Best Practices 2018-19

Best Practice No.1 : Parivarthana – Zero Waste Campaign and Sustainable Environmental Practices in CHRIST (Deemed to be University)

Objectives of the Practice

·   To ensure sustainable environmental promotion through Zero Waste Campaign

·   To ensure trash to treasure and create livelihood promotion for women and men through sustainable and scientific management of wastes generated in the campus

·   To develop replicable models of waste management segregation at source and ensure systematic and scientific management

·   To educate the student community and faculties, educational institutions, community people and other stakeholders such as BBMP and corporate sectors etc.

The Context

In an institution set up like CHRIST (Deemed to be University) the challenging issues that needed to be addressed in designing and implementing this practice is that systematic waste audit and types of waste generated in the campus and accordingly design the intervention strategy is need to be comprehensive and integrated in nature. The biggest challenge would to educate the student community and faculty members to ensure their participation and commitment in waste segregation at source. One needs to also consider the capital investment in terms of machineries and appropriate infrastructure for systematic collection, segregation and recycling of waste. Education of house-keeping staff and other workers associated with waste management process is supremely important for the success of this model.

The Practice

Under the Parivarthana project Centre for Social Action (CSA), the development wing of The Zero Waste Campaign with primary focus on *"Reduce, Reuse, Recycle and Safe and Scientific Disposal"* is the major strategy adopted in CHRIST (Deemed to be University). Student volunteers of CSA-CHRIST (Deemed to be University) sensitize and educate the student community and faculty members on Zero Waste Campaign. All the students are given exposure on sustainable waste management and environmental practices in the campus. CHRIST (Deemed to be University) generates around 900 kgs of waste everyday which includes both wet and dry waste. 70% of primary segregation of waste generated in the campus is undertaken by the students and faculties. 30% of secondary segregation is undertaken by sorting cum composting unit. In order to ensure carbon neutrality food waste is converted into bio-gas and kitchen waste, fruit/vegetable waste and other bio-mass are converted into organic manure and used for vegetations. The Institution does not use chemical or synthetic fertilizer. Paper and tetra packs are recycled and sold by which a sizeable amount of revenue is generated. Waste resources such as bottles, newspapers,

aluminium foils, chocolate wrappers, plastics etc. which cannot be recycled are sold in the scrap market and revenue generated. By this process CHRIST (Deemed to be University) generates monthly revenue of Rs. 150,000 which goes as the remuneration for the people working in the waste management unit. 70-75% of the waste resources generated in the campus is reused, recycled or sold in the scrap market. Only 25- 30% rejects are sent to the scientific landfill for safe disposal and treatment. Parivarthana initiative of CHRIST (Deemed to be University) has been awarded by Rotary Club for comprehensive waste management initiative in the campus as well as in the slum community. Water harvesting systems established in CHRIST (Deemed to be University) is unique in all aspects. Every day in the main campus about 300000 liters of grey water is being treated and used for vegetation and gardening.

Similarly grey water is being treated and used for vegetation and gardening in Kengeri campus as well. Rain water harvesting promoted in Kengeri Campus is one of the unique features of judicious utilization of water resource. With the concept of "catch rain water where it falls", CHRIST (Deemed to be University) ensure in both campus to recharge ground water. Roof top rain water and run-off water is channelized through a system and collected in a swamp and used for watering the garden. Student volunteers of CSA-undertake awareness campaigns on E-waste Management; The Institution has ensured systematic way of collection of E-wastes which are sold in the scrap market to generate revenue for the Parivarthana unit. Toilet waste and laboratory wastes are managed safely and systematically. Thorny bushes/shrubs and thermacol are sent to the scientific landfills. Indeed CHRIST (Deemed to be University) is a hazard free environment. Educating the student community with imbibing in themselves the culture of ensure primary segregation concept and practice, educating the house keeping staff and other workers associated with waste management process, and staff attrition were some of the constraints.

