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**Phaltan Education Society's** 

# COLLEGE OF ENGINEERING PHALTAN

Approved by AICTE & Govt. of Maharashtra

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ONE WEEK STTP ON
FACULTY INDUCTION



# Book of Abstracts ISTE Approved One Week STTP Faculty Induction

## **Preface**

I am feeling privileged and honored to write preface to The Book of Abstracts of the ISTE approved STTP on Faculty Induction. It was the sincerest try to give helping hand to the faculties development in all the aspects. Considering the students progress and overall development. College is always abide by the responsibilities and duties assigned. I thank all the resource persons for the giving cent percent during their sessions. They have left hall mark at our institute that our faculty will cross check themselves in the further course of time. I really appreciate the responsiveness and sense of responsibility of all the resource persons.

This Book of Abstracts is the tiny effort to keep the gained knowledge during STTP for long time and provide the key points to the faculty who could not attend the STTP. I also very grateful to the Convener, Co-convener and organizing committee who made this programme successful.

The feedback of the participants is really note worthy because this is the only way from where we can analyze the effectiveness of the STTP. All the faculty participants are very happy and energized by the programme. They are feeling that this is the right training to check their development and way of progress. Most of them were unaware of the teaching, learning process and were trying to be developed but were not getting proper guidance. Now, they are feeling confident and ready to explore every opportunity in future and this abstract book is tiny effort to keep open the all knowledge gained during the STTP for all faculties of our own institute and other institutes.

Thank You.

Dr.M.K.Phadatare

Principal

## Acknowledgement

It is sincere try to epitomize the whole short term training programme on faculty induction organized at Phaltan education Society's College of Engineering, Phaltan between 16<sup>th</sup> August and 20<sup>th</sup> August 2016. The content of abstract book is mere outcome of the resource persons endeavour to improve the teaching-learning process. We express our sincere gratitude to all the resource persons for their valuable and gracious presence and thought provoking sessions. We really appreciate and thank Principal, Dr. M.K. Phadatare, as our chief guest of inaugural ceremony Mr. Yewale, rightly pointed out, for innovative idea STTP onfaculty induction and the Book of Abstracts. Then we would also express my gratitude towards Convenor Prof Kalel S.V., HOD Science and Humanity Department and Co-convenor Prof. Bagawade R.P., HOD Computer Engineering Department for their constant support and tender loving care throughout this challenging period.

Thank should also be bestowed upon the our teaching and non-teaching staff present during the STTP and after STTP.

Editors:

Prof.S.T.Kale

Prof.V.D.Bhosale

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#### Student Psychology

Day 1 16/08/2016 Session 2

 ${\bf Prof.(Dr.)B.G.Chougule}$  Principal, Aranyeshwar Adhyapak Mahavidyalay, Pune

College students are in early adulthood. They are self directed, practical and result oriented, less open minded, and slow but integrate learner.

Teachers must take these characteristics in the consideration and should mould his teaching accordingly. It will help to teach the given subject to the student.

Then teacher must analyse his own personality and try to develop himself for betterment of self and the students. Teacher should ask question like What kind of person am I? or use SWOT analysis method. He must understand trends and use it for the betterment and to reduce threats and to explore opportunities.

For to cope with multicultural classrooms teachers must use creative approaches like teacher must be multi lingual. To face problem related personality teacher must try to understand the type of personality of student like extrovert and introvert.

To cope with introvert student's personality teacher must use appropriate tools or aids. Individual difference can also be hindrance in the teaching learning process. Individual differences like cultural, age, environment, sex etc can be reduced by proper counselling and teacher should play role of counsellor.



Figure 1: Student Psychology:Prof.(Dr.)B.G.Chougule

Prof.(Dr.)Sanjay Dixit Professor, Mudhoji College,Phaltan

The role of teacher is to manage misbehaviour in the college class room. According to academicians higher education programmers do not give emphasis on the teacher attaining class room management. The focus of the session was on creating a conducive learning atmosphere for the student. Teaching is multi-skilled activity which includes domain knowledge, command over medium, language and knowledge gained through practical work or experience.

What is classroom management? It is ways of organizing the resource, pupils and helpers, so that the teaching and learning process can be in an efficient and safe manner. The approach towards the teaching has changed with time traditional approach was compliance with rules and strategies that make students to sit in class following directions and listening attentively. But modern approach gives importance to implement effective and innovative strategies to make the process of learning student friendly. That is guide students towards success by helping them to see how their efforts pay off in the classroom.



Figure 2: Classroom Management:Prof.(Dr.)Sanjay Dixit

Classroom management is creating environment where students are successful as a result of their own efforts. For this the necessary factors are behaviour, environment, expectation, materials, activates in the classroom of the teacher.

