# TACIT AND EXPLICIT COMPETENCIES: SECI MODEL A LOOK ON HIGHER EDUCATION SYSTEM

الكفاءات الظاهرة والمخفية: نموذج نوناكا نظرة على نظام التعليم العالي

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#### Abstract:

Higher education is a system based on knowledge and competencies management that includes several components for the empowerment of knowledge, know-how and soft-skills. Tha aim of this paper is to introducing the SECI model (Socialisation, Exteralisation, Combination, Internalisation) whis considered as the most well known model of knowledge management. This model consists of displaying and transforming the hidden side of competencies (tacit) to the visible one (Explicit) and vice-versa. Furthermore, the paper will seek its application on Algerian higher education system from a quality view.

Therefore, higher education institutions need to establish an evaluation system for the competency of their lecturers. The system will serve as a benchmark in monitoring their competency.

**Keywords:** SECI model, Competence, Kowledge management, Higher education, Algeria

**JEL Classification Codes**: J53, M12,O15.

#### ملخص:

يُعدّ التعليم العالي نظاما قائما على المعرفة وإدارة الكفاءات يتضمن عدة مكونات لتتعزيز المعرفة والدراية والمهارات السلوكية تمدف هذه الورقة البحثية إلى تقديم. نموذج نوناكا SECI (المشاركة ، الاستخراج ، التوليف، التضمين) الذي يعتبر النموذج الأكثر شهرة لإدارة وتوليد المعرفة. يتكون هذا النموذج من عرض

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وتحويل الجانب الخفي من الكفاءات (ضمني) إلى الجانب المرئي (صريح) والعكس صحيح. علاوة على ذلك ، ستسعى الورقة إلى تطبيقها على نظام التعليم العالي الجزائري من منظور الجودة.لذلك ، تحتاج مؤسسات التعليم العالي إلى إنشاء نظام تقييم لكفاءة أساتذتها. سيكون النظام بمثابة معيار في مراقبة كفاء تهم.

كلمات مفتاحية: نموذج نوناكا، الكفاءة، تسيير المعرفة، التعليم العالي، الجزائر تصنيفات J53, M12,O15.: JEL

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#### 1. INTRODUCTION

Human resources management occupy a great importance in the organizations, because it is one of the most important functions of the organization's success in establishing an effective program in human resources investment used in production, and there is no secret that efficiency and performance to achieve organisation's strategic goals depend directly on the quality of its human resources.

True enhancement is not only in developing buildings or machinery or advanced technologies, but in developing the human resource capable of dealing with the management of other resources and invest in a product, therefore the most modern administrative trends had confirmed the importance of human resources and considering its scarcity as a capital, in particular, the competencies, experience and skill.

The business world is changing; the programs offered in higher education institutions should also evolve. We must anticipate the needs of business, be innovative, and better target gaps in skills to fill to ensure a carrier future. People have always passed their accumulated knowledge and wisdom to future generations by telling stories about their thoughts, work and experiences, face-to-face and hands-on methods to convey their know how or tacit knowledge to others (Hansen, Nohria, & Tierney, 1999). Throughout recorded history, some form of written language has been used to document their know-what or explicit knowledge. Higher education is

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knowledge-based activity which requires creativity and experience. It requires experience and knowledge to be created, evaluated, maintained, and disseminated systematically to improve the quality of teaching and research. Competency management helps higher education institutions (HEIs) to perform better, faster and develop quality outputs within time and budget which is based on the knowledge and experience of whole stakeholders of HEIs.

Algerian HEIs must raise the question of quality of their competencies as a key issue and start thinking about changing the traditional methods, "in many of our universities, we, unfortunately, still practice today an education as it was conceived last century: the student memorizes what the professor said, while his criticism and his own intelligence are as dormant" (Bernard, 2001)

After this brief introduction, some questions are worth asking and require reflection, some of them are as follow:

- What is a competence?
- What is the SECI model?
- What is the context of the Algerian higher education regarding competency and knowledge management?

#### 2. LITERATURE REVIEW

The following section provides some information concerning the competency definition and the iceberg model.

## 2.1 Competency

Whenever we talk about skills, knowledge, attitude or behaviour. We are referring to quality. This word is regarded as "competence". The word of "competence" comes from the Latin word "competere" which means "competent" that is a person's ability to possess adequate skill, knowledge, attitude or behaviour to perform certain activity. Thus quality, ability and skills to do some certain activity competently.

