then justify the choice of this method in the context of this thesis before presenting the approach adopted for its use.

3.1. The Delphi method

Initially developed in the 1950s, the use of the Delphi method came from the experimental research conducted by Dalkey and Hamler (1963, cited by Clayton, 1997) for the RAND Corporation, they called it at the time "Delphi Project". It was designed to apply expert opinion to the selection of an optimal target system for the US military industry, reports Clayton (1997). It is a method of dealing with opinions, not objective facts, through the technique of iterative feedback from a group of experts (Schmidt, 1997).

The Delphi method is a systematic and formal questioning method for making predictions by expressing rational opinions on questions where there is no absolute answer, notes leronciq (1983). It consists of administering questionnaires iteratively (usually three or four successive iterations) to previously identified experts. Each expert, depending on the sequential information identified at each stage of Delphi, can either maintain his judgment, or modify it and so on.

he Delphi method is particularly useful when the researcher is faced with ambiguous problems, low availability of empirical data, an incomplete theoretical basis or a high level of complexity (Jones, 1978, cited by Bordeleau, 1997). Some experts use the Delphi method to develop models and identify causal relationships between complex organizational phenomena (Linstone and Turoffe, 1975, cited in Bordeleau, 1997). It requires consideration of the different aspects of the problem (Ieronciq, 1983); this is why the method favours the systematic use of people who have an excellent knowledge of the environment in which the problem is located. It should be added that this qualitative method is relevant when the problem does not lend itself to specific analytical techniques but can benefit from subjective judgment made on a collective basis (Marlaidakis and Wheelwright, 1974, cited by Nadeau, 1982).

The Delphi method is a versatile research tool that can be used to select or define research questions. Researchers can use it to develop a theory (Okoli and Pawlowski, 2004). First, it can help researchers identify variables and generate proposals. Second, the participation of experts with extensive experience in their field allows researchers to consolidate the empirical observations on which their theory is based. The third advantage is that the Delphi method can contribute to the validity of the construct since it depends on a clear definition. In short, the Delphi method is a relevant tool for exploratory studies.

3.2. How to use the Delphi technique

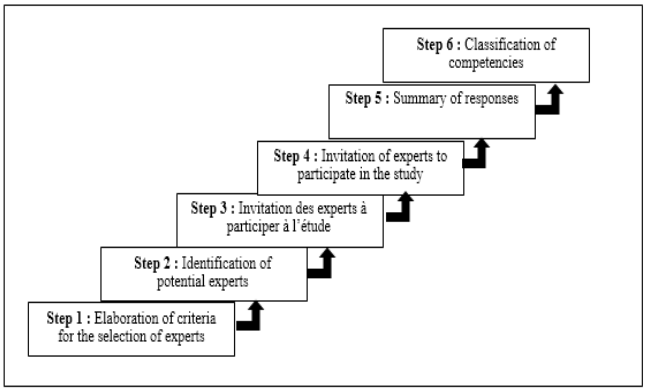
Several application schemes have accompanied Delphi studies since its inception by the RAND corporation (Brancheau, et al. 1996; Nambisan et al. 1999; Hayne and Pollard, 2000 ;

Mulligan, 2002; Holsapple and Joshi, 2002...). Some of these patterns have been criticized, in particular for the lack of rigour in developing their definitions (Schmidt, 2001). This author was one of the first to propose a step-by-step methodology for driving a Delphi. Later, Okoli & Pawlowski (2004) propose improvements to Schmidt's (2001) work.

They emphasize in their work, the importance of the choice of experts and the determining role they play in the validity of Delphi. Drawing on their work (Schmidt & al. 2001; Okoli & Pawlowski, 2004) we defined the steps of our own Delphi (see Table 1).

Figure 2 shows the research strategy we used to use the Delphi method. This consists of 6 steps which can be divided into two phases: one preparatory, from 1 to 3, and the other relating to the actual implementation, steps 4 to 6.

Fig 2. Delphi Method Search Strategy



- **Step 1: Definition of the criteria for the selection of experts**

During this stage, we contacted the heads of the respective institutions: The Higher Council for Education, Training and Scientific Research (CSEFRS), the National Centre for Scientific and Technical Research (CNRST) and the National Agency for the Evaluation and Quality Assurance of Higher Education and Scientific Research (ANEAQ) in order to request their support and collaboration to carry out our Delphi survey. To do this, we asked them to provide us with lists of persons acting as higher education experts in their institutions who might agree to participate in our Delphi study.

We have chosen two main criteria to make their selection:

- Be an expert in one of the organizations: CSEFRS, CNRST or ANEAQ ;
- Minimum 5 years of experience as an expert;
- Be familiar with the competence approach and understand the context of the teaching and research profession in Morocco.

- **Step 2: Identification of potential experts**

Taking these criteria into account, we were able to compile a list of experts from the three above-mentioned bodies, with a solid and long experience of intervention in the field of higher education, who would be able to provide us with information in the study of this theme. In order to complete this pool of resource persons, we decided to associate representatives of the National Union of Higher Education in Morocco (SNESup) to this study in order to have their opinions, and who would have the following two characteristics: the status of teacher researcher, grade PES (professor of higher education); a thorough experience in the union.