Good classroom management lead towards effective execution of the knowledge which teacher wants to give/transmit. Whereas bad classroom management lead towards lower rate of academic engagement in the classroom.

Although classroom management appear deceptively simple, but it require a variety of sophisticated techniques and a significant amount of skill and experience. Dr. Dixit Suggested the book <u>Teach Like a Champion</u>. 49 techniques that put students on the path to college for the technique for positive classroom management

at last told.

#### Simple rules of classroom management

- 1. I will treat each student with respect.
- 2. I will criticize in private and praise in public; I will make every effort not-to embarrass you in front of your peers.
- 3. I will maintain a sense of humors, laughter which is important.
- 4. I will remember, you may have other issues going on; recognize your load words , but encourage you to keep going and trying.

#### Research and Pedagogy

Day 2 17/08/2016 Session 2

Prof(Dr.)S.S.Mohite

Professor and HOD, Mechanical Engineering Department, Government College of Engineering, Karad

Research and Pedagogy go hand in hand. Teaching requires research and research is the way to gain new knowledge. So teacher must be a good researcher. Research is the process of searching carefully to answer a question using a method. Research is knowing everything about nothing. Research cannot lead from unknown to unknown but it leads from unknown to known. In primary school we know everything at graduation we known little more and at PhD. We know nothing because world looks different to you now.

The process of research starts with identifying the research problem and end with report and disseminate research. In between researcher have to review the literature, specify a research purpose, collect data, analyse data, interpret the research. The same way teacher has to identify the areas of research problems and try to reach at the solution that he can change his teaching or method as per learners need.

Research and pedagogy goes hand in hand. Research helps in making pedagogy more successful, fruitful and give helping hand to the pedagogy whenever it requires.



Figure 3: Research and Pedagogy:Prof(Dr.)S.S.Mohite

#### Teaching and Learning: Two Sides of Coin

Day 3 18/08/2016 Session 1

Prof(Dr.)Ms.Lalita Vartak Principal, Adarsh Comprehensive College of Education and Research, Pune

Tell me and I will forget
Show me and I will remember
Involve me and I will understand
- Chinese proverb

Participation that helps students to learn and apply the things in day to day life. Teaching is a performing art where learners judge the teacher and decides whether he/she can follow.

To know more about the students learning, teacher should use Bloom's Taxonomy in which teacher can ask three types of questions like lower order, which are totally based on memory and teacher can use the verbs like define, describe etc. The second type of questions is middle order, which is based on comprehension and verbs can be used like compare, summarize etc. It helps teacher to know about the student learning about concepts. The third type higher order helps to know about whether students are able to apply the gained knowledge in day to day life that's why it is application based questions and the verbs like analyse, relate, change, design etc. are used in a question.

Reinforcement is the inevitable part of teaching learning process. It may be verbal or non-verbal positive or negative. Negative in the sense it is a stimulus that removal or withdrawal of which increases the likelihood of a particular behaviour. In the educational context one example may be a teacher's saying to the students that whoever does drill work properly in the class would be exempted from homework.

So teaching and learning are two sides of coin. Just like a coin can not exist with "just-one" side, neither can teaching, nor learning.



Figure 4: Teaching and Learning: Two Sides of Coin - Prof(Dr.)Ms.Lalita Vartak

#### Challenges Before Teachers

Day 3 18/08/2016 Session 2

Prof(Dr.)Ms.M.M.Upalane

Associate Professor, Department of Education and Extension Savitribai Phule Pune University, Pune

Good learning is the development of the students ability to do things for himself /herself. For this teacher must plan the lecture that maximum participation of the students will help students to take decisions that will offset their lives.

Teacher is the responsible person for the life of student suffers from. So, when teaching teacher faces many challenges. Teacher has to critical and innovative thinking. It helps him to use more techniques and methods of teaching. He must be good communicator.

Teacher must enhance the use of technology and think that can I firmly justify the use of technology. Teacher must be good researcher and must tried to know about learners need, interest, culture, learning style, condition and profile. So that he can use technology to meet the above things. Assessment must be for learning but not for assessment of learning.

In 21st century teacher face many challenges due to the advent of technological advances. Recent technological advances have affected many areas of our life; the way we communicate, collaborate, learn and of course teach.



Figure 5: Challenges Before Teachers:Prof(Dr.)Ms.M.M.Upalane

# Use of Advanced Pedogogy and Modern Technology in Classroom

Prof(Dr.)S.J.Kalekar

Professor, Aranyeshwar Adhyapak Mahavidyalay, Pune

Day 4 19/08/2016 Session 1 and 2

Session starts with pre-test that helps to gage the depth of the participants. People learn from the immediate, here and now experience, as well as from concept, and books and people learn differently that is according to there preferred learning style. So the teacher must plan the activities and teaching aids according to the learning styles of learners. Teacher should follow a Philip Jackson model for the effective lesson plan. The Jackson has introduced 3 phases of teaching. The first which is Pre-active Phase in which teacher should fix up the goal and content and take decision about strategy. Second Phase is Inter-active Phase in which teacher should plan the activities in the classroom, where he should plan the activities on the basis of the diagnosis of the learner, action and reaction of the students. In the last phase, Post-active Phase, teacher forms appropriate testing devices to gain the feedback to the teaching like KWHL charts. There are many resources are available on net or market which should be used by teachers for making the teaching learning process more effective.



