Comprehensive Multi-source Multi-criterion System for Evaluating the University Faculty members

M. A. Abdel-halim* Fahad Almufadi College of Engineering, Qassim University, Saudi Arabia

* masamie@qec.edu.sa

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Abstract. Most of the universities have three main tasks, namely; teaching, scientific research and community service. Staff member is the motive and core element in the education process as he is the leader of the education and upbringing work. Also, the staff member is responsible for developing the universities, and realizing their scientific and practical missions towards the community. It is very important for ensuring the efficiency of the universities to develop the faculty members. The first step towards this is to measure and evaluate the faculty members' performance. Evaluation will aid in taking the right decisions, encouraging the staff to enhance their performance, and enabling rewarding the distinguished staff. To avoid the disadvantages of existing evaluation systems such as limited evaluation sources and items of valuing, a comprehensive multi-source multi-criterion comprehensive system has been developed. The system has been applied on the faculty members of College of Engineering at Qassim University. The results proved its efficiency, accuracy and fairness. Also, the results showed that the system possesses great flexibility such that it can suit the ordinary academic institution and those having special nature.

Key Words: Staff Evaluation, Self-evaluation, Comprehensive Evaluation.

1. Introduction

The universities have many tasks. Although differ from university to another, the main tasks are education, scientific research and community service [1-3]. Staff member is the fundamental and principal element in the education process as he is the leader of the education and breeding work. He deals directly with the students, and consequently influences their scientific and social construction. Also, the staff member is responsible for developing the education institutions and realizing their scientific and practical missions towards the community.

According to the regulations, rules and duties of the staff member, staff member is the person who is efficiently qualified and has the potential to carry out his responsibilities and duties concerning the followings [1, 4]:

- Reserving, developing, improving, following-up and applying the knowledge.
- -Teaching aiming at a distinguished preparation of the human staffs.
- Scientific research to contribute to promoting the scientific standard in his specialization, and to add to the art of science
- Keeping the values and moods and giving a good example and model in this regard.

It is very important for ensuring the efficiency of the education institutions to develop the faculty members. The first step towards this is to measure and evaluate the performance of them. Evaluation will aid in taking the right decisions, encouraging the staff to develop themselves, and enabling proper identification and rewarding the distinguished faculty members.

Many systems of faculty members' evaluation have been developed and applied in the different education institutions [5-11]. Most of these systems [5-8] depend on limited sources of evaluation. The main sources of these are a limited self-evaluation and evaluation by the direct head or evaluation by the students. This will result in an inaccurate evaluation as it is affected by human factors. Also, the evaluation in many systems is not an inclusive evaluation as it is not targeting various and different staff activities.

2. Features of the Developed Evaluation System

To avoid the disadvantages of the existing evaluation systems, a new rigorous and comprehensive system has been developed. The new system has the following features:

- The system has input from many sources including the different bodies, units, and directorates with which the faculty members deal such as the students, colleagues, head of the scientific department, planning and quality units, vice deans and the dean in addition to the self-evaluation.
- All the staff activities are evaluated. In this regard, the evaluation covers teaching and associated jobs, education quality assurance activities, scientific research, community services, university services and administration work. The behavior, attitude, appearance, values, and other personal features are covered in the evaluation.
- To attain high accuracy, all the evaluation items will be divided into sub-items which have weights according to the relative importance of the sub-item. Each category (staff activity) will be evaluated from different sources to minimize the personal sentimental factors, and to ensure accuracy and fairness.
- The system is transparent as it is clarified and pronounced to each staff member as regarding evaluation sources, items and sub-items evaluation weights. Also, full illustration about how the system works is presented through workshops and via the college site.

3. Evaluation Sources and Criteria

The suggested evaluation system depends on different sources which are in contact with the faculty member. The evaluation is carried out through seven sources. These sources and their weights are as follows:

Source	Weight
Self-Evaluation	82 point
Evaluation by the Students	12 point
Evaluation by the Head of the Dept.	20 point
Evaluation by the QAAA Unit	15 point
Evaluation by the Vice Dean for Academic Affairs	16 point
Evaluation by the Colleagues	5 points
Evaluation by the Dean	10 points
	bonus

Total

3.1 Self-Evaluation (82 point)

Self-evaluation is one of the evaluation methods followed by many universities. In this evaluation, the staff member evaluates himself usually in the teaching [5-7]. Through this evaluation, universities aim at encouraging the instructor to criticize himself and define the strengths and weaknesses of his teaching performance. Thus, he can develop himself. Self-evaluation is carried out either by using forms which are filled by the instructors, or by recording the lectures while delivered by the instructor. This self-evaluation has the disadvantages of being for teaching only and that the instructors have the trend to give them-selves points more than what they deserve.