Table 2. Profile of the experts participating in the Delphi study

	CSEFRS			CNRST			ANEAQ		SNESup		
Number of experts	12			8			2		3		
Years of practice as an expert	5 to 10 years	10 to 15 years	15 to 20 years	5 to 10 years	10 to 15 years	20 to 25 years	5 to 10 years	10 to 15 years	10 to 15 years	15 to 20 years	20 to 25 years
	58,3%	25%	17%	50%	37,5%	12,5%	50%	50%	33,3%	33,3%	33,3%
position	Expert member of CSEFRS			Expert of CNRST – University professor			Expert of ANEAQ _ University professor		Member of SNESup National Office – University professor		

- **Step 3: Invitation of experts to participate in the Delphi study**

Following the identification of potential experts, we contacted them by letter of invitation. These contacts were made by telephone or e-mail. Many of the people contacted declined our invitation, however, due to time constraints, and suggested names of others who could help us. At the same time, we have contacted representatives of the National Union of Higher Education who have several years of experience in the field of higher education.

Of the 40 people we contacted, 25 agreed to participate. Given the nature of the expertise sought, we considered this number sufficient. Subsequently, and due to the requirements of the Delphi technique (several iterations) and the multiple concerns of the experts who agreed to participate in this study, we suggested that they conduct the study by e-mail to optimize the time they generously gave us.

Subsequently, reminder letters were sent to experts who were slow to respond to our request. After a few days of waiting and in order to avoid keeping those who had agreed to participate waiting, we decided to start the Delphi study with the 25 experts whose collaboration we had received confirmation of.

- **Step 4: Experts' reactions to the competency framework**

In this second phase, we first sent an email thanking each of the experts who agreed to participate in our study. Subsequently, we sent them a second email to which we attached a preliminary terms of reference. We have stated that this is the result of our literature review and that it is only a starting point. In doing so, we wanted to provide them with a tool to initiate exchanges and lead to the identification of the pedagogical skills required for the teaching and research profession in Morocco by placing pedagogy -as being the fundamental competence of the profile of a university teacher- at the heart of the teaching-learning processes. We asked the experts to comment, accept, remove, add and/or reword the content of this document with particular emphasis on the factors (derived generic pedagogical competencies) and the statements associated with them (specific competencies). We also asked them to comment on the relevance of the proposed factors.

- **Step 5: Summary of responses**

At each iteration, we summarize the comments from all the experts before returning them all. In the second formulation of the framework, we added two new columns, one to summarize previous comments in relation to each statement and the other to ask for their new reactions and proposals. The experts' comments on each statement are written in a different colour in this summary for ease of reading. In addition, general comments or suggestions (covering the entire model) are summarized in an introduction that we have added to the terms of reference.

- **Step 6: Classification of competencies**

In the light of all the comments and agreements that emerged from the different iterations, we drew up a list of competences including the various suggestions, modifications and additions of the experts. All expert comments were taken into account to improve the wording and content of the competency statements; where consensus was not reached, the majority of experts were favored in making changes.

The results of this Delphi study are presented in the following section on the presentation of results.

4. RESULTS OF THE DELPHI METHOD

4.1 First round: sending the terms of reference to participants

In 2020 the year of completion of this study, we sent from the outset to participants a copy of our framework of reference and the definition of the competency we had chosen, mentioning that this framework constituted a working document that they could question, modify and complete. We asked them to pay particular attention to the generic derived competencies and the specific competencies associated with them (statements associated with each competency). More specifically, in relation to the preliminary framework, participants were asked to comment primarily on the "generic derived competencies" and "specific competencies or actions to be taken" columns. We also told them that they could give their opinion on whether the statements belonged to each of the jurisdictions.

Participants' reactions, comments and suggestions were summarized. However, some of the comments made by the experts were general in scope and sometimes went in different or even opposite directions. That is why we have prepared a separate note to summarize them.

4.2 Second round of the Delphi study

In the second round, we submitted a new document for the experts' attention. This includes the addition of a new page to the terms of reference that presents the summary note. In the latter, we presented the general

observations of the experts and asked them to react, once again, to them. We also indicated in this note that we added two columns to the competency framework, one to summarize the comments from the first round in relation to each statement and the other to collect new reactions. Due to the large number of comments and suggestions, we have presented each dimension on a separate page for ease of reading by participants.

The experts continued to provide comments and suggestions. Some proposals were accepted by the other members and did not give rise to new comments. For example, the two comments from the first round, which stated that the competency model contains too many statements and that they should be reduced, particularly in the pedagogical dimension, did not give rise to further exchanges among participants. Despite the reminder to participants, no comments were made and we considered that the experts who made these comments had abandoned them. In addition, during this second round, the experts marked several agreements (OK) in the column that we had newly created, which was reserved for new suggestions. On the other hand, remarks referring to ambiguity or vagueness in a formulation were supported.

4.3 Last round of the Delphi study (round 3)

In terms of methodology, it should be recalled that we added two new columns to the reference framework submitted to the experts, starting with the second iteration. The first was used to summarize the various comments or suggestions of the participants; the second was reserved for the reactions of the experts to these comments and suggestions. After summarizing the experts' comments and presenting the changes and additions suggested by their peers, we reported on the changes made to the initial competency framework.

These modifications were of two types: suggestions proposing new statements: in total, 48 statements were added by the experts, changes aimed at deleting items or changes to their content and/or wording to make them more explicit and adapt them to the Moroccan context. It should be noted that certain statements were considered imprecise in the context of the practice of the profession, vague or lacking in clarity. The experts questioned their wording without making any suggestions. To answer these questions, we modified these statements to make them more explicit, clearer and better adapted to the target individuals.