Figure 6: Use of Advanced Pedogogy and Modern Technology in Classroom:Prof(Dr.)S.J.Kalekar

Collaborative learning is one of the best learning strategies. It is an umbrella term for variety of educational approaches. Involving joint intellectual efforts by students or student and teacher together. Usually students are working in groups of 2 or more, mutually searching for understanding, solution or meanings or creating products. Collaborative learning increases involvement co-operation and team work and community responsibility. It includes peer-teaching, problem based learning, discussion groups, learning community.

Teacher must be aware of modern technology available and should use in teaching learning process. Teacher can use Prezi- Presentation as a substitute to

Powerpoint presentation that needs supportive files whereas Prezi Presentations can be used with zoom in and zoom out facility and decide path which helps to focus on the entire linked studies. It also provides facility of video upload in the slide only.

Teacher must update himself with the recent updated apps in the market. He can use the EDMODO for creating groups and assigning the work to the group with help of this app. He also can check the online progress of the student and assignment. It provides the facility to teacher and students to remain in the contact of the class.

Simply, teacher should be update and use technical gadgets and learn more about it that they will able to use them in their teaching. That is they must try to walk with the 21st century student that there will not be a generation gap.

Efficient use of information and communication technology is must and creating knowledge based society is responsibility of teaching community, so the future starts now and we will help make it brighter.

#### **Outcome Based Education**

Day 5 20/08/2016 Session 1

Prof(Dr.)P.K.Brahmankar

Professor and HOD, Mechanical Engineering Department, Dr. Babasaeb Ambedkar Technological University, Lonere

Should education be outcomes based and some might argue that it already is, to some extent. Nearly all education institutions have goals that guide their work. When educators plan curriculas or teachers plan lessons for their classes, they usually start by clarifying the purposes. So outcome-based education means clearly focusing and organizing everything in an educational system around that what is essential for all students to be able to do successfully at the end of their learning experiences and after 3 or 5 years. For the assurance of the outcome based education there is accreditation process.

Accreditation focuses on evaluation of outcomes of the program, through input and output parameters. Input parameters are financial resources, lab equipment, infrastructure facilities, faculties, number of quality students and output parameters are number of graduating students, quantitative grades of students, success rate of students, placements, number of publications etc.

Key Constituents of Outcome Based Education are defining curriculum objectives and intended learning outcomes, designing assessment tasks, selecting teaching and learning activities. These constituents help to bring classify, flexibility, comparison, environment in the education.

Thus clarify focus that can enhance the coherence of what is actually taught to students. A commitment to common outcomes that can enhance quality. An accountability that respect collective professional judgment and decision making in schools and colleges. Shared responsibility for achievement of established outcomes i.e. the responsibility of students to engage with their studies, the responsibilities of principal to provide curriculum leadership and of teachers to examine their teaching students.



Figure 7: Outcome Based Education:Prof(Dr.)P.K.Brahmankar

#### **VENUE:**

Seminar Hall, Phaltan Education Society's College of Engineering, Phaltan

### **CHIEF GUEST:**

## **Inauguration Ceremony:**

• Mr. Mahesh Kakade Controller of Examination, Shivaji University, Kolhapur

#### Valedictory Ceremony:

• Prof. (Dr.) P. K. Bramhankar

Prof. & Head, Department of Mechanical Engneering, Dr.Babasaheb Ambedkar Technological University, Lonere Dist-Raigad

#### **RESOURCE PERSONS:**

• Prof. (Dr.) Suhas Mohite

Professor & Head, Department of Mechanical Engineering Government College of Engineering, Karad

• Prof. (Dr.) Ms. Megha Uplane

Professor, Department of Education & Extention Savitribai Phule, Pune University, Pune

• Prof. (Dr.) Ms. Lalita Vartak

Principal, Adarsh Comprehensive College of Education & Research, Pune

• Prof. (Dr.) Bapusaheb Chaugule

Principal, Adhaypak Mahavidyalaya Aranyeshwar Pune

• Prof. (Dr.) Sunil Kalekar

Professor, Adhaypak Mahavidyalaya Aranyeshwar Pune

Prof. (Dr.) Sanjay Dixit

Professor, Mudhoji College, Phaltan