



**February - March 2024**  
**Bi-Monthly Report**

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Government of Pakistan

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## Executive Summary

STEAM Pakistan is a multi-strand project aimed to improve STEAM education through a phased approach. Its expected outcome is to improve STEAM learning for 5 million students, build the professional capacity of 100,000 teachers and revamp 13,000 high schools all across Pakistan in the next 5 years.

Major milestones achieved during the months February and March 2024 include:

- 4,348 STEAM partner schools have signed up for the programme as of 31st March
- 1,961 students from 15 schools in Sindh and Punjab were engaged through various STEAM Pakistan corporate and university partners in the form of Safer sessions, Math circles, and STEAM Safari trips
- 7 virtual activity-specific refresher sessions were held with 250+ teachers attending
- The Islamabad FDE STEAM Competition area round results were announced and notified with 136 student and teacher winners from 36 schools The final event/STEAM Mela is scheduled for 30th April to take place at the Pak China Friendship Center with an expected attendance of 1500+ students and teachers from all over Islamabad.
- The Sindh SE&LD STEAM Muqabulo district rounds were conducted in 10 districts of Sindh engaging 8,000 students and teachers, and 56 judges representing academia, corporate entities, HEIs, industry experts and government officials. The final event held on 6th March saw participation from 3500+ students and teachers as well as 60 facilitators from 20+ partner organizations. In addition to an award ceremony where the STEAM Muqabulo champions were crowned, the event featured live science shows, STEAM Safer sessions, speed mentoring, art activities, design workshops, maths and STEAM games related to climate change and sustainability, teachers' workshops in wellness, art, STEAM, physics and game design, as well as a display of a formula electric car and a virtual reality playspace.
- STEAM Pakistan registered 75+ schools from three districts in Gilgit-Baltistan (Hunza, Ghizer and Nagar). In-person orientations will tentatively be scheduled in the first week of May.
- STEAM x Secretariat Series was initiated in February. The purpose of these activities is to share tokens of excitement and curiosity with education bureaucracy, showcasing what schools do through the program. These activities were conducted at MoFET and SED, Punjab in the months of February and March.

- Schools celebrated Pi-day with “Design a Postcard” activity. STEAM Pakistan received 574 entries, the best of which will be shared with institute partners while also featuring on the Programme’s social media.
- A meeting of the Sindh STEM Technical Working Committee was organized on 6th February by STEAM Pakistan. The meeting was attended by the Education Minister, Secretary, and representatives from other state allied institutions, education NGOs, and IBA Karachi. Meeting details are added in the section “Policy deliverables” under “Sindh”.
- The STEAM Policy Unit of SE&LD convened meetings with the Minister Ms. Rana Hussain and Secretary Dr. Shereen Mustafa on February 2nd, discussing STEAM interventions in Sindh including the STEAM Muqablo. Additionally, STEAM Policy Unit requested budgetary allocation for STEAM in FY 2024-25, with a commitment from the Secretary to recommend inclusion in the next fiscal year budget to the Finance Department.
- An MoA was signed with ERA Professionals to support their efforts in the design, development, and execution of educational and environmental programs such as the Butterfly Effect. Under this agreement, the first butterfly conservatory project was launched on 29th February at Church Mission School, Karachi.
- Senior management of Reckitt global’s team met with STEMForward alumni and STEAM Pakistan to learn about the collaboration and pathways to expand the partnership further. A team member also conducted brief Safer sessions with grades 6, 7 and 8 students.
- Meetings have been held with Girls Make Games to replicate the game design workshop conducted in Karachi in the previous summer to now be held in Islamabad in the month of April. It will tentatively engage 20 students from 4 schools.

Moreover, the program activities and outputs are being tracked against deliverables for the purpose of monitoring and evaluation. The bi-monthly STEAM report will contain an overview of the program outputs and the challenges encountered during implementation.

## Project update

This section of the report will include strand-wise updates for the deliverables covered within the months February and March 2024.

## Learning

This section will provide updates on partner school's status as of 31st March 2024 by geographical coverage, level of activities, student and/or teacher engagement, an update on training/fresher sessions, orientation sessions, and/or portal development.

