

Efficient Methods to Improve the Productivity of a Teacher and Quality of Lectures in Teacher Educational Institutions

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Abstract :- Teacher and higher education both have become an international service, consequent to the general trend of globalization of economic activities. Consequent upon *the privatization and commercialization policies* of our Indian education, there is a great concern about both the quantity and quality assurance mechanisms in schools, teacher education and higher educational institutions(Ref.1). There is a premium on both quantity and quality of education, quantity in terms of *access to education* and quality in terms of *relevance and excellence of academic programmes offered*. There is a great challenge indeed by the teacher and higher educational institutions, which offers teacher and higher education relevant to the current and projected needs of the society and industry. Their academic potential and excellence have to grow with respect to time. The ideas and ideals of these institutions will evolve and change with respect to trends world-wide, global needs and national requirements. Therefore, our teacher education and higher education should adopt open, transparent and efficient system to produce value added knowledgeable trained human power (Ref.2). This demands quality and credibility in functioning of educational institutions. The quantity and quality depend on curriculum aspects, teaching-learning and evaluation, research, consultancy and extension, student support and progression, organization, management and healthy practices. There should be specific focus and emphasize to be given on the educational innovations, mission and goals, quality enhancement strategies, master plans for institutional growth, feedback from stake holders and innovations in management and communication. The author has gained sufficient experience during his long service in several schools, teacher educator and research institutions. Bases on his experience, he has presented some *scientific, efficient methods and educational innovations* to improve the productivity of a teacher and quality of lectures in teacher-educator and higher educational institutions. The institutions, which have adopted these innovative methods, have turned out with improvements in their systems with special reference to productivity and quality lectures. The quantity and quality assurance mechanisms should be practiced in schools, teacher education and higher educational institutions. Some of these methods are discussed in this paper. These methods shall be more useful for the purpose of internal academic audits. (Ref.2).This research paper also highlights the concepts of Academic Information System (ACADIS), Teaching Slots Concept (TSC) and Faculty Credit Log Concept (FCLC) for managing all the academic courses conducted for the various classes of teacher educational institutions / higher levels during the semesters/ trimesters/ yearly patterns. These concepts viz.. ACADIS, TSC and FCLC are computer based educational innovations developed by the author to manage the entire academic courses. This increases the quantity and quality of education in schools and higher learning institutions. The information contained here will be useful to all Principals, Teacher-Educators & teachers, for improving the productivity in their institutions and quality and quantity of education.

Key-Words: - lecture, productivity, teacher-educator, institution, credit, norms, standards

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1 Introduction

The economic progress of our country is strongly linked with the quantity and quality of education. There is a premium on both quantity and quality of education, quantity in terms of access to education and quality in terms of relevance and excellence of academic programmes offered. The quantity & quality depends upon curriculum aspects, teaching-learning and evaluation, research, innovation, creativity and extension, students support and progression, organization, management and healthy practices (Ref.1). There should be specific focus and emphasize to be given on the educational innovations, quality enhancement strategies, master plans for institutional growth, and innovations in management and communication. Hence in this paper research work concerned to the various mechanism to improve the productivity of a teacher and methods top improves the quality of lectures are presented. Various problems concerned to the quality and quantity of engineering education were formulated and thus solutions have been presented.

2 Problem Formulation

The author has concerned about both the quantity and quality assurance mechanisms and put forth some efficient methods to improve the productivity of a teacher and quality of lectures in teacher educational institutions (Ref.1 &2). Some of the methods briefly discussed in this research paper are:

1. Specifying workload norms for teacher-educators/ workload distribution per week/ filling up of 6 X 8 Matrix form weekly.
2. Preparation of lecture plans (yearly/semester wise, weekly & daily), lesson action plans for theory, tutorials, and practical)
3. Reporting self-assessment by the teacher-educator for each day's progress (work diary) Table. Reporting weekly summary report by the teacher given in Table No.

4. Structure of the class room lecture. Methods for preparation of the lecture notes and methods for preparation of lecture notes supplement.
5. Computer oriented e.based education.
6. Setting up of performance appraisal system for the teachers is given in Annexure-I.
7. Training and development of teacher –educator
8. ACADIS (Academic Information System), teaching slots & teacher-educator credit log concepts .

The information contained here will be useful to all Principals, Teacher-Educators & teachers, for improving the productivity in their institutions and quality and quantity of education.