The word competency was initially discussed and assessed by David McClelland in the early 1970s as a real features of individuals which they possess such as skills, knowledge and ability of worker performance which can be predicted, measured and assessed. Although, the first research of competency that came out with human resource development was done by

McLagan in 1989 who believed competency is an area of knowledge, attitude and skills of individuals to produce vital key output.

Competence has been long understood as a person's ability or capacity to do a job. It was devised in the 1970s by the US Company McBer to identify the specific personal characteristics which resulted in effective and/or superior performance.

the competencies concept is multi-faceted concepts, differed in terms of perception and the applicable areas and proposed, and has evolved considerably in the last two decades, it has become difficult to identify and limit the joint definition to the concept, but we can say that this concept is linked to working situations we cannot talk about efficiency only in the framework of the practical, and most of the different definitions, although they are involved in the components or resources problem and overall in the classic triple: knowledge (savoir), practical knowledge (savoir-faire) and behavioural knowledge (savoir-être)<sup>1</sup>.

For more than three decades, the term 'Competency' is defined by different researchers with different perceptions and perspectives and in different ways. According to McLagan and Suhadolnik, competency can be defined as a centre for knowledge, attitude and skills that are vital in producing key outputs(McLagan & Suhadolnik, 1989). Likewise, Boyatzis defined competency as the capability and ability of individual skills, knowledge and behaviour to complete the task assigned to them(Boyatzis, 2008). While Lee defined competency as set of related skills, abilities knowledge and behavior which can influence the main aspect of workers job(Lee, 2009). Another researcher, Abel conceptualised competency as to apply some knowledge into practice within a specific context(Abel, 2008). In addition, according to Sulaiman et al, competency refers to the workers or individuals or practitioners performance as related to the organisational performance in doing task or job that can be evaluated or measured (Sulaiman, Salleh, Mohamad, & Sern, 2015). Taken together, competency in the context of current research is defined as the ability of an individual to apply the knowledge, skills and attitude to complete the given task that can be evaluated.

Competency-based approach is a strategy that is utilised to ensure individuals to obtain characteristics related to the tasks assigned to them. Bernotavicz, Jordan, Zanghi, and Jacobos (2001) in their research emphasised on the employment of competency model to ensure the effectiveness in carrying out assigned tasks. The model includes specific task and individuals who carry out the tasks in the context of organisation Meanwhile, Bratton

<sup>&</sup>lt;sup>1</sup> The words between brackets are a translation into french.

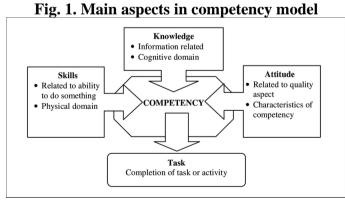
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(2004) in his research explained on the importance of building a core competency framework for specific job and position. Core competency is defined as knowledge, skills, attitude, motives, values or personal characteristics which are important for completing a job and evaluating the performance of a worker to be either good or excellent.

According to the United Nations Industrial Development Organization [UNIDO] (2002), competency encompasses a combination of knowledge, skills and behavior that are practiced for self improvement. Similarly, Salleh (2012) defined competency as set of skills, knowledge, and behavior, which characterize better performance in every aspect of an individual.

Competency exists due to values in life, attitude and internal motivation of individuals to complete tasks in hand perfectly and produce excellent job. According to Rychen and Salganik (2001), competency is not merely about knowledge and skills. Instead, it involves the ability to fulfill complex demands by preparing psycho-social resources such as skills and attitude in specific context. Every organization have different concept of competency.

According to Selvarajan and Candy (2006), from the management perspective, competency refers to a combination of resource and ability. On the other hand, the human resource management perceives competent as the ability of individuals to complete the tasks assigned to them. The main purpose for organization to apply the concept of competency is to facilitate the process of evaluating the suitability and expertise of employers in completing assigned tasks. Basically, competency includes three important aspects which are knowledge (cognitive), attitude (affective) and skills (psychomotor) that are combined to solve certain assignments (UNIDO, 2002). Figure 1 illustrates the competency model that is based on the three aspects that can be used by organizations.



Source: UNIDO, 2002.