### 1. Partner Schools' Highlights

#### A. Journey to date

**4,348** Government Schools Engaged

**86** Districts Covered

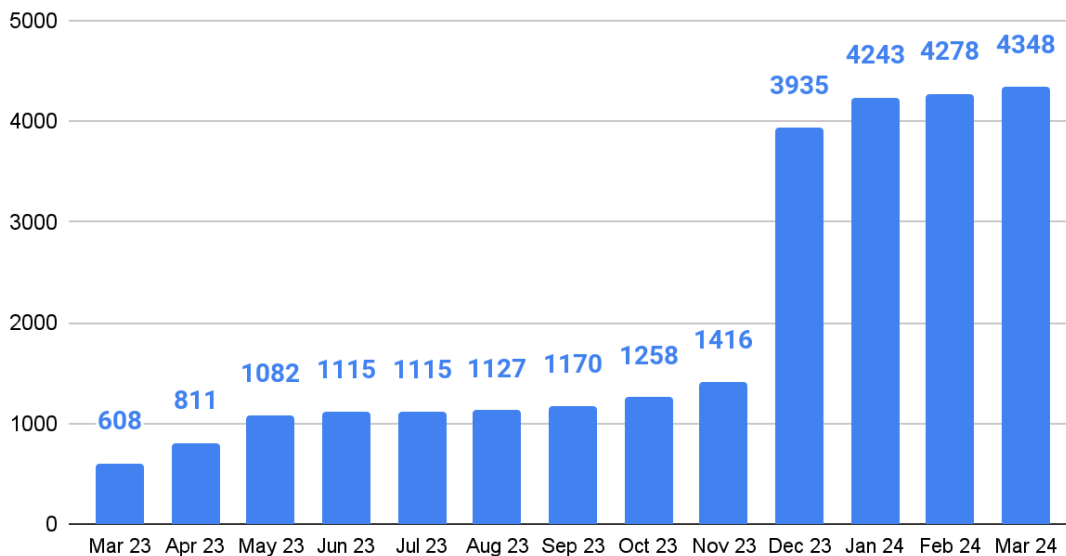
**336,687** Students Engaged

74% Girls, 26% Boys

**1,429** STEAM Clubs

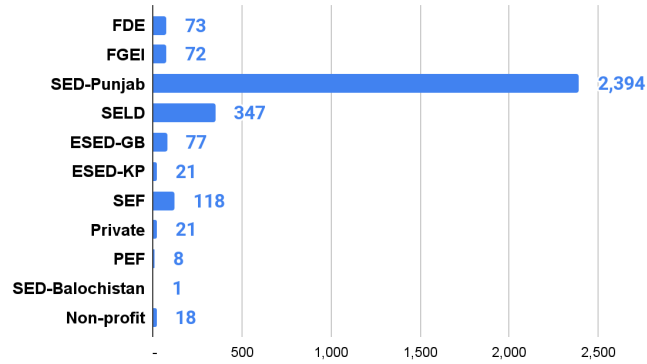
**4,940** STEAM Club Activities

No. of Schools Registered Over Time

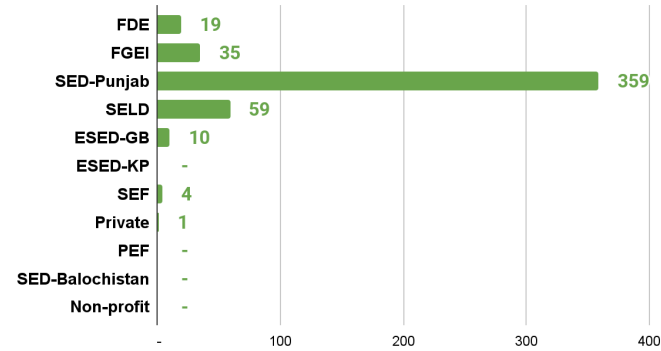


## B. Level-wise progress

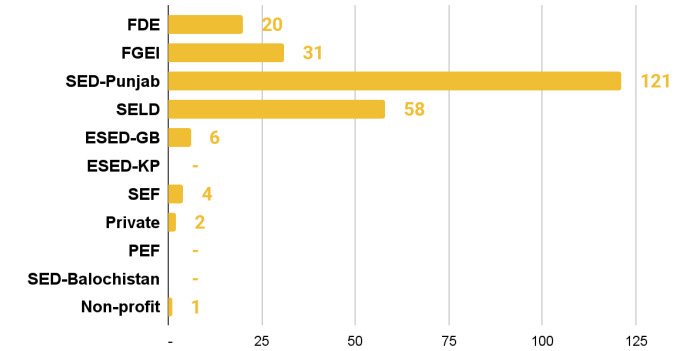
Level 1 by Institute



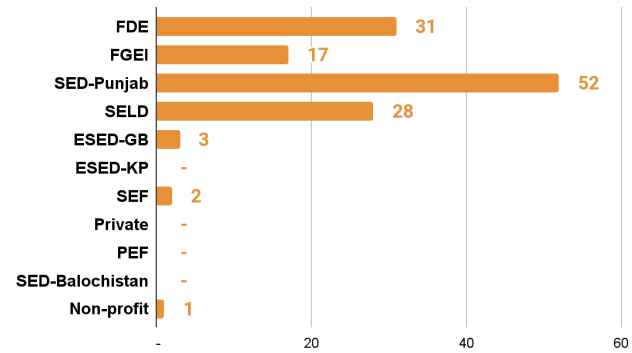
Level 2 by Institute



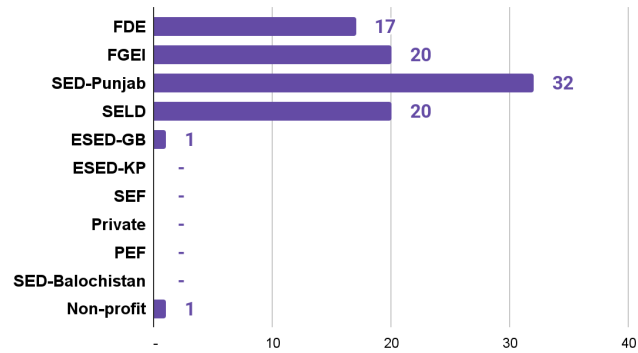
Level 3 by Institute



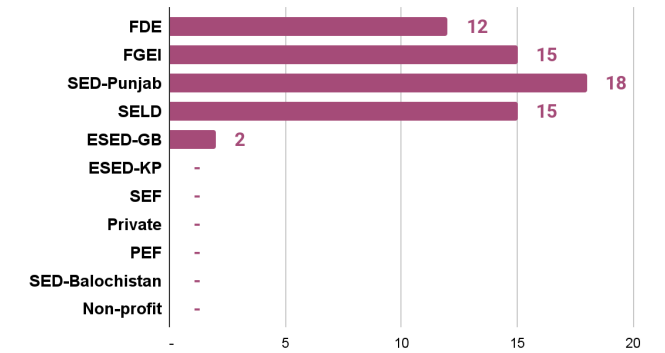
Level 4 by Institute



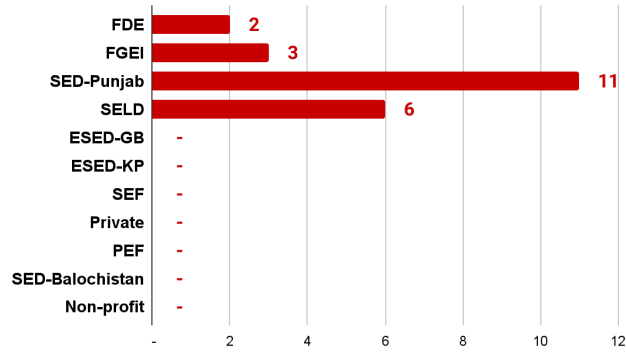
Level 5 by Institute



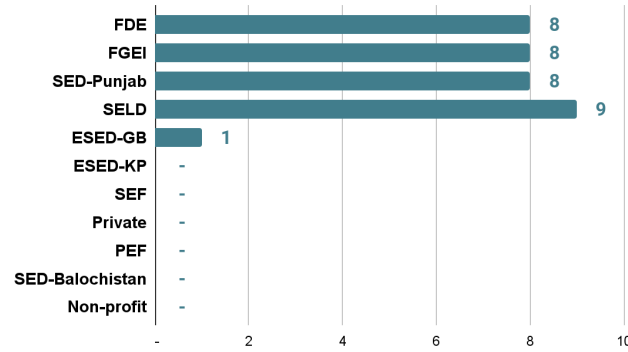
Level 6 by Institute



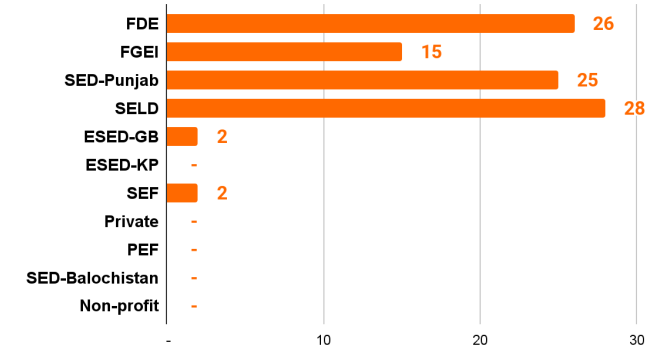
Level 7 by Institute



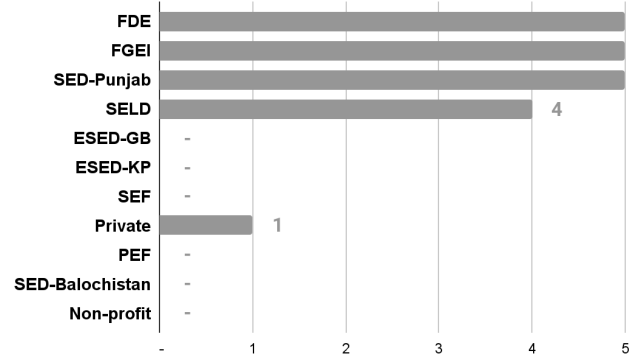
Level 8 by Institute



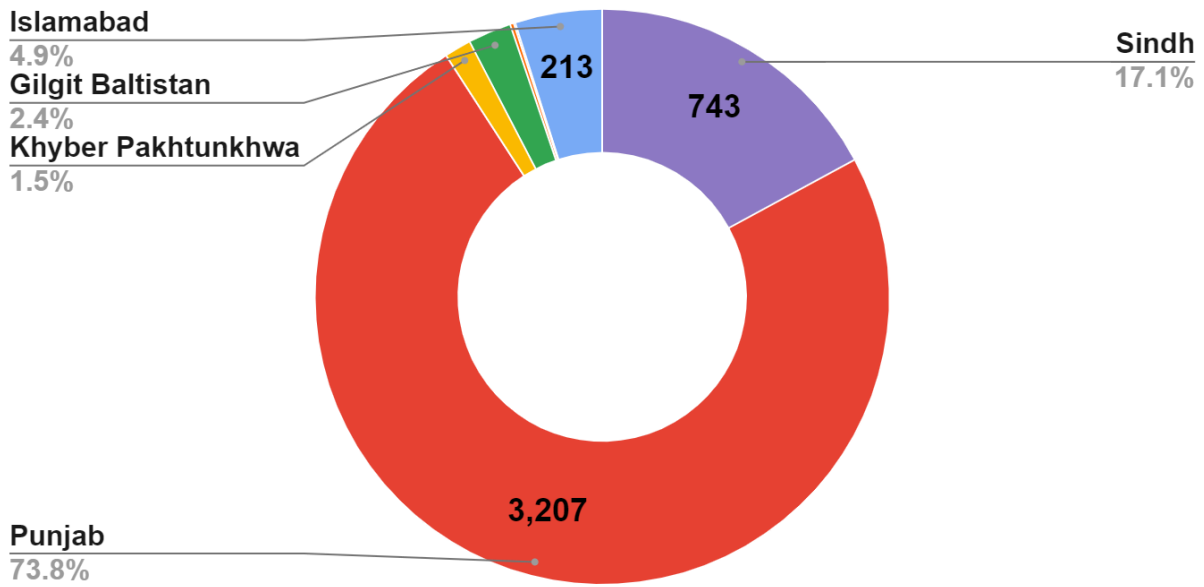
