INSTITUTE BEST PRACTICES

Implementing Interventions at Middle Stage: A Block Level Research

(2018-2023)

EXECUTIVE SUMMARY

NEP-20 has emphasized on ensuring equitable quality education for lifelong learning. For achieving the critical targets and lofty goals, the entire education system is to be in support of foster learning for all. Bringing quality improvement in the teaching-learning process in schools and progress in learning as well as overall development of the learners has been the core of the functioning of NCERT. To achieve the desired goal, several research, development, orientation and capacity building programme of teachers and teacher educators and extension activities at the macro (regional and district) level are conducted every year. To study the implementation of interventions at a micro level and to find effectiveness, the Institute has taken research in one of the block of states of northern region. For implementing need-based interventions at block level and to see its effectiveness, the Institute has conducted a research study in 167 schools including 83 Primary, 54 Upper primary, 6 Secondary and 24 Senior Secondary schools involving 5 Sanskrit Pathshalas and 5 Madarsa of Hurda Block of Bhilwara District of Rajasthan from the year 2018-23. The block has been selected on the basis of research reports and varied diversity of sample. In NAS 2017, the Bhilwara district of Rajasthan was ranked 33 in class III (lowest), 30 in class V (lowest 4th) and 31 in class VIII ((lowest 3rd) among the all 33 district. The Hurda block has diversity of sample, the identified 167 schools have 5 Sanskrit Pathshala, 5 Madrasa, one Model school established by state government offering CBSE syllabus and one residential school; KGBV.

For planning the interventions, the training needs of teachers and teacher educators have been assessed through the *Need Assessment tool* developed on the basis of their subject specific needs, and particularly on the low performing areas of district as reported in NAS-2017. The needs of more than 200 teachers were collected through google form and direct interactions, and were assessed. To track the learning levels and development of competencies amongst the students of the block, a *baseline assessment survey* was organized on March 29-30, 2019. The test items based on learning outcomes developed by Educational Survey Division of NCERT, New Delhi were administered to the 19,568 students of class I-IX and XI of all 167 schools of the Block. A huge majority of the 17,131 students (87.54%) out of total 19,569 participated in the test. The results of baseline assessment survey have been assessed, and analyzed as per the needs of the study. The performance of students in the achievement of attaining the learning outcomes were presented class wise or level specific in Low Performing to High performing order. The level specific results were assessed and analyzed block wise, panchayat wise and school wise. The interpreted results were also analyzed and compared categorically with respect to rural and urban, and gender. The results have been shared with the block officials (CBEOs), Panchayat Elementary Education Officers (PEEOs) and School Heads and all school teachers of the block for improving the low performing Learning Outcomes (LOs).

On the basis of the assessed learning levels of students and teachers' need assessment data, the need-based interventions (training and onsite support) have planned. It has been planned strategically that for improving learning outcome the quality interventions will be imparted using Art Integrated Learning (AIL) and School Based Assessment (SBA). The capacity building programme (in face to face or online mode) for the teachers and head teachers in the block, focusing on improving learning outcomes in school subjects have been organized. For promoting peer learning, the 2 teachers from each panchayat have been identified and trained as *Master Trainers* (MTs) on attaining Learning Outcome through "*Art Integrated Learning*".

The follow-up, onsite support and continuous mentoring of quality interventions have done by team of faculty of Institute in collaboration with Chief Block Education Officer (CBEO), Panchayat Elementary Education Officer (PEEOs), School Heads and AIL Master Trainers (MTs). The institute faculty have established rapport and personal dialogue with different stakeholders of school (CBEO, PEEO, SMC/ SDMC, teacher and parents). They demonstrated suitable solution to the problems/ difficulties faced by the schools in imparting the planned interventions. During onsite visit to the assigned schools the faculty ensured the implementation of interventions by observed the classroom processes. Besides onsite support, the faculty members have also conducted case studies for exploring the effect of implemented interventions. The findings of the case study have also guided for planning future interventions for the project.

