RESEARCH

# PREPARATION OF AN INSTRUMENT OF VIGNETTES TO EVALUATE PROFESSOR PERFORMANCE

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#### Abstract:

Educational institutions face the challenge of selecting professors best able to perform their functions, in addition to training professors to take advantage of their individual potential. It is not easy, however, to distinguish professors with outstanding skills and aptitudes from professors who simply transmit knowledge. Based on a previous study's identification and differentiation of the skills and aptitudes of good professors versus talented professors (Sánchez and Domínguez, 2006), an instrument was developed to evaluate aptitudes and teaching skills by asking professors to solve ten vignettes representing various practical situations. The instrument proved to be useful for detecting professors' strengths and weaknesses in relation to the characteristics evaluated; it was also adequate for measuring aspects uncommon in institutionalized evaluations.

Keywords: professors, professor performance, evaluation, higher education, Mexico.

#### Introduction

To a large degree, a university's quality depends on the training, ability, responsibility and enthusiasm of its academic personnel. Gómez (2002) mentions that at the present time, very few professors are dedicated to the teaching profession because of a teaching vocation; and as the student population grows, newly-hired teachers frequently do not undergo an adequate selection process. As a result, the problem of forming a good faculty is aggravated. Selecting the most apt has become an urgent matter.

Current controversies involve the evaluation of the teaching profession: the multidimensionality of the profession, the lack of a consensus in the methodologies and instruments for the evaluation process, concern about generating the most appropriate instruments, and criticism of the assumed definition of a "good teacher" (Rueda-Beltrán y Díaz-Barriga, 2000).

With such a panorama, we should not be surprised that a quite broad movement has arisen in favor of evaluating teachers, in order to learn what and how they teach, and to able to add the best teachers to university faculties. Guided by this purpose, Latin American educational systems have emphasized efforts to improve educational quality and have identified the variable of "the teacher's professional performance" as a necessary and determining factor for attaining the qualitative improvement of schools. Being able to characterize teacher performance encourages future professional development while constituting a fundamental manner of serving and stimulating teachers.

Numerous studies and experiences have shown the indispensable characteristics for considering a teacher *good* (Aguirre *et al.*, 2000; García-Garduño, 2000; Gilio-Medina, 2000; Luna-Serrano, 2000; Rueda-Beltrán y Díaz-Barriga, 2000). Many of these projects are within a framework of approaching teacher effectiveness based on evaluation surveys. Such a diversity of ideas complicates the intent to establish a single, somewhat uniform referential profile of professional performance or relationships for university professors, who are conditioned by the context of pedagogical action and/or the psychological nature imprinted on all their actions, whether professional or personal.

Until now, the means most employed for evaluating the teaching profession has been opinion questionnaires completed by students, who are considered the best source of information on

teacher performance: students interact constantly with teachers and notice if teachers have the pedagogical skills to transmit their knowledge, if they develop adequate, real programming of the course, if they communicate efficiently, and if they are congruent in their grading (Loredo, 2000). However, in general terms, student opinions are believed to be subjective and influenced by diverse factors; the result is evaluation susceptible to slant (Van de Grift, 2007).

An examination of the related literature has shown that no universal definition exists for teaching effectiveness or high-quality teaching. The reason is that teaching is a complex activity that includes a wide variety of individual characteristics and styles. Part of the polemical view of defining effective performance resides in recognizing if teaching is an art or a science. For Schwartz (1996), this apparently simple question involves a series of complex, contradictory, and constantly changing responses. If teaching is an art, the selection and identification of talents and skills may be the essence of the response; however, if teaching is a science, the response will be the proven and verifiable experiences of training.

Since no established model indicates the essential characteristics in the definition of an outstanding teacher, Sánchez y Domínguez (2006) used the technique of modified natural semantic networks (Reyes-Lagunes, 1993) to identify the characteristics associated with the concepts of "Good teacher" and "Talented teacher"; their sample included 400 students and teachers in four areas of basic knowledge (physics/mathematics, chemistry/biology, economics/administration, and social sciences/art). This technique (Figueroa, González y Solís, 1981) is a tool based on free association and a reconstructive process of information stored in the long-term memory, and permits exploring the psychological meaning of concepts. It proposes an explication of how information is represented and organized in the memory and how the memory can have effects on behavior. The technique has been used in diverse studies in the field of education to explore concepts and reaching comprehension (Valdez-Medina, 1998). Therefore, it has been deemed used for the purposes of this study.

The results obtained in the above study indicated that although the terms, "Good teacher" and "Talented teacher" have characteristics in common, they have sufficient elements to be considered different. The first term puts more emphasis on skills, i.e. on behaviors that can be acquired, while the second term contains a larger number of primary characteristics or aptitudes preexistent to learning. The results agree with the idea that has been developed in relation to talent, as a particular profile of aptitudes that are reflected in exceptional performance in a field of action (Buckingham and Clifton, 2001). In the particular case of the "Talented teacher", this profile would be defined by the aptitudes of intelligence, creativity, flexibility, open-mindedness, and charisma and by the skills of knowledge, communication, preparation, training, being up-to-date, responsibility, empathy, experience, refinement, commitment, innovativeness, wisdom, tolerance, motivation, and scholarship. The "Good teacher" profile, on the other hand, would be defined by the skills of knowledge, preparation, responsibility, organization, commitment, punctuality, fairness, training, communication and empathy and by the aptitudes of intelligence, patience, and flexibility.

