

1. Title of the Practice:

Inculcating life-long learning through self-learning using Coordinated Student Development (CSD) model

2. Objectives of the Practice

- 1) To inculcate lifelong learning through a CSD model
- 2) To facilitate an access to various global platforms
- 3) To empower student with emerging technologies

3. The Context

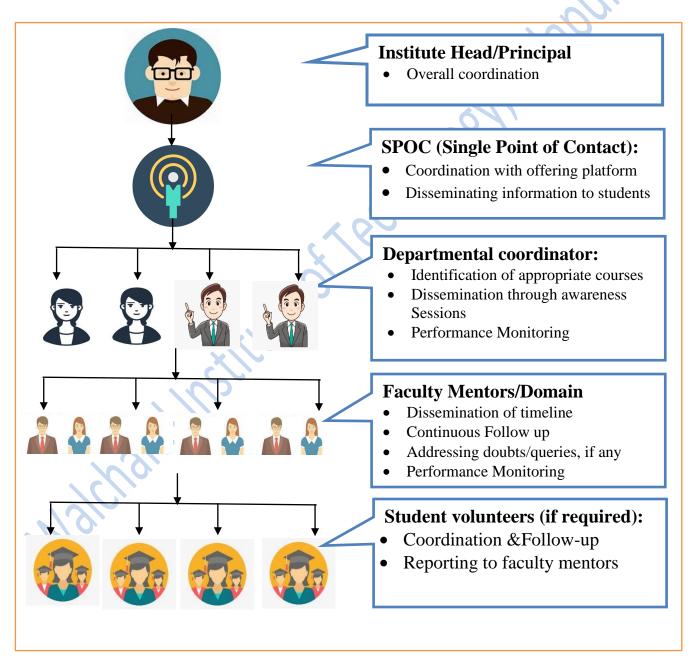
The technological development is evolving at a rapid pace beyond imagination. To accommodate these continuously ever-evolving changes into the course curriculum from time to time is a challenging task. As overall technological development is enormous, the course curriculum cannot be all inclusive at any given instance of time. Also, it is not possible to accommodate all possible knowledge domains as a part of course curriculum as well it is unlikely to accommodate choice of every student. The choice of individual learner to the expected breadth and depth can be made possible through various MOOC platforms, including emerging areas.

Also, the constrains imposed due to COVID-19 pandemic situation has resulted in significant transformation in the education system because of compelled online education system in place of on campus education system through virtual classrooms for content delivery and interactions.

Looking to all above, this is an attempt to make it possible by inculcating, lifelong learning through self-learning, to accommodate varying choices of students and situational constraints. This will also be beneficial & effective even after restoration to pre pandemic situation.

4. The Practice

Our Coordinated Student Development (CSD) model aims at inculcating lifelong learning through continuous self-learning. It is an observation that generally in normal circumstance the entire system is left to students and the success rate observed is low. With an objective to enhance success rate and to facilitate the learning process to be a joyous one, Institute has developed the following CSD model:



Coordinated Student Development (CSD) model

• Feedback and review

Two-way communications are effectively maintained. Regular feedback on implementation & effectiveness is taken and accordingly addressed into review meetings for corrective actions, if any.

5. Evidence of Success

• Infosys Springboard

The success rate of MOOC implementation at the institute level is @90% which is very much higher as compared to the success rates observed globally. Institute has received "Star Achievers" award in 2021 for maximum learners and certifications on Infosys Springboard platform. We are top in Maharashtra zone for having highest number of certifications completed by students.

	01-08-2021 to 30-11-2021	01-12-2021 to 28-02-2022	01-03-2022 to 21-06-2022	Total
Total Registration	2590	2590	2590	2590
Users started learning	1697	1674	1546	2405
Number of Courses	89	106	107	211
Number of Certifications	2	263	155	420
Number of Course Certificates	2979	2330	2497	7806

Table 11nfosys Springboard User Progress Report

Few courses completed by students are Java Programming, DBMS using InfyTQ Platform, Python, Machine Learning, Artificial Intelligence, Data Science, Big Data Analytics, Cloud Computing, Practical GIS - Fundamentals of Open Source GIS, Advanced Mapping with ArcGIS etc.

