

December 2023

Bridging the Gap: Enhancing Coordination and Communication in KP's Educational Landscape



Diagnostic Report



### Acknowledgement

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# LIST OF ABBREVIATIONS

A&E	Assessment and Evaluation	KP	Khyber Pakhtunkhwa
ASDEO	Assistant Sub-Divisional Education Officer	KPI	Key Performance Indicator
BISE	Board of Intermediate and Secondary Education	LMS	Learning Management System
B-TAG	Bridging Technical Assistance for Government	NFE	Non-Formal Education
CPD	Continuous Professional Development	NMD	Newly Merged Districts
DCTE	Directorate of Curriculum and Teacher Education	NOC	No Objection Certificate
DPD	Directorate of Professional Development	OOSC	Out of School Children
ECE	Early Childhood Education	R&I	Reforms and Implementation
EMA	Education Monitoring Authority	RPDC	Regional Professional Development Centre
ESEF	Elementary and Secondary Education Foundation	SDEO	Sub Divisional Education Officer
ESP	Education Sector Plan	SL	School Leader
ESRU	Education Sector Reform Unit	TBB	Textbook Board
FCDO	Foreign, Commonwealth & Development Office	тск	Teacher Content Knowledge
IMU	Independent Monitoring Unit	TCS	Teacher Competency Survey
KESP	Khyber Pakhtunkhwa Education Sector Programme	TLM	Teaching Learning Material



# Background and Problem Statement

School education service delivery in Khyber Pakhtunkhwa (KP) is shared between multiple attached and autonomous departments under the Elementary and Secondary Education Department (E&SED).

The Directorate of Professional Development (DPD) is responsible for training teachers, both pre<sup>1</sup>- and in-service, developing necessary materials and carrying out research to inform practice.

The Directorate of Curriculum and Teacher Education (DCTE) is mandated with carrying out student assessments from grades 1-8, developing curricula for all grades and reviewing textbooks, and conducting research.

The Education Monitoring Authority (EMA) is responsible for collecting data on school facilities and infrastructure, enrolment, teachers, retention etc., and developing monitoring indicators. The Elementary and Secondary Education Foundation (ESEF) is the KP Government's arm for promoting public-private partnerships to support school education.

These departments are generating information and data year-round and utilizing it to inform their respective planning and implementation. However, sharing of data and information among departments is limited, with regards to content as well as frequency, and contributes minimally to information-based planning and decision-making.

This report identifies the disconnect that exists between different departments under the E&SED in terms of sharing of data and information, lack of coordination to overcome challenges, and consequently limited collaborative planning and informed decision-making. The report makes some recommendations and suggests guidelines to improve coordination and communication among departments.

The primary audience of this report is the E&SED and its attached departments, and it is anticipated that the

<sup>1</sup>Currently, pre-service training in not provided by the E&SED.

recommendations made in the report will be adopted by the E&SED to streamline internal coordination and communication. A first step towards adopting the recommendations will require formation of multi-tiered committees in the E&SED to initiate coordination, communication and data-sharing for collaborative planning.

## **Policy Landscape**

The current and past policies in KP highlight the importance of data-sharing and utilisation for better planning and implementation of school education initiatives, while also acknowledging the challenges faced in data collection, sharing, and use in decision-making.

The KP Education Sector Plan (ESP) 2020/2021 – 2024/2025 states that various units and institutions maintain their databases but do not share these with other institutions that might benefit from them. These databases do not align together in any centralised framework or mechanism and are not accessed by the Independent Monitoring Unit<sup>2</sup> or the Education Management Information System Cell. Centralising data management would ensure a unified picture of education supply and demand. Data needs to be systematically analysed to be of value. For this, a research function should be established to provide trend reports and allow evidence to feed into the design and delivery of programmes.

The KP Education Blueprint (2018-2023) identifies a key issue regarding the lack of reliable and accurate data within the province, which makes it hard to accurately establish a baseline for the state of education and provision of services. The Blueprint talks about the development of a high-level implementation plan that would require effective use of resources, backed by data, and supported by ongoing monitoring and evaluation. Data should be used to support prioritisation of areas that require additional school supply, evidence-based intervention design, allocation of adequate financial resources, the right service delivery mechanism, and effective monitoring and evaluation to prove and improve impact. The Blueprint emphasises the use of current sources of data coming from different institutions to monitor each school's performance against the standard indicators and ensure compliance.