Transforming classroom processes
by
Art Integrated Learning (AIL) Interventions

➢ The level specific learning outcome of the students are being improved through Art Integrated Learning (AIL) activities

➢ Integration of Art is being used as pedagogical tool for activating students' interest, engagement and participation in classroom context

➢ The performing art forms; 'storytelling, drama, chanting poems and rhymes, skit, situational ice breakers and challengers' is providing an opportunity for every learner to participate and express themselves with enhanced confidence, communication skills and attitude.
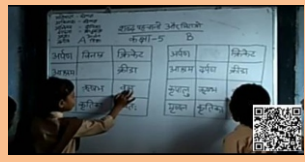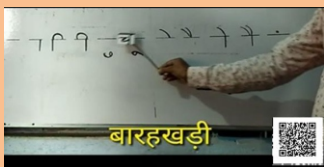
*Scan QR Code to watch video

The interventions have also implemented through alternative strategies. Some of these are

- **Providing platform for learning and sharing experiences**: For disseminating the planned activities, a platform for the teachers to learn and share the practices under the study a app titled "**NCERT Research Interventions**" has developed. The APP have used by all the stakeholders as a learning platform. It provides platform for sharing and projecting their activities. The app may be downloaded from play store.

- **Promoting teacher circles on Art Integrated Learning for Peer-Learning**: As a part of implementation strategic to impart interventions in the schools of the block, the teacher circles on the Art Integrated Learning have formed. For this, the 2 trained master teachers of AIL from each panchayat have observed the peer learning on Art Integrated Learning. The shared AIL activities of the teachers through what's app group have made available for others on the institute APP "NCERT Research Interventions". It has given the opportunity for other teachers to use the shared activities in their classroom processes.

Platform for Learning and sharing experiences

Institute AAP: NCERT Research Interventions

Sections:

- **Vision & Mission**
- **Block Identified:** detail & profile of block and information of schools
- **Methodology**
- **Need Assessment:** provides the opportunity to teachers, school heads and teacher educator for submitting their academic needs, required
- **Interventions Schedule**
- **Assessment Survey**
- **Intervention Module:** gives the access of interventions modules
- **AIL Practices:** presents the AIL practices being adopted for Peer-Learning.
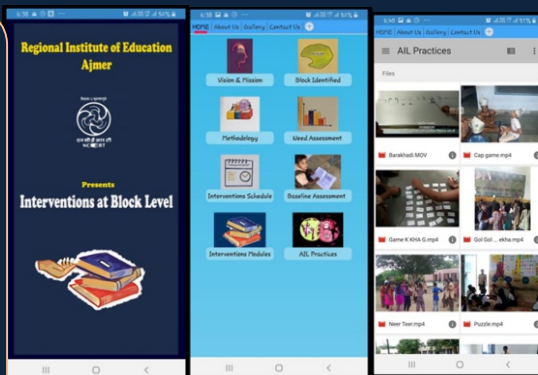
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Features

- Platform for dissemination of interventions implemented
- Provide all the details of the block: schools, teachers, students, research methodology and interventions schedule
- Provide level specific and learning outcome based assessed data of baseline achievement of students
- Provides the access of training modules at any time
- Sharing platform for the schools on impact of Quality Interventions; Art Integrated Learning

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- **Community- Sensitization & Engagement**: To sensitize community including SMC members and parents, and to ensure their participation in school system along

with the direct interaction of the faculty of institute, the working with community programme (Jan 10-13, 2019) by Institute's students and career counselling exhibition (September 14, 2019) were also organized.

- ➢ **Emphasizing on Low Performing Learning Outcomes***:* For improving the low performing LOs indicated by baseline assessment survey, the Learning Outcome posters (5 items to each schools) of Low performing areas, Learning outcome booklet have been distributed to all the schools of the block. The NCERT Alternative Academic Calendar (AAC) has also been provided to teachers and students for studying during the COVID-19 lockdown period.

- ➢ **Monitoring and follow-up by Core Team of NCERT***:* To mentor and monitor the progress of the interventions implemented in the block the core team of NCERT visited the schools of block as a routine feature, and interacted with the students, teachers, block officials and community.

The learning levels and development of competencies amongst the students of the block were tracked regularly. For this the baseline assessment survey (on March 29-30, 2019), sample based Mid- term assessment (on Sept 5-9, 2022) and Terminal Assessment (March 10-11, 2023) was organized by competencies based test items. The results were assessed and analyzed as per the needs of the study.

The progress of attaining LOs was shared with the PEEOs and teachers of particular school. The hands on workshop for attainment of poor performing LOs were also organized for the teachers. The terminal assessment had shown a remarkable improvement in the learning outcomes of the students across all grades and subjects.