In the context of higher education, competency analysis is a very important requirement. This is supported by Chih, Wen, Fang, dan Yi (2003) who stated that in the effort to achieve the objective of technical and vocational education and effective training, an indispensable aspect that needs emphasis is the analysis of content for competency in education and training. This is to ensure the standard and other matters related to measurement of competency can be identified (Salleh, Khalid, Sulaiman, Mohamad, & Sern, 2015).

According to the UNIDO HRMF, the Organization's human resource system is underpinned by a Competency Framework, where a competency is defined as a "combination of skills, knowledge and behaviors that leads to effective performance on the job, be it at Headquarters or in the Field Offices, and is therefore important for the success of the Organization in achieving its strategic goals, as well as the success of individual staff members."

Furthermore, a competence needs a specific framework to support goals achievement and effectiveness as well as strategic direction. This framework can be realised by:

(a) Facilitating a better understanding of what is required for a staff member's development and career progression from the staff member and from the Organization;

- (b) Fostering a common understanding about what is needed and expected in terms of individual performance, thereby providing a sound basis for consistent performance management;
- (c) Providing a clear basis for the definition of job requirements for the purposes of recruitment, human resource planning, reassignment and career development;
- (d) Identifying growth opportunities and competency gaps in the Organization and addressing them through focused staff development and learning and/or targeted external recruitment. "("Human Resource Management Framework (HRMF)," 2015)

## 2.2 Tacit and explicit competencies: SECI model

The vast literature on tacit competencies mostly concentrates on knowledge management and knowledge sharing within and between organisations. There is a bridge between the two approaches in the way in which different competences incorporate different forms of tacit knowledge. Tacit knowledge is built and transferred not only via formal training, but also via informal learning, observation and daily practice. The epistemological dimension, which has its origin in Polanyi (1958, 1967) to distinguish between tacit and explicit competencies. This classification is the most used

and it has been further developed by Nelson & Winter (Nelson & Winter, 1982) in his evolutionary theory of the firm, and by other authors as Kogut & Zander (Kogut & Zander, 1992) among others. Distinction between tacit and explicit competencies should not be considered as two separate types, but as two possible states of competencies. Tacit competence is a "set of subjective perceptions, intuitions, rituals, insights what are difficult to express in a semantic, auditory or visual way" (Byosiere, 1999) and therefore, it is difficult formalise, communicate and share with others, and consequently to be copied. It is deeply rooted in individual action and experience, as well as the ideals, values or emotions that the person takes (Nonaka, 1991; Nonaka & Takeuchi, 1995; Nonaka & Konno, 1998) and in his context. Explicit knowledge is knowledge structured, bit ambiguous and easy way to improve, objective, rational, theoretical, systematic, which can be transmitted more quickly, easily and with less cost. Competitive advantages based on it are easier and less hard to imitate. It is expressed in a formal and systematic language, written, auditory or visual because it can be collected and shared as data, formulas, specifications and manuals. (Byosiere, 1999)

**Tacit** Tacit Sharing and creating Articulating tacit tacit knowledge knowledge through through direct dialogue and Socialization Externalization experience reflection Explicit 5. articulating tacit 1. walking around Tacit inside the company knowledge 6. translating tacit 2. walking around Individual knowledge outside the company 3. accumulating tacit Systemizing and knowledge applying explicit 4. transferring of knowledge and Internalization Combination tacit knowledge information **Tacit** Learning and G 7. gathering and acquiring new tacit integrating explicit knowledge in Org (G knowledge practice 8. transferring and diffusing explicit 10. embodying explicit knowledge knowledge through 9. editing explicit action and practice **Explicit Explicit** knowledge 11. Using simulation and

Fig. 2. SECI model of knowledge creation

I = Individual, G = Group, O = Organization, E = Environment

Source: (Ikujiro Nonaka & Toyama, 2015, p. 100)

experiments

The SECI model (Ikujiro Nonaka, 1994) is the best-known conceptual framework for understanding knowledge generation processes in organizations. Competency is created when there is a transformation of tacit knowledge of individuals into explicit knowledge at group and organizational