The EdTech Hub report on Data Access and Protection Laws in Pakistan (July 2022) mentions issues relating to coordination, communication and data-sharing among stakeholders in the education service delivery.

## Key Data Types and their Utility

Student assessment annual data for grades 2, 5 and 8 is generated by the DCTE and by the exam boards for higher grades. This data serves as a cornerstone to gauge academic progress, identify areas of improvement, and tailor instructional approaches to address specific needs. When shared with relevant stakeholders, this data enables a comprehensive understanding of student performance trends, allowing for the development of targeted interventions to support struggling students and the implementation of successful pedagogical strategies. DCTE also conducts teacher assessments, and this data is shared with the DPD to help them develop relevant teacher training content. The collective utilisation of assessment data promotes a collaborative environment where educators can learn from each other's experiences, ultimately enhancing the quality of education across the entire department.

Similarly, the data on school facilities, enrollment, teachers, and other items collected by the EMA plays a pivotal role in optimising resource allocation and ensuring a conducive learning environment. Efficient utilisation of school-level data not only contributes to cost efficiency, and better utilisation of resources but also enhances the overall educational experience for students. The E&SED planning wing primarily utilises this data for its annual planning of physical school needs, recruitment, and financial outlays.

The DPD as the apex teacher development body plans and administers teacher training activities, utilising teacher assessment data shared by DCTE. The availability of teacher training, mentoring, and classroom observation data supports ongoing professional development initiatives, enabling educators to stay abreast of the latest pedagogical trends, teaching methodologies and technological advancements. This collaborative approach ensures that educators are well-equipped to provide high-quality instruction, fostering a culture of continuous improvement within the education department.

The I-SAPS team interviewed various departments under the E&SED including DPD, DCTE, ESEF, EMA and the Textbook Board (TBB) to learn about data and information sharing in KP. The responses shared by these departments, and desk review of websites, and documents such as the school census, and DCTE reports have informed the findings of this report.

## 02 Stakeholders and Data Landscape

The significance of disseminating education related data, which includes crucial details like student evaluations, records of teacher training, enrollment figures, retention rates, and information about school facilities, cannot be emphasised enough. Encouraging cooperation among educational entities sets the stage for an environment that relies on well-informed decision-making, policies grounded in evidence, and focused interventions to cater to the varied needs of students, educators, and education establishments.

Following is a brief description of the functions of attached and autonomous departments under the E&SED, the data and information they generate, which is/should be shared among all stakeholders routinely for better planning and delivery of education services:

The DPD is an attached department of the E&SED, and is responsible for training teachers, headteachers and education managers. DPD develops necessary Teaching and Learning Material (TLM) and also conducts research to inform practice. The DPD has 25 Regional Professional Development Centers (RPDCs, 13 male, 12 female) in 17 districts including the newly merged districts (NMDs) to support various teacher development initiatives.

The DPD offers a Continuous Professional Development (CPD) programme for primary school teachers covering all the districts across KP and is planning to upgrade CPD to cover the elementary level as well. The CPD programme is offered one day every month during the academic session (9 months) and the teachers receive face-to-face training at the cluster level (explain cluster level). DPD supports teachers, headteachers and Assistant Sub-Divisional Education Officers (ASDEOs) to carry out other professional development activities such as self-reflection, classroom observation and mentoring, teacher group meetings, and monitoring meetings. DPD also offers a nine-month blended Induction Programme for newly recruited teachers (primary to secondary levels) when they are placed in schools.

The activities implemented by the DPD generate significant information and data on the professional

development of teachers, headteachers, ASDEOs, and School Leaders. This data, if regularly made available to concerned units and departments, is an important source for planning and decision-making. The training data has the potential to inform decision-makers about individual competence, further professional needs, a sequential approach to professional development modules, and allocation of resources for training, and may eventually be used for promotion and rewards.