In our developed self-evaluation, the staff will be asked to evaluate his main jobs; teaching, research, community services and administration works. These activities will be divided into subitems of predetermined weights to guide the staff during their evaluation.

A) Teaching (No upper limit, threshold is 9 points)

Each staff member should evaluate himself regarding the following items:

Item		Points
His teaching load as compared with his official burden. 6 point		No upper
to the full-loaded staff more or less points will be given to over-	loaded or under-	limit
loaded staff, respectively.		
The evaluation system of the students' works as regarding its course outcomes, accuracy, and transparency.	suitability to the	4 points
Use of modern strategies methods and tools of teaching.		4 points

B) Scientific Research (No upper limit, threshold is 34 point)

The Scientific Research is divided into 4 categories as follows:

i) Papers Publication

Item	Points*
ISI Paper	6
Scopus Paper	5
International Journal Paper	2-4
International Conference Paper	2-3
Local Journal Paper	2
Local Conference Paper	11/2
Invited talk, Plenary talk, Keynote Speaker in International Scientific Conference or Symposium	3

Invited talk, Plenary talk, Keynote Speaker in Local Scientific Conference or	2
Symposium	

* To be divided by the number of authors for multi-author papers

ii) Research Projects& Theses supervision

Item	Points
Big Research Project supported by national or international authorities, Principal Investigator (PI)	5
Multi-disciplinary research project supported by research authorities or industry, PI	5
research project supported by research authorities or industry, PI	31/2
Multi-disciplinary University supported research project, PI	31/2
University supported research project, PI	21/2
Supervision of a PhD Thesis, Principal Supervisor (PS)	4
Supervision of an MSc Thesis, PS	3
Presenting a Scientific Lecture	11/4
Co-Investigator of Research Project	60% of the PI
Co-Supervisor of a Thesis	60% of the PS

iii) Reviewing Activities

Item	Points
Reviewing a Promotion Scientific Works	2
Reviewing an International Journal Paper (at least 1 paper/year)	11⁄4
Reviewing an International Conference Paper (at least 1 paper/year)	1
Reviewing a local journal paper (at least 1 paper/year)	1
Reviewing a Local Conference Paper (at least 1 paper/year)	3⁄4
Reviewing an External Research Proposal (at least 1 /year)	11⁄4
Reviewing an Internal Research Proposal for a local body (at least 1 /year)	3⁄4
Review of a PhD Thesis	2
Review of an MSc Thesis	11/2

iv) Other Miscellaneous Activities

Item	Points
Director of a Conference Session	11/2
Attendance of a Scientific Conference	3⁄4
Invention confirmed by an International Patent	3 for all inventors
Invention confirmed by a Local Patent	2 for all inventors
Authorship of a Book Chapter	2 divided by number of authors
Translation of a Book Chapter	1 ¹ / ₄ divided by number of authors

C) Community Service

(No upper limit, threshold is 6 points)

The community services and the related activities should be mentioned and described by the staff member and will be evaluated by giving them weights according to their importance. They are classified into the following sub-categories:

Item	Points
Consultation and engineering studies	3
Training courses and workshops	3
Activities associated with the professional societies	11/2
Interaction with community authorities (schools, ministries, companies, etc.)	11/2
Others	1

D) University, College, and Department Service (No upper limit, threshold is 4 points)

D.1- University services

Participation in committees and activities at the University level should be mentioned by the staff member and will be evaluated. These includes:

Item	Points
Directing the University-level centers, units, and committees	4
University quality assurance and accreditation activities	3
University Strategic Plan and projects	3
University administration consultations	3
Participations in councils and committees at the University level	2

D.2- College and Department Services

The staff member evaluates himself concerning the followings:

Item Poin

Directing the college-level centers, units, and committees.	3
Directing the department-level centers, units and committees.	2
Departmental administration work	2

3.2 Student Evaluation (12 points)

Most of the universities use this evaluation. In this evaluation, the students evaluate the performance of the instructors through surveys. These surveys are supposed to have well-designed enquiries regarding the teaching abilities, personal characteristics, attitude, some values, and general appearance of the staff member.

