

**DEVI AHILYA UNIVERSITY, INDORE**

**Report**

of

**NATIONAL WORKSHOP**

on

*Quality Technical Education*

**9<sup>th</sup> June 2017**

**Venue:** University Auditorium,  
Khandwa Road, Indore  
(M.P.)

## **1. Introduction**

The workshop is organized to bring together eminent experts from premier technical education to share their enormous knowledge and experience with faculty members on aspects of quality in teaching learning process. Various aspects of quality such as curricula design, class room discussion, importance of laboratory assignments and projects, research leading to publications in reputed journals, intellectual property rights, and consultancy issues etc. were discussed.

## **2. Aim**

The aim of workshop is to create awareness of effective strategies and innovations in teaching learning to meet the global standards in quality technical education.

## **3. Objectives**

The objectives of the workshop are to:

- Impart knowledge about state-of-art practices used globally to meet desired standards in technical education.
- Introduce quality aspects of teaching learning, the important quality parameters for assessment.

## **4. Inauguration**

The inaugural ceremony of the Workshop commenced by Hon'ble Vice Chancellor, Prof. Narendra K. Dhakad, chief guest, Prof. A. D. Sahasrabudhe, Chairman, AICTE, New Delhi, Padmshree Dr. D. B. Phatak, Professor, CSE, IIT Mumbai. Welcome address is delivered by Prof. Sanjeev Tokekar.

Prof. Sahstrabudhe enlighten the gathering with his vast experience and knowledge. He has suggested some very good ideas for improving quality education. The summarized key points of his talk are as follows:

- i. The teacher is the heart of quality education. They must be committed to education and willing to learn. They must be inspirer and motivator.
- ii. The academic bodies like AICTE should work like facilitator.
- iii. Student teacher ratio must be 15:1.
- iv. In every education institute there must be 80% regular teacher and 20% industry experts.
- v. Every engineering college should adapt 5 villages. So that students will know challenges of villages and will try to resolve these challenges.
- vi. Good performing institute should become the facilitator for the institutes which are not performing well.
- vii. Library and laboratory should be open for 24×7 hours.
- viii. Faculty induction program should be mandatory.
- ix. The question paper should not include terms like explain, short notes etc. The question paper should be challenging and for this we can increase the exam duration.
- x. Curriculum should be updated and revised regularly as per the industry need.

He concluded as like Devi Ahilya teachers should also act as worriers to remove ignorance for gaining knowledge.

Prof. Narendra Dhakad addressed about the importance of Industry Institute Interaction for better teaching-learning, to create awareness among the students about the environment of industry, provides real practical knowledge and self confidence to students to become a better technology competent. Prof. Sanjay Tanwani, Head SCSIT presented the vote of thanks.

## 5. Summary of Sessions

The panel of eminent speakers who were invited in workshop to deliver the enlisted topics were as follows:

Session	Name	Topic
I	<b>Prof. K. K. Agarawal,</b> Founder VC, Guru Gobind Singh Indraprastha University, New Delhi	Accreditation as a Means for Quality Improvement
II	<b>Padmshree Dr. D. B. Phatak,</b> Professor, CSE, IIT Mumbai.	From Deliverers of Knowledge, to Facilitators of Learning
III	<b>Prof. K. Chandrasekaran,</b> NIT, Surathkal.	Promoting Innovations in Teaching - Learning - A Few Thoughts
IV	<b>Prof. P. K. Chande,</b> Ex Director, MANIT, Bhopal.	Making Foundations for Research

### 5.1 Session I by Prof. K.K. Agarawal

The summarized key points of this lecture are as follows:

- i. Quality cannot be measured quantitatively. Quality can be measured at various levels and there is always a tradeoff between quality and cost.
- ii. Accreditation and syllabi design should be outcome based. Outcomes should be defined for each or a group of students.
- iii. Emphasis should be given on learning rather than duration of course.
- iv. Over emphasis on placement is enemy of the education.
- v. The creativity among higher educated students is decreasing continuously. 23% patents in world are from school level students.

### 5.2 Session II by Prof. D.B. Phatak

The summarized key points of this lecture are as follows:

- i. Limitations of classical model of teaching learning are discussed. Based on research on classical teaching learning model only 8-15 % learning occurs during lectures.
- ii. Students can learn maximum by solving assignment problems and presenting demonstration.