Evidence of Success

· Continuous education of student community by the student volunteers with primary focus on *"Reduce, Reuse, Recycle and Safe and Scientific management of waste.*

· Comprehensive waste segregation system established in the campus to ensure 70% primary segregation at source and sorting cum composting unit for ensuring 30% of secondary segregation.

· Establishment of Bio-gas units to ensure carbon neutrality and convert food waste (with 500 kgs of daily feeding capacity, cooking gas equivalent to 25 kgs of LPG generated everyday and slurry rich nutrient is used for vegetation) and establishment of Information dissemination unit to educate other stakeholders

· Kitchen waste, fruit/vegetable waste and other bio-mass are converted into organic manure and used vegetations.

· Paper and tetra packs are recycling unit which mobilizes a sizeable amount of revenue is generated. Waste resources such as bottles, newspapers, aluminium foils, chocolate wrappers, plastics etc. which cannot be recycled are sold in the scrap market and revenue generated about Rs. 150,000.

· Every day in the main campus about 300000 liters of grey water is being treated and used for vegetation and gardening. Similarly grey water is being treated and used for vegetation and gardening in Kengeri campus as well.

· Rain water harvesting promoted in Kengeri Campus is one of the unique features of judicious utilization of water resource. With the concept of "catch rain water where it falls", CHRIST (Deemed to be University) ensure in both campus to recharge ground water. Roof top rain water and run-off water is channelized through a system and collected in a swamp and used for watering the garden.

· With a view to managing E-wastes, systematic way of collection ensured which are sold in the scrap market to generate revenue for the Parivarthana unit.

· Toilet waste and laboratory wastes are managed safely and systematically. Thorny bushes/shrubs and thermacol are sent to the scientific landfills. Indeed CHRIST (Deemed to be University) is a hazard free environment.

Problems Encountered and Resources Required
Following are the problems encountered and resources required to implement the practice:

· In spite of best efforts many a times lack of cooperation from student community to ensure primary segregation at source

· Human resource – adequate staff with commitment to work in the waste management unit

· Adequate financial and material resource for ensuring systematic and scientific management of waste

Notes
Following are some of the intervention may be relevant for adopting/ implementing the Best Practice in other institutions:

· Formation of Eco-club with a view to making the children aware on solid waste management

· Working with other educational institutions: This intervention aimed at creating a learning space for other educational institutions to understand the waste system and help them as well to undertake such initiatives in their own campus.

· Observing Green Apple Day of Service event and undertaken tree plantation Capacity building for members of Resident Welfare Associations on segregation concepts and utilization of food and dry wastes, water management

· Street theatre training for college/university students on segregation policies, safe disposal of food waste in bio-gas plant, solid waste management etc.

· Street theatre to educate the community on segregation of garbage, solid waste management and water management

Best Practice No.2: Centre for Concept Design-Developing Multimodal Communication in Teachers
Objectives of the Practice
The principle

Centre for Concept Design (CCD) was conceived in CHRIST (Deemed to be University) as a platform for blending the EMRC (Education Media Research Centre) Model of Central Universities in India and the very popular and effective MOOCS offered by western Universities. The idea underpinning the objectives of the Centre is that the teachers could refine their communication skills and make it effective as well as accurate. The idea was also to make classes digital so that students can access the sessions wherever and whenever they want. This makes learning more effective and durable for the students who are primarily digital natives and mostly visual learners.

The Objectives of the Centre is to help teachers:
· Create "clear" arguments, sentences, and images as a type of visual-multimodal composition.
· Encourage teachers to move from visual critics to being visual multimodal producers
· Focus on various modes in teaching, so that students learn and gain from new materials and approaches.
· Understand that learning cannot just be enactment of alpha centric literacies because it is no longer the case that mono modal, alphanumeric texts encompass the entirety of textual production.