The integrated efforts for the project study have improved the learning atmosphere of the schools of Hurda block. It has transformed the classroom processes of the schools. Some of the outcome or findings of the implemented interventions are

- ➢ The imparted interventions have improved the learning levels of students. The results of NAS 2021 have evidenced their achievement in comparison to NAS 2017. The state report card has shown a significant improved in learning level of students and ranking 10, 19 and 15 among 33 districts of Rajasthan for Class 3, 5 and 8 respectively.

Class	Rank among the total 33 districts	
	NAS 2017	NAS 2021
	(Before Interventions)	(After Interventions)
Class 3	33	10
Class 5	30	19
Class 8	31	15

The terminal assessment has shown a remarkable improvement in the learning outcomes of the students across all grades and subjects. The competencies based LOs have shown enhanced attainment in terminal assessment than in baseline.
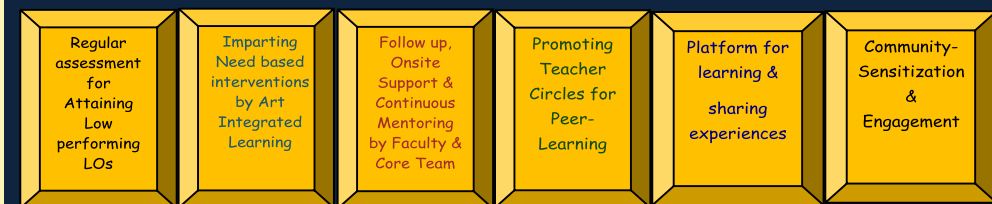
➢ The implemented quality interventions have changed the classroom processes in schools of the block. The learning outcome of the students have improved by integrating art with subject specific learning outcomes. The art integrated learning has enhanced interest, engagement and participation of students. The AIL activities have provided opportunity for every student to participate and express themselves. Besides improving their learning outcomes, it has also enhanced their confidence, communication skills and attitude for participation.

➢ The AIL activities have also supported students for sustainable learning specially at their homes during the COVID-19 situation lockdown.

➢ The finding of the case studies on imparted interventions have reflected the effectiveness of implemented interventions.

➢ The community sensitization programme (working with community and career counselling exhibition) has sensitized the community improve attendance and retention of students in school and support in basic facilities in school.

➢ The sharing platform and teacher circles have given opportunity for teachers to share the practices. The peer leaning has created a learning atmosphere in the block.

➢ The sharing of analyzed and categorically compared i.e. rural and urban, and gender, results of assessment with the block officials (CBEOs), Panchayat Elementary Education Officers (PEEOs) and School Heads and all the school teachers have targeted them for improvement in level specific LOs.

➢   The sharing and displaying of posters of Low performing LOs in the schools of the block have provided opportunity to students and teachers to work over it. The Learning Outcome posters have used for facilitating concepts and self-learning and assessment of students. The Learning Outcome Booklet and Alternative Academic Calendar (AAC) have guided the teachers and students to achieve the level specific LOs during COVID-19 period.

Implemented Quality Interventions

Major outcomes:

➢ Implemented quality interventions have transformed the classroom processes to Joyful and Meaningful learning by integrating art with subject specific learning outcomes.
➢ The imparted interventions have improved the ranking of the District in the NAS 2021 report card.
➢ The assessment survey has shown a significant improved in learning level of students.
➢ The AIL activities have supported students for sustainable learning specially at their homes during the COVID-19 situation lockdown.
➢ Onsite academic support of the faculty has provided solutions of the identified the problems/ difficulties with demonstration
➢ Finding of the case studies on imparted interventions are reflecting the effectiveness of implemented interventions
➢ Personal dialogue and rapport with different stakeholders (CBEO, PEEO, SMC/ SDMC, teacher and parents) have encouraged in improving the academic and infrastructural environment of schools.
➢ Community sensitize programme (working with community and career counselling exhibition) has sensitized the community improve attendance and retention of students in school and support in basic facilities of school.
➢ The sharing platform and teacher circles have given opportunity for teachers to share the practices. The peer leaning has created a learning environment in the block.