The DCTE is responsible for implementing the Khyber Pakhtunkhwa Supervision of Curricula, Textbooks and Maintenance of Standard of Education Act 2011. The mandate of DCTE is to:

- Develop, revise and approve curriculum and scheme of studies for pre-1-12 grades.
- Review and approve textbooks from pre-1-12 grades.
- Review and approve supplementary reading materials, training manuals, and teaching learning material.
- Maintain standards for education.
- Conduct assessments and research to inform assessments.

The Assessment and Evaluation (A&E) Wing of DCTE is mandated to conduct both the teacher and student assessments, in addition to designing, administering, marking, and reporting on the following assessments:

- Annual Grade 2 sample-based assessment.
- Annual Grade 5 sample-based assessment.
- Annual Grade 8 sample-based assessment.
- Annual Teacher Content Knowledge (TCK) Test.
- Annual Teacher Competency Survey (TCS) [replaced by School Leader (SL) led teacher observations – DCTE develops the tool].
- Teacher Induction Program (DCTE develops external assessment for certification and tools for Learning Management System (LMS) that DPD uses for internal assessment).

The DCTE is also awaiting E&SED approval to notify Non-Formal Education (NFE) assessments and certification for the Elementary and Secondary Education Foundation schools, following which DCTE will design the assessment protocols.

The assessment data generated by DCTE is an important source of information for the DPD, Textbook Board, and E&SED to inform their planning and interventions. The student assessment data for grades 2, 5 and 8 provides valuable insights into various aspects of students' academic performance, learning progress, and areas of improvement. This data, if available, can be used by curriculum authorities to make necessary changes in the textbooks. The data is equally useful for the DPD to plan teacher training content focusing on areas where students need additional support.

The EMA was initially set up as an Independent Monitoring Unit (IMU) in 2013 under the KP Education Sector Programme (KESP) before its regularisation in 2019. The EMA is the first organisation in Pakistan to adopt technology-based school data collection.

The EMA collects data on several E&SED initiatives such as regular governments chools, second shift schools, girls community schools, and Annual School Census. It is the main data generator of educational statistics for KP.

The EMA maintains a dashboard where school-level information and data on all key indicators are available once the concerned school code is provided. EMA data is used by E&SED for planning initiatives related to schools, basic facilities, recruitment, etc. The data generated by EMA is also useful for the DPD to plan customised training considering multigrade classrooms, single-teacher schools and dropouts. A key piece of data that is missing and needs immediate attention is on equity and inclusion. It should not just focus on visible physical disabilities, but also invisible impairments and cognitive issues.

The KP Textbook Board (TBB) is mandated to ensure the production and publication of textbooks for Classes I to XII, supplementary reading material for textbooks, production of reference and research material, and conduct research in the field of curricula. After the adoption and introduction of the new KP Textbooks and Learning Materials (KPTLM) Policy 2017, the role of the Textbook Board has become more important as a regulatory authority.

The prime objective of the TBB is the timely availability of quality textbooks (Classes 1 to 12) to all the students of Khyber Pakhtunkhwa at minimum cost. The TBB utilises data from EMA to plan the production and distribution of textbooks every year. The mandate for any revisions in textbooks rests with the DCTE. The TBB shares textbook manuscripts with DCTE for review and final approval.

The ESEF is an autonomous body established under the KP Elementary and Secondary Education Foundation Ordinance 2002.

The main objective of the Foundation is to take all necessary measures for the promotion, improvement, and

financing of school education in the KP province through strengthening elementary and secondary education in the private sector in line with the education policy of the KP government.