After having adjusted our competency framework and having gathered all the experts' comments during the first two rounds of the survey by adding, deleting or improving the names given to pedagogical competencies, we then sought, in a third round, to give a rating of the new list of competencies by evaluating the experts' final degree of agreement on each of the derived and specific generic competencies on a Likert scale (from 1 to 5) in order to quantify the degree of consensus among the participating experts.

4.4 Delphi Study Data Analysis

The objective of our Delphi-type exploratory study is to measure the consensus of the experts which includes on the one hand the evaluation of the degree of individual agreement of the participants with the proposals under consideration, typically measured from the collection of the opinion of each participant by means of a numerical or categorical scale; on the other hand, the evaluation of the overall agreement between the participants, typically measured by statistical indicators of central tendency (average or median) and dispersion calculated at group level. The RAND Foundation in the United States proposes to use an ordered scale of 5, 7 or 9 points, where 1 represents the lowest agreement and 5 (in our case) the highest. A simpler criterion is to seek a minimum proportion of overall agreement, usually between 51 and 80% (often 70% or 75%), or even simple stability over several turns.

In our study, consensus was defined as agreement among participating experts on the assessment of the relevance of an item (generic or specific competencies) of the questionnaire. 75% was taken as a minimum percentage of agreement on a given item (Murry and Hammons 1995). To calculate consensus, scores 1 and 2 were calculated as (totally) irrelevant 3 on average, and 4 and 5 as (very) relevant. This implies that in this study, an item is considered (very) relevant when 75% of participating experts rate it with a score of 4 or 5.

In this section, we will first analyze the descriptive data obtained for the 14 derived generic competencies for the Likert scale. On the other hand, for practical reasons, we will content ourselves with identifying the most striking elements for the 143 items (specific skills). We will examine the average of each item of the questionnaire as well as its standard deviation while focusing on the most striking values.

After analyzing our Likert scale of data with descriptive statistics, we will then proceed to analyze the frequency by displaying the distribution of each response category on a table to see if the percentage of consensus (75%) among the experts was reached or not.

4.4.1 Generic derived pedagogical competencies

4.4.1.1 Descriptive analyses

Table 3 shows that the average scores for each of the 14 generic derived pedagogical competencies for all experts (25 respondents) are close for almost all items, ranging from 3.92 to 4.76 for the relevance scale. This shows that the 14 generic derived competencies are considered very relevant by participants.

As for the standard deviation of these 14 items, we note that there is no great difference between the participants' responses for these items, since the smallest value (0.436) for the ninth skill of the first pedagogical dimension (Supervision) and the largest

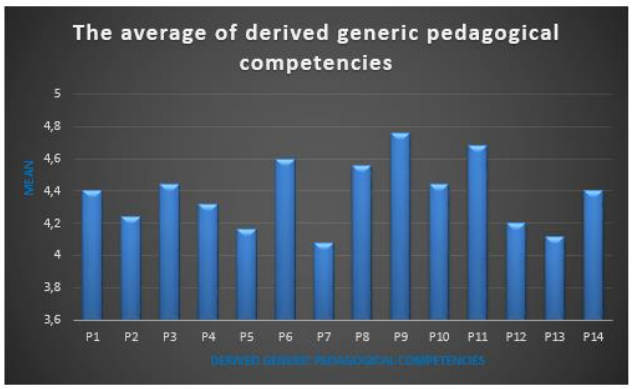
standard deviation (0.759) for the item representing the seventh skill of the same dimension (Synthesis), which indicates that their responses rotate around the mean.

Table 3. Descriptive statistics of derived generic pedagogical competencies

	N	Minimum	Maximum	Sum	Mean	Standard déviation	Variance
P1	25	3	5	110	4,40	,645	,417
P2	25	3	5	106	4,24	,663	,440
P3	25	3	5	111	4,44	,712	,507
P4	25	3	5	108	4,32	,748	,560
P5	25	3	5	104	4,16	,746	,557
P6	25	4	5	115	4,60	,500	,250
P7	25	3	5	102	4,08	,759	,577
P8	25	4	5	114	4,56	,507	,257
P9	25	4	5	119	4,76	,436	,190
P10	25	3	5	111	4,44	,651	,423
P11	25	4	5	117	4,68	,476	,227
P12	25	3	5	105	4,20	,707	,500
P13	25	3	5	103	4,12	,666	,443
P14	25	3	5	110	4,40	,577	,333
N valide (liste)	25						

As Figure 3 clearly shows, which graphically presents the average of the respondents for each of these twenty-six items (derived generic competencies), the highest averages are those of competency P9 (Management) of the first pedagogical dimension (Mean = 4.76) and that of competency P11 (Evaluation) of the same dimension (Mean = 4.68).

Fig 3. The Average obtained for each derived generic competency



4.4.1.2 Frequency analysis: number of expert respondents by scale level

The aim of our Delphi-type exploratory study is to develop and validate a framework of reference of competences of teacher-researchers in Morocco with experts in higher education until reaching a consensus (global agreement) on the relevance of the competences proposed and approved by the said experts.
Before starting our Delphi study, consensus was defined as an overall agreement percentage of 75%, i.e. if at least 75% of the participating experts consider the items presented to be relevant or very relevant (rating score of 4 or 5 on a Likert scale) these competencies will be considered valid (consensus reached), otherwise they will be omitted.

