

# **Kamla Nehru Mahavidyalaya, Sakkardara, Nagpur**

## **SESSION 2020-21**

### **Best Practices**

#### **Best Practice 1:**

##### **1. Title of the Practice –Participatory and Experiential Learning**

##### **2. Objective of the Practice**

To make students totally involved in the teaching-learning process, alternate teaching technique must be used. The shift from traditional to innovative method should make teaching, exciting and interactive exercise. All categories of students (slow and advanced learners) must be benefitted and motivated to self-learn at least the part of topic discussed in the class. Learning must be participatory and students should not be passive. Towards this effort, teaching modules and lesson plans were specifically designed to meet practical purposes.

##### **3. Context**

Every teacher has her/his own style of teaching. Feedback from students clearly indicates that the lecture method is not an adequate method to sustain the interest of learning. The curriculum needs to be innovative, application oriented and skill based for all disciplines. These courses cannot be taught by only conventional lecture method but have to used innovative methods by using different teaching tools wherein the student gets to do hands-on-learning which ensures development of lifelong skills.

The students are involved in, case-studies, and class seminars and power point presentations, in humanities departments, using different ICT tools. Study tours, brainstorming sessions, projects, industrial visits, onsite learning, surveys and management games are some tactics employed by commerce, science and management departments to make their students industry-ready.

Student centered learning strategies have been initiated. Exercises are undertaken to enable students to acquire hands-on learning and first hand information from real life situations.

##### **4. The Practice**

Best Practices such as visits, on site learning and field visits, internship, on-job training / field work, projects and surveys were undertaken under the Best Practice-I.

Following are the details of the various significant methodologies followed under the participatory and experiential learning practice –

S.N.	Activity	Name of the department	Number of Activity
1.	Educational Visits	Botany	1
		Cosmetic Technology	1
		Environmental Science	1
		Zoology	1
2.	On site learning / Internship / on job training / Fieldwork	Library Science	1
		Microbiology	1
		Computer Science	1
		B.Voc. Software Development	1
3.	Surveys	Commerce	1
		Library Science	1
		Botany	1
		Microbiology	1

### Number of students undertaking project work/field work/ internships

Programme name	Program Code	No. of Students
B.SC AND M.SC MICROBIOLOGY	B.Sc./FY, B.Sc./ SY, B.Sc./ TY, M.Sc./MIC/S4	391
MBA	MBA/S3, MBA/S4	111
BBA	BBA	103
B. Tech. and M. Tech. Cosmetic Technology	BCT/S1, BCT/S3, BCT/S5, BCT/S7, MCT/S1, MCT/S2, MCT/S3, MCT/S4,	164
M. Sc. Physics	M.Sc./PHY/S4	21
M. Sc. Electronics B. Sc. Electronics and B. Voc. Consumer Electronics	B.Sc./FY, B.Sc./ SY, B.Sc./ TY, M.Sc./ELE/S4, UG/BVOC/CE/TY	145
B. Voc. (R/M)	UG/BVOC/RM/TY	27

B. Voc. (S/D)	UG/BVOC/SD/TY	41
MCA	MCA/S2	63
	MCA/S4	7
	MCA/S6	60
B.Com. (Computer Application) (BCCA)	BCCA	61
Post Graduate Diploma In Computer Commercial Application (PGDCCA)	PGDCCA/S2	8
Post B. Sc. Diploma In Computer Science And Application (PGDCS & A)	PGDCS&A/S2	1
M.Sc. Computer Science	M.Sc./COM/S4	20
Master of Computer Management (MCM)	MCM/S4	7
M.Sc. Biotechnology	M.Sc./BT/S4	21
M.Sc. Chemistry	M.Sc./CHE/S4	31
Environmental Science Both UG and PG	B.Sc./FY, B.Sc./ SY, B.Sc./ TY, M.Sc./EVS/S4	218
M.Sc. Biochemistry	M.Sc./BCH/S4	17
M.Sc. Botany	M.Sc./BOT/S4	19
M.Sc. Zoology	M.Sc./ZOO/S4	24
MLISc. (Master of Library and Information Science)	MLISc/S4	7
BA. Music	B.A.	48
	Total Students	<b>1615</b>

The above exercises are done by all UG and PG departments as they help the students to develop composite skills like data collection, organization, presentation and interpretation of data, usage of ICT tools like visualizer, smart board for teaching and power point presentation.

