



## **SCHOOL OF SCIENCES**

IG/SOS/Dir/Feedback/2020/  
3<sup>rd</sup> September 2020.

### **Sub. : School Board Item as approved by circulation.**

The following agenda item was circulated to all the School Board members for their consideration and approval.

#### **ITEM: To consider and approve the Feedback Reports on the feedback received from external subject experts and teachers**

The School of Sciences has carried out feedback studies, using feedback forms developed by CIQA (Centre for Internal Quality Assurance) for subject experts and for faculty of IGNOU. The external experts were members of our programme expert committees or course expert committees and course writers. The responses were received from 42 external subject experts and 37 teachers of the School of Sciences.

These reports are required to be placed before the NAAC Team, after getting approval of the School Board. Given the present circumstances and the urgency, the following agenda was circulated to all the School Board members for their consent.

**The School Board members have given their approval of the reports, along with some suggestions and minor corrections, which have been incorporated. The finalized reports are attached herewith for information.**

*Sujatha*

03.09.2020

Director, SoS

निदेशक / Director  
विज्ञान विभाग / School of Sciences  
इन्दिरा गान्धी राष्ट्रीय मुक्त विश्वविद्यालय  
Indira Gandhi National Open University  
विद्या नगरी, नई दिल्ली-05 / Maidan Garhi, New Delhi-05



## INDIRA GANDHI NATIONAL OPEN UNIVERSITY

### SCHOOL OF SCIENCES

#### FEEDBACK ANALYSIS REPORT OF TEACHERS ON THE DESIGN & DEVELOPMENT OF CURRICULUM

##### 1.0: Preamble

Indira Gandhi National Open University (IGNOU) was established by an Act of Parliament in 1985, with the objective to disseminate learning by a diversity of means and provide opportunities for higher education to large segment of population.

From the beginning, the university has been striving towards achieving its mandate by offering high quality, innovative and need based academic programmes to all segments of our society. IGNOU especially focuses on supporting the most disadvantaged social segments academically at affordable cost.

The objective of IGNOU is being met as team effort, with in-house faculty and subject experts from prestigious universities and higher education institutions across India pooling their knowledge. The external subject experts form an important category of stake holders for obtaining inputs on regular basis. Such inputs are used by the IGNOU faculty towards the design, development and up gradation of the curriculum.

Teachers have pivotal role in the open distance learning (ODL) system. Besides sharing their expertise in the subject concerned as in the conventional system, the distance educator perform many academic functions such as curriculum development coordinator, course writer, media facilitator, course editor, counsellor, trainer, and evaluator and also participate in many other academic activities of the university. The main job of distance educator is to design curriculum and develop self instructional course materials for IGNOU programmes. In open distance education, still self instructional course material is considered the backbone of teaching and learning process.

In order to ensure a high standard, appropriateness of level and quality of self learning materials, the curriculum of every new or revised programme/course is designed by a Programme/Course Experts Committees comprising distinguished subject experts drawn from prestigious universities and higher education institutions representing all regions of the country and the IGNOU faculty of the University.

In our programmes/courses we have taken care of various aspects related to effective learning, communication, problem solving as well as enhancing critical and creative thinking,

*Sujatha*

Quality is a major concern for all stakeholders involved in distance education. The feedback received from them helps us in assessing quality and providing guidance for further improvement of the curriculum. We have collected feedback from teachers of the School of Sciences to help us in assessing best practices followed in the university regarding improving the design of the curriculum and development of high quality SLMs.

## **2.0: About the School**

The School of Sciences started functioning in 1986, with the challenge of imparting good quality theoretical and practical education in major science disciplines, namely, Physics, Chemistry, Mathematics and Life Sciences. In the year 2009, four new disciplines were added to the School, namely, Biochemistry, Geography, Geology and Statistics.