3 Problem solution

3.1 Objectives of The Study

1. To prepare workload norms for teacher educational institutions
2. To evaluate efficient methods to improve the productivity of a teacher and quality of lectures in teacher educational Institutions
3. To promote experimentation among teachers and teacher-educators

3.2 Workload Norms For Teacher-Educators

The author has prepared the workload norms for teacher-educators. These are outcome of intensive discussions held during various seminars (Ref.2). Given below the workload norms for a faculty in teacher educational institutions to attend his/ her normal duties :

1. Teaching Workload; 16 hours / week
2. Preparation Time ; 16 hours / week
3. Research work; 10 hours / week
4. Organizing Science, History, Mathematical Tutorials/ Science outdoor/ indoor activities/Exhibitions; 40 hours/week
5. Co-ordination of extra- curricular activities; 6 hours/ week

Given below the workload norms for the various levels of faculty / teachers in Teacher educational institutions

Table-1
Workload Norms For The Various Levels Of Faculty /Teacher-Educators In Teacher Educational Institutions

Duties	Lecturer	Asst. Professor	Professors/ HMs /Principal
Teaching workload conduct hours	20 hr/ week	18 hr/ week	10 hr/ week
Preparation Time	12 hr/ week	10 hr/ week	8 hr/ week
Research work	10 hr/ week	15 hr/ week	19 hr/ week
Teaching Administration	Nil	6 hr/ week	6 hr/ week
Organizing Tutorials/ Seminars/ Exhibitions	20 hr/ year	40 hr/ year	40 hr/ year
Co-ordination of extra- curricular activities	6 hr/ week	5 hr/ week	1 hr/ week
Teaching work load / Total credits	13 hr/ week	10 hr/ week	9 hr/ week

Given below the norms for teacher-educators in higher educational institutions to attend his normal duties as per the following schedules as per Table-2.

Table-2
Teacher / Teacher-Educator – Workload Distribution Per Week

S.No	Programme Activity	H.M/Principal/ Professor HOD (Hours)	Sr. Teacher (Hours)	Jr. Teacher (Hours)	MIMIC
1	Total Contact Hours (Instructions) (TCH)	8-0-0	LTP 8-0-8	LTP 8-0-16	
		8	12	16	LTP
2	Preparation Assessment and Evaluation	6	10	14	PAE
3	Research and Project Guidance	14	8	4	RPG
4	Academic administration	2	2	0	AA
5	Counseling	2	2	1	C
6	Developmental Activities	3	2	1	DA
7	Exhibitions/Industrial Visits	1	1	1	IV
8	Seminars /Workshops/symposia	2	1	1	SW
9	Extra curricular activities	1	1	1	ECA
10	Consultancy	1	1	1	CON

Foot Note:

- Wherever the Sr. Teacher is not available in sufficient number, the department shall utilize Jr. Teacher for Academic Administration.
- Semester Workload is 12 weeks. Trimester workload is 8 weeks.
- Norms for correcting the test papers and assignments
 Time allocated per paper = 15 min
 Time required for correcting 60 papers (one class) = 15 hrs.
 Total time required for 4 tests and assignments in a semester = 60 hrs

Given below the workload weekly schedules to be filled weekly by a teacher / teacher – educator filling his academic cum research activities during 40 hours per week. Guide specimens – I and II are provided in Tables 3 & 4 for only guidance (Ref.1 & 2).

Table-3
Guide Specimen – I
Workload Distribution – Weekly Schedule

Name : _____ Faculty/Teacher Code: _____ Dept. : _____
 Designation : _____
 Period From _____ To _____

Period / day	1*	2	3	4	5	6	7	8
Monday	LTP	PAE	LTP	AA	SW	LTP	LTP	PAE-4
Tuesday	ECA	LTP	LTP	AA	LTP	AA	C	
Wednesday	PAE	PAE	PAE	RPG	LTP	PAE	C	PAE-4
Thursday	LTP	SW	CON	CON	LTP	PAE	C	IV-1
Friday	ECA	AA	DA	DA	SW	ECA	LTP	PAE-5
Saturday (off campus)	IV	IV	CON	CON	IV	CON	CON	IV-3 CON-4

Footnotes:

* Procedures for filling up the above 6 X 8 matrix forms, workload distribution per week.
 above activities are given in following Table-4.

Signature of Teacher/Faculty

Signature of Principal/ Head Master

Table-4
Guide Specimen – II
Elements of Various Activities In Teacher Educational Institutions*

S.No	ACTIVITIES	MIMICS
1	Teaching	Lecture
		Tutorial
		Practical
2	Preparation Time	PAE
3	Assessment	PAE
3	Evaluation	PAE
5	Counseling	C
6	Academic Administration	AA
7	Project Guidance	RPG
8	Research	RPG
9	Development	DA
10	Design	RPG
11	Industrial Visits	IV
12	Seminars / Workshops	SW
13	Extra- curricular Activities	ECA
14	Consultancy	CON

*Footnotes;**Procedures for filling up the 6 X 8 matrix form workload distribution per week using the above activities are given in Table-4.