Level 10 by Institute



Star Journey Schools by Institute

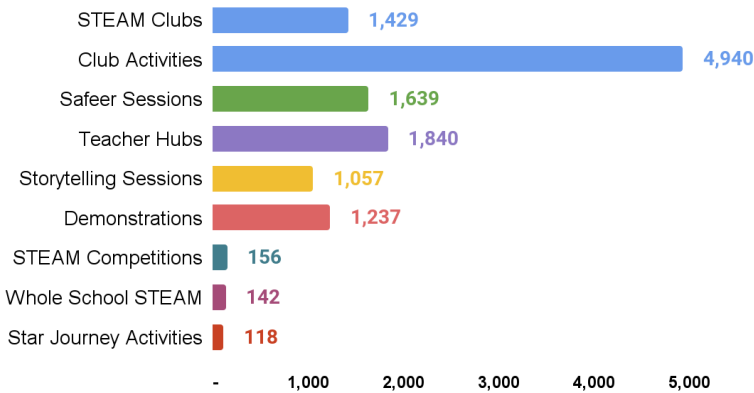


### C. Region-wise partner school distribution

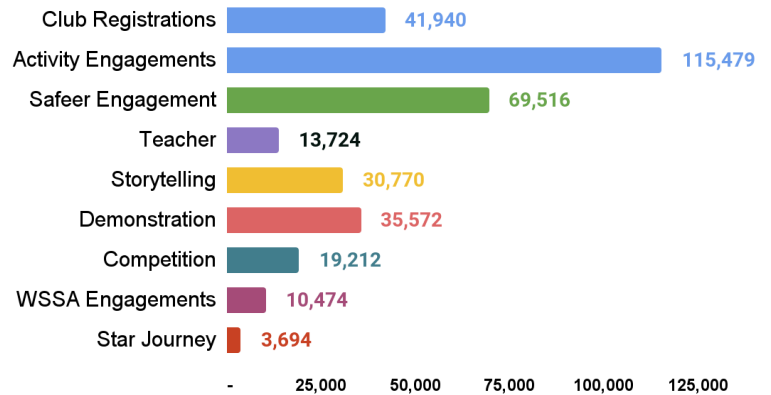


### 2. Activities in partner schools

#### Components



#### Engagements





### 3. STEAM Mela / Muqabulo

#### Federal Directorate of Education (FDE), Islamabad

##### *Area Round - Result Announcement*

STEAM Pakistan finalized the Area Round results conducted at various schools in Islamabad based on judges' score sheets. The categories featured in the competition were Balloon Car, Strongest Catapult, Egg Drop Challenge, Math-a-thon, Gamify Math, Thumbprint Art, Handmade Design, Pop Art, Performing Arts, and STEAM Quiz. Additionally, results for lesson planning teacher category were also finalized along with shortlisting of Rube Goldberg Machine entries, some of which will be displayed at the competition's venue. Notifications/results for the winners can be accessed [here](#).