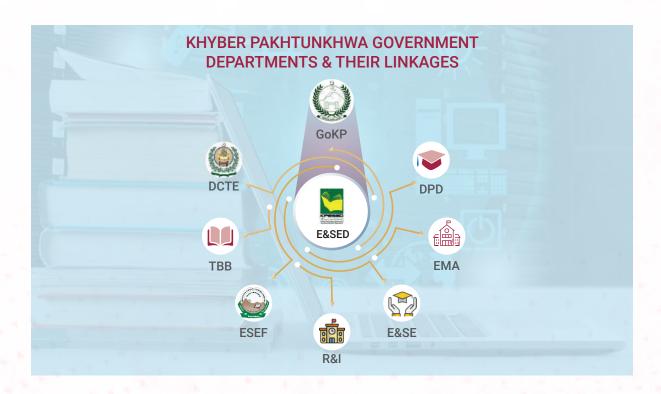
The ESEF supports out-of-school children (OOSC) through four distinct initiatives engaging private sector partnerships. Almost 250,000 boys and girls are enrolled in 3,800 schools and are taught by approximately 5,500 teachers. The ESEF is in coordination with the DCTE for designing assessment protocols for its schools.

The Reforms and Implementation (R&I) Unit, formerly the Education Sector Reform Unit (ESRU), is tasked with managing and implementing school education reforms to enhance the quality and accessibility of education. As per the KP ESP, the R&I Unit is conceived to monitor progress against the KPIs in school education and ensure that the activities of the KP ESP are on track and report the same to the senior E&SED management. The R&I Unit also supports the conduct of third-party evaluation studies, as part of its monitoring function. The Unit is expected to coordinate with international projects to ensure their interventions are aligned with the KP ESP. In practice, however, this coordination is not smooth, and international projects mostly coordinate directly with E&SED and its departments.

The Elementary and Secondary Education (E&SE) Directorate plays a pivotal role in overseeing the educational landscape in the districts. The Directorate is responsible for the administration, management, and implementation of educational policies at the elementary and secondary levels. It strives to improve educational outcomes, promote literacy, and contribute to the overall development of school education in the province. E&SED's service delivery is through the Directorate which has an elaborate structure at the district level. Each district has two District Education Officers (DEOs), one male and one female, responsible for the management of boys' and girls' schools respectively. Each DEO is supported by a Deputy DEO, a Sub-Divisional Education Officer (SDEO) and an ASDEO. The Directorate also oversees provincial and district education planning and coordinates with the district education offices to track policies, plans and targets. As such, the availability of educational data from multiple sources is of vital importance for the Directorate to help in its planning and implementation of education interventions.

The Boards of Intermediate and Secondary Education (BISE) are responsible for conducting examinations at the secondary and higher secondary levels. The examination data generated at the eight BISEs operational in KP is of paramount importance to the E&SED institutions, particularly DPD, DCTE and TBB. Likewise, data and information from DCTE and TBB are important for BISEs when designing exam papers. BISEs share only exam results, which are sufficient for public use. However, more details at the item and outcome level can be shared with DPD, TBB, and DCTE to inform instructional and curriculum interventions and textbook revisions.

The following figure shows the relationship between the E&SED and its departments:



## 03 Data-Sharing: Opportunities and Challenges

The vast education data generated by different departments in KP has the potential to support evidence-based decisionmaking, planning and implementation. Some of this data is already being disseminated and utilised for this purpose but there are data sets and information which are not sufficiently analysed and disseminated. The following table illustrates various data sources, their consumers (current or potential) and utilisation (as it currently is, and the Opportunity for further use).

Data Source	Data Type	Consumer	Data Use and Opportunity (appears in bold)
DCTE	Student Assessment Grades 2, 5 and 8 Teacher Assessments TCS TCK	DPD TBB/DCTE DCTE E&SED Planning Wing R&I Wing Teachers	Teacher Training Textbook Development Curriculum Revision Resource Planning and Allocation, Quality Assurance Teachers do not receive any information on DCTE assessments. Allowing them access will help them better plan their instruction techniques

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Data Source	Data Type	Consumer	Data Use and Opportunity (appears in bold)
DPD	Teacher Training Records CPD Induction Programme Other in-service programmes for teachers, headteachers, SLs, district officials	E&SED Planning Wing HR	Resource Allocation, Quality Assurance <b>Promotions and Rewards</b>
EMA and SLs	School Census, Attendance Records (equity and inclusion data is missing) Classroom Observations	E&SED Planning Wing and Directorate DPD	Resource Allocation and Planning Teacher Training Equity and Inclusion Planning
ESEF	Enrolment Data Teacher Training Record	E&SED Planning Wing DPD	Resource Allocation Teacher Training
	Assessment Data Enrolment Data	DCTE EMA and EMIS	Quality Assurance Monitoring and Census
BISEs	Secondary and Higher Secondary Examinations	DPD DCTE E&SED Planning Wing E&SE Directorate	Teacher Training Textbooks and Curriculum Resource Allocation District Planning

