ICT for Effective Physics Teaching, Learning and Evaluation

The Department of Physics organized a Webinar on ICT for Effective Physics Teaching, Learning and Evaluation in a view to make the PHYSICS faculty familiarize with the digital tools available to enhance the teaching, learning and evaluation methods which would be the need of the hour. This webinar was held on 18th of May, 2020 and had around 200 state level participants in which Google meet was used as the Webinar platform. Though it was designed for the faculty involved in Physics teaching, the event saw an equal participation from students and research scholars. The programme was intended to make the participants aware of the various digital resources available online pertaining to the physics discipline and how a faculty need to synchronize the three domains i.e expertise in the subject knowledge, pedagogical tools and technological tools for effective Teaching and learning. The programme also emphasized on the need of evolving modern education, towards a more dynamic curated curriculum which would enhance conceptual learning and create scientific curiosity in the young minds.

The Webinar started with an invocation prayer followed by an overview on Online education by Dr. Sr. Francisco Nirmala F.M.M., Provincial Chennai Province. The webinar had four sessions:

i) **First Session:**

**Resource Person:** Dr. Belina Xavier  
Head and Associate Professor,  
Dept. of Physics,  
Stella Maris College,  
Chennai.

**Use of ICT for quality education**  
This first session concentrated on the introduction of TPCK required by teachers for student centred learning.

ii) **Second Session:**

**Resource Person:** Ms. A. Christy Preetha  
Assistant Professor  
Dept. of Physics,  
Stella Maris College,  
Chennai.

**ICT for student-centred teaching & learning of Physics**  
The second session gave insights on how ICT can be implemented for teaching and learning of Physics. It dealt with ICT methods that can be used for improving the approach towards Physics problem solving.
iii) **Third Session:**

**Resource Person:** Dr. R. Shanmugasundari  
Assistant Professor  
Dept. of Physics,  
Stella Maris College,  
Chennai.

**ICT tools for Content creation**  
Third session discussed the various free web resources available for designing and structuring lessons. The interesting components of this session were the video journals, simulation software, and the ICT initiatives by MHRD that we can benefit from.

iv) **Fourth Session:**

**Resource Person:** Dr. D. Sukanya  
Assistant Professor  
Dept. of Physics,  
Stella Maris College,  
Chennai.

**Demonstration of Learning Management System tools**  
The webinar concluded with a detailed demonstration of two LMS tools namely the Google Classroom and Blendspace. The session gave the benefits of using the LMS tools in creating contents on different subjects, communicating with students, sharing lessons with them, receiving assignments/reports from them and how these tools can even be used for conducting tests and evaluating them.