



Tutor Marked Assignment (TMA) Online Submission and Evaluation System



राष्ट्रीय मुक्त विद्यालयी शिक्षा संस्थान
National Institute of Open Schooling

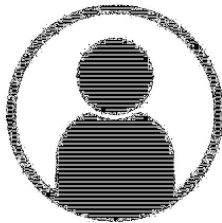
(An autonomous institution under Ministry of Education, Govt. of India)
(The Largest Open Schooling System in the World) ISO 9001:2008 CERTIFIED

Naveen Bhatia, System Analyst

Key Players in TMA Processing System



Submission of **Hand written** TMA by Learners

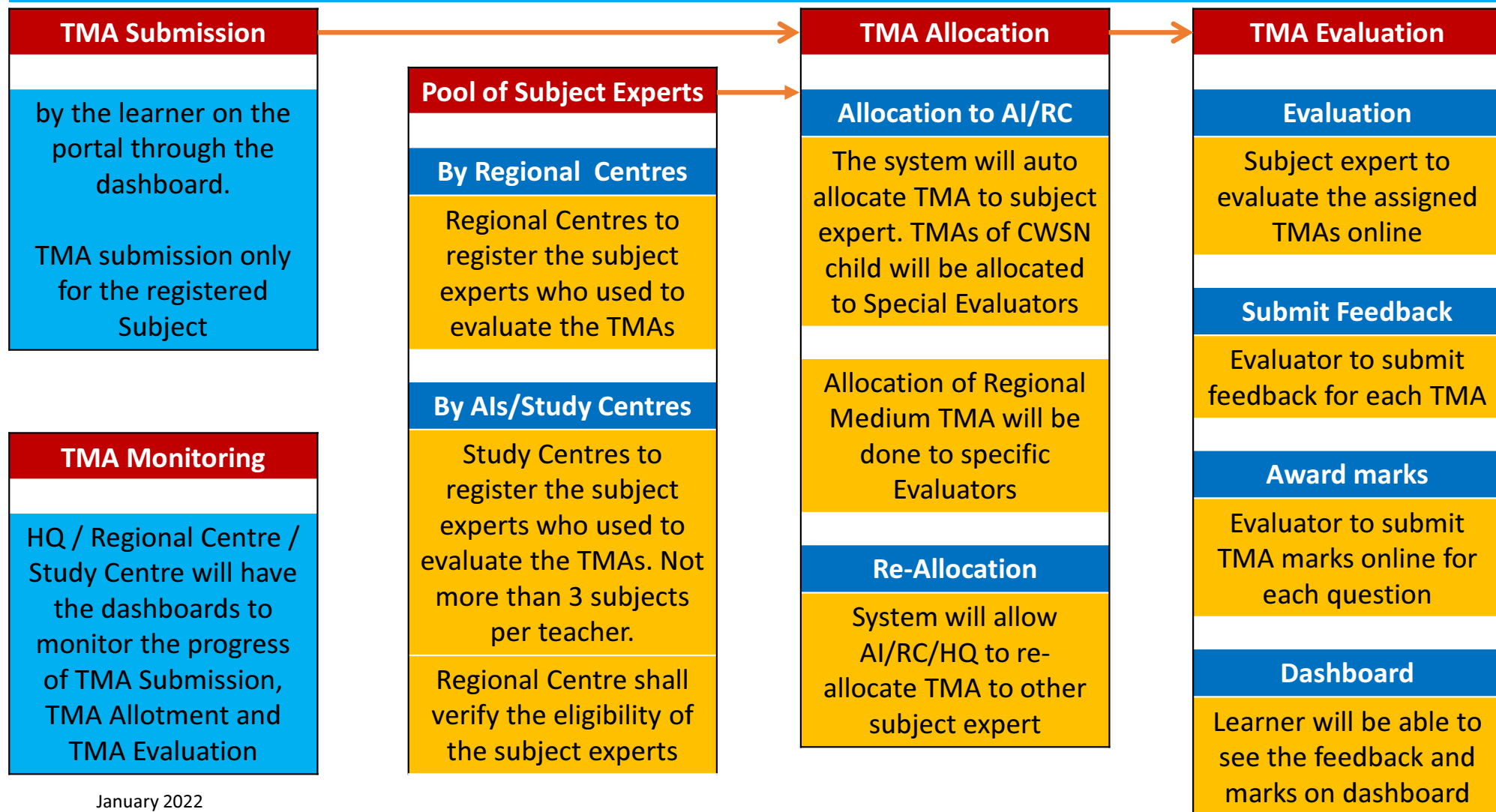


Evaluation of TMA by
Study Centres

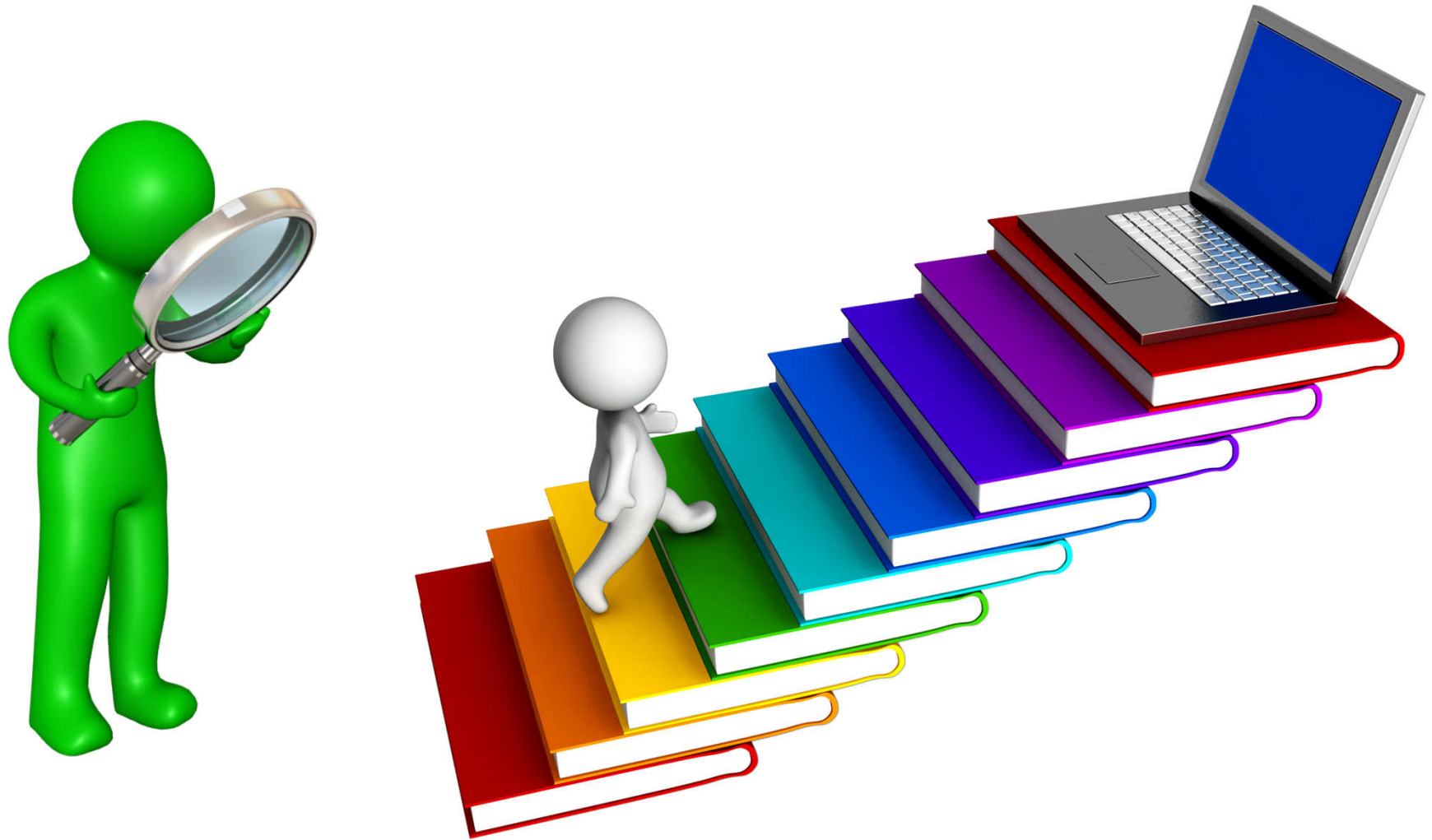


Monitoring by Regional
Centres and NIOS HQ

Tutor Marked Assignment (TMA) Online Submission & Evaluation System – HL Diagram



Registration of Subject Experts for TMA Evaluation



Registration of Subject Experts – Through Study Centre and Regional Centre

January 2022

Variables Required
Name
Date of Birth
Mobile Number
Email Address
Gender
Aadhaar Number
Is Retired
Date of Retirement
Yrs. of Teaching Experience
Address/District/State
Pincode
Qualification
University/Degree
Employment
Organization Name
Designation
Start Date/End Date
Subjects for TMA Evaluation

Documents Required
Photo & Aadhaar
Qualification Proof
Employment Proof

Registration by AIs
Study Centres to register the subject experts who used to evaluate the TMAs.
Not more than 3 subjects per teacher.



