



## SARDAR PATEL COLLEGE

Re- Accredited 'B+' Grade  
14 Padmarao nagar, Secunderabad – 500025  
(Affiliated to Osmania University, Hyderabad- TS)

Sponsored and Managed jointly by the Osmania Graduates association and the Exhibition Society)

### BEST PRACTICE-I

**Title of the Practice:** CONSERVATION OF ENERGY, INSTALLATION OF SOLAR PANELS

**Objectives of the Practice:** The College has taken the initiative to install solar panels as a further step towards conservation of energy. Solar energy is produced by the sunlight which offers many benefits that make it one of the most promising energy. It is renewable, inexhaustible, and non-polluting, avoids global warming, reduces use of fossil fuels, and contributes to sustainable development. Use of solar energy also helps in managing the electrical cost. It has reduced the burden of heavy electricity bills. The management in addition has replaced the incandescent bulbs with LED (Light emitting diode) bulbs in the previous year, which are more efficient in energy saving.

**The Context:** To educate and make aware students on the issues such as renewable energy sources, global warming and harmful impacts on our natural ecosystem etc. There is a greater need to generate power from renewable, inexhaustible and non-polluting sources of energy which contributes towards environment protection and its sustainable development. Thus, the institution has decided to work in the areas of minimal power consumption and follow the motto 'Affordable and clean energy for all'.

**The Practice:** The institution has put this principle in practice and effectively started using solar energy along with the other sources of energy. It is an important component of higher education to make the students aware about ecological destruction which is a consequence of the construction of dams for hydroelectric power generation and the use of fossil fuels etc. Institution has also replaced all the traditional bulbs with LEDs and tubes in the whole campus to minimize the consumption of electricity and put a step forward to reduce global warming and this has also helped in reducing the electricity bill. In the future, more and more addition of Solar street lights and rooftop solar plants will be made. 'Save Electricity' campaigns are conducted throughout the academic year.

**Evidence of Success:** The institution has installed 20 Solar panels of capacity with 43KW and 30 Inverters of capacity 20Kv roof top system in the new building of the college which enhanced the power generation that has increased the total solar power generation to 60KW. The electricity consumption bill has been minimized. Maximum use of pollution free, eco-friendly and renewable sources of energy as an initiative towards reduction of global warming.

#### **Problems Encountered and Resources Required:**

- Cost Management: Installation & maintenance of solar power projects is a costly affair due to the expensive panels.
- Availability of labour: wherein we always encounter the problem of labour availability.



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### BEST PRACTICE-II

**Title of the Practice:** DIGITAL TRANSFORMATION OF THE INSTITUTION

**Objectives of the Practice:** Main objective of this practice was to cater knowledge among students through this digital awareness and paperless work programme. Digital solutions for education aimed at improving, facilitating and upgrading the learning process and acceleration.

**The Context:** The institution embraces digitalization throughout the entire academic and administrative processes. Digitalization pervades all processes, administration, formats, and goals of higher education teaching, learning, evaluation and research. This digital transformation includes the increase in use of digital media and technologies for teaching and learning, research, support services, administration, and communication, as well as the need for students and faculty to develop digital skills for their current and future endeavours.

**The Practice:** The institution provides digital learning resources to implement effective teaching and learning techniques and to support extensive use of ICT enabled tools. Sardar Patel College maintains a good IT infrastructure which covers wifi, cyber security and data management. The college regularly upgrades its infrastructure covering Wi-Fi system with Act fiber connectivity which is upgraded with 300 Mbps, 2000 user capacity, cyber security, software, ERP system and ICT enabled teaching learning resources. The institution has ICT enabled classrooms with 2 smart boards to promote digitalization in curriculum delivery. The faculty members effectively utilize audio visual aids to enhance the learning experience of the students. All the Departments are provided with the desktop computers with internet facility, HP desk jet printers, scanners and Epson LCD projector for ICT related activities.

The institution maintains two servers to connect all its systems. The institution has three computer labs which include 245 systems with Microsoft License, with HP Acer and Dell desktops running with Windows 7 and Windows 10 versions. The latest hardware configuration, LED monitor and uninterrupted power supply support to enhance the teaching and learning process. The administrative office is also provided with a number of desktops and printers with LAN connection. A backup is taken for all the administrative systems windows and antivirus are upgraded on regular basis, LAN and network connections are also monitored. Library has 300 mbps speed internet connection for all the systems in library. The institution has subscribed to E-Journal Portal, and e-resources like INFLIBNET (N-LIST), IIT SPOKEN TUTORIAL. Apart from this, applications like Google Meet, WebEx, and Zoom Meet etc. are also used for sharing of knowledge.

The institution implemented the digitalization in the administration which includes updating the students' admission details, fee details, distribution of Transfer Certificate, updating the details of the staff, payment through online, fee collection, UPI facility, etc. Individual emails in domain, Exclusive Social Media Pages and Groups, SMS Tool used for communication



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purpose and dissemination of information. The institution induced digitalization in the examination processes; the Exam cell is equipped with Computers, Printers, a reprographic machine and a copier machine. It communicates the faculty through domain mail ID. The examination circulars, question paper setting circulars, evaluation process etc are communicated.

**Evidence of Success:** The increased use of mobile applications of the learning platform is clear evidence for the success of digital learning tools provided by the institution. The interest level among the students for peer learning and digital learning has been gradually increasing. The teaching faculty is also motivated to use more of this learning resource in delivering the knowledge content to the students. The digital learning platform provides motivation to learn and enhance the skill sets of the students by registering themselves for online MOOC and SWAYAM- NPTEL courses.

As the institution already adopted the usage of digital platform since pandemic, the faculty members and students finds the transformation towards digitalization to be quite easy to conduct various online events that results 100% utilization of ICT. The institution has hosted a number of webinars presented by subject specialists that helps the students to learn at their own comfort.

### **Problems Encountered and Resources Required:**

- Technical issue confronted during usage of ICT.
- Shortages of gadgets as students are from economically downtrodden backgrounds.
- Digital Literacy - Requirement of technical proficiency. Although digital learning is enriching, students do not find a virtual classroom as engaging as a traditional one.
- Security issues exists as online platform have been a fertile ground of cyber network.