Based on the identification of the mentioned characteristics, the need arose to elaborate a measuring tool that could take these attributes into consideration; objective evaluations carried out to date simply readdress some of the identified attributes (Fresán, 2000; García-Garduño, 2000; Gilio-Medina, 2000).

The ways of evaluating teachers also have some intrinsic problems. Measuring tools can be classified into three types: closed-ended questionnaires, observational logs, and students' evaluations (Loredo, 2000; Van de Grift, 2007). Questionnaires have the disadvantage of directly asking teachers about their professional work in the classroom; the result may be socially desirable responses since teachers complete the questionnaire based on their pedagogical theoretical knowledge and not necessarily on what they do in the classroom (Van de Grift, 2007). Observational logs, although proven in effectiveness, are the most costly in terms of time and resources; a sufficiently objective evaluation requires training personnel who are present in the

classroom, a possibly annoying situation for the teacher. The third and most used strategy of evaluation is to ask students directly. This strategy is by far the most frequently used (Loredo, 2000; Loredo y Grijalva, 2000); however, one of its greatest problems is that students sometimes ventilate their frustration in an offensive, aggressive personal attack on the teacher (Rhea *et al.*, 2007).

Due to the above, and in line with the purpose of developing an objective evaluation of teacher performance independent from teacher estimations, without resorting to questionnaires or observational logs, the decision was made to use an instrument based on a model of vignettes. Such an instrument could be used to present the participant, in this case a teacher, with daily situations in the classroom. Some studies have indicated that vignettes are a valuable technique for exploring individuals' perceptions, beliefs, and meanings in relation to specific situations, and that they are especially useful for researching sensitive topics that cannot be addressed by other methods; responses to vignettes have been found to be a good reflection of the way individuals respond to reality (Carlson, 1996; Rahman, 1996).

The use of vignettes in the educational field (Barnatt et al., 2007) offers a way to evaluate the cognitive processes of teachers' decision-making. Vignettes can also result in findings that guide teacher performance in the classroom. The respondent grounds his answers and reflects on his attitudes with respect to complex, difficult, and realistic situations.

## Method

## **Participants**

The study was carried out with a sample of eight full-time academics who served as judges for the first stage of the study, the validation of vignettes. Subsequently, a pilot study was completed with an independent sample of fifteen academics who made a second evaluation of the instrument. A third sample of thirty teachers was used for applying the final version. All the participants were teachers at the Universidad Iberoamericana in Mexico City, with one to twenty-five years of teaching experience, and from the four academic areas identified above (physics/mathematics, chemistry/biology, economics/administration, and social sciences/art). They were selected in a non-probabilistic manner for the three phases of constructing the instrument.

#### Procedure

Based on the results of the study by Sánchez y Domínguez (2006), we used the sixteen characteristics *not* shared in the first twenty definitions of the concepts, "Good teacher" and "Talented teacher" for constructing the vignettes (Table 1).

TABLE 1
Words Not Shared in the Definitions of "Good teacher" and Talented teacher"

Good teacher	Talented teacher
Organized	Creative
Punctual	Experienced
Fair	Refined
Patient	Innovative
Reliable	Wise
Respectful	Motivating
Honest	Charismatic
Understanding	Scholarly

At least one vignette was written for the sixteen characteristics. Each vignette had four response alternatives that represented different ways of solving the same situation and that considered the evaluated characteristic to a different degree. In the particular case of the adjectives, *punctual*, *patient*, *fair* and *honest*, more than one vignette was written; these four characteristics, based on the first version of the test, generated the most possible scenarios. In the end, twenty-three vignettes were constructed.

As we mentioned, the validation of the vignette instrument was carried out in three stages. The first stage consisted of submitting it to a group of eight judges—three men and five women, all experts in the study of the teaching profession—to allow them to indicate the type of characteristic evaluated by the vignette; the intention was to ratify if the situations were representative of the attribute to be measured. The first instrument consisted of eight pages, each containing vignettes listed in a random manner. The instructions were at the top of the page, followed by the twenty-three vignettes; each vignette was followed by four response options. At no time was mention made of the attribute or characteristic being evaluated in each scenario. The instrument was applied by giving it to the judge along with a list of the sixteen attributes, and asking the judge to select the attribute represented in each vignette.

The second stage consisted of distributing the same instrument to an independent sample of fifteen teachers, who were to specify the type of attribute measured by each vignette. They were asked to assign the number 1 to the response most adequate for solving the specified problem or to the response that most represented the attribute evaluated; they would assign the number 2 to the second best alternative, followed by the number 3, and then number 4 to the response they found least representative of the evaluated attribute.

Once the data were collected, the corresponding data analysis began:

1) The responses to each vignette were assigned a weight according to their frequency of selection. The intention was to identify the most representative response for the vignette in first place, second place, third place, and the least desirable option for the solution.

Value of ratification = Hierarchy X fr

- 2) The central tendency, mode and mean were obtained for each response.
- 3) The obtained values were compared, along with a general evaluation of each response to determine which response the individuals believed would be the most adequate for each vignette, and which would be the least adequate.