Table- 5
Weekly Workload Distribution Account

	LTP	PAE	RPG	AA	C	DA	IV	SW	ECA	CON
Load Assigned										
Load Handled										
Load Loss										
Load Leave										
Load Holiday										

Signature of Teacher/ faculty

Head Master/ Principal

3.3 Procedures For Self-Assessment Report By A Teacher-Educator

Table-6
Self Assessment by the Teacher for each day's Progress (Work load Diary)
WORKLOAD DIARY

Date	Time	Class	Subject	Student Present	Topic Covered	Remarks

1. Teacher should maintain the work load diary. In the work daily diary, the teacher should write clearly the details of the lectures engaged during the day, number of students present and topics covered.
2. If the lecture is not engaged remarks should be entered why the lecture was not taken and what arrangements is made for extra lecture.
3. Based on the daily work diary, details for a week that is weekly summary report should be prepared as per the following format given in Table No.7.

Table -7
Weekly Summary Report

Class :	Subject:	Date : From ----- To-----
No. of lectures allocated		
No. of lectures engaged		
No. of lectures not engaged		
No. of extra lectures engaged		
No. of extra lectures to be engaged		
Remarks		

3.4 Procedures for Preparing Lecture/ Lesson Plans

Given below in Tables 8, 9 & 10 are the methods for preparing the lesson plans in an academic year

Table-8
Preparation of Lecture Plan (Yearly)

Preparation of Year / Trimester/ Semester Planner for the Academic Year

Guidelines may be referred for filling these lecture plans.

Year		Tri semester / Semester	
		From	
Class _____	Subject _____	Date _____	
		To	
Days of period			
Time of period			
Date	Period	Main Topic	Sub. Topic

3.4.1 Tips For Preparing The Lecture Plans

1. The syllabus should be divided into the main topics and sub topics. Time required for the main topic as a whole and each sub topic should be noted .
2. Curriculum of the various classes to be taught should be prepared. This is because same topic may be important for one class which may not be required for the other class.
3. The information should be up-dated for providing to the students. The new plans should be formulated. This should be prepared based with the current plans and additional material from new books, journals, publications and seminar proceedings (Ref.1).

TABLE- 9
WEEKLY LECTURE PLANS
Preparation of Weekly Plans

Year		Trimester / Semester	
Class _____	Subject _____	Date _____	From
			To
Days of period			
Time of period			
Date	Period	Main Topic	Sub. Topic

3.4.2 Tips for preparing the weekly plans are similar to the yearly plans

Tutorial timings are not fixed in advance at the beginning of the academic year/ semester/ trimester. Weekly schedule for the tutorials

for that particular week is to be prepared as and when the information for the tutorials is made available (Ref.2).

Table-10
Daily Lecture Plans

3.5 Preparation of the Daily Planner

Class _____	Subject _____		
Days of period			
Time of period			
Date	Period	Main Topic	Sub. Topic

Foot Note: Based on the yearly / Trimester / Semester Plan and Weekly Plan, Daily plans should be prepared.

3.5.1 Advantages of Daily Plans

1. The daily plan gives an idea what has to be done at a particular instant of time during a day whether a particular point has to be discussed in brief or in detail.
2. This avoids wastage of time.
3. This helps to complete the topic as per the time schedule
4. This benefit to efficiently complete the lecture.

TABLE-12
TEACHER EDUCATOR INSTITUTION

DEPARTMENT : FACULTY :
SUBJECT & CODE : FACULTY CODE :

SEMESTER : CLASS / BATCH :

DATE : From To

TUTORIALS (LESSON ACTION PLANS)

<u>Unit No.</u> Main Topic (1)	Sub Topic (2)	Text / Reference Books Chapter & Page Nos. (3)	Week. No (4)	Date (5)	No.of hour Allotted (6)	Cum.Hrs (7)

TABLE-13
Name of the Institution

DEPARTMENT :	TEACHER :
SUBJECT & CODE :	TEACHER CODE :
SEMESTER :	CLASS / BATCH :

DATE : From _____ To _____

LABORATORY PRACTICALS (For Academic Audit Only)
LESSON ACTION PLANS

S. No	Name of Experiments	Text / Reference Books Chapter & Page Nos.	Week No.	Date	No. of hour Allotted	Cum. Hrs
(1)	(2)	(3)	(4)	(5)	(6)	(7)

Signature of Teacher

Signature of HOD

3.6 Procedures For Planning Assignments

Each semester at least 8 to 10 assignments are to be given and assessment of these assignments are to be completed in time.