Specific functions of the Faculty of the School are to:

- a) Plan, develop and offer academic programmes at the certificate, diploma, undergraduate, post-graduate, doctoral and awareness levels.
- b) Encourage research in discipline-based as well as systemic areas.
- c) Collaborate in the development of programmes/courses offered by other Schools of the University.
- d) Provide learner support using electronic media and ICT tools.
- e) Participate in the assessment activities and monitoring of student support services.

## **Programmes Currently Offered by School of Sciences:**

### **Doctoral Degree**

- Doctor of Philosophy in Biochemistry (PHDBC)
- Doctor of Philosophy in Statistics (PHDSTAT)
- Doctor of Philosophy in Geography (PHDGEOG)
- Doctor of Philosophy in Geology (PHDGY)
- Doctor of Philosophy in Mathematics (PHDMT)
- Doctor of Philosophy in Chemistry (PHDCHE)
- Doctor of Philosophy in Life Sciences (PHDLS)
- Doctor of Philosophy in Physics (PHDPH)

### **M.Phil. Degree**

- M.Phil. in Geography (MPHILGEOG )
- M.Phil. in Chemistry (MPHILCHEM)

### **Master's Degree**

- M.Sc. (Mathematics with Applications in Computer Science) (MSCMACS)

### **Bachelor's Degree**

- B.Sc. (General)
- B.Sc. Botany (Major)
- B.Sc. Zoology (Major)
- B.Sc. Physics (Major)
- B.Sc. Mathematics (Major)
- B.Sc. Chemistry (Major)
- B.Sc. General under UGC CBCS
- B.Sc. (Hons) Biochemistry

### **PG and Advance Diploma**

- Post-Graduate Diploma in Analytical Chemistry (PGDAC)
- Post-Graduate Diploma in Environment and Sustainable Development (PGDESD)
- Post Graduate Diploma in Applied Statistics (PGDAST)

### **PG and Advance Certificate**

- Post Graduate Certificate in Geoinformatics (PGCGI)

### **Diploma**

- Diploma in Aquaculture (DAQ)

### **Certificate**

- Certificate Programme in Laboratory Techniques (CPLT)
- Certificate Programme in Teaching of Primary School Mathematics (CTPM)
- Preparatory Course in General Mathematics

### **Appreciation Course**

- Appreciation Course on Environment (ACE)

In all the programmes mentioned above, the School of Sciences has followed rigorous mechanism for designing of the curriculum and development of programmes and courses described in Sec. 1.0. To ascertain this methodology a feedback has been obtained from the School faculty members.

### **3.0: Methodology**

Obviously quality a major concern for all the parties involved in distance education. To assessing and improving quality of the curriculum and print material developed, a survey study was conducted on the teachers of School of Sciences using a feedback form designed by CIQA (Centre for Internal Quality Assurance).

A well designed feedback form was sent via email to the teachers of the School of Sciences. The filled feedback forms of the teachers were collected. We have received thirty seven filled Feedback forms from the teachers of the School of Sciences.

Feedback has been obtained on the following 10 items from the teachers:

- Need analysis is done before finalizing the curriculum
- Curriculum is periodically modified and new concepts/topics are incorporated
- Instructional Activities align with the Learning Outcomes
- Curriculum is developed to enhance critical thinking
- Curriculum caters to the needs of all types of learners
- Curriculum of your subject is up to date
- Curriculum matches with the level of the programme
- Assessments are developed based on the Learning Outcomes
- Learning Outcomes are framed to enhance the Employability Skills
- Integration of Technology in teaching learning will enhance the learning process and benefit the Learner

The Index Value of the assessment have been kept on 5 point basis as

SA – Strongly Agree

A – Agree

N – Neutrul

SDA – Strongly Dis-agree

DA – Dis-Agree

All parameters mentioned in feedback from carry equal weightage. The teachers provide the feedback for each parameter on a scale of 5. Then the feedback responses have been compiled using different tables and graphs to represent the responses received from the faculty members of the school. The average of the scores of each parameter is calculated.

