School Education Shagun
Integrated Online Junction

Department of School Education & Literacy
MHRD, Government of India
FOREWORD

The Integrated Online Junction designed and developed by the Department of School Education and Literacy will simplify the process of information gathering and synergise value addition from the information. It will be of immense benefit to all stakeholders as it breaks down the compartmentalization of information and gives a holistic view of the School Education sector. The envisioned Integrated National School Education Treasury (INSET) will not only be a seamless state of art information dissemination system but will also be a repository of modern techniques to create high quality e contents and e material for enhancing learning and teaching.

This handbook vividly brings out the benefits of the Integrated Online Junction. I, therefore, take immense pleasure in commending this book and am sure that all stakeholders will find it informative and useful. I also take this opportunity to congratulate the Department on the good work and wish them the best for their future endeavours.

(Ramesh Pokhriyal ‘Nishank’)
Rationale for creating an Integrated Online Junction

- To enable access to web resources relating to school education in a holistic manner, the Department of School Education and Literacy has created a Junction of all portals and websites relating to the Department and the States and Union Territories (UTs).

- The junction has more than 80 portals and websites which include those on schemes, autonomous bodies, monitoring apps and portals and the school education related websites of the States and UTs. Taking into account the sites of all SCERTs and DIETs, the final figure will be more than 700.

- At present, all these portals and websites provide information about areas specific to them. This makes it difficult to get information about a particular activity or product which is being produced/created by multiple organisations. To cite an example, while e-learning contents are being created by several organisations viz. NCERT, CBSE, KVS and States and UTs and the Department of School Education & Literacy, it is difficult to access them simultaneously as they are available on different portals/websites.

The name ‘Junction’ has been given because it is a meeting point of all relevant portals and websites at one place to provide the user a single point access to data and information.
• For a comprehensive understanding of the education sector, it is imperative to break down these silos and present the information in a holistic manner. Thus, all e-learning material should be accessible through a single platform thereby making it easier for the students and teachers to make an informed choice.

• School Education Shagun, by creating this Junction, aims to bring back into focus the Student, the Teacher, the Principal, and the School – entities which have lost their relevance in the mesh of multiple and siloed structure of the information system. It also enables availability of information on thematic issues.

• The following sections highlight some of these themes and the user in getting a comprehensive insight about these themes by accessing the Junction.
SCHOOLS and TEACHERS
Single source of information for location and details of schools all across the country
KVS Directory

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>KV Name</th>
<th>Principal Name</th>
<th>Office Address</th>
<th>Email Address</th>
<th>Phone No</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>KENDRIYA VIDYALAYA ALIGARH</td>
<td>PRACHI DIXIT</td>
<td>KENDRIYA VIDYALAYA ALIGARH RAMGHAT ROAD ALIGARH NEAR PAC, DEVSAINI 202001</td>
<td><a href="mailto:ppl.aligarh@kvs.gov.in">ppl.aligarh@kvs.gov.in</a></td>
<td>9084773474</td>
<td><a href="https://aligarh.kvs.ac.in/">https://aligarh.kvs.ac.in/</a></td>
</tr>
<tr>
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<td>KENDRIYA VIDYALAYA MIRzapur</td>
<td>SOM PAL (I/C)</td>
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<td><a href="mailto:kvmirzapur@gmail.com">kvmirzapur@gmail.com</a></td>
<td>5442265611</td>
<td><a href="https://mirzapur.kvs.ac.in">https://mirzapur.kvs.ac.in</a></td>
</tr>
<tr>
<td>3</td>
<td>KENDRIYA VIDYALAYA AMHAT SULTANPUR</td>
<td>K P YADAV</td>
<td>KENDRIYA VIDYALAYA AMHAT SULTANPUR, NEAR-NAVEEN SABJEE MANDI SULTANPUR U.P. - 228001</td>
<td><a href="mailto:ppl.amhat.sultanpur@kvs.gov.in">ppl.amhat.sultanpur@kvs.gov.in</a></td>
<td>5362231185</td>
<td><a href="https://amhat.kv">https://amhat.kv</a></td>
</tr>
</tbody>
</table>