**TABLE-14
ASSIGNMENTS PLANNED**

NAME OF THE DEPARTMENT

Subject : Teacher Name :
 Subject Code : Teacher Code :
 Year/Semester/Trimester:

Unit No	Topics	Books to be Referred	Date of Announcement	Date of Submission
1				
2				
3				
4				
5				

Teacher In- charge

Head Master

Lesson Plan-Model-2

Subject Name : Branch :
 Subject Code : Semester :
 Definition :
 Objective :
 Name of the Faculty : Faculty Code :

TABLE-15

Unit No: .
Theory Class :

S.No	Date	Hour	Topics	Prescribed Books	Reference Books

Along with above theory classes the following programs are planned according to the date and time given.
Attached Academic Programs:

Program Name	Date	Hour	Details

<ul style="list-style-type: none"> ○ Tutorial ○ Assignment ○ Seminars (External / Internal) ○ Visits ○ Model Exams 			
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Faculty Incharge

Time Table Incharge

HOD

3.7 Procedures For Lecture Notes & Lecture Notes Supplement Preparation

3.7.1 Preparing the Lecture Notes

1. The lecture notes should be prepared on loose sheets with the papers relating to one lecture filed together. The papers should be numbered
2. On the right hand corner, a margin of 5cm is kept for putting remarks. The remark column should be used for entering the names of references from which the materials has been collected.
3. The lecture notes should be made up to date and self-informative.

3.7.2 Preparing Lecture Notes Supplement

- 1 Each lecture notes should be prepared with a Supplement.
 1. It should contain the details about the topic namely additional books, journals, publications and other relevant references for further reading.
 2. It should contain the list of expected questions so as to enable the student to get prepared for answering all questions.
 3. It should contain the list of instructional aids namely Overhead Projector, Charts and Models, Slide Projector and Photo Displays Board.
 4. It should contain the summary of complete lecture as well as the topic covered.
 5. It should contain the topics of next lecture.

3.8 Structure of The Class Room Lectures

Time duration of the elements of a class room lecture and brief description is given below:

- | | |
|---------------------|----------|
| 1. Introduction | - 5 min |
| 2. Actual Lecture | - 40 min |
| 3. Summarizing | - 5 min |
| 4. Students Queries | - 5 min |
| 5. Attendance | - 5 min |

3.8.1 Introduction

1. At the start of class lecture, introduction should be made in brief and interesting
2. The introduction should give an idea about the learning in the lecture.

3.8.2 Actual Lecture

1. During the lecture, simple questions should be asked to the students and link their answers to the topics to be taught.
2. All students must be involved with the lecture and understand it better.
3. The Paise and content of the lecture should be planned and decided such that an average student is able to grasp the contents of the lectures.
4. Direct dictation should not be given form his notes.
5. All the points of the lectures should be explained while looking in the eyes of the students.

3.8.3 Summarizing

1. Summarization should be good as it again highlights the points covered in the lecture.
2. References should be given for additional details on the topic of the lecture.

3.8.4 Student Queries

Student queries should be attended. The doubts should be cleared.

3.9 Procedures For Computer Based E. Education

1. There are timetabling, scheduling software have been designed to

- use the available teaching resources effectively (Ref.2).
2. Each teacher should maintain a course page and notify web address to the students.
 3. Lesson plans for theories, tutorials and practical shall be prepared as per the formats given in Table. Please refer Tables – 8 to 15.
 4. They should upload lesson plans, lecture notes, supplements etc. So that they are available to the students. These locations or pages can also display their attendance, test marks, assignments and so on. It is encouraged that there can be a class group or course group for each subject (these are e-groups with all the members having mail ID and they

communicate through e-mail). It is also advisable to make it compulsory that all students and faculty have e-mail ID.

5. ACADIS, TEACHING SLOT & TEACHER-EDUCATOR CREDIT LOG CONCEPT for teacher-educational institutions.

3.9.1 STEP – I : PREPARATION OF ACADEMIC INFORMATION SYSTEM

Details of Academic courses are prepared as per the format given below which is called Academic Information system (ACADIS) during trimester / semester.

1. One lecture hour per week is rated as one credit hour.
2. Two tutorial or two practical hours per week are rated as one credit.