As can be seen in Table 4, the consensus of experts on the relevance of derived generic competencies is reached for all items. The majority of participating experts (at least 75%) found the following teaching skills to be very relevant (rated them with 4 or 5): Communication/Listening (P6), Critical Thinking (P8), Coaching (P9) and Evaluation (P11).
Also, 96% of them agreed on the pedagogical competence Professionality (P14), 92% for the competences Pedagogical leadership (P1) and collaboration (P10).
The lowest percentage is 76% as a degree of agreement on Synthesis skills (P7).

In conclusion, we can say that the consensus has been extinguished for all derived generic competences.

Table 4. Number of experts who found the generic derived competencies (very) relevant (At least 75% of experts rated these competencies with 4 or 5)

Generic derived competencies	Frequency (Number of experts) N=25	Percentage of (very) relevant skills (%)
P1	23	92
P2	22	88
P3	22	88
P4	21	84
P5	20	80
P6	25	100
P7	19	76
P8	25	100
P9	25	100
P10	23	92
P11	25	100
P12	21	84
P13	21	84
P14	24	96

4.4.2 Specific pedagogical skills (actions to be taken):

4.4.2.1 Descriptive analyses:

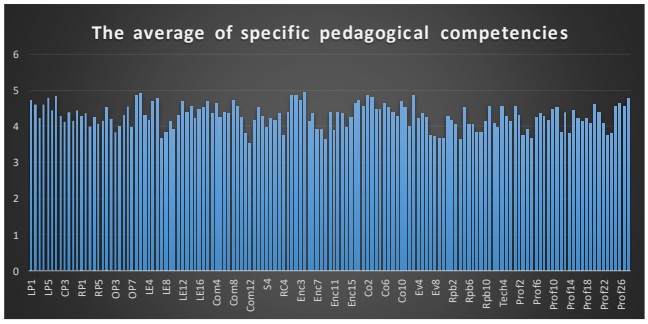
Looking at the averages of the 143 specific competencies in the pedagogical dimension (see Appendix 1), we find that there is not much difference between the respondents' averages for the relevance scale. The average of the 25 expert respondents ranged from 3.52 to 4.96 for all items. This demonstrates that specific pedagogical skills are considered relevant by

participants. The table presents the averages of all the educational items.

With regard to the standard deviation of specific pedagogical competencies for this scale, we identify items with a reduced standard deviation (CP1, Enc1, Enc2 : 0.374 LE1, Co2, Ev3 : 0.332 ; Enc4 : 0.200), which indicates that there is no great difference between respondents with respect to these items. Again, we notice some items whose standard deviation is significant (RP1 : 0.891 ; Tech3 : 0.889 ; Tech3 : 0.882 ; Enc5 : 0.881). The table (Appendix 1) presents these items and the standard deviation value for each item.

Figure 4 presents a histogram that allows us to compare the means of the different specific pedagogical competencies. According to this figure, there are no major differences between the average scores of the experts responding on the questionnaire relevance scale, the highest averages are those of the LE2 (Mean=4.92) and Enc4 (Mean=4.96) skills and the lowest averages are those of the Com12 (Mean=3.52), Rpb4 (Mean=3.64) and Ev9, Ev10 (Mean=3.68) skills.

Fig 4. The average obtained for each specific pedagogical competencies



4.4.2.2 Freqency analysis: number of expert respondents by scale level

To see if the experts participating in our Delphi study were able to find agreement regarding the relevance of specific pedagogical competencies, we conducted a frequency analysis of their responses (Table 5) and it emerged that most of the items were judged (very) relevant by the experts, and this for the competencies of Pedagogical Leadership, Pedagogical Control, Pedagogical Rigour and Collaboration, 83% of the items of the Competencies in Communication/Listening and Technology, 82% for Coaching and 81% of the specific competencies of Expertise Leadership were also judged relevant.

For the Synthesis competency, 75% of the items are considered relevant, 72% for the Professional competency, 70% for the Problem Solving competency, 60% for the Assessment competency and only a percentage of 57% for the Pedagogical Opening competency are considered relevant.

Table 5. Number of experts who rated the specific pedagogical skills as (very) relevant (At least 75% of experts rated these skills with 4 or 5)

Generic derived competencies	N items	N (very) relevant items	Percentage (%)
Pedagogical leadership	6	6	100
Pedagogical control	6	6	100
Pedagogical rigour	6	6	100
Pedagogical opening	7	4	57
Expertise leadership	16	13	81
Communication/Listening	12	10	83
Synthesis	4	3	75
Critical thinking	5	4	80
Framing	17	14	82
Collaboration	10	10	100
Evaluation	10	6	60
Problem solving	10	7	70
Technology	6	5	83
Professionality	28	20	72

As can be seen from Table 5, specific competencies where expert consensus was not reached (Percentage agreeing is less than 75%) were omitted. These are: 43% of items omitted from the Competency Pedagogical openness, 40% of items from the Competency Assessment, 30% of items from the Competency Problem Solving, 28% of items from the Competency Professionalism, 25% of items from the Competency Synthesis, 20% of items from the Competency Critical Reasoning, 19% of items from the Competency Expertise Leadership, 18% of items from the Competency Coaching and 17% of items discarded from the two respective Competencies Communication/Listening and Technology.

In total, 28 of 143 specific pedagogical competencies (20%) were omitted by the experts.