Regular assessment for Attaining Low performing LOs	Imparting Need based interventions by Art Integrated Learning	Follow up, Onsite Support & Continuous Mentoring by Faculty & Core Team	Promoting Teacher Circles for Peer-Learning	Platform for learning & sharing experiences	Community-Sensitization & Engagement

problems/ difficulties with demonstration to the school. The faculty members established personal dialogue and rapport with different stakeholders (CBEO, PEEO, SMC/ SDMC, teacher and parents) of the school, which has encouraged them to improve the academic and infrastructural environment of the school.

➢   The block has served as a laboratory for field survey & data collection for many significant projects of Ministry of Education (MoE)& NCERT such as "Curriculum Survey in the rural schools of the country" (July 23-26, 2019), Piloting of NAS 2021 tests items by ESD, NCERT (2020-21), ICT Interventions of CIET-NCERT (2021-22) and Institute projects on Impact of Science Kits on conceptual understanding of Science (2021-22) and Exploring the determinants in Inclusive Classroom (2020-21). The study has adopted an integrated approach and involved the expertise available in different constituent units of NCERT as per the requirement in planning, developing and implementing interventions.

ENVIRONMENTAL EDUCATION THEME PARK

Regional Institute of Education (RIE), NCERT, Ajmer

Rajasthan, India

Welcome to one of the most unique educational adventure at RIE, Ajmer. Here through environmental education theme park, we have designed a wide array of Eco smart programmes to expand learning experience beyond the boundaries of the classroom and into natural environment of Aravali range of Ajmer, Rajasthan. This is an opportunity for students, teachers and educators to enjoy natural beauty and outstanding 'living laboratory' (Environmental education theme park).

ABOUT THEME PARK

To promote environmental awareness through interactive way and to bring school children, youth and teachers to a forum where they can discuss their perspectives on the environmental issues, Regional Institute of Education, Ajmer maintained a theme park which is a part of PAC programme, namely "Environmental Education Theme Park for strengthening school education programme and training of school children for generating environmental awareness.

OBJECTIVES AND VISION

RIE, Ajmer is nurturing and ensuring excellence,quality and inclusive growth in school education and teacher education for the states and UTs of northern region i.e Delhi, Haryana, Himachal Pradesh, Punjab, Rajasthan, Uttar Pradesh, Uttarakhand, Chandigarh, Jammu, Kashmir and Ladakh. To attain learning about the environment, learning through the environment and learning for the environment, this programme has been undertaken with the following objectives:

To maintain the environmental education theme park that includes aquatic, desert and terrestrial ecosystem, a medicinal plant conservatory a centre for demonstration of rain water harvesting, conservation of water and soil, organic farming etc.

To enable the learners, teacher as facilitator, teacher educators and visitors to perform simple activities related to environmental education.

To educate teachers, learners and community of the need to conserve and protect the environment.

MEDICINAL PLANT ARBORETUM

Medicinal plants belong to the earliest known health care products that have been used by the mankind. In India, the earliest reference to the medicinal value of plant in Rigveda, in which brief reference to the healing property of plants has been made.

Most of the drug plants are found in the tropics, growing in wild condition and are mainly used by herb doctors and Ayurvedic Vaidyas, who refer to them as Jari-Butis.

We observed that in the absence of proper knowledge related to the identification of medicinal plants, many plants remained either unidentified or wrongly identified. As a result, many important and precious medicinal plants are the often considered as weeds and disposed off as waste material. Wrong identification even lead towards more serious repercussions as there may be used wrongly in preparing medicines for which they are not recommended due to different chemical constituents and hence deprived of their actual user. In this programme, an attempt is made to fill the above identified gaps.It is our firm belief that this programme will be of immense use to Ayurvedic exports, teachers, students of botany, scientist, pharmacologist, pharmaceutical organisation and pharmacist etc

Some of the plants available in the terrestrial ecosystem are as follows:

1. **Common name** : Safed Aak
   Botanical name : *Calotropis gigantea*
   Family : Asclepiadaceae

Description of the plant: The milky juice of the stem is used in leprosy, taenia, dropsy, rheumatism etc. It is also used in typhus and syphilis. The dried latex is antispasmodic and an efficient nerve tonic. The latex also bears the properties of curing ringworm of scalp and reliving toothache.

2. **Common name** : Neem

   Botanical name : *Azadirachta indica*

   Family : Maliaceae

Description of the plant: Juice of leaves with honey or salt cures jaundice and intestinal worms. Decoction of fresh leaves is used in malarial fevers. External application of leaf-paste cures boils, ulcers, skin eruptions swellings and wounds. Mixed with camphor, the leaf juice is applied to fractures. Warm decoction of leaves is used as douche after childbirth.