**TABLE-16
ACADIS FORMAT**

Department :

Class :

Subject code	Subject Title	Handling Department	Lecture Hours	Tutorial Hours	Practical Hours	Total Credits	Name of the teacher handling the subject

Example :- How to prepare the ACADIS

TABLE –17
NAME OF THE INSTITUTION **Course No: 47**
DEPARTMENT
EVEN SEMESTER 2001-2002

Strength : 49

SUB CODE	SUBJECT TITLE	HANDLING DEPT.	L	T	P	TOTAL CREDIT HOURS	HANDLING FACULTY
KCF	Statistical Methods	Mathematics	4	1	-	5	Faculty 'A'
KCG	Micro processor	Physics	4	-	-	4	Faculty 'B'
KCH	Accounting & Finance Management	Physics	4	1	-	5	Faculty 'C'
KCJ	Object Oriented Programming with C	Physics	3	1	-	4	Faculty 'D'
KCK	Data Structures	Physics	4	1	-	5	Faculty 'E'
KC2	Practical II- Data Structures using C	Physics	-	-	7	7	Faculty 'F'
KC3	Practical III Microprocessor	Physics	-	-	4	4	Faculty 'G'
Total						34	

3.9.2 STEP II : PREPARATION OF TEACHING SLOTS :-

This is the one page information which shows the teaching slots of the teacher and free time slots (FTS).

1. The teaching workload is calculated as in terms of credit based contact hours.
2. One lecture hour per week is rated as one credit hour.
3. Two tutorial or two practical hours per week are rated as one credit.
4. The conduct hour is sum of theory tutorial and practical hours.
5. The conduct hour is interpreted as "One hour of practical / tutorial classes is treated as one hour of lecture".
6. The departmental codes are identified in three letters.
7. The number of teaching slots is prepared as one line statement.

For example a teaching slot statement mentioned below is interpreted as

ECE4A- EC402-T1-3.5-ECE-SLT

ECE4A is the Branch code / semester / //Sub-section

EC402 is the Subject code entitled "Transmission lines and Wave guides"

T1 is the main teacher / T2 is second assisting teacher / T3 is third assisting teacher.

D1TI is Day 1 main teacher / D1T3 is Day I third assisting teacher.

3.5 is the credit hours of the individual teacher

ECE is the handling department

SLT is the mnemonic of handling teacher.

Example :- How to prepare the Teaching Slots

Table –18
Teaching Slots of Department
Even Semester (2001-2001)

S. No	Teaching Slots	S. No	Teaching Slots
1	ECE4A-EC402-T1-3.5-ECE-SLT	35	ECE6-6E1-D2T1-2.25-ECE-ASL
2	ECE4A-EC403-T1-3.5-ECE-DKS	36	ECE6-6E1-D2T2-1.5-ECE-AKT
3	ECE4A-EC404-T1-3.5-ECE-SMW	37	ECE6-6E2-D1T1-2.25-ECE-KRB
4	ECE4A-EC405-T1-3.5-ECE-MJP	38	ECE6-6E2-D1T2-1.5-ECE-KMJ
5	ECE4A-EC406-T1-3.5-ECE-SUS	39	ECE6-6E2-D2T1-2.25-ECE-KRB
6	ECE4A-EC407-T1-3.5-ECE-KAA	40	ECE6-6E2-D2T2-1.5-ECE-KMJ
7	ECE4A-EC408-D1T1-2.25-ECE-SMW		
8	ECE4A-EC408-D1T2-1.5-ECE-SLT	41	ECE8-8EA-T1-4-ECE-ASL
9	ECE4A-EC408-D2T2- 2.25-ECE-	42	ECE8-8EB-T1-4-ECE-TSN
10	ECE4A-EC408-D2T2-1.5-ECE-SLT	43	ECE8-8EC-T1-4-ECE-BJK
11	ECE4A-EC409-D1T1-2.25-ECE-DKS	44	ECE8-8EJ-T1-4-ECE-KMJ
12	ECE4A-EC409-D1T2-1.5-ECE-SUS	45	ECE8-8ED-T1-4-ECE-JSS
13	ECE4A-EC409-D2T1-2.25-ECE-DKS	46	ECE8-8EE-T1-4-ECE-KRB
14	ECE4A-EC409-D2T2-1.5-ECE-SUS	47	ECE8-8EG-T1-4-ECE-SSK
15	ECE4B-EC402-T1-3.5-ECE-MJP	48	IYD-206-T1-4-ECE-STS
16	ECE4B-EC403-T1-3.5-ECE-BJV	49	IYE-206-T1-4-ECE-BJV
17	ECE4B-EC404-T1-3.5-ECE-SMW	50	IYD-NS3-D1T1-2.5-ECE-STS
18	ECE4B-EC405-T1-3.5-ECE-ASL	51	IYD-NS3-D1T2-1.0-ECE-SUS
19	ECE4B-EC406-T1-3.5-ECE-SUS	52	IYD-NS3-D1T3-1.0-ECE-DKS
20	ECE4B-EC407-T1-3.5-ECE-AKT	53	IYD-NS3-D1T4-1.0-ECE-SMW
21	ECE4B-EC408-D1T1-2.25-ECE-BJK	54	IYI-NS3-D1T1-2.5-ECE-STS
22	ECE4B-EC408-D1T2-1.5-ECE-BJV	55	IYI-NS3-D1T2-1.0-ECE-SUS
23	ECE4B-EC408-D2T1-2.25-ECE-BJK	56	IYI-NS3-D1T3-1.0-ECE-DKS
24	ECE4B-EC408-D2T2-1.5-ECE-BJV	57	IYD-NS3-D1T4-1.0-ECE-BJV
25	ECE4B-EC408-D1T1-2.25-ECE-SSK	58	IYH-NS3-D1T4-1.0-ECE-BJV
26	ECE4B-EC409-D1T2-1.5-ECE-TSN		
27	ECE4B-EC409-D2T1-2.25-ECE-SSK	59	CSE4B-CSE402-T1-3.5-ECE-TSN
28	ECE4B-EC408-D2T2-1.5-ECE-TSN		
		60	OMAN-OMAN-8-T1-5-ECE-KAA
29	ECE6-6ZB-T1-4.5-ECE-AKT		
30	ECE6-6EB-T1-4.5-ECE-SSK	61	CSE4B-CSE404-T1-5-ECE-JSS
31	ECE6-6EC-T1-4.5-ECE-KRB		
32	ECE6-6ED-T1-4.5-ECE-SLT	62	CSE-8CC-T1-3.5-ECE-DKS
33	ECE6-6E1-D1T1-2.25-ECE-ASL		
34	ECE6-6E1-D1T2-1.5-ECE-AKT	63	CSE-8CJ-T1-3.5-ECE-BJK
		64	IT8-8FA-T1-3.5-ECE-STS