Table 6. Number of specific pedagogical competencies omitted by experts (Consensus not reached: Percentage of experts agreeing is less than 75%)

Generic derived competencies	N items	N items Omitted	Percentage of items omitted (%)
Pedagogical leadership	6	0	0
Pedagogical control	6	0	0
Pedagogical rigour	6	0	0
Pedagogical opening	7	3	43
Expertise leadership	16	3	19
Communication/Listening	12	2	17
Synthesis	4	1	25
Critical thinking	5	1	20
Framing	17	3	18
Collaboration	10	0	0
Evaluation	10	4	40
Problem solving	10	3	30
Technology	6	1	17
Professionality	28	8	28

5. DISCUSSION

The objective of this study was to develop and validate a framework of reference of pedagogical skills for the practice of the teacher-researcher profession in Moroccan higher education. Delphi was the most appropriate method to reach consensus among the participating higher education experts on the importance and relevance of the identified competencies.

For the pedagogical dimension We found that the experts had reached a consensus on 115 items among the 143 specific pedagogical skills identified, taking 75% as the consensus threshold. 28 items, whose level of consensus among the experts was not reached, were omitted because they were considered imprecise in relation to the Moroccan context, vague or lacking in clarity. These include, for example, "Making constructive comments about problems and behaviours, not people", "Believing in the possibilities of learning even in difficult cases or situations", "Voluntarily offering specialized help", "Dealing with sensitive situations while keeping things in context", "Testing hypotheses or concepts to rethink ways of doing things or solving problems", “Ensure availability of logistical support and be informed of administrative requirements”, “Consult students when setting up standards and procedures’’, “Attempt to limit administrative requirements by subordinating them to efficiency”, “Communicate the standards, criteria, standards and requirements to be met”, “Attempt to identify the essence of a situation from several elements”, “Communicate at a distance with students (email, etc.)”, “demonstrating moral rectitude, stating personal values and explaining decisions''.

One of the requirements of a new competency framework for higher education was that competencies should be defined in the broadest possible sense, in order to leave room for different teacher-researcher profiles (Uhlenbeck et al. 2002; Korthagen 2001). We believe that we have met this condition because the results indicate that the elements that were broadly and generally defined were considered more relevant by the experts. In addition, the elements that were omitted were generally defined in a more specific and detailed framework.

Another requirement for a new frame of reference was to define competencies relating to aspects of the teacher-researcher's personality, which are determining elements of teaching effectiveness (Korthagen 2001). This condition has also been met. The results indicate that in the personal generic competences included in the pedagogical dimension: communication/listening, synthesis, critical reasoning, problem solving, professionalism, very few items were omitted. Over 75% of the participating experts rated these skills as 4 or 5 on the Likert scale, indicating that they were considered very important.

Thus, this framework of reference had to be appropriate to more student-centred teaching methods (Martin et al.2000). The results indicate that this requirement has

been reasonably met. The competencies focused on a positive and respectful attitude towards students, on the teacher as an expert in university pedagogy, knowledge and content, on the transmission of important values that play a role in the discipline, were validated by the experts. In the same sense, other competencies on which experts have reached consensus are to adopt a representation of the act of teaching so that students gradually learn to learn in a context of self-directed learning, providing feedback and designing appropriate assessments. For the expected learning outcomes, they are all fully consistent with constructivist approaches to teaching in which the student is considered an active and self-regulating learner (Ertmer and Newby 1993; Harris and Alexander 1998).

The experts also reached consensus on the items concerning cooperation with colleagues, indicating that the teacher's role as organiser is mainly associated with contact with peer teachers. This is in line with recent theories on teacher professional development, in which cooperation with peers is considered very important (Putnam and Borko 1997).

Other thinking skills and openness to innovation were well noted by the participating experts, consistent with the need for ongoing professional development of the teacher-researcher in a modern student-centred approach to teaching/learning as a learner (Putnam and Borko 1997).

6. CONCLUSION

In conclusion, it must be recognized that the Delphi technique, as developed in this research, has its limitations. First, some general comments can be made. Many items were rated 4 or 5 by the participating experts, indicating that virtually all of the skills on the original list were considered important. This could also mean that it was difficult for participating higher education experts to distinguish between items.

In addition, it was difficult for us to exhaustively define the specific competencies and/or actions to be taken for each pedagogical dimension as formulated in the introduction. The analysis of the teaching and research profession in a Moroccan context, its specific characteristics, knowledge, skills and attitudes required by teachers, was not an obvious thing. However, the results indicate that in most of the generic core competencies, the items described in the broad sense were rated higher and considered more important than the more detailed items, which will make them useful as a starting point for the professionalization of HRM practices (Recruitment, training, career management, evaluation, etc.) of Moroccan university teacher-researchers.

Secondly, some comments regarding the selection of experts can be made. Although several experts were selected, it was difficult to make a meaningful distinction between the different expert profiles as most of them fulfilled several roles. For example, an expert may be both a teacher-researcher in teaching (Higher Education Professor Degree), a researcher member of a scientific research commission, a head teacher, a policy maker and a higher education expert representing one or more higher education institutions. However, the latter may have different visions of higher education, of the reference frame of pedagogical competencies best adapted to the practice of the profession in the Moroccan context, of the definition of policies relating to the recruitment and/or training of teachers and of research on teaching.

Third, there is no evidence that the same Delphi results would have been obtained with different experts selected according to the same criteria. Consequently, further validation of the reference frame is necessary through a confirmatory study, the subject of our future research, to test it in the field with the target individuals.