Once the above data were obtained, the vignettes that were most confusing or that had the lowest index of agreement among the judges were eliminated. The result was a final instrument of ten vignettes referring to the adjectives of fair, honest, patient, punctual, reliable, organized, motivating, innovative, wise, and scholarly.

In the third state, the final instrument was applied to an independent sample of thirty teachers, ages 27 to 48. All had a minimum of one year of teaching experience at the university level, and eight had been newly hired by the institution. The division by academic area was as follows: six teachers were from physics/mathematics, ten were from chemistry/biology, ten from economics/administration, and four from social sciences/art.

On this occasion, the instrument consisted of two letter-size sheets of paper, with the instructions on the top followed by ten vignettes in random order. Each vignette had four possible answers and no specification of the attribute being evaluated. The participants received one point for selecting in first place the response previously identified as the most adequate, and zero points for any of the other three responses. Thus each participant received a score between 0 and 10,

where zero meant no vignette was solved in the expected manner, and ten meant that all vignettes were solved correctly (see complete instrument in annex).

#### Results

The judges' agreement for the first stage of instrument validation ranged from 63% to 100% as shown in Chart 1; therefore, the degree of agreement was considered sufficient to continue with the following stage of validation.

In the second stage, once the weighted analysis was complete, as well as the judges' agreement on the most adequate answers for solving the vignettes, the discovery was made that only ten vignettes attained the minimum agreement of 90% in the hierarchy of options. Chart 2 shows the order of the four response options for the ten vignettes identified as consistent.

CHART 1

[Judges' Agreement Regarding the Attributes Evaluated in the Vignette Instrument (%)

Vignette	Agree- ment	Vignette	Agreement	Vignette	Agreement
Charismatic	88	Honest (1)	75	Motivating	88
Understanding	88	Honest (2)	75	Organized	63
Creative	75	Honest (3)	63	Patient (1)	88
Refined	75	Innovative	75	Patient (2)	63
Reliable	100	Fair (1)	75	Punctual (1)	88
Scholarly	63	Fair (2)	63	Punctual (2)	75
Experienced	63	Fair (3)	88	Respectful	88
Wise	75	Fair (4)	63		

CHART 2
Response Options in the 10 Most Consistent Vignettes

Vignette	Response	Options		
1. Reliable	1	2	4	3
2. Patient	3	4	1	2
3. Organized	3	2	4	1
4. Honest	2	3	4	1
5. Fair	2	1	3	4
6. Punctual	1	4	2	3
7. Wise	3	2	4	1
8. Motivating	3	4	2	1
9. Scholarly	3	4	1	2
10 Innovative	2	1	3	4

For the third stage of validation, frequency analyses were made of the correct and incorrect responses for each vignette (Chart 3).

CHART 3

Correct Responses

Freque	ncy of C		Respo	nses in	the Vi	gnettes	3					
N	1	2	3	4	5	6	7	8	9	10	Total	%
											Correct	Correct
											Responses	Responses
1	0	1	0	0	0	0	1	1	0	0	3	30
2	1	1	1	1	0	1	0	0	0	1	6	60
3	1	0	1	1	0	0	1	0	1	1	6	60
4	1	1	1	0	1	1	1	0	0	0	6	60
5	1	1	1	1	1	1	1	1	1	1	10	100
6	1	1	1	1	1	1	1	1	1	1	10	100
7	1	0	1	1	0	1	0	1	0	1	6	60
8	0	1	0	1	0	1	1	1	1	1	7	70
9	1	0	1	1	1	1	1	0	0	1	7	70
10	0	0	0	1	0	1	0	1	0	1	4	40
11	0	0	0	1	0	1	1	1	0	1	5	50
12	0	0	0	0	0	1	1	0	0	1	3	30
13	1	1	1	1	1	1	1	0	0	1	8	80
14	1	1	1	1	0	1	1	1	0	1	8	80
15	0	1	0	0	1	1	0	0	0	0	3	30
16	1	1	0	0	1	0	1	0	0	1	5	50
17	1	0	1	0	1	1	1	0	1	0	6	60
18	1	0	1	0	0	1	0	0	0	1	4	40
19	1	1	1	1	0	1	0	1	1	1	8	80
20	0	0	1	1	0	1	0	0	0	1	4	40
21	1	1	1	1	0	1	0	0	0	1	6	60
22	1	0	1	1	1	1	1	1	1	1	9	90
23	1	0	0	0	0	1	1	0	0	0	3	30
24	1	1	1	1	0	1	1	0	0	1	7	70
25	1	1	1	1	1	1	1	0	1	1	9	90
26	1	0	0	0	0	0	0	0	0	1	2	20
27	1	0	0	0	0	0	0	1	0	0	2	20
28	1	1	1	0	1	1	1	0	0	1	7	70
29	0	1	1	1	1	1	1	1	0	1	8	80
30	0	1	1	0	1	1	1	1	0	1	7	70
Total	21	17	20	18	13	25	20	13	83	24		
%	70	57	67	60	43	83	67	43	27	80		

Of the ten vignettes, we observed that in at least seven, the percentage of correct answers is greater than 57. The highest percentage is for vignette 6, which evaluates punctuality, while the lowest is for vignette 9 (scholarly). Below is a description of the responses for each vignette.

## Vignette 1: Reliable

Of the 30 professors, 70% selected the correct option. This indicates that the most of the teachers assume they are responsible for their absences; they make up the class to cover the scheduled material and do not leave the students to carry a load that does not correspond to them.