3.9.3 STEP- III : FACULTY CREDITS LOG CONCEPT :

The teacher individual Teaching Workload and Projects Workload are given in credits.

Example;- How to prepare the Faculty Credit Log

TABLE- 19
FACULTY CREDIT LOG
Teaching Workload

Faculty Code	MJP	SSK	KMJ	ASL	KRB	BJK	TSN	CAA
Credits	7.0	13.0	7.0	12.0	13.0	12.0	10.5	8.5

JSS	BJV	DKS	SMW	SUS	STS	AKT	SLT	XXX	Total Credits
7.5	12.5	13.5	11.5	12.0	12.5	11.0	11.0	-	174.5

Project Workload

MJP	SSK	KM J	ASL	KR B	BJ K	TSN	KA A	JSS	BJV	DK S	SMW	SUS	STS	AK T	SLT
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

Footnotes;

1. Total Credits for the projects - 68 Credits
2. **XXX** denotes new faculty to be recruited in that particular semester, if required.

system should be followed by the management for career advancement of teachers.

3.10 Procedures For Performance Appraisal System

A performance appraisal system (Ref.1,2) for teachers should be sent up well integrated with institutional functioning and this should lead to the identification of individual training and development needs. This should also enable the identification of teachers whose performance is outstanding. Such performances and excellence should be well recognized and rewarded. All teacher educational institutions should introduce a system for performance appraisal given in Appendix- I . The performance report should comprise the data such as the teachers' papers published, seminars paper reading, books authored, research contributions, patents, innovations, inventions and discoveries etc. This

APPENDIX-1
NAME OF THE INSITUATION
TEACHER-EDUCATOR PERFORMANCE APPRAISAL FORM
ACADEMIC YEAR 2003-2004

1. Name :
2. Department :
3. Employee Code :
4. Date of Birth :
5. Date of joining the College :
6. Present Designation and from which date :
7. Academic Background (in reverse order down to U.G. degree level)



Degree Class/Grade	University	Year	Field of Specialisation
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8. Employment record (in reverse order starting from present position)

College/Organization	Designation	Period	Scale of Pay
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10. **ADMINISTRATIVE LOAD**

a. Details of Administrative work load handled by you at the College level (Eg., Hostel Wardenship, Placement co-ordinator, Alumni Incharge, ISO Incharge, Accreditation / Deemed University etc.)

b. Details of Administrative work load handled by you at the Departmental level (Eg., Class Teacher, Time-Table, Lab in-charge, Placement Co-ordinator, Alumni, Deemed University etc.,)

- c. Give details of Counseling and guidance services relating to students study problem / personal problems.