##### *Final Event: STEAM Mela*

For the final event, 131 student winners from 33 schools have been shortlisted. Additionally, 5 teachers from 5 schools have been finalized from the teacher's category. Moreover, level 10 schools have also been invited to the competition to celebrate their achievement. Approximately 1500 students and teachers are expected on the final day which is scheduled to take place at the Pak China Friendship Center on 30th April.

#### Sindh Education & Literacy Department

##### *District Round*

11 STEAM Muqabulo district round competitions were held from 13th to 17th February. These were held in 10 districts: Hyderabad, Sukkur, Shaheed Benazirabad, Larkana, Karachi Korangi, Karachi Malir, Karachi South, Karachi East, Karachi Central, and Karachi West. Approximately 8,000 teachers and students from grades 6-8 showcased their solutions to challenges that address real-world problems with creativity and innovation. A panel of 77 judges from 56 partners from academia, industry and SE&LD's allied institutions volunteered their time to judge students' and teachers' projects across three interdisciplinary challenges. This committee at each district competition viewed every group's presentation keenly and also asked critical questions to help select the winners based on comprehensive criteria including understanding of STEAM concepts, collaboration, creativity and communication. The complete instruction guide shared with schools can be accessed [here](#) including the categories of the competition.

Highlights from the district rounds can be viewed [here](#).

##### *Final Event*

The grand finale of the inaugural STEAM Muqabulo was held on Wednesday, 6th March, at Church Mission School Karachi. The event was attended by 3500 school students and teachers, district round winners and additional visitors from Karachi schools, who travelled from all over Sindh including Hyderabad, Sukkur, Larkana, and Shaheed Benazirabad, 6 districts of Karachi. The program agenda and flow can be viewed [here](#). The event featured an award ceremony to crown

the provincial champions as well as a variety of exciting activities like live science shows, maths games, design challenges, VR playspace and formula electric car displays, collaborative art-making, teachers and students' yoga, inspiring STEAM Safer sessions, a STEAM game show and a music performance. This was made possible by 60 facilitators from a variety of institutions including corporate entities as well as universities.

Highlights from the event can be found [here](#).

#### **4. Meetings with FDE and SE&LD**

##### Director Academics, FDE

A meeting was held with Director Academics FDE, Ms. Riffat Jabeen on 13th March regarding updates on the STEAM Journey, CPD, and content development. A discussion was initiated to curate a PC-1 for STEAM in FDE and discussed the non-salary budget details of schools. Next steps involve having further discussions internally and with AEOs around the following points.

- Notified list of Goldberg and Teacher Lesson plan category entries for the Area Round of the 2024 FDE STEAM Competition
- STEAM Competition final event date being shifted to 30th April due to venue availability constraints i.e. Pak China Friendship Center
- Event to now only be the award ceremony instead of a final round
- Planning for the STEAM Competition final event, agenda, and sessions

##### District focal persons, SE&LD

Multiple meetings were held with the district focal persons at the office of Director, ES&HS Karachi as well as at Church Mission School regarding planning for the STEAM Muqablo district and final rounds. For Korangi, a meeting was also held at the DEO's office with the DEO, district focal person and other related staff to the Korangi District Round. Similarly, for Karachi South, a meeting with the DEO and district focal person was also held for the organization of South District Round. Meeting dates were 12<sup>th</sup> February, 14<sup>th</sup> February, 16<sup>th</sup> February, 22<sup>nd</sup> February, 26<sup>th</sup> February, and 4<sup>th</sup> March.

#### **5. STEAM x Secretariat**

The Learning strand of STEAM Pakistan took the initiative to share tokens of excitement and fun in ministries and departments where STEAM Pakistan is operational starting with SED Punjab and Ministry of Federal Education and Professional Training (MoFEPT). The purpose of these activities is to diffuse some of the excitement and awe inside the ministry that the Programme offers inside partner schools.

##### Ministry of Federal Education & Professional Training (MoFEPT)

On February 19<sup>th</sup> and 22<sup>nd</sup>, the activity involved gifting Newton cradles to 20 officers, including the secretary. This was used to demonstrate the ideas of conservation of momentum and transfer of energy. They were also given 5 printed cards each, which contain brief but interesting

and relatable snippets of information that demonstrate what an integrated learning approach means. Highlights can be found [here](#).

#### School Education Department, Punjab

On 31st January, the team distributed 10 Newton’s cradles and a pack of 5 STEAM snippets amongst 40 people at the secretariat of the Punjab School Education Department in Lahore. The special secretary took interest in the puzzles that were shared. A brief discussion ensued on how important identifying passion is for students to pursue fields of their interest rather than sticking only to what would be of value in the future. These STEAM gifts were also shared with the then secretary, various directors and section officers at the Punjab School Education Department. Highlights can be viewed [here](#).

### **6. Content development**

#### Teacher and student authored guides

Development is underway for 5 guides which are co-authored by teachers and students, each containing SLO-based low cost activities that have been derived from activity submissions made by partner schools over the course of the last year.

#### Teacher’s content guide

Teacher content guides are being prepared to be used in the summer for teacher training workshops. The first version of the final guide has been developed and is scheduled to be completed by April. The design of these guides is also in the process of being finalized.

### **7. Pi-day engagement in schools**

Initiated a ‘Design a Postcard’ activity with the instruction of using as many digits of Pi as possible. 574 entries from partner schools were received from across all provinces of Pakistan, with most from Sindh. Winners were selected from each partner institute and the winning postcards will be shared with the secretary of the respective department digitally or by post where possible. There are 7 winners from SE&LD, 2 from FDE, 1 from SED - Punjab, and 2 from FGEI. Results have been shared in the institution WhatsApp groups while the entries will be featured on STEAM Pakistan’s social media in the coming weeks.