- iii. Instead of giving more emphasis on lecture preparation the teacher should make efforts to maximize the quality time that the students spends on learning. The teacher should give good examples and ask question after each 10-15 minutes.
- iv. The various advantages of flip class room model are discussed. It has proven that learning is more superior by implementing this model. The flipped classroom model allows faculty to engage students in innovative ways, both inside and outside the classroom, and to employ a range of modern teaching tools and approaches.
- v. Thing pair share model for programming courses can be implemented for active learning.
- vi. Autonomy should be given to teachers. The teacher should be facilitator of knowledge rather than deliverer.
- vii. Blended MOOCs should be practiced.
- viii. Permit students to do mistakes, a student learn from mistakes.

He concluded by following six keywords abbreviated as “**INDORE**” for effective teaching learning:

**Inspire:** Spend quality time to students.

**Nurture :** Pay attention to each students.

**Delegate :** Some responsibilities to Teaching Assistants.

**Organize :** Work and duties.

**Respect :** Yourself and every students.

**Engage :** In solving problems and research activities.

### **5.3 Session III by Prof. K. Chandrashekharan**

The speaker discussed his experiences regarding expectation of students and teachers in teaching learning process. He also suggested some good ideas for improving quality in higher education. The summarized key points of this lecture are as follows:

- i. The students expect more on demand classes, online materials, social media for learning, and industry experts.
- ii. Innovative lecture delivery methods and alternative assessment methods should be implemented.
- iii. Differential teaching model should be used. This model involves providing different students with different opportunity to learning acquiring content; processing of ideas and developing teaching materials and assessment measures.

#### **5.4 Session IV by Prof. P.K. Chande**

The speaker discussed his views about integration of research in teaching. He also suggested some good ideas for quality research. The key points of his lecture can be summarized as follows:

- i. Research should be society or industry oriented.
- ii. Good results can be generated by team work.
- iii. Radical thinking, leadership, motivation, incentives are the factors which leads to good research.

#### **6. Feedback from participants**

Participants suggested some valuable inputs as the follows:

- Slides and videos may be provided to participants.
- Workshop is helpful and motivational in ensuring quality of teaching.
- Workshop duration should have been extended to 2 days.
- Workshop arrangement was nice, and resource persons delivered excellent lectures.
- Workshop contents were good.
- We need more of such workshops.
- It should be focused on NBA to help colleges in establishing standards.
- Workshop is beneficial for teachers.
- Overall it was a good initiative.
- Participants expected some notes or materials related to lectures.
- Participants expect some group activity in this workshop.
- Workshop was informative, and creative.
- Overall experience was good and participants learned many aspects of effective teaching.
- More time should have been allotted to interactions with experts.
- Emphasis on practical implications of the content.
- Topics coverage was satisfactory
- Excellent initiative of IET and SCSIT
- Such workshops should be conducted on regular basis.
- Contents should be solution oriented.
- Include experts from diverse background.
- Food arrangements may be improved.

**Appendix A**

**Brochure**

**Appendix B**

**Program Schedule**

<b>Time</b>	<b>Details</b>	<b>Topic</b>
10:00 a.m. – 11:00 a.m.	Inaugural Function	
11:00 a.m. – 11:30 a.m.	Tea	

11:30 a.m. – 12:45 p.m.	Prof. K. K. Aggarwal Founder VC, G.G.S. Indraprastha University, New Delhi	Accreditation as a Means for Quality Improvement
12:45 p.m. – 1:00 p.m.	Discussion	
1:00 p.m. – 2:00 p.m.	Lunch	
2:00 p.m. – 3:15 p.m.	Padmshree Dr. D. B. Phatak Professor, CSE Department, IIT Mumbai	From deliverers of knowledge, to facilitators of learning
3:15 p.m. – 3:30 p.m.	Tea	
3:30 p.m. – 4:45 p.m.	Prof. K. Chandrasekaran Dean, R & D, NIT, Surathkal	Promoting Innovations in Teaching - Learning - A Few Thoughts
4:45 p.m. – 6:00 p.m.	Prof. P. K. Chande, Former Director, MANIT, Bhopal	Making foundations for Research

## Paper News