## Vignette 2: Patient

In this vignette, 56.7% of the professors gave the correct option. The results show that slightly more than one-half of the participants are patient when their students request a class before an examination; they are willing to explain a difficult topic again. However, they do so in brief form simply to answer questions, and do not cover the entire topic the second time.

## Vignette 3: Organized

In relation to this attribute, 66.7% of the professors in the sample selected the correct option. This shows that most of them are adequately organized when a study guide must be turned in with short notice. Most of the teachers opt to prepare a preliminary guide and turn it in with a basic bibliography, and make the necessary modifications at a later time.

## Vignette 4: Honest

60% of the professors in the sample selected the correct option. This shows that in terms of honesty in relation to a forgotten item, slightly more than one-half admit their error and the remainder prefers not to inform students that an exam had been scheduled for that day and then forgotten.

## Vignette 5: Fair

In this vignette, 43.3% of the teachers in the sample chose the correct option. In terms of fairness, when most of the group fails, 56.7% tend to repeat the exam or assign extra work so that students can improve their grades, regardless of whether some may have obtained a good grade. Less than one-half leaves the grades as they are and only 20% opt to calculate a bell curve.

### Vignette 6: Punctual

The results of this vignette show that 83.3% of the professors selected the correct option. This shows that most are concerned about arriving in the classroom punctually, regardless of the circumstances.

## Vignette 7: Wise

For this attribute, 66.7% selected the correct option. The results show that slightly more than one-half of the professors like to answer their students' questions, regardless of whether or not they are related to the topic at hand, and that they provide answers in a simple, clear manner. The remainder opts to allow students to research their questions, or only answers questions related to the topic.

## Vignette 8: Motivating

In this vignette, fewer than one-half of the professors, 43.3%, responded adequately. This means that when a student has difficulties in a subject, at least one-half of the professors give him constant feedback and establish along with him programs of action to enable the student to deal with negative aspects and improve his performance.

## Vignette 9: Scholarly

In this vignette, only 26.7% selected the correct option. This shows that the professors incorporate examples into their professional practice so that their students have an improved understanding of the subject; but only 26.7% are concerned about searching for and incorporating updated bibliographic material to enrich their courses.

## Vignette 10: Innovative

In the final vignette, 80% of the professors selected the correct option. This shows that when they find extra innovative material, even when the course is almost finished, they incorporate the material to enrich the topic.

Final scores were obtained for the participants by adding the total points from the ten vignettes. An average score was calculated and two groups were formed: one higher than the average and one lower. Contingency tables were completed and the determination was made, through the Pearson Chi square, that seven of the vignettes discriminated between groups. Chart 4 shows that all of the vignettes based on the attributes of a "Good teacher" discriminate among groups, while only one of the four characteristics of "Talented teachers" discriminates between high and low scores.

CHART 4

Pearson Chi-square Test for Comparing High and Low Scores

Vignette	Chi-square	Gl	Sig.
1: Reliable	4.983	1	0.026
2: Patient	6.111	1	0.013
3: Organized	18.373	1	0.000
4: Honest	7.751	1	0.005
5: Fair	4.474	1	0.034
6: Punctual	4.852	1	0.028
7: Wise	3.517	1	0.061
8: Motivating	0.344	1	0.558
9: Scholarly	6.316	1	0.012
10: Innovative	2.907	1	0.088

#### Discussion

Human strengths rest on the ability to apply, flexibly, as many resources and skills as necessary for solving a problem or working toward attaining a goal (Staudinger, Marsiske, and Baltes, 1995; Staudinger and Pasupathi, 1995). The vignettes in the constructed instrument permit evaluating ten characteristics of "Good teacher" and "Talented teacher", and represent different ways of resolving the same situation.

With respect to the instrument, it is interesting to observe that of the 30 professors who answered the questionnaire, 19 obtained between 6 and 10 correct answers, and only 11 obtained fewer than 6 correct answers. This means that the instrument is capable of determining the way professors would respond to situations that are being evaluated.

According to other research results on talent in the academic setting, specifically with regard to professors' work (Gordon, 1999), the aim is not for all of the participants to respond correctly to all the vignettes, but to detect the participants' strengths and weaknesses in relation to the topics the vignettes evaluate.

The results of the study show that the greatest number of correct responses occurred in the vignettes on being *punctual* (83.3%), *innovative* (80%) and *reliable* (70%). The vignettes for being *organized* (66.7%), *wise* (66.7%), *honest* (60%) and *patient* (56.7%) were answered correctly by somewhat more than one-half of the professors. The fewest correct answers were found in the vignettes on being *motivating* (43.3%), *fair* (43.3%) and *scholarly* (26.7%).

In relation to the vignette on being *punctual*, we observed that 83.3% (25 out of 30) of the professors participating in the study are concerned about beginning their classes at the indicated time. They organize their activities to allow time to reach the university without rushing. Punctuality

is a characteristic all groups value, and tardiness is considered a characteristic of the "Bad teacher". Punctuality is a valued characteristic on most teacher evaluation questionnaires and is considered a personal characteristic (Aguirre *et al.*, 2000; Fresán, 2000; Vargas, 2000).