The disadvantages of this method of evaluation is that the evaluation of the students is affected by their marks in the course [8], the students do not have enough experience and ability to evaluate their instructors and their scientific knowledge [10-12], the students concentrate on the behavior and manner of the instructor rather than his scientific knowledge and abilities, and the evaluation is affected by some circumstances such as the number of students in the lecture room, type of the course whether it is elective or compulsory course, time of delivering the course. Some researchers think that the evaluation by the students mostly affects the staff self-confidence and affects his status in the university [9]. Most of the authors think that it is not right to use the student evaluation only for assessing the faculty members.

In the present developed system, the student evaluation is one of the seven sources of evaluation. It is done through a well-designed survey measuring many items. Due to the low reliability of the student evaluation, it is given low weight. The items and their weight are as follows:

Item	Points
Curriculum Planning and adhering to the course contents	11/2
The instructor knowledge of the course scientific material	11/2
The instructor ability of conveying the information	11/2
The fairness of evaluation of the students	11/2
The instructor punctuality	11/2
The usefulness of the office hours afforded by the instructor	11/2
The instructor manners and attitude towards the students	11/2
The extent of using and dependence on the textbook	11/2

3.3 Evaluation by Head of the Department, Vice Deans and the Dean

This type of evaluation is usually used as a guide for taking administrative decisions such as promotion, fixing and giving financial increment. Selden [13] sees that the evaluation by the Head of the Department is the most important one among the evaluation sources as the Head of the Department has detailed information about the teaching burden and other administration activities

of the staff member. Also, he may receive information from the students and colleagues which enables him to properly evaluate the staff member.

3.3.1 Evaluation by the head of the department (20 points)

To increase the accuracy and reliability of the evaluation, and to minimize the personal factors, the evaluation is designed to covers the following detailed items:

Item	Points
Teaching:	6
Scientific abilities	
Extent of punctuality with the office hours	
Research activities	4
Administration Works	3
Contribution in the Departmental committees	
Performing the academic advising	
Activities related to the quality assurance system and accreditation	3
Behavior and adherence to the University values	4

3.3.2 Evaluation by the vice dean for the academic affairs (16 point)

To increase the accuracy and reliability of the evaluation, and to minimize the personal factors, the evaluation is designed to covers the following detailed items:

Items	Points
Quality of the grades of the taught courses	6
Academic advising	3
Efficiency of the office hours	4
Punctuality to the courses' regulation work such as marks and attendance recording	3

3.3.3 Evaluation by the dean (10 points, bonus)

The evaluation covers the following items:

- General Reputation
- Contribution in College activities
- Contribution in the Univ. activities

3.4 Colleague Evaluation (5 points)

In this type of evaluation, the staff member is evaluated by his colleagues. This may be done individually or through committees [13-15]. In most universities, this type of evaluation is used to assess the research, university works and community service of the faculty members. This type of

evaluation is normally carried out when a staff member submits his scientific product for higher rank promotion.

The researchers have different opinions about the suitability and effectiveness of utilizing this type of evaluation for teaching activities. Braskamp [14] supports the opinion of using this evaluation for teaching performance. His reasons behind this is that the colleagues has the experience and knowledge to judge a colleague in the same specialization. He recommends that this evaluation to be carried through frequent visits by the colleagues, dead of department and the dean during the lectures of the staff member. In this regard, Selden [13] stated that, for effective visits and to have positive influence of this method, there should be mutual confidence between the faculty members, the visitors should be trained on operative observation and animadversion, the visitors should use a well-prepared evaluation form, and the reported notes should be subjectively and friendly discussed with the assessed faculty members.

In the present system, a staff member is evaluated by ten randomly-chosen faculty members from his department. The evaluation is carried out through the College site, and the evaluators will be kept unknown for the evaluated member. Each staff member is given the right to reject being evaluated by two at most of his colleagues.

The items of evaluation are as follows:

Item	Points
- General appearance	1
- Cooperation and help initiation towards his fellows	2
- Respect of other opinions	1
- Ability of convincing	1

3.5 Evaluation by the Quality Assurance& Academic Accreditation (QAAA) Unit (15 point)

Quality assurance and academic accreditation activities are getting increased nowadays in all the education institutions. To urge the faculty members to effectively participate in these activities, they should be evaluated concerning this side. The items of evaluation concerning this task should be defined and announced to the faculty members.

The evaluation covers the following items:

Item	Points
Participation in the activities of the quality assurance of the education process	7
and academic accreditation.	
Preparation comprehensive folders for the taught courses containing all the	8
course particulars, activities and evaluations of the student works	

If the institution has a special nature such as research institutions, or if it is required for any reason to concentrate on the research, the system can be adapted to serve this attitude by increasing the

weights of the research activities at the expense of other activities. The same can be done if teaching activities only are to be evaluated.