Finally, and as a research perspective, the competency framework developed will be presented to professors and researchers at the Moroccan universities of higher education with regulated access or not. The choice of this target is not insignificant, insofar as the establishment of a reference frame of competences requires a favourable teaching environment to shape the university teacher's approach to teaching (Ramsden 1992 ; Kember and Kwan 2002), and we have judged that the grandes écoles à accès régulé constitute environments which offer more favourable conditions for teaching/learning and the implementation of a learner-centred pedagogical approach, than the institutions of higher education with open access.

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Annex (in French) : Preliminary questionnaire of the Delphi study

RENSEIGNEMENTS PERSONNELS

1. **Lieu du travail:**

   A. Au Conseil Supérieur de l'Education, de la Formation et de la Recherche Scientifique :
      a. Quel poste ? ……..

   B. A l'Agence Nationale de l'Evaluation et de l'Assurance Qualité (ANEAQ) :
      a. Quel poste (direction ou division) ? ……..

   C. À Centre National de la Recherche Scientifique et Technique (CNRST) :
      a. Laquelle? Quel poste? ……

   D. Autre : ……

2. **Experience au travail:**

   a) 5 à 10 ans
   b) 10 à 15 ans
   c) 15 à 20 ans
   d) 20 à 25 ans
   e) 25 à 30 ans

Adresse email :

COMPÉTENCES PEDAGOGIQUES

Il s'agit de la compétence fondamentale du profil d'un enseignant de niveau universitaire. Elle est au cœur de la profession et les autres compétences gravitent autour d'elle. Par définition, le terme désigne l'ensemble des méthodes et pratiques d'enseignement et d'éducation de même que toutes les qualités requises pour transmettre un savoir, un savoir-faire, savoir–faire faire ou un savoir-être.

Dimensions / Compétences fondamentales (Ajout en rouge, vous pouvez réagir sur la même colonne)	**Compétences fondamentales dérivées** (Commentaire en rouge, vous pouvez réagir sur la même colonne)	**Compétences spécifiques ou actions à poser**	**Pertinence**					**Commentaires portant sur les compétences spécifiques**
			1	**2**	**3**	**4**	**5**	
Pédagogique	**1. Leadership pédagogique**	**1.1** Enoncer les objectifs en début de cours ;						
		1.2 Expliquer comment faire les travaux ;						
		1.3 Faire des suggestions précises et utiles ;						
		1.4 Structurer la matière en fonction des objectifs à atteindre (clarifie, contrôle) et des niveaux de difficulté ;						
		1.5 Motiver les étudiants et susciter leur intérêt (stimule, respecte) ;						
		1.6 Prendre des moyens pour apprendre à connaître les étudiants;						
		1.7 Informer les étudiants sur toute notion utile et pertinente à l'apprentissage.						
	2. Contrôle pédagogique	**2.1** Réviser régulièrement la planification et le plan d'évaluation, et réajuster au besoin;						
		2.2 S'assurer du respect des programmes et du régime pédagogique;						
		2.3 S'assurer de l'usage judicieux du matériel didactique;						
		2.4 Estimer le temps et les efforts requis à la réalisation des activités et les adapter en conséquence.						
	3. Rigueur	**3.1** Donner des instructions, des consignes et directives						

	pédagogique	ponctuelles, détaillées et claires;						
		3.2 Appuyer les notions de démonstrations ou d'explications, de raisonnement d'exemples concrets pertinents;						
		3.3 Offrir des ressources, des outils, des renseignements ou des conseils spécialisés;						
		3.4 Tenter de suivre le progrès des étudiants;						
		3.5 Mettre en place des mécanismes qui assurent le progress vers l'atteinte des objectifs, et suggérer des actions correctives si nécessaire;						
		3.6 Déterminer le besoin de formation ou de développement des étudiants et mettre au point du matériel en vue d'y répondre.						
	4. Ouverture pédagogique	**4.1** Connaittre et utiliser plusieurs approches pédagogiques;						
		4.2 Adapter ses exigences au contexte d'apprentissage;						
		4.3 Faire des commentaires constructifs visant les problèmes et les comportements, et non les personnes;						
		4.4 Croire aux possibilités d'apprendre même dans les cas ou dans les situations difficiles;						
		4.5 Gérer les erreurs de bonne foi;						
		4.6 Organiser pour les étudiants des activités comprenant la possibilité d'apprendre de leurs erreurs dans un cadre de critique constructive;						
		4.7 Renforcer les aptitudes courantes et attendues des étudiants.						
	5. Leadership d'expertise	**5.1** Etre en mesure d'identifier un besoin de formation;						
		5.2 Transmettre l'ensemble des connaissances utiles et pertinentes reliées à la matière du cours;						
		5.3 Partager des connaissances supplémentaires;						
		5.4 Répondre aux questions des étudiants;						
		5.5 Aller au-delà de la simple réponse pour ajouter aux connaissances des étudiants;						