#### **4.0: Feedback of Teachers**

Responses received from the teachers on the items mentioned in Sec. 3 are reported in Table A and Fig. 1.

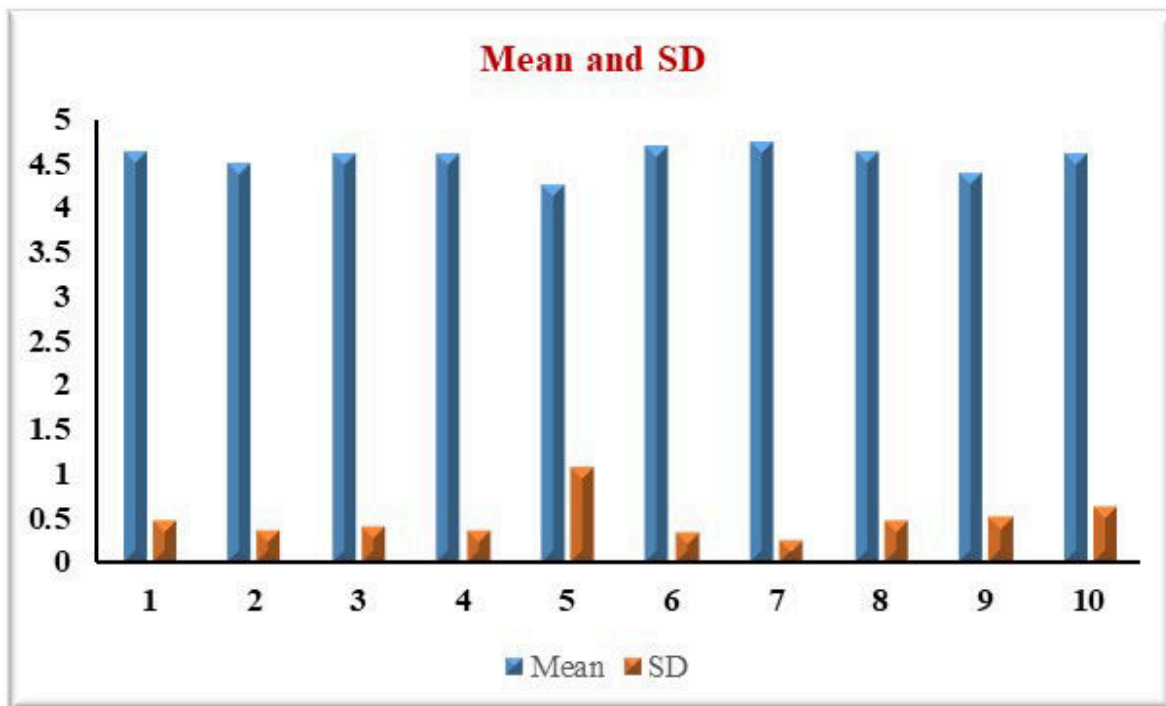
**Table A: Frequency Percentage, Mean and SD of experts agreement for the items related to the Design of the Curriculum**

S. No	Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean	SD
		5	4	3	2	1		
1	Need analysis is done before finalizing the curriculum	27	6	4	0	0	4.62	0.45
		73%	16%	11%	0%	0%		
2	Curriculum is periodically modified and new concepts/topics are incorporated	20	15	2	0	0	4.49	0.36
		54%	41%	5%	0%	0%		
3	Instructional Activities align with the Learning Outcomes	25	9	3	0	0	4.59	0.4
		68%	24%	8%	0%	0%		
4	Curriculum is developed to enhance critical thinking	24	11	2	0		4.59	0.35
		65%	30%	5%	0%	0%		
5	Curriculum caters to the needs of all types of learners	19	11	6	0	1	4.24	1.05
		51%	30%	16%	0%	3%		
6	Curriculum of your subject is up to date	27	8	2	0	0	4.67	0.33
		73%	22%	5%	0%	0%		
7	Curriculum matches with the level of the programme	28	8	1	0	0	4.73	0.25
		76%	22%	3%	0%	0%		
8	Assessments are developed based on the Learning Outcomes	27	6	4	0	0	4.62	0.45
		73%	16%	11%	0%	0%		