- All school systems are in the process of creating websites for schools and linking them to their own portals so that they can be accessed on the Junction.
- It is expected that 17606 private schools, affiliated to the CBSE, 1212 Kendriya Vidyalayas and 661 Navodaya Vidyalayas as well as 1,24,647 senior secondary schools in all States and UTs will ultimately be on the junction.
• Information about the location of the NIOS study centers in the entire country and abroad is also available through this junction. It is pertinent to note that NIOS has study centers even in jails and army installations thereby taking education to the doorsteps of all sections of society.

• The GIS based mapping gives the location of all the schools along the length and the breadth of the country. The Report Card facility of the GIS system also provides vital information about each of these schools.
• Thus, with the integration and one site location of all these websites, **access to information** on all types of schools and learning centers are available from one source, thereby cutting out compartmentalisation of information of the schools as a whole.

• It is for the first time that region wise information on 19,452 Teacher Education Institutions (TEIs) and 25727 courses are available on this junction. Work on integrating the individual websites of all the TEIs are in progress.

There are over 15.58 lakh schools, 92.56 lakh teachers and 25 crore students in the country.
STUDENTS-SUPPORTING ACADEMIC IMPROVEMENTS

All E-Contents for enhancing learning of Students to be at one place
To encourage active digitalized learning, various websites and portals which have e-learning contents have been brought together through integration of different websites. National Repository of Open Educational Resources (NROER), E-Pathshala and Digital Infrastructure For Knowledge Sharing (DIKSHA) are some of them.

NROER hosts large number of educational resources in many subjects and in different Indian Languages for Primary, Secondary and Senior secondary classes. It also has contents which enhance creative potential of the child.

More than 14000 E-resources have been developed and are made available with user access. A large number of very popular videos relating to toy making are contributed to this platform by eminent personalities like Mr. Arvind Gupta.
• E-Pathshala gives access to digitalized version of books and also hosts educational resources for teachers, students, parents, researchers and educators. Through this, the students can get access of all educational material, including textbooks, audios, videos which can be downloaded by the user at no cost.

• DIKSHA is a portal managed by Department of School Education and Literacy which provides video content for enhancing learning. The videos available on this portal are mapped to the curricula of a particular class, subject and topic thereby making it easier to relate to the academic content of a student.

• Access to these various types of e-material through a single source will empower the students and help them to make informed choices.
Programme for International Student Assessment (PISA) on the Junction to provide information on competency based learning skills

- PISA is a triennial international survey which aims to evaluate education systems worldwide by testing the skills and knowledge of 15 year old students who are nearing the end of their compulsory education.
- India will participate in the internationally acclaimed PISA in 2021 cycle after a gap of 12 years.
- PISA assesses how well the students can apply what they learn in school to real-life situations.
- To do well in PISA, students need to improve their various skills such as competency, reading, analytical and critical thinking etc.
- On this portal, the Department will be uploading various games and quizzes for both students and teachers on a regular basis. Access to this portal will enhance the competency level of the students.
MONITORING and DATA ANALYSIS
All Websites and Portals at one Place to Help Data Collection, Surveillance and Interpretation
Unified District Information System on School Education Plus (UDISE+)

About UDISE+
Timely and accurate data is the basis of sound and effective planning and decision-making. Towards this end, the establishment of a well-functioning and sustainable Educational Management Information System is of utmost importance today. The Unified District Information System (UDISE) initiated in 2012-13 integrating DISER for elementary education and SBMIS for secondary education is one of the largest Management Information Systems on School Education covering more than 1.5 million schools, 8.5 million teachers, and 250 million children.