4. Application

The suggested system which employs the seven sources of evaluation, and the well-defined items and sub-items has been applied on the faculty members of the College of Engineering at Qassim University in the academic year 2018/2019. The number of faculty members in the three departments; Civil, Electrical and Mechanical departments are 13, 13 and 20 respectively. The resultant evaluation by the six sources; Department-Head, students, colleagues, QAAA unit, vice-dean for the academic affairs and the Dean, will be compared with the self-evaluation results to show the extent of confidence and reliability of the suggested self-evaluation regime. Previous system which concentrates on evaluation by the Head of the Department and the students only has been applied and compared with the suggested system to explore the advantages of the developed system and show how it aids in getting rid of the defects of the old systems.

The evaluations as regarding research or teaching only have been carried out. This has been done by summing the evaluation points of the items related to the concerned category, research, or teaching. For research-based evaluation, the sources are self-evaluation and the Department-Head evaluation. The sources of teaching-based evaluation are self-evaluation, the student evaluation, the Department-Head evaluation, and the Vice-Dean evaluation. Evaluation depending on the research only is suitable for research institutes, while this depending on teaching only is suitable for institutions which have no research concern.

5. Results and Analyses

Sample of the results when applying the system with its seven sources including all the activities is shown in Table 1. Detailed results as concerning the self-evaluation four parts, namely, teaching, research, community service and university services (Table 2).

Serial	Staff Code	Dept.	Self- Evaluation	Students Evaluation	Head of Dept. Evaluation	QAAA Unit Evaluation	Vice-Dean Evaluation	Colleagues Evaluation	Dean Evaluation	Total without Self- Evaluation	Total
			82	12	20	15	16	5	10	78	160
1.	231	CE	82.0	10.32	20	12.5	13	4.66		60.48	142.48
2.	204	EE	80.53	9.35	17	12.5	13	4.75		56.6	137.13
3.	10	EE	66.05	9.67	20	15	14	4.91	3	66.58	132.63
4.	233	ME	68.05	9.61	19	11	14.3	4.86		58.77	126.82
5.	28	ME	66.75	9.4	13	13	15	4.43		54.83	121.58

Table (1). Results of the comprehensive system using all sources of evaluation

6.	68	CE	57.26	10	20	12.5	15	4.64	 62.14	119.4
7.	215	EE	61.7	7.92	15	12.5	12.7	4.02	 52.14	113.84
8.	107	ME	48.13	11.1	19	13	10.7	5	 58.8	106.93
9.	51	ME	50.93	9.96	15	15	10	4.86	 54.82	105.75
10.	145	CE	43.85	9.67	18	14	15	4.8	 61.47	105.32
11.	38	ME	49.5	8.87	15	13	13.7	4.8	 55.37	104.87
12.	13	CE	40.75	9.55	18	12.75	12.5	4.84	 57.64	98.39
13.	1236	ME	36.87	10.9	19	11	13	4.65	 58.55	95.42
•										
35.	39	EE	23.74	7.73	17	13.5	12	4	 54.23	77.97
36.	202	EE	17.9	9.83	17	12.5	13.2	4.73	 57.26	75.16
37.	218	CE	18.5	9.8	17	12.5	12.5	4.56	 56.36	74.86
38.	188	ME	27.32	9.47	10	13	10	4.57	 47.04	74.36
39.	52	ME	23.17	10.45	12	13	10.7	4.81	 50.96	74.13
40.	37	CE	18.55	8.38	16	12.5	12.7	4.54	 54.12	72.67
41.	1235	ME	17.45	5.1	19	11	15	4.39	 54.49	71.94
42.	228	EE	18	8.38	15	12	14	4.38	 53.76	71.76
43.	133	CE	15.17	9.66	17	14	11.2	4.71	 56.57	71.74
44.	80	ME	18.37	8.92	14	13	10.7	4.23	 50.85	69.22
45.	235	CE	11.2	8.42	14	11	11	4.48	 48.90	60.1
46.	1237	ME	11.25	12	11	11	10.3	4.45	 48.75	60

Table (2). Detailed results of the self-evaluation

Serial No.	Staff Code	Dept.	Teaching	Research	Communit y Service	University Service	Total self- evaluation
1.	231	CE	9	103.32	6.08	0	82.0
2.	204	EE	14.1	66.06	0	0.375	80.53
3.	10	EE	14.4	31.43	14.22	6	66.05