80% of the professors (23 out of 30) responded correctly to the vignette on being *innovative*. Galindo y Zwaiman (2000) define this attribute as the degree that the professor programs class techniques and activities, as well as new and original tasks. This characteristic is one that differentiates the "Talented teacher" from the "Good teacher" and implies that the talented teacher incorporates new elements in his courses—even when they have not been programmed—if he believes they will promote greater student learning and understanding of the topic. According to the vignette, a "Good teacher" is more concerned about complying with the program exactly. It is interesting to observe that this characteristic is not considered in most teacher evaluation questionnaires.

70% of the professors (21 out of 30) are concerned about making up classes, even if the professor's absence is due to forces beyond his control. This vignette evaluates the characteristic of being *reliable*. The seven professors who did not respond correctly to the vignette prefer to accelerate the pace of the course, cover the topics in partial form, or ask the students to review the topic on their own. This characteristic is valued in most teacher evaluation questionnaires, and also involves complying with the program's objectives and attending scheduled classes (Aguirre *et al.*, 2000; Vargas, 2000).

Organization is one of the characteristics of teachers that is evaluated most often; it involves the ability to plan (Jiménez-Zamudio, 2000). In the vignette on being *organized*, 66.7% of the professors (20 out of 30) organize their time adequately to comply with the requirements of the department where they work and to turn in their complete study guide on time. Two professors opt to complete a preliminary guide and to make modifications during the course; the remaining eight are not adequately organized.

The vignette on being *mise* was also answered correctly by 66.7% of the professors (20 out of 30). This is a characteristic of the "Talented teacher"; such teachers are knowledgeable about different topics and they like to answer students' questions even if they are unrelated to the topic. The other professors center only on their subject and do not answer questions or allow their students to research on their own. It is interesting to emphasize that no references were found on the teacher evaluation questionnaires in relation to this characteristic; most questionnaires evaluate the mastery of the subject, the level of knowledge, and the degree that the professor answers student questions that are related to the topic (Vargas, 2000).

The vignette on being *honest* was answered correctly by 60% of the professors (18 out of 30); honesty is a characteristic of the "Good teacher". This means that more than one-half of the study participants admit a forgotten item to their students. The remainder has difficulties in admitting an error, and seeks a way to resolve the situation without their students' realizing the error. It is important to point out that a teacher is considered honest when he speaks truthfully, is not deceptive, does not cheat or steal, and does not participate in any type of corruption (Contreras *et al.*, 2002).

56.7% of the professors (17 out of 30) responded correctly to the vignette on being *patient*, which evaluates the degree they respond to students' needs when they need to explain a topic to students for the second time, without neglecting the course's program. The thirteen remaining professors opted either to remain on the topic until their students understand it, or to ask their students to study the topic on their own. Although several studies consider this characteristic as a characteristic of a good teacher (Fernández, 2002; Gómez, 2002; Schmelkes, 2001), it was not found in the literature related to teacher evaluation questionnaires.

Fewer than one-half of the professors (43.3%, 13 out of 30) responded correctly to the vignette on being *motivating*, which is a characteristic of the "Talented teacher". This characteristic evaluates a teacher's ability to motivate students who feel they cannot handle the subject by establishing with

them, in individual form, a program of action to allow them to confront their weaknesses; the teacher then provides adequate feedback. Most professors, instead of motivating, are devoted to answering questions or assigning extra work so that students pass their subjects. According to Csikszentmihalyi, Rathunde and Whalen (1993), good teachers minimize feedback focused on controlling students and maximize feedback that reports on the development of skills, while remaining attentive at all times to responding to their students' changing needs on the emotional as well as the cognitive plane. It is important to point out that the professor's evaluation of his students' work and the timely communication of these results, including the indication of errors and discussion of correcting them, is a characteristic that is frequently present on teacher evaluation questionnaires (Aguirre *et al.*, 2000; Fresán, 2000). On the other hand, it is also important to consider that motivation depends on intrinsic factors (mastery, goals, challenges) as well as extrinsic factors and the characteristics of each student (affective and cognitive variables). This result may be due to the fact that teachers are generally asked to comply with topics and not really asked to motivate students to learn.

In relation to the vignette about being *fair*, only 43.3% of the professors (13 out of 30) opt, if most of their students fail an exam and one student obtains 9/10, to leave the grades as they are and not give the exam again or assign extra work to raise the grade. It is of interest to ask if it is fair for the student who obtained 9/10 to repeat the exam or to keep his grade when the rest of classmates, who failed the exam, have the option of doing extra work to obtain a better grade.

In some studies (for example, Contreras et al., 2002) a professor is considered to be fair when he evaluates in an objective manner, believes that all individuals have the same rights and opportunities, and does not have preferences; besides, this is a frequently evaluated characteristic on teacher questionnaires (Jiménez-Zamudio, 2000). There is no clear definition of fairness that is accepted by all, since the term can be studied from different facets; it continues to be seen as an imprecise concept. Formal justice or fairness has been defined as a principle of action of agreement by which beings from the same essential category must be treated in the same way. This implies that based on a concrete definition of the respective groups to which each case pertains, the same criteria or norm will be applied for the corresponding case. The importance of the matter is that what is fair depends on the groups to be formed and the rules to be applied; once these definitions are established, the concept of fairness becomes trivial and consists simply of applying the adequate norm to the adequate case.