Until 2022, the student and teacher assessments conducted by DCTE were shared with DPD to help them prepare CPD content for teachers based on assessment results. DPD utilised TCK, TCS, and student assessment results effectively to train teachers. A Trends Analysis Report under KESP (2020) provides evidence to indicate that needs-focused CPD has a direct correlation with improved student learning. Since 2022, no assessments have been carried out due to a lack of budget, and no teacher training has been done in the current fiscal year for the same reason.

During 2023, the E&SED has recruited almost 3,000 SLs to provide academic supervisory support to all the primary

level teachers in the province. The SLs will administer fortnightly formative assessments for selected grade-2 students and will also carry out teacher observations (replacing TCS) against approved teacher competencies. DCTE will develop the test items and tools for both the grade-2 fortnightly assessments and teacher observations. The SL-led activities will be carried out using a tablet and will be used to mentor teachers to help improve their classroom teaching.

The classroom observation and mentoring data available through SLs will be an important source of information for planning teacher CPD programmes and informing curriculum and textbook planning.



The TBB coordinates with the DCTE and E&SED for the preparation, review and approval of textbooks in the province. Once the publishers are invited to share their draft textbooks (subject and grade wise), TBB reviews the drafts and then sends them to DCTE for their review and No Objection Certificate (NOC). DCTE reviews, provides feedback, and issues the NOC. TBB then sends the drafts to Special Secretary E&SED who makes the final decision as to which draft is to be selected for government schools. DCTE also shares the revised curriculum with the TBB every time new books are to be published, and TBB shares the curriculum with the publishers. For gathering feedback from the field on textbook relevance and difficulty, a proforma is appended at the end of each textbook for teachers and school heads to provide comments. However, this feedback does not reach the TBB. Any feedback received is shared only with the DCTE since they have the mandate to revise the textbook content.

BISEs produce exam results for the secondary and higher secondary levels which are published for consumption by students, schools, and colleges. However, no detailed data on exams is made available by BISEs, such as item-level analysis, or learning outcome level information, which if available and shared can be used by DPD and DCTE to design their training programmes accordingly and perform curriculum and textbook revisions.

While the data from ESEF informs E&SED planning on PPPs, closer coordination on information sharing with DPD and DCTE can be extremely useful for strengthening assessment frameworks, teacher professional development, and overall quality assurance for PPP initiatives. The EMA reports data on school census, student and teacher attendance, student dropout and retention, and other initiatives of E&SED. This data is utilised by E&SED for its annual planning for school education. However, the school census does not include any data on equity and inclusion apart from sex disaggregation. Data on all disabilities must be collected to allow E&SED to adequately plan and allocate resources.

The exchange of education data within E&SED can lead to several specific goals, outcomes, and incentives. Here are some key outcomes that can be achieved through effective data-sharing, leading to both intrinsic and extrinsic motivation:

Informed decision-making will enable decision-makers (E&SED at the provincial level, attached and autonomous departments at their respective levels) to make well-informed and evidence-based decisions.

 Outcome: Improved decision-making processes, leading to better strategies, operational efficiencies, and resource utilisation resulting in improved learning outcomes for students.

Cross-Departmental Collaboration will facilitate collaboration and information sharing among different departments and teams.

 Outcome: Enhanced communication, synergy, and innovation across the organisation leading to a reduction in duplication, optimised workflows, and efficient use of resources. Departmental Productivity will empower departments and staff through access to relevant data and information necessary to perform their roles effectively.

 Outcome: Increased productivity, as employees can make more informed decisions and perform their tasks more efficiently.

Accountability and Performance Measurement will help establish Key Performance Indicators (KPIs) and measure organisational performance.