### **8. Refreshers**

#### Weekly virtual refreshers

STEAM Pakistan initiated virtual weekly refreshers for all institutions starting August last year. These are optional sessions aimed at recapping various elements of the school journey as well as addressing any problems teachers might be facing in progressing further. Six sessions have been held in the months of February and March with 250+ teachers participating. These sessions are generally held on Mondays each week from 3-4 PM. The schedules for the months of February and March can be found below.

Sr. No.	Theme of session	Date	Time
<b>March</b>			
1	Level 9 - Whole School STEAM Activity + Reporting	25-Mar-24	3-4pm
2	Level 5 - STEAM Safeer	18-Mar-24	3-4pm
3	Level 4 - Storytelling + Teacher Hub	11-Mar-24	3-4pm
4	Level 2, 3 & 6 - Student Registration & Perception Survey + STEAM Club + STEAM Club Demonstrations	04-Mar-24	3-4pm
<b>February</b>			
5	Level 5 – STEAM Safeer	26-Feb-24	3-4pm
6	Level 4 - Storytelling + Teacher Hub	19-Feb-24	3-4pm
7	Level 2, 3 & 6 - Student Registration & Perception Survey + STEAM Club + STEAM Club Demonstrations	12-Feb-24	3-4pm

## 9. Monthly Maker Challenge (MMC)

### February & March

Pakistan Science Club and STEAM Pakistan launched the 5th Maker Challenge for February 2024. This month's challenge was to build tall, strong towers using limited supplies. The objective of the task is to make a unique and tall tower able to withhold its weight. The students can use no more than 100 straws along with tape, glue, and pins.

Due to upcoming examinations, schools did not participate in February's MMC. The MMC was on break in March and will resume in April.

## 10. Newsletter

The Learning team has taken an initiative to publish its own newsletter for institution partners as well as relevant stakeholders. The newsletter for March can be viewed below:

- [Mar 24](#)

## 11. STEAM portal

The school STEAM Portal is a platform for schools to access important resources such as guides and tutorials for school staff. Additionally, all reporting activities are performed through this portal. It can be accessed on the STEAM Pakistan website ([www.steampakistan.com](http://www.steampakistan.com)). Along with multiple other tweaks, following are significant developments taking place between February and March.

New developments:

- Report assigning mechanism on the portal to help allocate reports for quality check
- Level 11-15 implementation on portal with the star journey

Additional items:

- Bug fixes and improvements for user logs
- Star Journey image and video are now live on the website
- Perception survey to now show as an option for all star journey schools as an endline perception survey
- All art videos added to the portal under pedagogy videos

## 12. Helpdesk

A helpdesk has been set up to file queries from focal persons of our partner schools regarding STEAM journey levels, activity ideation and the portal reporting mechanism. The helpdesk is functional across three avenues of communication.

- Schools can reach out with queries over WhatsApp (0300-0606063)
- They can reach out via email at [info@mathsandscienc.pk](mailto:info@mathsandscienc.pk)
- Zoom helpdesk - Tuesdays and Thursdays, 10:30 AM to 11:30 AM and 3:00 PM to 4:00 PM

## 13. Analytics for existing video content

Statistics for existing STEAM Pakistan content on [YouTube](#) can be viewed below:

Months / Cumulative	Modules	Views	Hours Watched
February - March	5	11,299	291.6
Cumulative	56	74,591	2,013.1

## STEAM Safeer

The STEAM Safeer component of the program aims to inspire students and connect them with skilled professionals who use STEAM concepts on a daily basis. Through sessions, STEAM Safeer exposes students to available in-school and out-of-school resources in the form of mentors who share their experiences, expertise and achievements to inspire and motivate them.

**13 Government Schools Engaged**

**34 Sessions Conducted**

**1,958 Students Engaged**

**38 Professionals**

**13 Organizations**

**50 Districts  
Covered to  
Date**

### STEAM Muqabla sessions

The Programme engaged Babar Sheikh, Summaiya Jillani, Areesh Lalani, Shereen Abdullah, Sukaina Arshad as STEAM Safeers from the fields of film and music, fine arts, behavioural and speech therapy, butterfly conservation and genomics research. They gave engaging and interactive talks in various parts of the venue including the auditorium, large classrooms as well as the butterfly garden.

### Newsletter

Newsletters published for the months December through March can be accessed below:

- [Dec 23 - Feb 24](#)
- Mar 24 newsletter will be shared in the second week of April

Previous monthly STEAM Safeer newsletters can be accessed [here](#).

### Dedicated webpage and portal

A dedicated landing page for STEAM Safeer and a back-end portal has been designed and developed. The landing page has been live at [www.steampakistan/safeer](http://www.steampakistan/safeer) since January 2023. The latest development on the Safeer portal is enabling user logs which allows the admin to review activities that have been taking place on the portal.

### Waasta team pilot

The Waasta program is based on school facilitation through continuous engagement with the school. Currently the STEAM Pakistan team is conducting an internal pilot for this component by visiting schools and engaging them twice a month. Activities include but are not limited to ones conducted by Safeer sessions.

## Policy Deliverables

### Sindh

#### Meeting with Minister and Secretary, SE&LD

The STEAM Policy Unit of SE&LD held a meeting with Secretary SE&LD Dr. Shereen Mustafa and Minister Education Sindh Ms. Rana Hussain on 2nd February. The discussion delved into the department's STEAM interventions across the province. Particularly, the discussion highlighted significant milestones in the district and final rounds of STEAM Muqablo, a province-wide STEAM competition aimed at fostering innovation and creativity. The meeting also featured insights of representatives from the Reform Support Unit (RSU) and Thar Education Alliance shared plans to reschedule the Science Festival in Hyderabad, shifting its dates to post-February 2024. This collaborative effort signifies a strategic approach to enhance the impact of STEAM initiatives by creating greater synergy amongst stakeholders and underscores the commitment to advancing education in Sindh. Highlights from this meeting can be viewed [here](#).

Following this, another meeting was held on the same day with the Secretary, along with Project Manager SDGs Unit Naveed Shaikh, Additional Director, Sindh Education Policy Commission Zahid Jatui, and Aftab from the Finance Department. The purpose of the meeting was to request for budgetary allocation for STEAM in FY 2024-25. This opportunity was also taken to follow up on a previous letter sent to the Secretary with recommendations for scaling up the STEAM program in Sindh – an updated list of active schools to be prioritized for scaling up was also shared based on the participation in the STEAM Muqablo. Thereafter, the Secretary committed to sending a letter to the Finance Department recommending the proposal be included in the next fiscal year budget.