		5.6 Tenter d'amener les étudiants à parfaire leurs connaissances;						
		5.7 Tenter d'influencer les étudiants quant à l'amélioration de leur comprehension;						
		5.8 Accepter de répondre à certaines questions plus poussées ou de diriger les étudiants vers des éléments de réponse;						
		5.9 Offrir de son plein gré une aide spécialisée;						
		5.10 Créer des occasions d'aider les étudiants à résoudre leurs problèmes dans le domaine d'expertise;						
		5.11 Conribuer à répandre l'usage de nouvelles connaissances ou technologies dans le domaine d'expertise;						
		5.12 Solliciter les commentaires des étudiants et les conseils;						
		5.13 Ne pas hésiter à demander conseil à des collègues ou à d'autres ressources lorsqu'on ressent le besoin;						
		5.14 Etre à l'affût des nouveautés dans son domaine d'expertise;						
		5.15 Avoir le souci de maintenir ses connaissances à jour;						
		5.16 Savoir mobiliser les gens autour de valeurs individuelles, sociétales, ou organisationnelles;						
		5.17 Susciter des projets qui captivent et stimulent l'imagination des étudiants;						
		5.18 Amener les étudiants à s'engager dans des actions concrètes dans le respect des objectifs d'apprentissage;						
		5.19 Manifester de l'intérêt pour les réalisations des étudiants.						
	6. Communication	**6.1** Saivoir se faire entendre et comprendre sans difficultés;						
		6.2 Déterminer l'objectif du message à transmettre;						
		6.3 Utiliser le langage approprié;						
		6.4 Rédiger avec clarté et precision;						

		6.5 Communiquer tous les objectifs et l'ensemble de la matière;						
		6.6 Clarifier au besoin;						
		6.7 Animer la réflexion pédagogique;						
		6.8 Appliquer les règlements avec justice et équité;						
		6.9 Soutenir les étudiants;						
		6.10 Faire des rappels à l'ordre nécessaires;						
		6.11 Justifier ses exigencies;						
		6.12 Savoir distinguer ce qui est obligatoire de ce qui est souhaité.						
	7. Analyse	**7.1** Dans la matière, prendre soin d'établir des relations simples;						
		7.2 Analyser de façon rudimentaire les rapports entre quelques éléments d'un problème ou d'une situation;						
		7.3 Etablir certains liens causals fondamentaux;						
		7.4 Dans la matière, établir des relations multiples.						
	8. Synthèse	**8.1** Analyser les rapports entre plusieurs éléments d'un problème ou d'une situation;						
		8.2 Faire des liens au moyen de connaissances théoriques ou de sa forte experience;						
		8.3 Décomposer les tâches relativement complexes en éléments plus maniables;						
		8.4 Savoir reconnaître des liens causals plus subtils;						
		8.5 Décomposer des problèmes ou processus multidimensionnels complexes en leurs composantes clés.						
	9. Critique	**9.1** Etablir des listes d'avantages et d'inconvénients avant de prendre des decisions;						
		9.2 Tenter de prévoir des obstacles et penser à l'étape à venir ou à des solutions de rechange;						
		9.3 Questionner de manière régulière les règles et les normes et partager ses idées dans un souci d'amélioration continue;						

		9.4 Mettre à l'essai des hypothèses ou concepts pour repenser ses façons de faire ou de résoudre les problèmes.						
	11. Encadrement	**11.1** Définir des procédures explicites et uniformes pour les opérations courantes;						
		11.2 Faire régulièrement un rappel des procédures à suivre;						
		11.3 Intervenir rapidement et efficacement face à un problème de fonctionnement;						
		11.4 S'assurer de la disponibilité du support logistique et s'informer des exigences administratives;						
		11.5 Limiter les changements de procédures au strict nécessaire;						
		11.6 Consulter les étudiants lors de la mise en place de normes et de procedures;						
		11.7 Prévoir et laisser un délai raisonnable pour l'exécution des travaux demandés;						
		11.8 Tenter de limiter les exigences administratives en les subordonnant à l'efficacité;						
		11.9 Elaborer des outils simples et efficacies;						
		11.10 Tenir compte des limites personnelles des étudiants;						
		11.11 Tenir compte de la culture institutionnelle;						
		11.12 Manifester sa disponibilité aux étudiants;						
		11.13 Reconnaittre formellement le bon travail et les progrès des étudiants;						
		11.14 Tenter de faciliter les initiatives des étudiants;						
		11.15 Pratiquer l'encadrement des étudiants;						
	12. Collaboration	**12.1** Savoir partager l'information;						
		12.2 Appuyer concrètement les décisions du groupe;						
		12.3 Faire sa part de travail de bon gré;						

		12.4 Savoir créer un esprit d'équipe en valorisant les autres;						
		12.5 Donner publiquement le bonus aux étudiants et collaborateurs qui le méritent;						
		12.6 Encourager les étudiants;						
		12.7 Renforcer l'esprit de groupe en demandant l'apport de tous;						
		12.8 Amener les étudiants à jouer un rôle concret au sein du groupe;						
		12.9 Etre le catalyseur principal de la dynamique de groupe;						
		12.10 Savoir orchestrer une résolution profitable de problématiques ou des situations conflictuelles;						
		12.11 Savoir gérer les conflits;						
		12.12 Favoriser le mentorat et le coaching;						
		12.13 Susciter le travail d'équipe et la concertation.						
	13. Evaluation	**13.1** Communiquer les objectifs à atteindre et qui seront sujet à l'évaluation;						
		13.2 Elaborer des activités et des situations permettant l'évaluation;						
		13.3 Mettre en place des critères objectifs qui mesurent les cibles d'évaluation préalablement énoncés aux étudiants;						
		13.4 Transmettre un feed-back favorisant le développement des apprentissages;						
		13.5 Transmettre un feed-back favorisant la préservation de l'estime de soi de l'étudiant;						
		13.6 Prévoir, développer et mettre en place des activités permettant la régulation et le développement des apprentissages						
		13.7 Communiquer le niveau d'atteinte des objectifs souhaités;						
		13.8 Communiquer les normes, critères, standards et exigences à rencontrer;						