The vignette that obtained the lowest number of correct responses was being *scholarly*, a characteristic that corresponds to the "Talented teacher"; this implies that the professor never stops developing his personal interest in his area of knowledge (Csikszentmihalyi, Rathunde, and Whalen, 1993; Gordon, 1999). Only 26.7% (8 out of 30) of the teachers in the sample responded to this item correctly. This vignette evaluates the degree that a professor incorporates and reviews new bibliographic material for the courses he has taught previously. It is important to point out that all the teachers in the study incorporate examples from their professional experience into their courses, but not new materials of study. In relation to the literature found on the teacher evaluation questionnaires, this characteristic is not evaluated since students have no way to determine if the professor has incorporated new elements into his course. Being scholarly, however, is considered by Buckingham and Clifton (2001) as the talent of continual, deliberate transit from ignorance to knowledge—the passion to learn, rather than simply a teacher's desire to become an expert in his subject.

It is important to mention that a purpose of this project was to make the characteristics evaluated in the vignette instrument sensitive to environmental and contextual influences, which determine the way these characteristics are manifest in their context. Thus an attempt is made to decrease the conflicts that frequently occur between the evaluator and respondent, as well as among the ends of the evaluation itself.

What makes a good teacher? Is it the presence of certain inherent skills or internal qualities, or is it the adequate use of didactic techniques that makes learning more interesting and permanent for students? Can any professional be trained to be an exceptional teacher, or should an investment be made in carrying out an adequate selection process for hiring only teachers who show talent in teaching? Can we conclude, as Gage (1992) establishes, that teaching is an instrumental art, and that certain aptitudes as well as certain developed skills must be present to have a good teacher? A professor needs, in first place, to be knowledgeable and have mastery of the subject to "teach" as well as "knowing" and "knowing what to do"; in other words, in addition to technical knowledge, experience in the work setting is required (general culture, professional training). The teacher must have pedagogical skills and the ability to transmit his knowledge (good communication, motivation, interest, organization, clarity, responsibility, compliance, congruity), and supplement this ability with the presence of attitudes and values (fairness, attendance, punctuality, respect, strictness, honesty) to encourage learning processes among his students. He must also have the qualities of intelligence, creativity, innovation, wisdom, empathy, openness to experience, and charisma. The study's findings show that it is more difficult to have "Talented teachers" than "Good teachers".

The results of this research reaffirm the consensus that exists in the idea that the failure or success of any educational system depends fundamentally on the quality of its teachers' performance. It may be possible to perfect the plans of study, programs, textbooks; construct magnificent facilities; or obtain excellent means of teaching; but without efficient teachers, the real perfection of education cannot occur.

The great challenge for educators is no longer to distinguish between teachers who are talented and teachers who are not, but to help all individuals to identify their potential and strengths and to exercise them in an adequate and socially useful context. This instrument of vignettes considered the differentiation between the characteristics of a "Good teacher" and a "Talented teacher" in relation to different situations that occur in the teaching profession. The method used is an uncommon form of institutionalized evaluations that attempts to correct certain errors of measurement that are present in other tools of evaluation like questionnaires, observational logs, and student evaluations. In addition, this instrument, because of its characteristics, can be used either for internal evaluation with teachers who already form part of the faculty, or from the outside, with newly hired professors. It can offer a good perspective of how to respond in relation to the evaluated characteristics, and to provide feedback and identify strengths and weaknesses according to each teacher's profile.

The vignette instrument evaluated only ten characteristics of the "Good teacher" and the "Talented teacher". It was validated by traditional methods of validation by judges, based on the results from the first part of the investigation. This instrument can be broadened to evaluate a larger number of characteristics. It is also feasible, according to the results of this study, to construct an instrument to evaluate diverse characteristics according to the needs of each area of study or academic area. In future projects, the instrument will need to be applied to larger samples; additional psychometric validations will have to be carried out to relate the instrument to the results of other instruments of teacher evaluation. In this manner, it will be possible to see how they relate and thus obtain empirical data on the concurrent validity that supports its use. It will be necessary to observe how the instrument behaves in different samples. Therefore we do not recommend using it in other contexts to evaluate teachers' characteristics without having carried out the necessary validations. It was constructed with a student and teacher population at the university level, and could not function at other academic levels.

Since the sample was selected in a non-probabilistic manner, some of the findings cannot be generalized. We suggest carrying out the same study in different educational institutions, both public and private. Lastly, the results contribute to understanding a topic of great relevance in diverse settings of human activity—a topic that has been the object of little study, like talent.