level (I. Nonaka & Takeuch, 1995) and each member of such groups internalise it, making it tacit knowledge again. conceived knowledge generation as a systemic, dynamic, and ongoing process, which emerges and recurs over time. The SECI model focuses on holistic processes that, through knowledge conversion from one type to another, generate a new quality of competence. This conceptualization highlights the underlying processes engendering knowledge, rather than the function that each knowledge stage plays for organizational life. It draws the coexistence of two types of knowledge and competencies: tacit and explicit, metaphorically comparable to an iceberg. The explicit knowledge represents the part of the iceberg above the water, that is, the knowledge we are aware of and capable of codifying and transferring through formal language. Examples of explicit knowledge in organizations are institutional communications (e.g., newsletters), practices based on formal meetings (e.g., conferences, refresher courses), or knowledge products (e.g., websites, databases, manuals, patents). Explicit knowledge, however, rests on a broad system of tacit knowledge, originated through experience related to professional practice and embedded into the specific work context. This knowledge is situated, analogic, and based on routines and habits (Warnier, 1999).Driving a car or using a computer keyboard are examples of actions based on knowledge we are mainly unaware of. Nonaka and Takeuchi suggested that knowledge is created through an epistemological process of knowledge conversion from one type to another (tacit and explicit) and amplified through different ontological levels (from interaction between individuals, to groups, to the organization as a whole) (I. Nonaka & Takeuch, 1995). The dynamic and continuous interaction between epistemological and ontological dimensions of knowledge gives rise to spiral conversion processes, which quantitatively and qualitatively expand knowledge. It implies that an organization aiming to increase and transform its knowledge should simultaneously promote many and diverse policies and related practices, supporting all of the conversion modes, so that the cycle does not deflate or stop.

The SECI model depicts the four Socialization–Externalization–Combination–Internalization conversion modes generated by the switching process from one type of knowledge to another. The spiral starts with the Socialization mode, in which tacit knowledge is exchanged among individuals through shared experiences in day-by-day social interaction. Since tacit knowledge is difficult to formalize and often time- and space-specific, it can only be acquired by directly sharing work experiences (e.g., working side-by-side or observing colleagues). Typically, it is the case of traditional apprenticeship where newcomers learn the tacit knowledge needed in their craft through hands-on routines and close interactions over time

(Ikujiro Nonaka & Toyama, 2015). Essentially, this first mode concerns the sharing of tacit knowledge, carried out at an interpersonal level, and allows for the defining of patterns of "how to do things" or reckon events, beliefs, representations of objects, and actions and models of professional practices.

Tacit knowledge is converted, through the Externalization mode, into new explicit knowledge in the form of concepts, images, and written documents. Here, individuals use dialog, metaphors, and team confrontations as effective methods to make tacit knowledge codifiable. For this mode to succeed. it is necessary that knowledge is dis-embedded through a reflectionon-action process, inserting distance between the subject and the object (Gherardi, 2000). An important outcome of this reflection on experience is the generation of crystallized knowledge, which is the organizational memory: "members come and go, and leadership changes, but organizations' memories preserve certain behaviours, mental maps, norms, and values over time" (Hedberg, 1981, p. 6). This formalization leads to new knowledge. accessible in the future and available to other co-workers. This is the gist of "synthesizing," where new meta-knowledge is generated through selection and connected to the established knowledge system in the organization, which allows for the emergence of new models or mental maps (Nonaka et al., 2006).

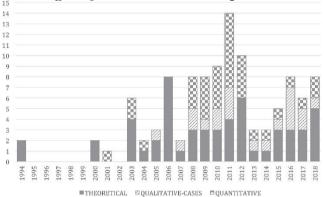
Explicit knowledge is then pooled with other intra- or interorganizational explicit knowledge through the Combination mode, being merged, edited, or processed to form more complex and systematic explicit knowledge. The creative use of computerized communication networks and large-scale databases can facilitate this mode of knowledge conversion. For example, using ICT, such as groupware, online databases, intranet, and virtual communities to communicate and share information has been the focus of several previous investigations (Koh and Kim, 2004). These informationsharing processes create higher-order knowledge, such as models, best practices, handbooks, and information systems (Van den Hooff and Van Weenen, 2004) that, in turn, may be disseminated even in the absence of interpersonal relationships.

The figure 3 demonstrates the actions and interactions of humans with the environment which creates and enlarges knowledge through the conversion process of tacit and explicit knowledge

To highlight the importance of the SECI model, figure 3 depicts results of 108 publications that have focused on the SECI model, published since Nonaka's (1994) seminal paper on knowledge creation. As shown, the SECI model has mainly been used in theory or for descriptive purposes and case

studies; indeed, approximately half of the studies are theoretical articles (n = 55), whereas the remaining empirical studies include qualitative case studies (n = 20) and quantitative investigations (n = 33) with high empirical heterogeneity (Gourlay, 2006).