4.	233	ME	11.6	54.25	2.2	0	68.05
5.	28	ME	18	46.35	2.4	0	66.75
6.	68	CE	13.2	36.9	7.16	0	57.26
•							
11.	38	ME	16	32.5	1	0	49.5
12.	13	CE	13.7	18.55	7	1.5	40.75
13.	1236	ME	12	22.49	2.38	0	36.87
14.	16	CE	11.7	20.3	2	0.375	34.69
15.	20	CE	17.7	8.74	3	5.25	34.37
16.	108	ME	9.2	25.24	0.4	0	34.84
•							
. 40.	37	CE	11.1	0.75	5.2	1.5	18.55
41.	1235	ME	9	8.45	0	0	17.45
42.	228	EE	12	6	0	0	18
43.	133	CE	14.8	0	0	0.375	15.17
44.	80	ME	18	0	0	0.375	18.37
45.	235	CE	11.2	0	0	0	11.2
46.	1237	ME	5.6	5.45	0.2	0	11.25

Table 1 shows that the self-evaluation in our system is consistent to a great extent with the total evaluation of the other sources. This is due to the rigorous presented system of self-evaluation which is governed through main- and sub –items of well-defined weights. As regarding the student evaluation, the results depicted in Table 1 confirms that the student evaluation is not reliable. To have accurate judgment, student evaluation should be supported by other sources of evaluation. More qualitative efforts are needed to strengthen the reliability of the student evaluation regime. Examples of the obvious inconsistency of the student evaluation with the overall evaluation are those of the faculty members of codes 1237, 52, 133, 188, 202, 218 and 235 who are at the bottom in the general evaluation. The conclusions regarding the student evaluation agree with conclusions of previous researchers [8]

The detailed evaluations of the 4 roles of the faculty members (Table 2) show that there is no relation between these 4 roles. It is possible to have very distinguished persons in research while their teaching, community services or university service are questionable (see faculty members of codes 231, 204 and 233). The reverse, also, is possible as there are persons of very poor research evaluation while their teaching evaluation is distinguished (Faculty members of codes 133, 80, 20 and 13).

The evaluation of the community service of the faculty members shows that this role is not given high attention by most of the members. The average point of this item is about 2.19, while the acceptable threshold is 6.

Colleagues' evaluation seems to suffer from drawbacks as the faculty members are obsequious to their colleague. This is obvious from the results given in Table 1. In this table, even the faculty members at the bottom of the table are getting colleagues' evaluation more than 85%.

The results when applying the system used in some other universities and employs evaluation by the head of the department and the students only are shown in Table 3.

Serial	Staff Code	Dep.	Students Evaluation, (12 Marks)	Head of the Dept., (20 points)	Total, (32 point)
1.	142	EE	11.33	19	30.33
2.	231	CE	10.32	20	30.32
3.	107	ME	11.1	19	30.1
4.	68	CE	10	20	30.0
5.	1236	ME	10.9	19	29.9
б.	10	EE	9.67	20	29.67
7.	16	CE	11.09	18	29.09
8.	230	CE	10.96	18	28.96
9.	233	ME	9.61	19	28.61
10.	108	ME	9.56	19	28.56
11.	217	EE	10.44	18	28.44
12.	145	CE	9.67	18	27.67
13.	13	CE	9.55	18	27.55
14.	163	EE	10.19	17	27.19
15.	146	CE	8.02	19	27.02
	•	•	•		•
39.	1237	ME	12	11	23.0
40.	80	ME	8.92	14	22.92
41.	52	ME	10.45	12	22.45
42.	28	ME	9.4	13	22.4
43.	221	ME	7.75	12	19.75
44.	188	ME	9.47	10	19.47
45.	215	EE	7.92	15	22.92
46.	235	CE	8.42	14	22.42

Table (3). Results of a system utilizing Head of the Department and Students evaluation

Comparing the results of Table 3 and Table 1, shows that the system of evaluation which has two sources only gives results which changes clearly the order of the faculty members. Consequently,

this system should be revised and developed by adding other evaluation sources as has been done by the comprehensive system of the present study.

A hypothetical study has been applied on the concerned faculty members evaluating them

based on the research activities only and reevaluating them based on the teaching activities only. The results are depicted in Table 4.

It can be noted by comparing the evaluation of research activities to that of the teaching activities that the two evaluations are independent each from the other and the system can be adopted by the institutions of special nature.

Table (4). Evaluation results as regarding either the research activities or the teaching activities

only.