### **Evidence of success**

Students have welcomed the change and are now actively interactive with the teachers and they are enjoying and benefiting from participatory learning. Visits, Projects, hands on training, internships, etc. give the student 1<sup>st</sup> hand learning. Besides it gives them a chance to clear their concepts more and more. Apart from this the student enjoys the application of knowledge as it is this practical knowledge that he knows will prove to be beneficial to him in the long run. From various best practices students acquired various skill sets. Students got employment because of acquiring new techniques.

The attainment of Program outcomes and Course outcomes clearly reveal that the benchmarks expected and set were attained.

## **Problems encountered and Resources required**

Workshops and seminars had to be organized to bring about attitudinal changes in teachers and to impress on them the effectiveness of methodologies as teaching tools, other than the lecture method. Teachers have to be trained in the usage of ICT for preparing teaching aids.

The management had to invest in procuring Projectors, Wifi, Educational CDs, Hardware and software. MoUs had to be undertaken with local industries, NGOs and other establishments to accommodate internship and on-site learning. New evaluation techniques also had to be introduced. Due to COVID restrictions on mobility further added to the trouble.

## **Best Practice2:**

### **Title of the Practice - Short term Certificate Courses**

#### **Objective of the Practice**

Short term certificate courses were student driven initiative for all the branches. A team comprising of technical experts within and off campus and teachers collaborated to develop the syllabi of these courses. The purpose of Short term certificate courses is to update and train students with latest technical development happening in the industry through various activities like workshops and seminars. Most of these courses were sanctioned by the **RTM Nagpur University**, Nagpur and one was taken in collaboration with **Bajaj Finserv**. The syllabi of different programs are usually not at par with the expected industry expectations. Hence to up skill the students, these courses are conducted throughout the year.

#### **Context**

KNM experts, invited experts and consultants from the industry were arranged for training, guest lectures and workshops to understand and overcome the current industrial issues and create awareness about new technologies and best problem solving practices. The syllabus was designed in consultation with the industry experts and later on the proposal for conducting the course was sent to the **RTM Nagpur University** for approval. After getting the approvals the respective departments commenced the course delivery.

#### **The Practice**

Following are details of various Short term certificate courses conducted by different Departments during academic year 2020-21. Due to COVID some departments conducted the course in online mode.

S.N.	Name of Department	Title of Certificate Course	Resource Person	Duration	No. of participants	Expenditure /Income (Rs)
1.	MBA	Certificate course on share market and investment management.	1. Dr. N.D. Shrigiriwar 2. Prof. Chaitanya Sakhare 3. Prof. KushalDharmik 4. Prof. Bhavini Patel	15 Days	50	5000/-
2.	Chemistry	Synthesis and Applications of Advanced Polymer	Dr.S.MGsdegone Dr.W.BGurnule Dr.M.SWagh Dr R.R Dubey Prof. NavinChandraShimpi Dr.K.ANandekar Dr.NareshBansod Dr.RinaBagde Dr.S.S .Rahangdale Dr. Mehjabin Huque DrChayan Das Dr S. Mandavgade Dr. S.S. Umare	15 days	56	20,000/-
3.	Biotechnology	Certificate Course on "Bio fertilizer formulation from agricultural waste and crop improvement through Biotechnology"	Dr. S. R. Moghe Dr. S. B. Nandeshwar, Dr. S. L. Tiwari Dr. A. Shanware Dr. Shweta Deote Dr.Manikandan Dr .Velmourougane Mr. Nikhil Meshram Dr.Bijaya K Sarangi Dr. Amit Bafana Mr. Vijay Harode, Mr. NishantBurade, Mr.AkshayTripathi Mr. Vilas Yeole	30 days	146	35,000/-