Monitoring by RCs
RCs shall verify the eligibility of subject experts registered by AIs

Registration of Subject Experts – Basic Details

January 2022

Basic Details

Type

TMA Evaluator x

Email

Email

Password

Password

Date of Birth

yyyy-mm-dd

Level

Select Level v

Experience Year

Experience Years

Is Retired ?

Name

Naveen Bhatia

Mobile

Mobile

Verify Password

Verify Password

Gender

Select Gender v

Designation

Designation

Aadhaar No

Aadhaar No

Registration of Subject Experts – Address

January 2022

Address

Permanent Address	Correspondance Address <input type="checkbox"/> Same as Permanent Address
House/Door/Flat No ? <input type="text" value="House/Door/Flat No"/>	House/Door/Flat No ? <input type="text" value="House/Door/Flat No"/>
Street/Locality/Area Name ? <input type="text" value="Street"/>	Street/Locality/Area Name ? <input type="text" value="Street"/>
Village/Ward No/Landmark ? <input type="text" value="Village/Ward No/Landmark"/>	Village/Ward No/Landmark ? <input type="text" value="Village/Ward No/Landmark"/>
Country <input type="text" value="Select Country"/>	Country <input type="text" value="Select Country"/>
State/UT <input type="text" value="Select State"/>	State/UT <input type="text" value="Select State/UT"/>
District <input type="text" value="Select District"/>	District <input type="text" value="Select District"/>
Pincode ? <input type="text" value="Pincode"/>	Pincode ? <input type="text" value="Pincode"/>

Registration of Subject Experts – Subjects, Qualifications, Employment details

January 2022

Subject Details

Subject

Medium

Select Subject

Select Medium

ADD

Qualification Details

University

Degree

Subject

Division

Select University

Select Course

Subjects

Select Division

ADD

Employment Details

Office Name

Designation

Start Date

End Date

Office Name

Designation

Start Date

End Date

ADD

Registration of Subject Experts – Documents

January 2022

Upload Documents

Upload Profile Photo

UPLOAD

Upload Aadhaar Photo

UPLOAD

Highest Qualification Document

UPLOAD

Employment Certificate /
Experience Certificate

UPLOAD

Regional Centre wise online TMA submission status

SR NO.	REGIONAL CENTRE	TOTAL STUDENTS	TOTAL SUBJECTS
1	101-HYDERABAD	183	854
2	102-PUNE	1407	6869
3	103-KOLKATA	4081	20832
4	104-GUWAHATI	2140	10403
5	105-CHANDIGARH	2368	11202
6	106-KOCHI	2587	12240
7	107-DELHI	14014	70312
8	108-NIOS HQ	17	75
9	109-JAIPUR	761	3595
10	110-PATNA	721	3434
11	111-ALLAHABAD/PRAYAGRAJ	1314	5840
12	113-BHOPAL	775	3707
13	114-DEHRADUN	2278	10690
14	115-BHUBANESWAR	1100	5744
15	116-VISAKHAPATNAM	115	573
16	117-BENGALURU	1490	6481
17	118-GANDHINAGAR	725	3393
18	119-RAIPUR	123	562
19	120-RANCHI	806	4026
20	121-CHENNAI	1456	6674
21	122-DHARAMSALA	60	287
22	123-GANGTOK	475	2444
23	125-JAMMU	302	1429
TOTAL		39298	191666

January 2022

Monitoring of TMA Allotment and Evaluation

January 2022

Subject wise number of TMAs uploaded by the students - Secondary

Sr. No.	Subject	Total TMA
1	201-Hindi	719
2	202-English	755
3	203-Bengali	2
4	206-Urdu	25
5	209-Sanskrit	15
6	210-Punjabi	3
7	211-Mathematics	262
8	212-Science and Technology	307
9	213-Social Science	553
10	214-Economics	75
11	215-Business Studies	83
12	216-Home Science	467
13	222-Psychology	31
14	223-Indian Culture and Heritage	58
15	224-Accountancy	13
16	225-Painting	443
17	229-Data Entry Operations (E)	397
18	235-Arabic	3
19	242-Hindustani Music	7
20	243-Carnatic Sangeet	1
21	246-Sanskrit Vyakaran (Sanskrit or Hindi Medium Only)	3
22	247-Bharatiya Darshan (Sanskrit or Hindi Medium Only)	2
23	248-Sanskrit Sahitya (Sanskrit or Hindi Medium Only)	9
	Total	4233