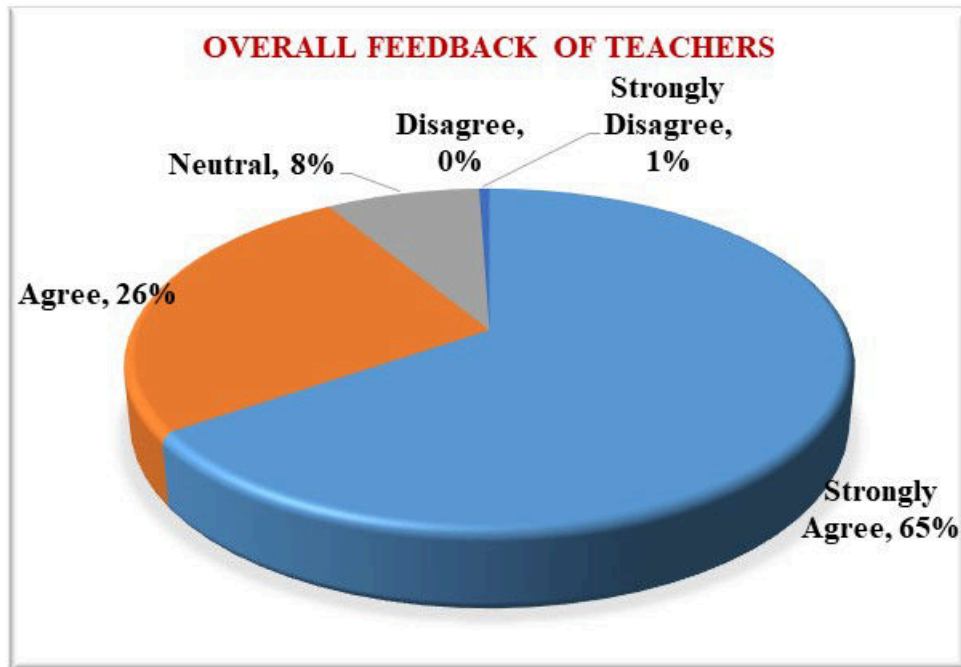
*Sybilta*



9	Learning Outcomes are framed to enhance the Employability Skills	19	13	5	0	0	4.38	0.51
		51%	35%	14%	0%	0%		
10	Integration of Technology in teaching learning will enhance the learning process and benefit the Learner	26	9	1	0	1	4.57	0.84
		70%	24%	3%	0%	3%		



**Fig. 1: Mean and SD values for teachers' agreement in regarding to items mentioned in Table A**



**Fig. 2: Over all teachers' agreement with 10 items**

### 5.0: Analysis of the Feedback received

In response to item no. 1 on need analysis, 73% teachers strongly agreed and 16% agreed. However, 11% teachers were neutral. 95% teachers (54% SA + 41% A) had shown agreement with item no. 2 related to periodic modification of curriculum and addition of new concept/topics. For item no. 3, majority of teachers found that instructional activities align with the learning outcomes (65% SA + 30% A). Important features of curriculum such as enhancing critical thinking and cater to the needs of all types of learners (for item no 4 and 5) were also rated high by the teachers (95% (65% SA + 30% A), 81% (52% SA + 30% A, respectively). However, some teachers are neutral (16%) for the item no.5 related to catering to the needs of all types of learner. For the item no. 6, majority teacher strongly agreed that curriculum of their subject was up to date (73% SA + 22%). Most of teachers also agreed for the item no. 7 that curriculum of their programmes and course matched with the level of the programme (76% SA + 22% A). For the item no. 8, 73% teachers strongly agreed that their assessment process is based on the learning out come. There is a relative less response (51% SA) for the designing of learning outcomes based on employability skills. For the last item majority of teachers strongly agreed that they had integrated technology in teaching. Further higher mean, i.e. more than 4 for most of the items clearly indicates that teachers had agreement with most of items which have been selected for the feedback provided by CIQA. This is also supported by Fig. 2, which is depicting overall agreement for ten items of our feedback form (65% SA and 26% A).