#### STEM Technical Working Committee

A meeting of the STEAM Technical Working Committee, organized by the STEAM Policy Unit Sindh, was held on 6<sup>th</sup> February with participation from the Education Minister Ms. Rana Hussain, Secretary SE&LD Dr. Shereen Mustafa, Chief Advisor SE&LD Dr. Fouzia Khan, along with heads of allied institutions DCAR, PITE, STEDA, STBB, Directorate LNFE, Reform Support Unit, JICA, Thar Education Alliance, Pak Alliance for Maths and Science, IBA Karachi, and representatives of the department's STEAM Policy Unit.

The STEAM Policy Unit presented the progress of the department's STEAM program over the past year, including school orientations, the STEAM School Journey, its online portal, partnerships with universities and corporations, rewards for schools and next steps including the upcoming STEAM Muqablo, for which the allied institutions were invited to judge the district rounds next week. The Minister stated that the program needed to be scaled to all schools of the province as hands-on learning activities are critical to education and should be prioritised as much as or more than high stakes exams. She recommended that STEAM activities be included in assessments to ensure the participation of all schools.

The Secretary SE&LD stressed upon the importance of internalising a mindset of leveraging partnerships with higher education institutions and private corporations to be able to expand and sustain the impact of the STEAM program. Executive Director STEDA, Syed Rasool Bux Shah, committed to support the STEAM program by visiting the high-performing schools and awarding certificates.

Highlights from this meeting can be found [here](#).

### **Sindh Teachers Education and Development Authority, STEDA**

After the SELD STEAM Stocktake, the STEAM Policy submitted the art guides developed in partnership with Zindagi Trust to the Sindh Teacher Education Development Authority (STEDA) for review and approval to be used for an art pilot in Sukkur, Jamshoro and Karachi South districts of Sindh. A meeting to conduct a comprehensive review of the art guides was held 21st March at the STEDA office. The representatives shared their feedback on the guides along with having a discussion with the STEAM Policy Unit regarding the art pilot. The STEAM Policy Unit will be incorporating the feedback and sharing the updated version of the guides with STEDA.

## **Gilgit-Baltistan**

### **Partner schools in Hunza, Ghizer, and Nagar**

In February, STEAM Pakistan successfully registered over 75 new schools from the Ghizer, Hunza, and Nagar districts in collaboration with the School Education Department, Gilgit Baltistan. A step-by-step instructions guide was shared to facilitate the registration process. Letters and instructions shared by directors and deputy directors for the same can be viewed [here](#). Following Ramadan, STEAM Pakistan will conduct in-person orientation sessions for head teachers and one nominated mathematics or science teacher from each of the participating schools in May 2024. The schedule for the orientation will be finalized in collaboration with the Education Department by mid-April.

### **Report on the initiatives and achievements of the BEEGB**

At the request of the Controller of the Board of Elementary Examination Gilgit-Baltistan (BEEGB), STEAM Pakistan has prepared a draft report outlining the initiatives and achievements of BEEGB during 2023-2024. The report will be shared with the Secretary of School Education and other stakeholders. This draft has been shared with the BEEGB team for their review and input.

## **Punjab**

### **Meetings with QAED**

#### 12 March 2024

A meeting was held with the Planning Wing regarding assistance with SED - Punjab school reports validation. Decisions in this regard were as follows:



- Report checking will be done by QAED's Education Officers
- Approximately 60 Education Officers will be trained. They will be trained in batches of 25 per month.
- QAED will be sharing the list of Education Officers and will help make batches of 25
- The initial training will be one-day sessions which will be held online. Following this the Education Officers will be given support through a WhatsApp group and through weekly meetings with the Learning Team.
- QAED needed time to conduct some internal meetings regarding the budgeting of this activity.

QAED has also notified a list of District Heads who will be responsible for overseeing the report checking. The notification can be found [here](#).

### 26 & 27 February 2024

Meetings were held with DG QAED, Tajammal Abbas Rana and DD Planning & Coordination, Dr. Zahida Batool regarding QAED's official calendar with additions proposed by STEAM Pakistan. Finalized items are as follows.

Sr.#	Name	Details	Duration
1	In-person Orientation Training by MTs (Master Trainers)	The MTs after being trained by the STEM Policy Unit/PAMS will conduct orientation trainings in the districts.	Half a day
2	Summer Content Training	MTs will be trained by the STEM Policy Unit/PAMS and then deliver the trainings to teachers at the district level.	3 days for MTs and 3 days for teachers in each district.
3	Winter Content Training	MTs will be trained by the STEM Policy Unit/PAMS and then deliver the trainings to teachers at the district level.	3 days for MTs and 3 days for teachers in each district.
4	Tadreesi Muqabla	Quarterly competitions for teachers. The categories and grading rubrics will be shared by the STEM Policy Unit/PAMS	N/A
5	Lesson Planning Workshop	MTs will be trained by the STEM Policy Unit/PAMS and then deliver the trainings to teachers at the district level.	3 days for MTs and 3 days for teachers in each district.

## Federal

### Matriculation exam analysis

The team has effectively gathered comprehensive data from 26 regional boards with some data being in partial form. Consequently, on 7th March a workshop was arranged in collaboration with the Pakistan Institute of Education and the Sindh Board of Technical Education online. During this workshop, detailed explanations regarding the three tools were provided. As a result of the meeting, it was emphasized that the Sindh boards must promptly submit their complete data. Following the workshop, data was received from all Sindh boards, however, some submissions remained partially complete. To address this issue, ongoing follow-up efforts are being undertaken by the PIE team.

Meanwhile, preliminary data cleaning procedures were initiated for the obtained data. Some boards necessitated further revisions and missing data points were requested from them to ensure data completeness and accuracy. This comprehensive approach aims to streamline the data collection process and enhance the overall quality of the dataset.

### STEM classroom observation tool for head teachers

Following the completion of the pilot phase, the STEAM team has been collaborating closely with FDE to expand classroom observations to all middle and high schools in the Islamabad Capital Territory. A rapid survey was conducted through which 92% of teachers reported an improvement in their teaching after utilizing the classroom observation tool. Given the response from the pilot and the approval of the scale-up, it was deemed essential for FDE to take ownership and integrate classroom observations into their system.