• NPTEL

For Jan-Dec 2020 NPTEL Session Walchand Institute of Technology, Solapur is among one of the top 100 Local Chapters in India and is hereby recognized as an ACTIVE Local Chapter.

The students form the Institute registered for NPTEL online Certification Examination for various courses and successfully passed the examination.

Few of the significant achievements of the students are

- SIDDHARAM DIVATE got 90% and is Top 5% of certified candidates for the course Wheeled Mobile Robots.
- SAMARTH DURGAPRASAD LAGHATE got 90% and is among Top 2% of certified candidates for course Design Practice and with 87% score, he is among Top 2% of certified candidates for the course Principles of Industrial Engineering.

Course Run	Present	Gold	Elite	Silver	Successful	Participation	Topper
Jan-Apr 2022	69	2	25	19	9	14	3

Table 2 Summary of the Local chapter performance in NPTEL online Certification

Sr No	Course Name	Present	Gold	Elite	Silver	Successful	Participation
1	Design Practice	31	1	13	9	4	4
2	Manufacturing Guidelines for Product Design	14	0	8	5	0	1
3	Wheeled Mobile Robots	6	1	1	4	0	0
4	Introduction To Programming In C	1	0	0	0	0	1
5	Understanding Incubation and Entrepreneurship	1	0	1	0	0	0
6	Entrepreneurship Essentials	1	0	1	0	0	0
7	Principles of Industrial Engineering	1	0	0	1	0	0

Table 3 Course wise performance of Local Chapter Students

Links for Feedback by the students about NPTEL:

- <u>https://youtu.be/C7YkE1mZy9w</u>
- <u>https://youtu.be/fnT7ThA4Xy0</u>
- <u>https://youtu.be/ypdlVIfn16g</u>

• Coursera:

We introduced access to courses of Coursera platform to deliver job-relevant, multi-disciplinary online learning to our campus community that empowers students, alumni, faculty, and staff with a world-class education. The major domains opted by learners include Computer Science, Data science and Business.

6. Problems Encountered and Resources Required

Problems Encountered

- Subscribed Mobile Data plan was observed to be inadequate for watching online videos for some students.
- Students from countryside were finding it difficult to complete assignments, especially for programming related courses due to poor Internet connectivity and appropriate hardware.
- o Infosys Springboard
- Learning analytics is not updated in real time and It is not user friendly for analyzing student performance department wise
- Technical issues in Online Proctored examination resulting in lesser completion rate certification
- Too high course duration for few of the certification courses (400 hrs for JAVA certifications courses)
- o NPTEL
- Economically weaker students were finding it difficult to afford the registration fees to undertake examination for the SWAYAM-NPTEL courses; to certain extent, this problem was resolved by offering scholarship in the form of exam part fee waiver
 - scheme.

Resources required

- Infrastructure
 - i. Desktop/Laptop/Tab/Smartphone with audio
 - ii. Adequate Internet connectivity
 - iii. Collaborations to access online platforms
- Human Resources as per CSD model.

7. Notes

The expectations for the jobs are changing as artificial intelligence, machine learning, robotic process automation and other digital capabilities are overwhelming the workplace. It therefore becomes imperative for student to constantly learn new skills and develop capabilities that will make them ready for the jobs of the future.

Also, Online learning is observed to be beneficial and cost effective with certain inbuilt challenges. These inbuilt challenges are: IT infrastructure, tie-ups with MOOC platforms, selection of appropriate courses and course completion rate. Our success rate was commendable and appreciated by respective platforms which is due to our CSD model. For ensured success, this proven model can be adopted by other institutes.