The Context
The present needs and expectations of higher education has changed drastically with focus on learning objective as being research and employability and the teaching focus being on the use of ICT and developing multi-skills and literacies. The conventional model of teacher- student classroom interaction is becoming redundant. There is a paradigm shift from teacher centered instructions to learner centered pedagogies. Today''s learners are found to be visual learners and a need to therefore serve the visually intelligent, digital natives is the call for the day. Western universities, to a **large extent, have catered to this need through MOOCS but the Indian model had to** be developed keeping in mind the constraints of affordability and accessibility of computers and the lack of other technological infrastructure. The fact that Indian teachers were hard pressed for time and have problems of constrained skills also was to be kept in mind. The digital sessions had to be customized in such a way that it catered the needs of both the Indian teachers, who are immigrants to technology, and the Indian students, who are digital natives. However, Indian teachers have optimism and experimental bend of mind which should be used for developing e-content. The place, personnel, expertise and conceptual clarity had to be worked out. Communication thus became a thrust area of focus and the need for effective and accurate communication was impressed upon the faculty community. To this effect, faculty development programmes were arranged and enthusiastic faculty participation has proved that the faculty are very receptive to this new trend.

To make a differentiator for the digital content made by the teachers, a separate studio was established with latest high definition audio and video facilities. The Centre for Concept Design (CCD) arranges training programmes for teachers in scripting, voice projection and Camera presence. CCD has received a large number of scripts and, after necessary scrutiny,

the approved scripts are loaded into the teleprompter for the teachers to read from. Teachers were at first reluctant to face the camera and script their sessions. It took many takes and rehearsals to bring out the first few videos. Since these videos were crucial in making an impact on the teachers to get involved, it took time to produce them. The studio crew also took time to edit the videos as there were many retakes and sound editing and animations to be done. Once the videos were screened, it generated a lot of interest among the faculty and helped in bringing them to the studio for their shoot. Today certificate courses, introductory sessions and orientation sessions are digitalized. Some faculty have also used their regular class syllabi to make digital sessions as well.

The Practice

Faculties are trained to write scripts to produce instructional videos and a full- fledged studio with the latest audio and video equipment and trained professional studio crew are made available for them to digitize their instructional content. The professional crew assist the teachers in producing the video, which are then uploaded into their official Learning Management System or Moodle account. This is shared by teachers with the students and relevant tests are also conducted through Moodle which helps ensure that the students have seen the sessions and have learned from it. Most of the mandatory Certificate Courses have 50% of their content as digital sessions prepared by the teachers in charge of the courses. Students have been very receptive to this blended teaching and faculties have taken note of this fact and are experimenting with the CCD facility in presenting newer and interesting formats like talk shows and expert group panel discussions. Faculties are also successfully using such digital content in bridge courses and Introductory/Orientation as well as regular classroom sessions. The training in communication skills needed to script and present their content in front of the camera

and prepare effective Power point or Prezi slides to make their video more appealing is a life skill for the faculty who need to keep abreast with the needs of the present generation of learners who are no longer comfortable with traditional learning practices.

Evidence of Success

The feedback taken by the Centre at the end of the academic year and the students who have used such sessions/content to learn, gives a comprehensive idea of the effectiveness of the sessions. While an official feedback system is in place for the students, the teachers" feedback comes in the form of congratulatory letters, appreciation letters and their return to the centre voluntarily for more sessions. Attached is the feedback collected from the students for two years. The digital sessions are gaining popularity among students and teachers have become proactive in creating such sessions.

Problems Encountered and Resources Required

The first challenge was in sensitizing the teachers to the need for digital sessions as opposed to traditional classroom transaction. Another challenge was to equip the teachers to write scripts as opposed to class notes which all of them were used to making. A third challenge was to decide whether to make the accents standardized, but later the Centre was in favor of individualized styles of speaking. Facing the camera was a problem for teachers but that problem was overcome by getting them to do a sample promo video for a minute first before they started on their digital sessions. Lack of competent crew for editing was a challenge as instructional videos needed a different visual aesthetics and orientation than

from a commercial video/ digital product. Another issue that the teachers face is the lack of time to script and the shoot.

Notes

CCD is only into its third year of existence. In the three years of its existence, faculty from all the departments have been trained to produce digital sessions. All the sessions that are produced are made to meet industry standards.