3. **Common name** : Ashvagandha / Asgand

   Botanical name : *Withania somnifera*

   Family : Solanaceae

Description of the plant: The roots of this plant have been recommended for high cough and in female genetic disorder. It is also useful in all types of skin lesions, ulcers and in reducing pus formation. It is an important drug in the treatment of rheumatic pain, inflammation of joints and certain paralytic conditions. It is also known to stimulate sex impulses and improve sperms.

4. **Common name** : Sandal wood / Safed chandan

   Botanical name : *Santalum album*

   Family : Santalaceae

Description of the plant: The tree is a sedative and bears cooling effects. It is given to relive thirst and with milk in gonorrhea and bilious disorders. Mixed with rice and honey, it relives dysentery and excessive thirst. The paste bears cooling effects and cures boils, sores and skin eruptions. The application of paste in also relives headache.

5. **Common name** : Datura / Dhatoora

   Botanical name : *Datura stramonium*

   Family : Solanaceae

Description of the plant: Dried leaves of Datura smoked in pipes cure asthma, whooping cough and bronchitis. Juice of leaves with curd is given in gonorrhea. A paste of leaves is a cure for swollen joints, inflammations and tumors. Fresh leaf juice is also used in mumps and gouts. Roasted leaves cure enlargement of testicles.

6. **Common name**   : Curry leaves / Mitha neem

Botanical name : *Murraya koenigii*

Family   : Rutaceae

Description of the plant: They are much valued as an antidiabetic, antioxidant, anti microbial, anti-inflammatory and hepato-protective. They also contain iron. Although most commonly used in curries, leaves from the curry tree can be used in many other dishes to add flavor.

7. **Common name**   : Indian gooseberry / Amla

Botanical name : *Emblica officinalis*

Family   : Euphorbiaceae

Description of the plant: The fruits are richest source of vitamin C and are considered to be a good liver tonic. The fruit is useful in the treatment of hemorrhage, leucorrhoea, menorrhagia, diarrhea, toothache, sores, fever, anemia, epilepsy, pimples, fistula, gonorrhea and dysentery. The leaves are a cerebral and gastrointestinal tonic. The root bark is astringent and is useful in ulcer.

8. **Common name**   : Patharchatta

Botanical name : *Bryophyllum pinnatum*

Family   : Crassulaceae

Description of the plant: Chew two fresh leaves along with black pepper on an empty stomach for the treatment of kidney stones. Plant paste is applied on forehead to alleviate headache, leaf paste is applied externally to cure cuts and wounds. Fresh sap of plant is used for eye diseases. The juice effectively knocks out Staphylococcus and Eschericia coli.

9. **Common name**   : Gheekanvar / Aloe / Kumari

Botanical name : *Aloevera*

Family   : Asphodelaceae

Description of the plant: Fresh aloe gel is well known for its domestic medicinal value. The gel has the property of relieving thermal burns and sunburn, as well as promoting wound healing; it also has moisturizing and emollient purposes.

10. **Common name** : Anar / Pomegranate

    Botanical name : *Punica granatum*

    Family : Lythraceae

Description of the plant: The pomegranate is a shrub, usually with multiple stems. It has beautiful orange-red trumpet shaped flowers with ruffled petals. The fruit is brownish yellow or red berry with a sweet edible pulp surrounding each seed. The pulp is juicy and refreshing. Its fruit juice makes an excellent drink, which contains potassium, phosphorous, and calcium as well as micronutrients likes iron, manganese, zinc and copper. The juice stimulates appetite and is used in treatment of stomach disorders.

11. **Common name** : Anjeer / Common fig

    Botanical name : *Ficus carica*

    Family : Moraceae

Description of the plant: Anjeer is a beautiful small tree with an interesting spreading habit. The bark is a smooth, silvery grey. The species name carica means having papaya- like leaves. The fruit is fleshly hollow syconus with a narrow aperture at the tip. They are used fresh as well as dried. Fresh figs are preserved and canned. Figs have a definite laxative property and are good for digestion.