		13.9 Faire ressortir les principales statistiques pertinentes (ex. : sommes et moyennes) afin de qualifier la compétence de l'étudiant;						
		13.10 Transmettre un feed-back favorisant l'autonomie et la responsabilisation de l'étudiant;						
		13.11 Transmettre un feed-back favorisant l'autogestion des erreurs et la regulation;						
		13.12 Développer et suggérer des activités visant le développement des apprentissages.						
	14. Résolution de problème	**14.1** Intervenir en cas de situation problématique;						
		14.2 Aborder un problème dans son ensemble afin d'en déterminer avec précision son origine, les causes et d'identifier les solutions pertinentes;						
		14.3 Permettre aux personnes mises en cause d'exprimer leur point de vue afin de favoriser la prise de décisions justes et équitables;						
		14.4 Tenter de dégager l'essentiel d'une situation à partir de plusieurs éléments;						
		14.5 Donner suite aux demandes légitimes;						
		14.6 Proposer des solutions, des expériences et des projets à mettre en oeuvre;						
		14.7 Agir à la suite d'un comportement inadéquat de la part des étudiants;						
		14.8 Donner une rétroaction à l'étudiant;						
		14.9 Retourner l'information pertinente à la suite d'une prise de decision.						
		14.10 Poser des jugements dans un esprit de justice et d'équité pour tous.						
	15. Technolo	**15.1** Maîtriser les systèmes d'information et de communication;						

	gie	**15.2** Utiliser des logiciels de création de documents;						
		15.3 Communiquer à distance avec les étudiants par les réseaux;						
		15.4 Utiliser les outils multimédias dans son enseignement;						
		15.5 Recourir aux divers sites internet spécialisés ou plateformes multimédias pour chercher ou trouver des outils et informations didactiques et pédagogiques nécessaires à l'enrichissement de mes enseignements;						
		15.6 Recourir aux divers sites internet spécialisés ou plateformes multimédias pour chercher ou trouver des outils et informations didactiques et pédagogiques nécessaires à sa propre formation;						
		15.7 Exploiter les potentialités didactiques de logiciels en relation avec les objectifs de son domaine d'enseignement.						
	16. Professionnalité	**16.1** Savoir s'adapter aisément à différentes situations;						
		16.2 Adopter une attitude positive et regarder vers l'avant et voir la vie du bon côté;						
		16.3 Perçoevoir les liens entre les éléments d'une situation pour en arriver à en saisir l'ampleur et à prendre des décisions claires et pertinentes;						
		16.4 Saisir l'état d'esprit et la logique d'une situation et prendre des décisions en consequence;						
		16.5 Exécuter une tâche en se fiant à ses ressources personnelles tout en ayant l'assurance de posséder les capacités, les connaissances, l'expertise et le potentiel pour réussir;						
		16.6 Penser, agir et réagir avec assurance et être conscient(e) que grâce à ses capacités, on peut faire face à diverses situations;						
		16.7 Contrôler ses émotions pour éviter de mal réagir à la provocation, l'opposition, l'hostilité ou toute autre condition stressante;						
		16.8 Fonctionner de manière efficace malgré un stress;						

		16.9 Savoir démontrer ses capacités d'accomplir une tâche ou de résoudre un problème;						
		16.10 Faire face à des situations de plus en plus exigeantes en prenant des décisions fondées et en exprimant ses opinions de façon efficace;						
		16.11 Apporter des idées nouvelles et imaginer des façons de faire différentes;						
		16.12 Manifester une attitude qui incite à se doter de règles et de normes de fonctionnement;						
		16.13 Faire preuve de transparence en disant la vérité aux étudiants;						
		16.14 Faire preuve de rectitude morale, en énonçant ses valeurs personnelles et en expliquant ses decisions;						
		16.15 Etre capable d'enthousiasme et de détermination et savoir déployer un haut niveau d'énergie;						
		16.16 S'adapter à différentes situations sans difficulté ou inconfort majeurs et fonctionner dans l'incertitude et l'ambiguïté;						
		16.17 Savoir influencer le cours des événements au lieu de le subir;						
		16.18 Amorcer avec enthousiasme de nouvelles activités au regard des objectifs à atteindre sans que cela soit demandé;						
		16.19 Savoir faire preuve de sensibilité et d'empathie aux étudiants;						
		16.20 Accueillir et respecter les valeurs des étudiants;						
		16.21 Porter intérêt aux étudiants par des comportements de l'ordre du dévouement et de l'altruisme;						
		16.22 Manifester de l'intérêt pour son domaine d'expertise ou pour la tâche à accomplir;						
		16.23 Maintienir des efforts soutenus face aux difficultés rencontrées afin de réaliser dans sa totalité la tâche à accomplir;						

		16.24 S'acquitter de plusieurs tâches différentes sans nuire aux résultats;						
		16.25 Savoir développer un sentiment de considération envers les étudiants et porter à les traiter avec des égards particuliers;						
		16.26 Se distinguer par l'exactitude, la logique et la précision de ses paroles et de ses actions;						
		16.27 Savoir faire naître des idées tout à fait nouvelles;						
		16.28 Posséder un sens du devoir et ressentir une forte obligation d'être honnête et intègre à l'égard des autres.						

DIMENSION I : COMPÉTENCES PÉDAGOGIQUES	REMARQUES & COMMENTAIRES	D'AUTRES COMPETENCES FONDAMENTALES OU SPECIFIQUES À AJOUTER ?