It covers more than:

• 1.5 million schools
• 8.5 million teachers
• 250 million children

• Availability of real-time credible data is absolutely imperative for policy making. The UDISE+ has been designed and implemented to meet this challenge.
• In order to ensure correct uploading of data, the Data Capture Format (DCF) has been rationalized and simplified. To ensure availability of real-time information, uploading of data through the internet is being ensured. In areas where the internet facility is not available, the forms are to be filled up in the softer version and uploaded from the nearest location where internet connectivity is available.
• Complete audit trail of the officials, uploading and verifying the data is being maintained through enforcement of digital signature. This ensures accountability and credibility of the uploaded information.
• In order to ensure control and supervision, the UDISE+ system is housed in the Department of School Education and Literacy. The system is maintained by dedicated staff from the National Informatics Center (NIC), the IT arm of the Government of India.
• The Dashboard gives a snapshot of the **Key Performance Indicators** (viz. management wise information of schools, enrolment of students and number of teacher’s status of infrastructure) at the All India and State and UT level.

• It also provides information on several parameters relating to the Autonomous Bodies.
Data Analytics – Interpretation of Data

- Based on the data received through UDISE+, this portal collates the data in an organized format to use it for analysis and evidence based decision making.
- Besides providing standard charts and tables, the data analytics portal has a provision for catering to any query based analysis thereby facilitating research activities.
- With the large volume of data generated by one of the world’s largest education system, the diverse variety of the information and the speed of the data enabled by an efficient and seamless real time information gathering system, this portal can be used for big data analytics and artificial intelligence based applications.
TRANSPARENCY and ACCOUNTABILITY
To be Enhanced Due to Availability of All Apps At One Place
GIS Mapping

- The GIS based mapping shows locations of the school along with the topographical surroundings, and a report card giving vital basic information on the school. The report card is generated by the information provided in the UDISE+ which is also hosted in this junction.

- This App provides critical information relating to availability of nearby schools, navigable distance vis-a-vis aerial distance between schools thereby helping the policy makers in taking informed decisions.

- 3 dimensional versions of the maps are also available which gives a clear understanding of the actual distances between schools and degree of difficulty in reaching the school in hilly terrain.

This App has a feedback mechanism through which any citizen can comment on the correctness of the information provided about the school. It will help in enhancing the transparency & accountability of the system.
Third Party Verification

In order to ensure accuracy of data provided through UDISE+, a mobile based geo-tagged App for the Third Party Verification has been developed. The App can be used by several groups of users for random and regular uploading of data along with photographs and in case of any discrepancies in the data vis-a-vis what is uploaded on UDISE+, a discrepancy report will be generated automatically and transmitted to the department and to the respective States/UTs for necessary action. Till the time the issue is settled amicably, the discrepancy report will remain alive. The App will also monitor the utilization resources for components of Samagra Shiksha like the library grants, grants for sports, equipment, grants for eco clubs etc.

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- The App can be used by several groups of users for random and regular uploading of data along with photographs.
- The App will also monitor the utilization resources for components of Samagra Shiksha like the library grants, grants for sports, equipment, grants for eco clubs etc.
- Availability of all these systems and apps at one place will help the policy makers, researchers, administrators to access relevant information.

In case of any discrepancies in the data vis-a-vis what is uploaded on UDISE+, a discrepancy report will be generated automatically and transmitted to the department and to the respective States/UTs for necessary action. Till the time the issue is settled amicably, the discrepancy report will remain alive.
MEASURING PERFORMANCE
One Site Availability of Tools to Enhance Interlinkability with Data Collection and Monitoring
Performance Grading Index (PGI)

About Performance Grading Index (PGI)

The Performance Grading Index (PGI) is a tool to provide insights on the status of school education in States and UTs including key levers that drive their performance and critical areas for improvement. More...