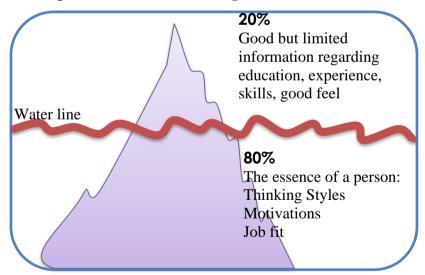
Fig.3. Qualitative review of publications on the SECI model



Source: (Farnese, Barbieri, Chirumbolo, & Patriotta, 2019)

The Nonaka model is similar to another theory called Ice-Berg Model, where the visible competencies consist 20 % only from the whole human competency. A pictorial representation of the model is as below:

Fig.4. Pictorial representation of the iceberg model



**Source**: the authors based on Iceberg competency model of MIT Careers, 2005.

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Below, a figure contains a brief explanation of the ice-berg model components:

Knowledge
Skill
Self image
Traits

Fig. 5. Explanation for the iceberg components



Source: the authors, based on (Management study guide, 2021)

So, is there a relation between the competencies which are above the surface and those which lie beneath? In the book Competence at Work Models for Superior Performance, the authors Lyle M. Spencer and Signe M. Spencer explain that a behaviour is incompletely defined without intent "The aspects of competencies which lie below the surface like attitude, traits, thinking styles etc directly influence the usage of knowledge and skills to complete a job effectively".

Let us try to understand it through an example. Suppose an organization is promoting an open door policy which literally means that a manager or supervisor would keep the doors of his/her chamber open to become accessible to their subordinates and encourage sharing of opinions and feedback. A manager sitting at the farthest corner of the office keeps his door open all the time, how does one evaluate whether it is for fresh air, claustrophobia or an indication that his subordinates are invited to reach out to him anytime. Therefore, intent behind a displayed action is necessary to understand the action and its implication fully.

In more complex jobs, these behavioural aspects, motives and traits become more important than the skills and knowledge required to do the job.

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Think of a soldier at the war front, he knows how to use the weapon he is holding, but thinks that the war is unjust and refuses to fire. In organizations, senior level hiring is therefore a time consuming and elaborate affair as it becomes necessary to establish the alignment between the organizational and individual motivation and aspirations.

Developing the two levels of competencies also takes different routes. The visible competencies like knowledge and skills can be easily developed through training and skill building exercises however the behavioural competencies are rather difficult to assess and develop. It takes more time and effort intensive exercises, like psychotherapy, counseling, coaching and mentoring, developmental experiences etc.

In the traditional method of hiring, most of the organizations looked at just the visible components of competencies; the knowledge and skills, believing that the behavioural aspects can be developed through proper guidance and good management. However, with major shifts in the conventional methods of people management, the hiring process has also undergone a change therefore a lot of emphasis is being put on the hidden behavioural aspects as well to make a sound decision. Hence, a complete picture regarding the competence of a person consists of both visible and hidden aspects and it becomes necessary to understand both to arrive at identifying the best man for a job.

The higher education institutes in Algeria suffer from this symptom. Recruitment is managed by a rigid regulation not allowing institutions to recruit the best fit for the open position. The cause is that the actual regulations don't give tools to measure all aspects of a competency, especially the hidden part of it.

## 3. Case of the university of Tlemcen

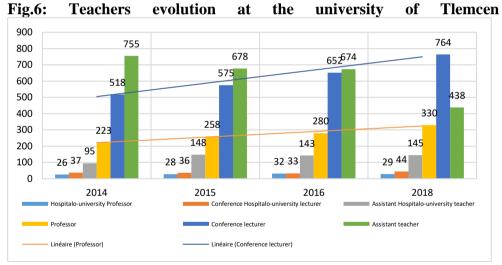
Algeria as developing country in the world, needs to have higher education competencies for educational development and socioeconomic advancement that would lead to egalitarian society full of opportunities. In order to be among the successful countries of the world, higher education institutions need to provide competent teachers with diverse technical knowhow and advanced skills to meet the challenges of real time in higher education institutions(Ismail & Mohammed, 2015). A lot of challenges have been taking place in the world of work including Algerian higher institutions(Paloniemi, 2006). This has resulted in the need for managing,

continuous learning and updating competencies of employees or teachers across all ages. Therefore, competency needs are categorized in many dimension of life endeavour such as organisational competency, thinking competency and application competency possessed by teachers in order to perform a task effectively and efficiently. It is more valuable for teachers to develop and improve their work ability, capability and Skills. Lack of competency in the higher institutions can bring more challenges which required new ways to accomplish teaching and learning processes(Salleh et al., 2015). Therefore, it is understandable that the challenges occur in different ways usually affect the institutions worldwide specifically Algerian higher institution. In order to minimize these unconditional challenges, the competency framework need to be restructured.