12. **Common name** : Guggal

    Botanical name : *Commiphora wightii*

    Family : Bureseraceae

Description of the plant: It is small tree, reaching a maximum height of 4 meter with thin papery bark the branches are thorny. The leaves are simple or trifoliate. Its produces a resinous sap known as gum, called gugulipid, has been used in Ayurvedic medicine. The active ingredient in the extract is the steroid gugguistone, which improves thyroid function, increases fat burning activity of the body. Guggul helps to lower cholesterol & triglycerides.

13. **Common name** : Kath Karanj

   Botanical name : *Caesal pinia bonduc*

   Family : Fabaceae

Description of the plant: It is large shrub. Bearing unusual pinnate leaves with viciously spiny winged rachis (axis that bears the leaflets) bearing 2-6 pairs of leaflets. The small yellow flowers are set close to the branches in small irregular lateral clusters, which ultimately form small capsules, which split to reveal the glossy black to dark red seed. Best grown in full sun to part shade, in a well draining soil. Twigs used to clean teeth, while the seed are ground as a condiment, as well as many other uses.

14. **Common name** : Papaya / Papita

   Botanical name : *Carica papaya*

   Family : Caricaceae

Description of the plant: Papaya as fruit is a rich source of nutrients such as provitamin A, carotenoids, vitamin B and C, dietary minerals and dietary fiber. It has a relatively high amount of pectin, which can be used to make jellies. Papayas leaves are made in to tea as a treatment for malaria. Papaya fruit and the trees latex are rich in papin, a protease used for tenderizing meat and other proteins. Papin is also applied topically for the treatment of cuts, rashes, stings and burns.

15. **Common name** : Gular / Uman/ Udimbara

   Botanical name : *Ficus racemosa*

   Family : Urticaceae (Moraceae)

Description of the plant: Roots are useful in hydrophobia. Fruits are astringent to bowels, styptic, tonic and useful in the treatment of leucorrhoea, blood disorders, burning sensation, fatigue, urinary discharges, leprosy and intestinal worms. Bark is useful in asthma and piles. Latex is applied externally on chronic infected wounds to alleviate pain and promote the healing.

ROSE GARDEN

Rose, one of the wild or cultivated flowering shrubs of Rosa, a genus of between 100-200 species, about 80% of which are native to Asia, 15% to America and the remaining are mainly natives of Europe and northeast of Asia. The rose flower has been closely associated with the culture of many

civilization. Not only it is a favourite flower, but it also serves as symbol of perfection, elegance, romance and love. Rose itself occupies a significant role in Ajmer. A large amount of rose flower is consumed or rather utilized by devotees daily at Pushkar and Dargah Sharif in Ajmer. Gulkand (A sweet preparation with Rose petals has very good medicinal properties), Gulabjal (Rose water), Itra (Natural Perfume prepared with rose thalamus), Dhup and Agarbatti also prepared from rose flower. Keeping this view in mind we have developed a beautiful rose garden having scented local rose varieties & large number of grafted varieties.

PLANT SIGNAGES

Plant signages are very much useful for study plant diversity. We have created signages for different plant available in Ajmer as well as large number of aromatic & medicinal plants. These signages can also be handy if somebody working on plant taxonomy or educational display garden with limited budget.

ACHIEVEMENTS

One of the major outcomes of this programme is Prakriti Mela, a three days mega event is being organized by the Institute. The objective of this three days mega event is to strengthen environmental education and to bring school children, youth and teachers together in an interactive forum to promote environmental awareness. The programme aims at involving the network of Eco-Clubs. Prakriti mela is a platform for teachers and learners from schools to participate and showcase the work done in the area of environmental education and sustainability, centre for demonstration of rain water harvesting, conservation of water and soil, organic farming etc. The participants shows example of engaging students in project based learning related to environment.

Institute acknowledges the contribution of Prof. B. Barthakur for his insight in the previous version of the brochure.

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e-Library
(Best Practice)

e-Library of RIE, Ajmer

About the e-Library:

The digital library of the institute was established in the year 2001 and it was built with LIBSYS software for library management. At present the library has around 86,900+ print books, 31 foreign journals, 15 Indian journals, 22 e-journals, 237 CD-ROM, and 55 Audio Cassettes. N-List consortium materials, more than 811 dissertations, 270 PAC reports, 169 Institute publications, and many other Open Access downloaded materials. It is continuously growing with the collection of e-resources for students intending to learn at their own convenience. Students can access the library and read digital materials in various digital formats anytime and anywhere using their preferred devices. The library is developed in a hybrid model with the most advanced technological applications. After 2019, the library is now fully computerized with KOHA (LMS) and DSpace-based Institutional Repository (IR), Barcode-based circulation, and an 'In-Out' application-based security system. WordPress-powered website and many state-of-art technologies. Online Public Access Catalogue (OPAC) Kiosk, QR code facilities are available in all halls of the Library and Web-OPAC access is through the website.