In collaboration with FDE, it was determined that a team of 24 headteachers (4 from each sector) would be designated to oversee and support classroom observations in schools. Their responsibilities include conducting training sessions, updating the tool and content, and monitoring/visiting schools. The team comprised the most active head teachers from the pilot phase as they proved to be more effective trainers. During the initial phase of handover, a two-day training session for this team was scheduled for April 2nd and 3rd, 2024. Subsequently, this team would train other headteachers following the Eid break.

Additional supporting materials were developed, including video examples of teachers during the training. The observation tool and guidebook underwent revisions based on feedback from headteachers, with 83% expressing satisfaction with the tool.

## Partnerships

### Overview

A major element of partnerships is the range of activities that they undertake. These activities are designed to cultivate a close relationship between higher education institutions and other corporate and non-corporate entities and schools. These could take the form of math circles, teacher baithaks, Safer sessions, university tours, field trips, boot camps and so on. Highlights from the last two months can be viewed below.

**2** Government Schools Engaged

**2** Sessions Conducted

**3** Students Engaged

**3** Faculty Members & Students

**1** Organizations

**27** Districts  
Covered to  
Date

### STEAM Muablo Engagement

#### District Round

Along with judges from the Sindh education bureaucracy and its allied institutions, judges from the following institutions also lent their expertise and experience: IRD Global, Khwarizmi Science Society, Zindagi Trust, Durbeen, Alt Academy, Habib University, IBA Karachi, Shaikh Ayaz University Shikarpur, Sindh University, Mehran University of Engineering and Technology, Shaheed Allah Baksh Soomro University of Art, Design and Heritage, LUMHS, Sukkur IBA University, Indus Hospital and Health Network, NED-UET, Pakistan Cables, Reckitt Pakistan, Jeeny, RECV, Bisconni, National Incubation Centre Hyderabad, Women Resource Center, and ConnectTech.

#### Final Round

60 facilitators from the following organizations led activities, talks, workshops and interactive displays: Habib University (Social Development and Policy program, Maths program, Playground Center), IBA Karachi (Mathematics Department, National Talent Hunt Program), NED-UET (Neuro-Computation Lab), IVSAA (IVS-CEP, Department of Communication Design), NUST (FERN), IRD, Zindagi Trust, Pakistan Science Club, Reckitt, Systems, ERA/Butterfly Effect, Kainaat Studios, and CFAW/PHC Global.

This afforded the Programme a great opportunity to engage with new partners as well as more deeply with existing partners. Multiple meetings were held with each partner to develop and

finalise their engagement to ensure that a rich and meaningful learning experience is curated for attending students and that they had all the support they required to conduct their activities.

Additionally, STEAM Pakistan engaged several potential corporate partners to seek support for the event, both in terms of financial sponsorship, in-kind support, and technical partnership from the first week of January to the end of February. This involved preparing and presenting presentations, proposals and sponsorship request letters customised for each organisation. The final sponsors who supported the event other than STEAM Pakistan were GetzPharma, Pakola, Soorty Enterprises, Ismail Industries, Aab-e-Hayat Water, UHU/Faber Castell.

## University Partnerships

### Overview

To date, STEAM Pakistan has signed LoU with a total of 12 universities and successfully on-boarded 15 other universities. 8 universities are actively conducting STEAM activities with their partner schools in various regions of Pakistan. An LoU is expected to be signed with the remaining universities, NUST, COMSATS, Bahria University Karachi, and Habib University Karachi being in the highlight.

### Habib University Karachi

A meeting was held with Habib University to explore a collaboration on their Civic Clubs project where students in a service learning course can contribute to the STEAM Program. Habib University has also requested a meeting with the Programme separately to finalise the MoU – they are excited to sign with some revisions.

### Lahore University of Management Sciences (LUMS)

A meeting was held with LUMS' SBASSE school on 14th March regarding the planning of the university tours for the Programme's top-performing schools in Lahore. These are expected to initiate mid-April post Ramadan. The funding committed by LUMS SSE for the same is to expire in June; their team will check regarding the possibility of carrying it forward so that STEAM Pakistan can bring 10-12 schools for a visit as initially planned.

## Corporate Partnerships

### Reckitt

An MoU was agreed with Reckitt for which final signatures are awaited. Under the MoU, Reckitt has committed to conducting Safer sessions. Additionally, Reckitt's senior global management visited on 25th February and a trip to one of the STEMForward program schools was arranged. During the trip, STEMForward alumni presented their experience to showcase the program, STEAM Pakistan shared how the partnership has been for the Programme and how Reckitt can support it further, and the Reckitt Pakistan team shared their plans for expanding STEMForward through greater school outreach across Sindh, supporting STEAM Pakistan's regional

competitions/festivals in the future, developing science demo videos for schools, and sponsoring/supporting STEAM Safaris. Highlights from the visit can be viewed [here](#).

## International Organisation Partnerships

### Girls Make Games

Meetings were held with Girls Make Games on 7th and 15th February along with follow up phone meetings with Isra Shabir from Girls Make Games regarding replicating the Video Game Design Workshop held at IBA Karachi previous summer in Islamabad. After deliberation, based on Ramadan, STEAM Competition, and exam dates, the tentative plan is for the workshop to take place in mid-April. The workshop will involve 4 schools, 20 students each and also engage 5-7 facilitators from a local university. The Islamabad team is seeking a venue for the same as well as support from FDE to align dates.

## NPO Partnerships

### ERA Professionals

STEAM Pakistan signed a Memorandum of Agreement (MoA) with ERA Professionals (Pvt) Limited on 20th February 2024 to support their efforts in the design, development and execution of educational and environmental programs such as the Butterfly Effect. It can be accessed [here](#). This will be made possible through outreach to the federal and provincial education departments for the establishment of butterfly conservatories in government schools. Under this agreement, the first butterfly conservatory project was launched on 29th February at Church Mission School, Karachi where an abandoned back alley previously filled with garbage was selected to be transformed into a butterfly garden.

ERA has established a Butterfly Effect Club at the school in partnership with their botany and science teachers where students learn about the metamorphosis of a butterfly, its essential role as a pollinator and bio-indicator; learn and practice how to identify, rescue and nurture larvae/pupae/caterpillars to help increase the butterfly population. The event described the goal of the project, how it connects to activity-based STEAM learning, its intended impact on students' personalities, wellbeing, civic sense as well as on their science learning.

Associated media coverage can be viewed below.