Grades

Category 1: Outcomes

- Domain 1 - Learning Outcomes And Quality
- Domain 2 - Access
- Domain 3 - Infrastructure & Facilities
- Domain 4 - Equity

Category 2: Governance & Management

- Domain 1 Governance Processes

Grade Wise Distribution of States

No. of States
**GRADEWISE PERFORMANCE OF STATEs AND UTs**

<table>
<thead>
<tr>
<th>GRADE (WEIGHTS)</th>
<th>STATES &amp; UTs</th>
<th>NUMBER OF STATES &amp; UTs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level I</td>
<td>NIL</td>
<td></td>
</tr>
<tr>
<td>Level II</td>
<td>NIL</td>
<td></td>
</tr>
<tr>
<td>Level III</td>
<td>NIL</td>
<td></td>
</tr>
<tr>
<td>Grade I</td>
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<td>Gujarat</td>
</tr>
<tr>
<td>Grade II</td>
<td>Punjab</td>
<td>Haryana</td>
</tr>
<tr>
<td>Grade III</td>
<td>Himachal Pradesh</td>
<td>Uttarakhand</td>
</tr>
<tr>
<td>Grade IV</td>
<td>Sikkim</td>
<td>Mizoram</td>
</tr>
<tr>
<td>Grade V</td>
<td>Jammu &amp; Kashmir</td>
<td>Uttar Pradesh</td>
</tr>
<tr>
<td>Grade VI</td>
<td>Arunachal Pradesh</td>
<td>Nagaland</td>
</tr>
<tr>
<td>Level VII</td>
<td>NIL</td>
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</tr>
</tbody>
</table>

- The PGI is a tool to provide insights on the status of school education in States and UTs including key levers that drive their performance and critical areas for improvement.
- The PGI is structured in two categories namely, Outcomes, and Governance & Management and comprises 70 indicators in aggregate with a total weightage of 1000.
- With the introduction of the UDISE+ system which ensures real time availability of data, and as data for most of the indicators of PGI are drawn from the UDISE+ the states and the UTs will be able to seek their provisional grading as soon as they upload the data. This will give them the opportunity to take remedial actions in areas where they are lagging and thus improve their overall grade.
- Subsequent to publishing of the PGI report for the year 2017-2018, several states and UTs have taken concrete steps to ensure better grades in the following years.
- **Due to integration of all the portals and websites, the user will be able to correlate the performance of the States and UTs with the information provided through the report card of the GIS based app and the tables and graphs of the Data Analytics portal.**
PROMOTING GOOD PRACTICES
Availability of Good Practices and Innovations on the Same Junction to Relate the Efforts Made by The States and UTs with Their Performance
The online repository focuses on positive stories, **best practices adopted** and **innovations made** across all States and UTs of India that are driving performance improvements in the arena of School Education.

As on date, the Repository hosts 4586 images, 305 videos, 269 case studies and 151 testimonials of inspiring stories and instances in this sector.
• Contrary to common perception in the media, there are several instances of excellent initiatives taken individually and collectively which have had far reaching the effects on the education system.

• Among other things the repository has videos relating to the Teacher’s award which shows how motivated teachers in far flung areas have fought against all odds and brought about long lasting positive changes in the education scenario. Sharing of such instances will definitely motivate the teaching community across the country.

• Integration of this portal in the Junction will help to relate the efforts made by the States and UTs with their performance.
WAY AHEAD
To set up the Integrated National School Education Treasury (INSET)

Features:
The INSET envisages a fully integrated, instantly accessible and seamless information network for all parameters relating to students, teachers and schools across the length and breadth of the country.

Future Steps for setting up the INSET:
- Reinforcing and cleaning the data of the Integrated Online Junction through feedback from stakeholders;
- Ensuring full interoperability among the websites, portals and applications which are already hosted on the Junction;
- Elevating the Junction by integrating some of the relevant MIS systems of the States and UTs and integrating the websites of the remaining DIETs, Navodaya Vidyalayas, etc;
- Creating an easily accessible multi layered eco-system of information (school-wise, block-wise, district-wise, constituency-wise, state-wise, region-wise);
- Creating high quality e-contents, including quizzes and puzzles to enhance learning and competency of students;
- Creating e-material for teachers to aid them in classroom transactions;
- Estimating and projecting resource requirements for the School Education Sector;
- Using artificial intelligence and deep machine-learning in a variety of ways to enhance the quality of school education including for designing evidence based interventions.