Objectives of the e-Library:

The primary objectives of establishing the e-Library in the Regional Institute of Education, Ajmer are:

- ➢ To enable the library for managing huge amounts of digital information available in various forms like e-books, online journals, databases, OA materials, Web materials, etc.
- ➢ To preserve unique collections through digitization.
- ➢ To preserve and provide online access to Institutional publications in digital form.
- ➢ To provide faster access to information through online-based services.
- ➢ To facilitate dealing with data from more than one locations.
- ➢ To enhance distributed learning environments.

e-Library System and Services:

The e-Library of the Institute provides various services to users with the existing hardware, software, internet, and local network platforms available in the Institute library system. The e-Library comprises the under mentioned components:

- High-end Server
- KOHA open-source software for library management
- DSpace open sources software for Institutional Repository
- Subscription to e-journals, and access to OA materials, etc.
- On-campus access for users to use e-resources
- Library website on WordPress for single-point access to e-resources
- Use of Open-Source Software (OSS) in different operations
- Feedback (QR-based) facility for authorized members to improve library services.

The outcome of the Best Practice:

Prolonged use of technologies is experienced to say that the innovative ways of using digital technologies increase the quality of services, sets benchmarks, and ultimately elevate the library's image among the user community. The major outcomes of the e-Library are:

1) Multifold increase in virtual users.
2) Facility of remote access to library materials/resources.
3) Resolve the issue of space problem through open access materials/resources and open-source software.
In time to come, the digital library best practices will help the Institute library to meet users' information requirements in the best possible way

Best Practices of the Institute
Session 2020-21

- Development of Institutional repository and, access of library resources using QR code: The institute's library has developed an institutional repository by collecting and preserving digital copies of the output of the institution. The digitized research projects reports, training and orientation outcomes reports, M.Ed. students 'dissertations, faculty research achievements and other documents are being disseminated to promote wider access and visibility of institute. The library has also truly enriched their services by providing access of OPAC, institute repository, current content, subscribed journals & newspapers, book requisition, user guide and institute website though QR code.

- Institute's Environmental Theme Park and organization of Prakriti Mela: The institute has developed an environmental theme park for strengthening the biodiversity and environmental based school education programmes. For this, the institute environmental theme park maintains the various ecosystems, medicinal plant conservatory, and centre for non-conventional source of energy, a green house, conservation of water and soil and organic farming. To sensitize and provide awareness to students about the various environmental themes the institute organized five expert lectures on important issues of environment in online mode. The event provides direct exposure to institute's students in demonstrating the course component of their syllabus and inculcates environmental related values for conservation of biodiversity, natural composition of atmosphere and natural resources. The theme park also benefits the nearby school students in demonstrating the structure and functions of various ecosystems at a single place.

- Development of Institute's App for dissemination of activities planned under block research project: For disseminating the planned activities and providing a platform for the teachers to learn and share the practices under the research study of implementing need based interventions an App titled "Interventions at

Block level" has been developed. The App has all the information related to the study such as vision, mission and objectives of study, name of schools covered with details of student and teachers, research methodology adopted for the study, baseline achievement assessment and analysis of students, interventions modules, Art Integrated Learning(AIL) activities of the block and details of interventions implemented. The teachers of the block are being benefitted by the app by exploring the resource material. The APP is also a sharing platform for peer learning and projecting their activities.

- Career guidance and counselling awareness programme for the rural school students, teachers and parents: To provide awareness and exposure to rural school students, teachers and parents about the various career options, the institute is organizing career guidance and counselling exhibition in rural schools of Hurda block of Bhilwara district. The exhibition gives opportunity to the students and parents of the block in guidance and counselling for planning future studies. The exhibition also benefited the institutes' Diploma Career Guidance and Counselling (DCGC) students to have real experience of interaction and demonstration, and presentation on the theme based situations.