## 3.1. Academic staff evolution at the university of Tlemcen

Regarding the university of Tlemcen, and in order to have an overview of its teaching competencies, let's take a look to its teaching staff evolution.

Figure 6 will show the evolution of its teaching staff along 4 years: 2014, 2015, 2016 and 2018:



**Source:** by the authors based on data from human resources department at the university of Tlemcen, 2019

From the graph, we can see the evolution of the professors and conference lecturers in the trend lines coloured with orange and blue respectively. If we want to analyse this trend, we can say that there is competency development of the academic staff at the university. The number of professors jump from 223 in 2014 to 330 in 2018 with a rate of 148 %. This progression is significant and generated by the conference lecturers

habilitation<sup>2</sup> who were promoted to professors. This promotion signify that teachers competencies were developed especially research competencies by producing more papers and conference communications.

## 3.1. The ranking of the University of Tlemcen

On another hand, the university of Tlemcen, it is working to ensure quality in its different organisation chart levels. To show its quality, let's take a look to its ranking. We tooked the Times Higher Education (THE) ranking and UniRank to do so.

- 3.2.1. Times Higher Education (THE): the reason behind this choice is that the THE ranking is considered as one of the most reliable sources in classifying higher education institutions around the world. Moreover, there exist some of the scholarship funders organisations who do not accept to offer any grant to study at a university unless it is ranked at the THE. The THE World University Rankings, founded in 2004, provide the definitive list of the world's best universities. THE carefully balanced and comprehensive methodology was developed after more than a decade of working in consultation with the world's leading universities, and builds on their team's deep understanding of what makes a university truly world class (THE, 2019). It is important to highlight that, in this paper, we focused on 2 ranking types:
- a. Young University Rankings: According to this classification, the university of Tlemcen is ranked 201-250 in 2018. This ranking cover the world's top universities under 50 years old. It provides a glimpse into the future, showcasing not those institutions with centuries of history, but the rising stars that show great potential.

In that very new ranking, the University of Tlemcen was on the top  $(1^{st}$  place) before the university of M'sila and Constantine 1  $(2^{nd}$  and  $3^{rd}$  place respectively).

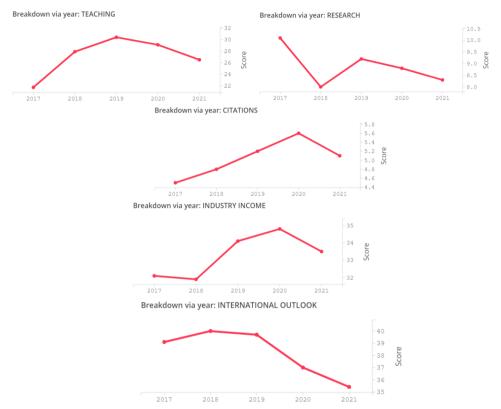
b. World University Rankings: the university of Tlemcen is ranked 801-1000 in 2018 among the world wide best universities. Then it moves down to +1001 ranking in the next 3 years (2019, 2020 & 2021). This degradation can be explained by the change occurred in the top management team after the death of the best competency that the university of Tlemcen have never seen Professor DJAFOUR Mustapha, who invested a lot in many areas that makes the university at the top of Algerian universities in the years 2016 and 2017.

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<sup>&</sup>lt;sup>2</sup> The habilitation is a promotion practice adopted by the Algerian HE system to enable teachers the promotion from a grade to another. To be accepted in an habilitation, the academic staff should submit a whole folder of all his academic work and scientific production since his last promotion. After examination from an ad hoc national committee, if they judge the teacher's work valuable, the declare him a professor.

Below, an overview on criteria composition used to rank all the universities around the world, accompanied by the university of Tlemcen indicators. These indicators measure the competency of the university (scores) in different higher education areas: teaching, research, citations, industry income and international outlook.