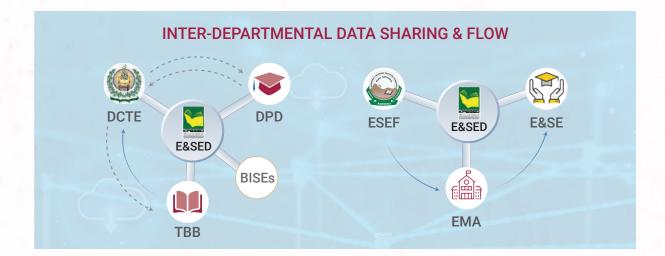
 Outcome: Clear insights into how well the departments and concerned staff members are meeting their objectives, ensuring compliance, facilitating continuous improvement, and contributing to the larger goals and objectives. where information and data are valued, and decisions are based on evidence provided by data.

 Outcome: Increased data literacy, better understanding of the importance of data, and a culture of continuous learning.

Innovation and Research will improve institutional practices by providing access to relevant data.

 Outcome: Accelerated research and development, leading to the refinement of existing and the creation of new products, services, or processes to improve practice.

The following figure shows the data and information flow between different departments under the E&SED. The dotted lines show that the information sharing is not adequate and needs to be strengthened:



Information/Data-Driven Culture will help foster a culture

## Recommendations

## Horizontal and Vertical Coordination and Communication

The E&SED needs to ensure that there is regular coordination among its attached and autonomous departments for information sharing, planning, implementation, monitoring, and reporting against all activities. Currently, this coordination is mostly limited to a needs basis; there is no mechanism in place that requires all concerned stakeholders to come together regularly to review and report progress.

Under a previous Foreign Commonwealth and Development Office (FCDO) initiative, the KESP, monthly meetings were held to review progress at the provincial level, bringing together district and provincial stakeholders under the leadership of the Secretary Education. The monthly stocktake ensured coordination and communication among stakeholders and created accountability and incentives for departments and individuals. During KESP, regular budget tracking meetings were also held under the leadership of the Secretary Education, engaging provincial department heads under the E&SED. Similarly, other donors working with the E&SED have adopted their coordination mechanisms to ensure smooth implementation and service delivery. Such regular progress updates and reviews under the highest leadership ensure the required coordination and communication among stakeholders and may be initiated by the E&SED yet again.

In consultations with the departments, suggestions were made to formulate multi-tiered committees to enhance coordination and communication at the horizontal and vertical levels. Multi-tiered committees are needed to make sure that coordination and communication below the level of departmental heads is taking place, as this is where the bulk of technical activities are planned and rolled out. Similarly, the sub-provincial committee involving districts is important to ensure that departments are in touch with districts and planning their interventions in discussions with district staff for better implementation and support. The suggestions are included as recommendations.

- A high-level committee that brings together Secretary E&SED, BISE Chairs, and departmental heads of DCTE, DPD, TBB, EMA, EMIS, and EEF should be notified to meet once every quarter to share progress and identify areas for collaboration. All challenges requiring policy-level attention should be part of the agenda.
- Smaller sub-committees involving technical leads from the attached and autonomous departments should also be notified to meet every four to six weeks to share progress, seek collaboration, and resolve issues.
- A sub-provincial level committee involving district education offices and including representation from E&SED institutions should also be notified for a quarterly progress review of education.

The details about these committees including their membership, functions, and responsibilities will be shared subsequently under a separate task in the Bridging Technical Assistance for Government B-TAG workplan.

Responsible Person and Department: Special Secretary (Development) and Additional Secretary R&I at E&SED.

## **Communications Strategy**

The E&SED will need to develop a provincial communications strategy; its attached departments should develop their respective communication platforms/frameworks. The communications strategy will principally aim to enable coordination and communication routines between tiers of E&SED and its departments at the provincial, district and sub-district levels to administer and manage the delivery of the school education initiatives. In addition, the strategy will facilitate informing and raising awareness among stakeholders, communities, and among end-line beneficiaries. It will pronounce accountabilities and rewards on duty bearers for the functions entrusted upon them. The communications strategy will support the E&SED theory of change at respective levels/tiers to achieve the outcomes. The strategy should lead to the following outcomes:

- Generate an environment for cooperation, effective communication, and coordination between different tiers of E&SED.
- Provide effective coordination for the implementation of programmes.
- Ensure effective and efficient information flow about core objectives and programmes for ownership at all levels.