## Annex

## Instrument of Vignettes of Teacher Evaluation (IVED)

Name:
Gender:
Academic area:
Years of teaching experience:
Dear Professor:
Below you will find a series of daily situations that occur in classrooms in your professional life as a teacher. Please indicate the way YO
would solve each situation, putting the number 1 beside the response that you would use in first place, the number 2 for your secon
choice, followed by 3 and 4, until the four alternatives for solving the situation have been used.
Thank you for your cooperation.
1. You had to miss two classes because of a reason out of your control. You:
Agree with your students as soon as you return to make up those two classes.
Decide to accelerate the pace of the course somewhat to cover the material that remains pending from the scheduled classes.
You ask your students to review the material from those two classes on their own, since you believe it is important for students
to take charge of their own learning process.
You concentrate only on the relevant aspects of the topics; you present them and continue with your course.
2. A couple of weeks ago you covered a somewhat difficult topic; however, there were no related questions or comments. One class
before the exam, a group asks you to explain the topic again. Yet you already have the exam scheduled and prepared, considering the
topic you have to cover that same class. You:
Decide that you will spend that class returning to the topic that was not clear.
Decide that you cannot return to the topic and that the students will have to do so on their own.
Tell them to express their questions in brief, explicit form in order to address immediately the new topic.
Tell them that anyone who has questions can meet with you another day or stay after class.
3. One week before classes begin, you are assigned a new course that you have never taught. You are asked to turn in the complet subject guide within four days—the same guide that you would have to give your students. You:
Ask for more days since you believe that a guide cannot be put together in such a short time.
You prepare a preliminary guide and turn it in with a basic bibliography; later you make modifications during the course.
You ask for the model guide and you decide to make the guide exactly the same, without making modifications that woul possibly be more adequate according to your way of structuring the class.
You make extra effort to turn it in the first day of class just as you were requested, and according to the material you considered pertinent.
4. You forgot that today you had the first partial exam scheduled. You:
Admit that you did not have time to print it. You ask everyone to take out a sheet of paper and you dictate some questions.
At that moment, you decide that it will be easier for you to give an oral exam, and that is what you do.
You do not explain to them why you do not have the exam and you simply postpone it until the following class.
You admit that you forgot there was an exam that day and you negotiate it with the group.
5. You already graded the exams and 50% of your group failed; however, you have one student you wrote an excellent exam and got grade of 9/10:
<ul> <li>To avoid harming the majority of the group, you make a bell curve and adjust the grades.</li> <li>You leave the grades as they are.</li> </ul>
You tell those who did not pass to turn in an additional project to raise their grade.
You give the exam again.
6. You start work at eleven to teach your class. However, at that hour the parking lot is full and you decide (taking into account that yo do not have prior activities):
To prevent arriving late, you arrive very early and work in the teachers' room before your class starts.

	you can check in on time.
	You prefer to agree with your students to start the class later and give everyone time to get there.
	To advise the coordinator that due to your schedule, you cannot arrive to your class on time, and for them to take that situation into consideration.
7.	This semester you have students from different areas of study in your class, since you teach a subject of integration. They often "bombard" you with questions of very diverse types. You:
	Answer some questions and leave others for them to research.
	Like to answer all questions although you have to explain some concepts so that they understand.
	Answer only questions that have to do with the topic.
	Answer most questions with a simple, clear explanation.
8.	One of your students tells you that he has realized he is unable to understand the subject you teach. You:
	Schedule an appointment with him to advise him and answer his questions.
	Ask him to make an effort and you assign extra work so that he can earn some points and have an opportunity to pass your subject.
	Give him feedback regarding his performance during the course, pointing out both positive and negative aspects so that he can work on them.
	Establish along with him a brief program of action so that he can confront his weaknesses and improve his performance.
9. ′	This semester, you are to give the same course for the third time in a row. You:
	<ul> <li>Before each class, review the material that is already prepared and has worked well for you in previous years.</li> <li>Already know the material perfectly, so do not need to review it.</li> </ul>
	Are always aware of new bibliographic material you can add to your class to enrich it, independent from your liking the course as it is.
	Incorporate new examples that you have found and have obtained through your professional practice, and which are relevant for the topic of your course.
10.	You have just seen a film that is very interesting for the last subject in your course. However, time is short and you still have some topics to cover. You:
	Decide to see the film in class and discuss its relevant points the following class.
	Ask your students to see it and you cover the topic in class.
	Explain the topics as programmed and use the film as part of the exam.
	Decide to comply with your program to the letter and see the film at ease the last class.

#### References

- Aguirre, X.; Botero, I.; Loredo, J.; Magaña, L.; Montano, A.; Rigo, M., et al. (2000). "Evaluación integral de la docencia: una propuesta formativa y humanista", en J. Loredo (ed.), Evaluación de la práctica docente en educación superior (pp. 1-36), México: Porrúa.
- Barnatt, J.; Shakman, K.; Enterline, S.; Cochran-Smith, M. and Ludlow, L. (2007). "Teaching for social justice: Using vignettes to assess attitudes and beliefs", paper presented at American Educational Research Association Annual Meeting: The world of educational quality, November, available at <a href="http://tne.bc.edu/documents/TeachingforSocialJusticeUsingVignettestoAssessAttitudesandBeliefs.pdf">http://tne.bc.edu/documents/TeachingforSocialJusticeUsingVignettestoAssessAttitudesandBeliefs.pdf</a>.

Buckingham, M. y Clifton, D. (2001). Ahora, descubra sus fortalezas, México: Norma.

- Carlson, B. E. (1996). "Dating violence: student beliefs about consequences", Journal of Interpersonal Violence, 11, 3-18.
- Contreras, E.; Sánchez, A.; Olivo, E.; Ramos, G.; Rojas, M.; Salinas, H., et al. (2002). Propuesta del perfil del profesor modelo UDEM, México: Universidad de Monterrey, disponible en: www.udem.edu.mx/claustro/prpuestas/doc13.doc.
- Csikszentmihalyi, M.; Rathunde, K., and Whalen, S. (1993). *Talented teenagers: The roots of success and failure*, New York: Cambridge University Press.
- Fernández, A. (2002). "Marco normativo para la calidad educativa: base para un nuevo sistema nacional de evaluación nacional educativa en México", Educación 2001, 85, 68-69.
- Figueroa, J.; González, E., y Solís, V. (1981). "Una aproximación al problema del significado: las redes semánticas", Revista Latinoamericana de Psicología, 13(3), 447-458.