- [BE LinkedIn](#)
- [Twitter Geo News](#)
- [Geo News Facebook](#)
- [The News](#)

## Communications

This section highlights social media developments, the progress made in creating strategic plans, expanding communications guidelines for programme impact and visibility.

### Strategies and branding

#### Branding and visibility

Co-branded collateral was developed for the programme's activities with partners that include the STEAM Muqablo 2024 in Sindh, partnered by SELD, which was held in the first week of March. The collateral was distributed to various schools, judges, and students in the form of certificates, invites, cutouts, cheques, programmes, standees, etc. The collateral can be found [here](#).

#### Earned media and influencer plans

The earned media plan is being developed with the support of an external communications expert; while the plan is being documented, STEAM Pakistan's outreach has already used its digital assets to engage and generate conversations around the programme outcomes and can be seen from the earned media numbers, i.e., the number of posts and content shared from non-STEAM digital assets.

### Coverage

The STEAM Muqablo school, district, and final rounds invited coverage from various organizations and platforms. These can be accessed below.

#### School Round

- [SELD Post on School Round](#)

#### District Round

- [SELD Post on District Rounds](#)
- [Geo Coverage of Karachi South District Round](#)
- [Pak 27 News Coverage of Korangi District Round](#)
- [Aanch News Coverage of Korangi District Round](#)
- [Karachi Central District Round](#)

#### Final Round

- [Dawn News](#)
- [HUM News](#)
- [GEO News](#)
- [Aanch News](#)
- [Youtuber teacher](#)

## Social media

### Report

Starting March, the communications team has taken an initiative to curate a comprehensive report on social media engagements and analytics. The report covering February to March can be viewed [here](#).

### Statistics

February and March have seen strong growth on LinkedIn, Instagram, and Facebook where followers have increased by 12%, 12%, and 9% respectively, and engagement/impressions have increased by 184%, 82%, and 128% respectively.

Below are the social media analytics for the months of February and March.

Platform	Posts	Stories	Accounts Reached / Profile Visits / Reactions	Engagements / Impressions	Followers	New Followers	Sample Post
<a href="#">Facebook</a>	47	13	18.2K	19.4K	4,924	515	<a href="#">Link</a>
<a href="#">X (Twitter)</a>	25	-	N/A	7.1K	920	24	<a href="#">Link</a>
<a href="#">Instagram</a>	43	30	4.8k	24.1K	1,793	148	<a href="#">Link</a>
<a href="#">LinkedIn</a>	40	-	1,421 (page views); 385 (unique visitors)	25K	2,498	268	<a href="#">Link</a>
<a href="#">Threads</a>	-	-	-	-	234	29	-

### Notable follows

Influential personalities/public figureheads who have followed STEAM Pakistan in the previous two months are highlighted below.

Name	Role	Organization / Entity	Profile
Nida Husain	Head of Health Services	IRD Global	<a href="#">Link</a>
Kainaat Kids	Official Page	Kainaat Kids	<a href="#">Link</a>
Headteachers Sindh	Official Page	Headteachers Sindh	<a href="#">Link</a>

### Driving conversations

This section covers conversations about STEAM Pakistan led by influential personalities. Below are social media posts made by such individuals/corporations in the last two months.

Name	Role	Organization	Link to Post
Malala Fund	Official Page	Malala Fund	<a href="#">Link</a>
IRD Global	Official Page	IRD Global	<a href="#">Link</a>
Getz Pharma	Official Page	Getz Pharma	<a href="#">Link</a>
Dr Majida Kazmi	Associate Professor	NED University of Engineering and Technology	<a href="#">Link</a>
National Incubation Center, Hyderabad	Official Page	National Incubation Center, Hyderabad	<a href="#">Link</a>

### Additional updates

Starting March, STEAM Pakistan has made a strategic decision to share more video content across all platforms to drive up the engagement. Moreover, STEAM Pakistan events and activities were covered on all platforms, including:

- Final Round of the STEAM Muqablo 2024
- Press coverage of the STEAM Muqablo on mainstream news channels
- International Women’s Day celebrations
- Pi Day postcard-making competition
- Celebration of 3000+ STEAM Clubs in SED Punjab schools
- STEAM Safer sessions
- STEAM activities conducted within partner schools across all provinces



## Program Management

### Monitoring and evaluation

As part of the regular Monitoring and Evaluation review carried out by the program, a technical glitch was identified at the STEAM Pakistan's reporting portal. The portal was duplicating specific school's information resulting in an overestimation of submitted activities from a total of 71 schools impacting 3,340 components and 103,431 engagements. The glitch, identified in March, was shared with the portal maintenance team for validation.

The development team identified the glitch and removed the duplicate entries, alongside embedding a manual Quality Assurance process (to be conducted fortnightly) to avoid any technical glitch hereon.

### Stocktake meetings

No stocktake meetings were held in the months of February and March.

### Bi-monthly reporting regime

Institute-specific bi-monthly reporting has been initiated starting August 2023. Each month, three institutes will receive their reports, while three others will receive them the following month with this cycle repeating. The reports shared and upcoming schedule can be viewed below.

#### Reports covering January to February 2024

- [FDE](#)
- [FGEI](#)
- [SED - Punjab](#)

#### Reports covering February to March 2024

These reports will be sent to the relevant departments in the second week of April.

- E&SED - GB
- SE&LD
- SEF

## Challenges and Mitigation Strategies

This section of the report will include critical challenges addressed during the two months, and the respective mitigation strategy for the challenge. Dedicated efforts from all stakeholders will be required for timely delivery of program components within the revised work plan.

Challenge(s)	Mitigation Strategy
<p>Change in bureaucracy at School Education Department, Punjab</p> <p>STEAM Pakistan was closely allied with the Special Secretary at SED, who also got posted out as part of changes that took place with the new government in place</p>	<p>PAMS is going to build relationships at bureaucratic as well as political level in Punjab.</p> <p>A programme presentation will be given to the new Secretary and Special Secretary, post the formation of the cabinet (expected in early April)</p>
<p>Unexpected technical glitch on the STEAM Portal</p>	<p>A double tier quality assurance plan has been developed where the development team will be running a manual QA fortnightly, alongside PAMS' M&amp;E Associate also tracking portal reporting access.</p> <p>PAMS foresees additional QA support embedded in the development teams' structure from the next grant cycle</p>