*Sujata*



### **Some Notable Suggestions of Teachers:**

- There is a need for further improvement of our learner support system especially regular orientation of counsellors so that they can effectively conduct counselling sessions.
- More research facilities should be provided at HQ.
- The academics at the learning support centres are our eyes in the field. There should be a coordinated effort for obtaining feedback from the learners and other stake-holders on a regular basis by them. A constant communication between those academics and the faculty who create the quality learning material and other support divisions should be in place.
- The quality assessment of science practicals conducted at study centres should be closely monitored
- Faculty strength should be based on work load.

### **6.0: Conclusion and Recommendations**

Teachers unanimously had agreements on most of items except for item no. 2, related to periodically updating of curriculum, item no. 5, related to the courses fulfilling needs of all types of learner and item no. 9 related to employability skills. Thus, on this basis of feedback analysis, it can be recommended:

- Curriculum of courses should be updated,
- Programmes should be designed in such way that can cater to the needs of all types of learners, and
- We should give more emphasis for the enhancement of the Employability Skills in our Curriculum.

### **7.0: Annexure**

**Annexure**

**FEEDBACK FORM FOR TEACHERS**

Name: Optional

Male:

Female:

Subject/Discipline:

Whether Course Coordinator:

Yes

No

If yes, Title of the Course(s):

Number of Years in University: ~

**Feedback is very important for University to grow and to improve the system, kindly respond to the following statements:**

SA: Strongly Agree, A: Agree, DA: Disagree, SDA: Strongly Disagree

S. No	Statement	SA	A	Neutral	SDA	DA
1	Need analysis is done before finalizing the curriculum					
2	Curriculum is periodically modified and new concepts/topics are incorporated					
3	Instructional Activities align with the Learning Outcomes					
4	Curriculum is developed to enhance critical thinking					
5	Curriculum caters to the needs of all types of learners					
6	Curriculum of your subject is up to date					
7	Curriculum matches with the level of the programme					

*Sujata*

8	Assessments are developed based on the Learning Outcomes					
9	Learning Outcomes are framed to enhance the Employability Skills					
10	Integration of Technology in teaching learning will enhance the learning process and benefit the Learner					

**List the areas that need attention to bring desired improvement in the system**


*Sujata*

निदेशक / Director  
विज्ञान विभागीय / School of Sciences  
इन्दिरा गांधी राष्ट्रीय मुक्त विश्वविद्यालय  
Indira Gandhi National Open University  
मैदान गढ़ी, नई दिल्ली-68 / Maidan Garhi, New Delhi-68

# Agenda

## **ITEM: To consider and approve the Feedback Reports on the feedback received from the Subject Experts and Teachers**

School of Sciences has carried out feedback studies using feedback forms developed by CIQA (Centre for Internal Quality Assurance) for 'Subject Experts' and 'Teachers' who were members of our programme expert committee meetings, course expert committee meetings and course writers' committee meetings for the design and development of curriculum. The feedback form was sent via email to the Subject Experts and Teachers who had participated in the meetings mentioned above. The filled feedback forms of the Experts and Teachers were collected. The responses were received from 42 subject Experts and 37 Teachers of School of Sciences. The Feedback Analysis Reports (two) on the basis of feedback received from Subject Experts and Teachers are placed for consideration and approval of the School Board of School of Sciences.

  
निदेशक / Director  
विज्ञान विद्यापीठ / School of Sciences  
इंदिरा गांधी राष्ट्रीय मुक्त विश्वविद्यालय  
Indira Gandhi National Open University  
मैदान नई, नई दिल्ली-68 / Maidan Garhi, New Delhi-68