Serial No.	Staff Code	Dept.	Research, no upper limit	Teaching, 54 point
1.	231	CE	107.32	32.32
2.	204	EE	70.06	41.55
3.	10	EE	34.43	42.87
4.	233	ME	58.25	38.21
5.	28	ME	50.35	45.4
6.	68	CE	39.9	41
7.	215	EE	53.4	39.32
8.	107	ME	37.53	39.1
9.	51	ME	42.47	31.76
10.	145	CE	33.05	36.27
11.	38	ME	35.5	39.87
12.	13	CE	20.55	39.55
13.	1236	ME	24.49	36.9
14.	16	CE	23.3	33.93
•				
•				
•				

35.	39	EE	10.05	36.93
36.	202	EE	4.4	40.03
37.	218	CE	4.5	40.0
38.	188	ME	14.75	31.47
39.	52	ME	13.4	32.45
40.	37	CE	0.75	32.38
41.	1235	ME	9.45	29.3
42.	228	EE	6	34.38
43.	133	CE	0	42.46
44.	80	ME	0	42.92
45.	235	CE	0	34.62
46.	1237	ME	5.45	28.4

6. Conclusion and Recommendations

In this paper, a rigorous comprehensive system for universities faculty members' evaluation has been presented and applied to the staff of College of Engineering at Qassim University. The results of the evaluation revealed the following points:

- i- Self-evaluation in the system is consistent to a great extent with other sources total evaluation. This proves that the presented system of self-evaluation is rigorous and well-designed as it uses main- and sub –items of accurately defined weights.
- ii- The student evaluation is not reliable, and it should not be used alone to avoid inaccurate evaluation and judgment. The student evaluation should be supported by other sources of evaluation. More qualitative efforts are required to increase the reliability level of such evaluation. The conclusions regarding the student evaluation agree with conclusions of previous researchers.
- iii- There is no relation between the four roles of the faculty members. It is possible to have very distinguished persons in research, while their teaching, community services or university service are bad. The reverse, also, is possible as there are persons of very poor research evaluation, while their teaching evaluation is distinguished.
- iv- The old system of evaluation which depends on evaluation by the head of the department and the students gives results which are more or less inaccurate. Such systems of evaluation should be revised and supported by adding other evaluation sources.

- v- Community service needs to be strengthened through cooperation and internship with industry and community authorities.
- vi- Colleagues' evaluation seems to be not reliable, and the universities should take care when dealing with it.
- vii- The suggested system can be easily adapted to suit any academic institution regardless of its nature. For example, in case of research institutions the scientific research should be given more weight at the expense of other activities.

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نظام شامل ومتعدد المصادر ومتعدد المعايير لتقويم منسوبي الجامعات محمد عبد السميع عبد الحليم* فهد بن عبد الرحمن المفضي كلية الهندسة- جامعة القصيم- المملكة العربية السعودية masamie@qec.edu.sa (قدم للنشر في 2022/10/3؛ وقبل للنشر في 2022/11/4)

ملخص البحث. تهدف معظم الجامعات إلى تقديم تعليم وبحث علمي وخدمات مجتمعية، و عضو هيئة التدريس هو المحرك الأساسي والعنصر المحوري في العملية التعليمية، و هو أيضا المسؤول عن تنمية المجتمع من خلال الأبحاث العلمية والخدمات المجتمعية. ومن هذا المنطلق يصبح لزاما على المجتمعات تنمية قدرات أعضائها، والخطوة الأولى لتحقيق ذلك هو القياس والتقويم العادل والدقيق لأداء أعضاء هيئة التدريس. إن التقييم الشامل الدقيق سوف يسهم في إتخاذ القرارات الصحيحة نحو تحسين الأداء ومكافأة المميزين. ولتجنب عيوب نظم التقويم السابقة من محدودية مصادر التقويم، يقدم البحث الحالي نظاما شاملا متعدد المصادر ومتعدد محاور التقويم، ولقد بني النظام على أساس بنود وبنود فر عية لها أوزان نسبية محددة لتجنب التقديرات الشخصية الخاطئة. وتم تطبيق النظام المقترح على أعضاء هيئة التدريس بكلية الهندسة في جامعة القصير، ولقد أثبت النظام فاعليته وعدالته ودقته، ولقد أظهر التطبيق مرونة النظام وإمكانية تطبيقه على الجامعات الأخرى بما فيها النظام فاعليته وعدالته ودقته، ولقد أظهر التطبيق مرونة النظام وإمكانية تطبيقه على الجامعات الأخرى بما فيها