Fig.7. "THE" Used Criteria to rank the university of Tlemcen



**Source: (Times Higher Education, 2021)** 

**3.2.2.** UniRank, another ranking organisation: In 2021, The Australian ranking website UniRank (UniRank, 2021) published the Algerian University Ranking of 91 Algerian higher-education institutions meeting the following UniRank selection criteria: 1. being chartered, licensed or accredited by the appropriate Algerian higher education-related organization 2. offering at least four-year undergraduate degrees (bachelor degrees) or postgraduate degrees (master or doctoral degrees) 3. delivering courses predominantly in a traditional, face-to-face, non-distance education format.

## 3.2. Competencies and quality management at the university of Tlemcen

MEGNOUNIF *et al* has conducted a survey in the faculty of Technology, at the university of Tlemcen, in order to assess its quality management. From the different responses to the 02 established questionnaires, they propose to summarize the results in order to provide solutions to issues, judged negative by respondents. In summary, the list of significant points regarding teachers competencies is as follows:

### a. The positive points for teachers

- Teachers know how and when to contact the administration for their problems.
  - Teachers establish objectives for the course taught.
- Most of the teachers have a teaching experience of 5 to 10 years
  - The majority of teachers respect the schedueld's hours.
- Good communication between the student and teacher outside the classroom.

#### b. The teachers negative points

- Absence of coherent and transparent system assessment and reward.
  - A demotivating work environment.
- The difficulty in applying newly acquired information and techniques in teaching

#### c. The needs

From this summary of the results obtained from the questionnaires, the main needs are as follows:

- Effective administration.
- Coherent evaluation system for teachers.
- Competent teacher.
- Effective library.
- Availability of teaching materials.
- Strengthening university-industry relationship.

## d. Suggestions

After their analysis, the authors propose several solutions. Regarding teachers competency, they suggest:

**Mandatory continuous training:** All teachers need ongoing training throughout their working lives. Initial training needs to be updated during the career knowledge and professions with particularly important consequences for professional courses.

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Continuous training is recognized as a fundamental component of the teaching profession. The establishment of a unique service training in our faculty will respond in an effective and efficient manner, to the academic mission of training throughout life, responding to a demand from institutional and economical environment.

**Best teaching practices:** Teacher training, which should provide best practices, needs to feed on search results. To acquire "best teaching practices", it is essential to give young teachers specific guides, efficient know-how in daily action: we

must show them what "works" and what "does not work", as many markers that will allow them to use the best of their pedagogical freedom, which are examples and recommendations, not requirements on standardizing practices (Megnounif, Kherbouche, & Chermitti, 2013)

In order to stress out on evaluating teachers, they propose to establish *Coherent evaluation system* through an office guided by inspectors with a great experience in the field of education that allows evaluating, monitoring and observing the activity and effectiveness of the pedagogical action, which carry every 5 to 10 years. This procedure will reward teachers who do their work with quality.

When applying these suggestions, the use of the iceberg model will be very useful. It will allow decision makers and training conceptors to focus on the key competencies smartly to gain time and effort, and get more results to the desired goals. For instance, the trainings could contain some communication games in order to learn solving problems (Thinking styles) throughout team working (Team player competence) by communicating and understanding each other (interpersonal skills), encouraging them to copy and repeat what they have learned with their students (Good practices transfer).

#### 4. Conclusion:

Nonaka's proposition is that knowledge is created through the interaction of tacit and explicit knowledge via four knowledge conversion processesm socialisation, externalisation, combination, internationalisation. This paper tried to integrate the literature regarding the concept of competencies, SECI model of Nonaka, besides the ice-berg model. Forthermore, it tried to have a look at the university of Tlemcen as case study.

Competencies are not a tool to be used for evaluating people for layoffs. Competencies are only a way of talking about what helps people get results in their jobs. What matters is performance—being effective and meeting job

expectations. Talking about Performance and its key indicators will be addressed in a further research paper.

Competencies are not about being "competent" or "incompetent". Everyone has strengths in certain areas—skills, knowledge and abilities that they have developed over time. The iceberg model clear the different part of a competence and put in evidence the hidden and the most important part of it. The actual Algerian higher education regulation do not allow to measure and reward teachers properly, thus, a lot of behaviours and decisions has to be revised.

After all, Competencies management are about *finding the best ''fit''* between the job and the person.

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