			Dr. Y. Thakkar Dr. Vinay Tule			
4.	Cosmetic Technology	Certificate Course in "Beautification"	Mrs. Shilpa Motghare Ms. Heena Popli Dr. Sonal Kolte Dr. Rashmi Akolelkar Mrs. Avanti Paranjape Ms. Pratiksha Khadsinge Ms. Ruchira Gajbhiye Dr. Mrs. Ketki S. Misar Ms. Manjusha Taywade Mrs. Sneha N. Sambare Mrs. Meenakshi Bokde	1 Month	53	15900/-
5.	Botany	Online certificate course in nursery techniques with special reference to floriculture	Dr. M.B. Bhowal Dr. R.C. Maggirwar Dr. S. Khodake	15 days	66	7000/-
6.	Electronics	Embedded system basics & 8051 microcontroller interfacing	Dr. Ashish Rewatkar	15 days	73	7300/-
7.	Microbiology	Cookery and food preservation	Dr. Rakesh Thakare Ms. Latika Shendre	2 Months	68	13600/-
8.	Environmental Science	Agricultural Waste Management	Miss Neha K. Thakur Miss. Chandani Kachave Mrs. Padmaja Shahakar Dr. S.B. Nandeshwar Dr. Manikandan Dr. Velmourougane Dr. Amit Bafna Mr. Vilas Yeole Dr. Akshay Tripathi Dr. Vinay Tule Dr. Alok Rai Dr. Kombe	1 Month	51	15,300/-

			Dr. Y. Thakkar Dr. Arti Shanware Dr. B. K. Sarangi Mr. Kaustubh Marpalliwar Ms. Sheetal Balpande			
9.	Biochemistry	Certificate course in Medical Laboratory Technology	1)Dr. Manoj Bhandarkar, Asst. Dir., RFSL, Chandrapur 2) Dr. Sachin C. Narwadiya, Sci.-D., Vigyan Prasar, Noieda 3) Dr. Shardul Wagh 4) Dr. Pravin Domde 5) Mr. Palash Thakre	15days	33	16500/-
10.	Physics	Maintenance of Domestic Appliances and Motor Winding	Prof. Chaudhary, BITCON ITI College, Nagpur, Mrs. V.R. Kharabe , Dr. S.P. Puppalwar, Dr. S.A. Bhagat , Mr. S.M. Suryawanshi , Dr. A. P. Mahajan Ms. P.A. Zingare , K.N.M. Nagpur.	1 Month	43	8,600/-
11.	B. Voc. Consumer Electronics	National Skill Qualification Framework Level-4	Mr. Priom Khandelwal  Prof. Kiran S Ambaskar	1 Month	24	25,000/-
12.	Commerce	Certificate Program in Banking Finance and Management	Mr. Siddhant Agrawal	1 Month	112	Nil

### Evidence of success

Students enrolled their names for the skill oriented certificate course and actively participated in the program and interacted with the experts. They enjoyed and benefitted by acquiring different skills in different programs. During the program, participants gave an overwhelming response by self-working and asking queries

which indicated curiosity among them. After the demonstration of scientific instruments, the students learnt how to use these latest techniques which indicated the success of arranging the course.

At the end of all the courses, an assessment test was taken and the results show that the **93.86%** students have cleared the tests.

### **Problems encountered and Resources Required:**

#### **Problems encountered-**

- Due to COVID situation, at many times network issue was faced by students and teachers.
- Teachers faced difficulty in demonstration of actual experimentation in virtual teaching.

#### **Resources Required-**

- Resource persons, Laptop, LCD projector, Wifi and necessary equipments for conducting the programs.
- Sufficient financial assistance is necessary to carry out this program. This may help to involve more number of students.
- The team who conduct this program also require an attendant for assistance during the program.