- d. Your contribution to build leadership attitudes in students to shoulder further responsibility

11. SELF DEVELOPMENT

a. List qualifications acquired during the year, if any

b. Details of training programs / seminars attended, if any. Also indicate the evaluation scores of the training given for the Quality Teaching Circle Program.

c. Details of in Continuing Education Programme participated or as Resource person

Title of the course	Duration	No. of participants	Total course fees received
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d. Details of Continuing Education Programme Sponsored and financially supported by ISTE / UGC/MHRD or other agencies

Title of the Course	Duration	Sponsoring Agency	Amount Received	No. of participants
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 e. Participation of faculty in Continuing Education / Quality Improvement Programmes conducted in other Institutions

Title of the course Institution Duration Whether sponsored by HCE

f. Other activities of the faculty to update his knowledge or improve his educational qualifications

12. RESEARCH & CONSULTANCY

a. Sponsored Research Activities

DURATION IN YEARS	ORGANIZATION	PROJECT TITLE	AMOUNT RECEIVED IN CURRENT YEAR	TOTAL AMOUNT RECEIVED TILL DATE

b.Details of Consultancy Activities

DURATION IN YEARS	ORGANIZATION	PROJECT TITLE	AMOUNT RECEIVED IN CURRENT YEAR	TOTAL AMOUNT RECEIVED TILL DATE

c. Details of Development of liaison with the industry (IIPC)

PUBLICATIONS

13. Publication of Books.

a. Give full details in the format as in the following

1. *Bathe, K.J., Finite Element Procedures in Engineering Analysis. Prentice - Hall of India Private Ltd., New Delhi 1990*

2. ...

b. Publication of Articles in Journals. Give full details in the format as in the following example.

1. *Wilson, E.L. An Eigensolution Strategy for Large Systems. Computers and Structures. Vol.16, 1983.*

2.

c. Publication of Articles in Proceedings of National / International Conferences / Symposia. Give details in the format as in the following example.

Murthy, D.S., Corrosion Fatigue Crack Growth in Tubular Joints under C.A. Loading. Proceedings of Sixth International Symposium on Tubular Structures, Melbourne, Australia, December 14-16, 1994.

PROJECTS

14. Details of final semester projects guided by you

S.No.	Course	Title of Project	Roll No. & Name of students
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PROFESSIONAL STANDINGS

15. Details of membership of Professional Bodies, Technical Committees, Societies, and Academies with date from which you became member (NOT APPLICABLE FOR NON MEMBERS AS ON DATE)

16. Honours and Awards obtained by you.

OTHERS

17. Any other curricular and extra curricular activities, which you feel to be taken into consideration in appraising your performance.

18.(a) The changes / improvements / involvements that have taken place in your performance since last year, if any

(b) If you feel that HCE can make more use of your academic and administrative talents than at present, please indicate in what ways this can be done.

19. Details of leave availed by you during the calendar year (Jan – Dec 2001)

EL

ML

CL

LOP

20. Making an objective self-appraisal of your performance, please indicate your expectations with proper justifications regarding promotion to higher cadre and in increment to your remuneration.

Date : Name of Teacher-educator Signature

3.11 Procedures For Training and development

Teachers should be provided with opportunity to improve upon their qualifications through the quality improvement programs. The opportunities will be provided for pedagogy and professional training. Under the quality improvement programmes a variety of short term courses will be provided to meet the training needs for all levels of teachers.

4 Conclusions

1. Prepared workload norms of a teacher-educator. The norms should be adopted by the Managements of various teacher-educational institutions. Regulatory agencies , councils and directorates should follow these norms.
2. The following methods improved the productivity of a teacher and his/her quality of lectures in teacher educational institutions.
 - (i) Lesson Plans concepts (yearly, weekly and daily). Lesson Action Plans for theory, tutorial and Practical.
 - (ii) Self assessment daily work diary
 - (iii) Weekly summary reports of teacher-Educators.
 - (iv) Structure of the class room lecture.
 - (v) Preparation of lecture notes.
 - (vi) Preparation of lecture notes supplements.
 - (vii) Computer based e. education.
 - (viii) Setting up of performance appraisal system
 - (ix) Training and development of teacher-Educator.
 - (x) Preparation of ACADIS, Teaching slots and faculty credit log.
3. These methods further facilitate:
 - (i) Design oriented teaching