- Institute students working with community programme: The institute organized working with community programme online with the aim to orient students towards community sensitization for retention, enrolment and regular attendance of the village children in the schools and to make them aware, about the various schemes of government related to education particularly school education. One of the objectives of the programme is to provide a platform for students for demonstrating the activities for establishing the link with community, interaction with various community stakeholders (like parents, villagers, SMC/SDMC members) along with teachers and students.

Best Practices of the Institute
Session 2019-20

- Development of Institutional repository and, access of library resources using QR code: The institute library has developed an institutional repository by collecting and preserving digital copies of the intellectual output of the institution. The digitized research projects reports, training and orientation outcomes reports, student dissertations, faculty research achievements and other documents are being disseminated to promote wider access and visibility of institute scholarly content. The library has also truly enriched their services by providing access of OPAC, institute repository, current content, subscribed journals & newspapers, book requisition, user guide and institute website though QR code.

- Institute Environmental theme park and organization of Prakriti Mela: The institute has developed and projected an environmental theme park for strengthening the biodiversity and environment based school education programmes. For this, the institute environmental theme park maintains the various ecosystems, medicinal plant conservatory, a centre for non-conventional source of energy, a green house, conservation of water and soil and organic farming. To sensitize and aware students about the various environmental theme institute also organize 'Prakriti Mela'. The event provide direct exposure to institute students in demonstrating the course component of their syllabus and inculcating environmental related values for conservation of biodiversity, natural composition of atmosphere and natural resources. The theme park also benefits the nearby schools students in demonstrating the structure and functions of various ecosystems at a single place.

- Development of institute app for dissemination activities planned under block research project: For disseminating the planned activities and providing a platform for the teachers to learn and share the practices under the research study of implementing need based interventions an app titled "Interventions at Block level" has been developed. The app has all the information related to the

study such as vision, mission and objectives of study, name of schools covered with details of student and teachers, research methodology adopted for the study, Baseline achievement assessment and analysis of students, interventions modules, Art Integrated Learning (AIL) activities of the block and details of interventions implemented and. The teachers of the block are being benefitted by the app by exploring the resource material. The APP is also a sharing platform for peer learning and projecting their activities.

- Career guidance and counselling awareness programme for the rural school students, teachers and parents: To aware and expose rural school students, teachers and parents about the various career options, the institute is organizing a career guidance and counselling exhibition in rural schools of Hurda block of Bhilwara district. The exhibition gives opportunity to the students and parents of the block in guidance and counselling for planning future studies. The exhibition also benefited the institutes' Diploma Career Guidance and Counselling (DCGC) students to have real experience of interaction and demonstration, and presentation on the theme based situations.

- Institute students working with community programme: The institute organized working with community programme with the aim to orient students towards Community sensitization for retention, enrolment and regular attendance of the village children in the schools and to aware them, about the various schemes of government related to education. One of the objectives of the programme is also to provide a platform for students for demonstrating the activities for establishing the link with community, interaction with various community stakeholders (parents, SMC/ SDMC, villagers) along with teachers and students.

- Use of experiments at Micro scale to promote the green chemistry at graduate level: The innovative micro scale and greener approach for experiments in Chemistry of B.Sc.B.Ed programme is being adopted and extended for learning. The experiments have been modified to be worked at micro or small scale. The micro scale lab has established in the institute where experiments can be performed at small scale along with the regular experiments. The manual for

performing experiments has already been developed in form of a book "Greener approach towards Chemistry Experiments for undergraduate level".

- Every year we are doing in-service training programme for capacity building of education personnel in the states under the jurisdiction of RIE, Ajmer. This year, a research methodology and data analysis training programme was organized for DIET and SCERT personnel of the states. For this programme, a logical frame was developed for the professional development of DIET and SCERT faculty including both subject related skills and personal attributes required to learn the research competencies. In the training process, adult learning principles were followed to create learning. In the logical frame, equal weightage was given to the creation of knowledge as well as experiencing and reflecting in groups. The whole training process transacted on the basis of a training model adopted for this in-service training. The training room was arranged to stimulate the curiosity and thinking of adult learners. Every day, in addition to content transaction, a rating scale was administered to sensitize the personal attributes and progress of the learning was monitored through reflection sheets. Above all, the process of the training programme provided enriching experiences to the trainer as well as trainees.

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