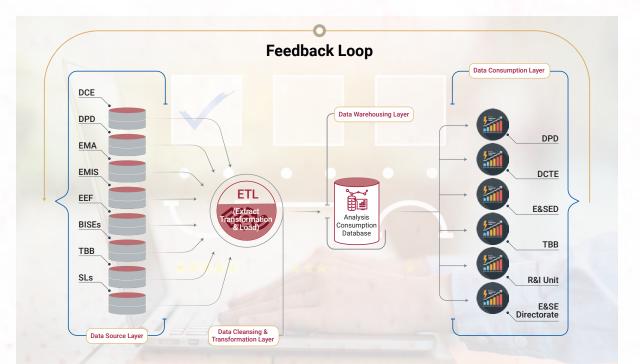
To develop a communications strategy, the following preliminary actions are proposed:

- The committee proposed under the previous recommendation should be tasked with identifying goals and objectives for the strategy.
- 2. It should identify key audiences for the strategy and commission a stakeholder analysis to identify the needs and communication channels for an effective outreach.
- 3. A stakeholders workshop should be organised to agree on the strategy contours, objectives, and its development and rollout mechanism.

Responsible Person and Department: Secretary, Special Secretary (Development) at E&SED, and Department Heads.

## **Data Feedback Loop**

The data generation, collection, analysis, and utilisation in KP should take the form of a loop, informing research, practice, and decision-making. The loop should create a mechanism whereby data is generated by different departments, processed, and shared with the consumers, and the feedback is provided to the concerned departments for reviewing their practices. The following diagram illustrates a data feedback loop that can be conceived and created to ensure that the data generated from various sources is shared with concerned stakeholders, processed, and fed back into the system.



Once the raw data is generated by various departments (red and grey cylindrical shapes) and entered into a database, a mechanism or system (ELT in the diagram) is required that can extract the data, transform it into a suitable shape after cleaning, validation, and aggregation, and then load it into a database or warehouse in a form that will allow analysis and reporting. The analysed data can then be shared with the consumers for multiple uses and providing feedback to the data sources for necessary modifications to their activities. This loop should form a continuous system in the E&SED allowing datasharing and feedback.

Responsible Person and Department: Chief EMA and Director EMIS at E&SED.

## Guidelines for E&SED on establishing education data-sharing practices

### • Establish a Data Governance Framework

Develop and implement a data governance framework that includes policies, procedures, and standards for data-sharing. Clearly define roles and responsibilities and establish data stewardship practices to ensure data quality and consistency.

#### Define Data Ownership and Access Controls

Clearly define data ownership to identify responsible individuals or teams for different datasets. Implement access controls to ensure that only authorised personnel can access and modify specific data.

#### Ensure Data Quality and Consistency

Prioritise data quality by implementing data validation, cleansing, and enrichment processes. Consistent

and accurate data is essential for reliable decisionmaking.

#### • Implement Secure Data-Sharing Practices

Prioritise data security and privacy. Implement encryption, access controls, and other security measures to protect sensitive information. Ensure compliance with relevant data protection regulations.

### • Facilitate Inter/Intradepartmental Collaboration

Encourage collaboration between different departments or teams. Establish channels and platforms to share insights, best practices, and data-driven findings. Foster a collaborative environment that values cross-functional knowledge sharing.

#### Create Data-Sharing Policies and Agreements

Develop precise data-sharing policies and agreements that outline the terms, conditions, and expectations for sharing data. Ensure that all parties involved understand and adhere to these policies.

#### Monitor Data-Sharing Practices

Conduct regular monitoring to ensure compliance with data-sharing policies and identify areas for improvement. Implement tools to track data usage, access patterns, and potential security incidents.

#### Stay Compliant with Regulations

Keep abreast of data protection regulations in KP and Pakistan. Ensure that data-sharing practices align with legal requirements and ethical considerations.

Responsible Person and Department: Special Secretaries (Establishment and Development) at E&SED.