- (ii) Exposure to practical fields.
- (iii) Introduction of emerging fields.
- (vi) New design and development of short term courses, addition of electives, non-credit courses, self-learning materials, curriculum adaptation updating syllabi
4. Development of continuing education Programmes.
5. Establishment of summer and winter projects

4.1 Recommendations

1. All the course materials are prepared for updating the knowledge of the teachers working in schools and educational institutions and for uplifting the standard of education and competence of professionals. Experts in the field with their vast experience and specialization in the subject area should prepare the course modules and adaptation of curriculum.
2. Self-learning modules cum course materials shall be prepared for teacher-educators to improve and update their knowledge.
3. Research work, innovations, creativity, inventions and discoveries should be encouraged and stressed in school level itself among the school teachers and students.
4. Lesson plans for theories, tutorials and practical shall be prepared as per the given formats .
5. Weekly schedule for the tutorials for that particular week is to be prepared as and when the information for the tutorials is made available.
6. Based on the daily work dairy, details for a week that is weekly summary report should be prepared as per the format .

- This has to be handed over to the Head of Department.
7. Formulating new design and development of short-term courses, addition of electives, updating the curriculum, preparation of new course material and educational innovations especially in emerging interdisciplinary areas.
 8. Introduction of the new courses and elective subjects as specialization on various emerging area. Development of new thrust areas are to be encouraged .
 9. The concept of Academic Information System (ACADIS), Teaching Slots (TSC) and Teacher Credit Log (FCL) for managing all the academic courses conducted for the various classes of teacher-educator institutions / higher levels during the semesters/ tri-semester/ yearly patterns have been established. These concepts viz.. ACADIS, TSC and FCL are computer based educational innovations developed by the author to manage the entire education.
 10. Most of the R&D work done by many scientists in teacher educational and R&D Institutions or significant findings found from the research establishments or R&D centers and educational innovations developed new process developed are stagnated and remained ineffective with them. There were no transfers of educational technologies/ innovations adopted by these educational institutions. Hence, there should be transfer of educational technologies.
 11. Training should be imparted by the teacher educator institutions during outside of the normal contact hours to teacher-educators those who are deficient in any particular courses. Part-time programmes shall also be conducted for this purpose.
 12. The academia continuing teacher-education programmes conducted by the summer & winter schools have to be designed in such a way that it should fulfill the specific requirements of the educational institutions/ teacher-educator institutions. If necessary, vocational courses may be conducted during the vocations. Summer and Winter projects must be undertaken related to the problems faced by them in consultation with the private practitioners.
 13. Adaptation of syllabi and curriculum should be there wherever required. Special learning materials (SLM) should be prepared as per the need.
 14. Introduction of non-credit courses in the syllabus/ curriculum for educating emerging aspects in consultation with the experienced teachers.
 15. Continuing education programmes training (CEP) centers shall be established for conducting short / long term course for professionals. CEP-Programs may be conducted having the duration of one or two week or one or two day seminars/ workshops to one year short term/ long term courses.
 16. Teacher-educational institutions must encourage the interactions and academic partnership between the Professional Associations / Societies and Academic institutions and research institutions.
 17. Exhibitions and study tours must be undertaken by the teacher-educator institutions to carry out research on the survey of curriculum/ syllabi and for necessary adoption of curriculum in higher institutions as per the requirements and demands. They should also study the design problems.
 18. Teacher educators have to be assessed periodically by their Heads of Departments for their performances for career advancement. Their expectations with proper justifications regarding promotion to higher cadre and/or award of increments/ remuneration have to be specifically recommended during performance appraisal forms.
 19. The recommended innovations in teaching and learning process are to be enforced and implemented in NCERT, SCERT, State Teacher Training and Research Establishments, State Higher educational Institutions, Primary Education centers, State Educational Directorates, All Universities, Schools and Colleges .
 20. The information recommended will be useful to all Policy makers, Planners, Principals, Academicians and teachers, teacher-educators and faculty of the University Departments.

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References:-

- [1] Book on “ Norms & Standards for improving the Quality Education ”, Dr.G.Vijayan Iyer, NCTE, New Delhi (2002).
- [2] Book on “How to Improve the Productivity in Teaching and Learning Process” By Dr.G.Vijayan Iyer (1999).
- [3] Vijayan Iyer, G.* “Quantity and Quality in Engineering Education and Research” , In the Proceedings *Seventh WFEO World Congress on Engineering Education: Mobility of Engineers*” at Budapest, Hungary, 4-8, March, 2006 organized by World Federation of Engineering Organizations (WFEO), pp.14 (2006).