- Fresán, M. (2000). "Una propuesta para la evaluación docente en el nivel de posgrado", en J. Loredo (ed.) Evaluación de la práctica docente en educación superior (pp. 37-62), México: Porrúa.
- Gage, N. L. (1992). "Art, science and teaching from the standpoint of an eclectic purist", School of Education Review, 4, 8-17.
- Galindo, D., y Zwaiman, K. (2000). "Un estudio empírico de la relación que existe entre la evaluación docente y el clima escolar", en J. Loredo (ed.) Evaluación de la práctica Docente en Educación Superior (pp. 179-214), México: Porrúa
- García-Garduño, J. M. (2000). "Las dimensiones de la efectividad docente, validez y confiabilidad de los cuestionarios de evaluación de la docencia: Síntesis de investigación internacional", en M. Rueda-Beltrán y F. Díaz-Barriga (eds.), Evaluación de la docencia (pp. 41-62), México: Paidós.
- Gilio-Medina, M. C. (2000). "La evaluación docente desde una perspectiva participativa: el caso de la licenciatura en química de la Universidad Autónoma de Querétaro", en M. Rueda-Beltrán y F. Díaz-Barriga (eds.), Evaluación de la docencia (pp. 85-102). México: Paidós.
- Gómez, M. M. (2002). "La Universidad de México, su función y razón de ser de su autonomía", Educación 2001, 85, 1-32.
- Gordon, G. (1999). "Teacher talent and urban Schools", Phi Delta Kappan, 81(4), 304-307.
- Jiménez-Zamudio, J. J. (2000). "Un instrumento de evaluación docente orientado a los procesos de enseñanza", en J. Loredo (ed.), Evaluación de la práctica docente en educación superior (pp. 179-214), México: Porrúa.
- Loredo, J. (2000). Evaluación de la práctica docente en educación superior, México: Porrúa.
- Loredo, J., y Grijalva, O. (2000). "Propuesta de un instrumento de evaluación de la docencia para estudios de posgrado", en M. Rueda-Beltrán y F. Díaz-Barriga (eds.), Evaluación de la docencia (pp. 103-132), México: Paidós.
- Luna-Serrano, E. (2000). "Aspectos implícitos sobre la enseñanza reflejados en los cuestionarios de evaluación de la docencia", en M. Rueda-Beltrán y F. Díaz-Barriga (eds.), Evaluación de la docencia (pp. 63-84), México: Paidós.
- Rahman, N. (1996). "Caregivers' sensitivity to conflict: the use of vignettes methodology", Journal of Elder Abuse and Neglect, 8, 35-47.
- Reyes- Lagunes, I. (1993). "Las redes semánticas naturales, su conceptualización y su utilización en la construcción de instrumentos", Revista de Psicología Social y Personalidad, 9(1), 83-99.
- Rhea, N.; Rovai, A.; Ponton, M.; Derrick, G. and Davis, J. (2007). "The effect of computer-mediated communication on anonymous end-of-course teaching evaluations", *International JI. on E-Learning*, 6(4), 581-592.
- Rueda-Beltrán, M., y Díaz-Barriga, F. (2000). Evaluación de la docencia, México: Paidós. Sánchez, S., y Domínguez, A. (2006). "Significado psicológico del talento en la docencia: maestros talentosos vs.
- buenos maestros", *La psicología social en México* (vol. 11, pp. 483-489), México: AMEPSO. Schmelkes, S. (2001). "La calidad en la educación básica: conversaciones con maestros", *Documento DIE, núm.* 48, México: DIE-CINVESTAV.
- Schwartz, H. (1996). "The changing nature of teacher education", in J. Sikula (ed.), *Handbook of Research on Teaching Education* (2 ed., pp. 3-13). New York: McMillan.
- Staudinger, U. M.; Marsiske, M. and Baltes, P. B. (1995). "Resilience and reserve capacity in later adulthood: Potentials and limits of development across the life span" in L. G. Aspinwall y U. M. Staudinger (eds.), A Psychology of Human Strengths, Washington, DC: APA.
- Staudinger, U. M. and Pasupathi, M. (1995). "Lifespan perspectives on self, personality and social cognition", in L. G. Aspinwall and U. M. Staudinger (eds.), A Psychology of Human Strengths, Washington, DC: APA.
- Valdez-Medina, J. L. (1998). Las redes semánticas naturales, usos y aplicaciones en psicología social, Toluca: Universidad Autónoma del Estado de México.
- Van de Grift, W. (2007). "Quality of teaching in four European countries: a review of the literature and application of an assessment instrument", Educational Research, 49(2), 127-152.
- Vargas Diez-Barroso, J. (2000). "Propuesta de un perfil integral de maestro universitario y de un instrumento para la evaluación docente", en J. Loredo (ed.), Evaluación de la práctica docente en educación superior (pp. 115-148), México: Porrúa.

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