Subject wise number of TMAs uploaded by the students - Sr. Secondary

Sr. No.	Subject	Total TMA
1	301-Hindi	1223
2	302-English	1507
3	303-Bengali	1
4	306-Urdu	26
5	309-Sanskrit	13
6	310-Punjabi	3
7	311-Mathematics	259
8	312-Physics	360
9	313-Chemistry	361
10	314-Biology	227
11	315-History	623
12	316-Geography	282
13	317-Political Science	751
14	318-Economics	239
15	319-Commerce/Business Studies	197
16	320-Accountancy	131
17	321-Home Science	525
18	328-Psychology	61
19	330-Computer Science	159
20	331-Sociology	209
21	332-Painting	441
22	333-Environmental Science	93
23	335-Mass Communication	62
24	336-Data Entry Operations	504
25	337-Tourism	21
26	338-Introduction to Law	44
27	341-Arabic	9
28	348-Sanskrit Sahitya (Sanskrit or Hindi Medium Only)	4
29	373-Physical Education and Yog	267
30	374-Military Studies	2
31	375-Military History	6
32	376-Early Childhood Care and Education	9
	Total	8619

HO
Holy International Sr. Sec.
School N/A

- Dashboard
- Student Manager
- Result Summary
- Payment History
- TMA Receiving Manager
- TMA Manager
- Tma Report Subject Wise**
- Study Material Dispatch
- Study Center List
- Practical Attendance

Subject Wise Tma Data Status

Subject Name

SR NO.	SUBJECT CODE	SUBJECT NAME	TOTAL STUDENTS
1	201	Hindi	7
2	202	English	6
3	209	Sanskrit	1
4	211	Mathematics	3
5	212	Science and Technology	2
6	213	Social Science	5
7	214	Economics	3
8	215	Business Studies	3
9	216	Home Science	3
10	224	Accountancy	1
11	225	Painting	

TMA Real-time visible status



**TMA Submission
Pending**



**TMA Uploaded
Online**



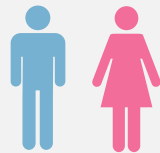
**TMA Assigned to
evaluator**



TMA unallocated



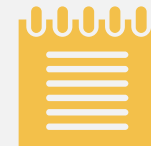
TMA Re-allocated



**TMA Evaluated
Marks Pending**



**TMA Evaluated
Marks Awarded**



Feedback submitted

Question wise marks awarding, No re-upload allowed, re-upload through e-services, Comment by Evaluator (if TMA not visible properly)

PCP MIS

PCP

MANAGEMENT

INFORMATION SYSTEM



Highlights of the system

PCP Management Information System



**Secure and
simple Mode of
PCP Centre
Allocation and
PCP Schedule
Preparation**



**Bespoke
customization
(Role based
access to users –
Study Centres,
NIOS RC & HQ
Officials)**



**Transparency
oriented
activity logs and
Reports**



**Integration with
Student Dashboard,
PCP Hall Ticket,
Formative Assessment
and PCP Payment**

Highlights of the system

PCP Management Information System



**Effective PCP
Monitoring
through PCP
Monitoring
Mobile App**



**Online
Attendance
while conduct of
PCP**



**Upload photos
of Conduct of
PCP, No Paper
submission for
PCP Payment**



**Wipes out all
logistics issues,
saves cost to NIOS,
Reduces
monitoring efforts**

PCP Portfolio



PCP Centre
Allocation



Upload PCP
Schedule



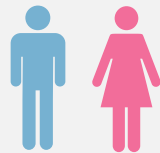
PCP Hall Ticket



Conduct of PCP



PCP Monitoring



PCP Reports



PCP Payment



PCP Record
Management

Key Points in PCP Management

Point A

Non-functional or non-viable study centres for PCP will be mapped with nearby functional and viable study centre/Nodal centre by concerned NIOS Regional Centre for the purpose of PCP. While doing PCP Centre Allocation, RC shall take due care as per geographic situation

Point B

There are four steps in the process of uploading the PCP Schedule: Batch Creation, Add Time Table, Add Students to the Batch, View, Verify and Publish the Batch

Point C

List of students registered in the session assigned to the study centre and the list of students of other study centre(s) mapped to the study centre will be available in the Study Centre Dashboard for allotment of the PCP batch

Point D

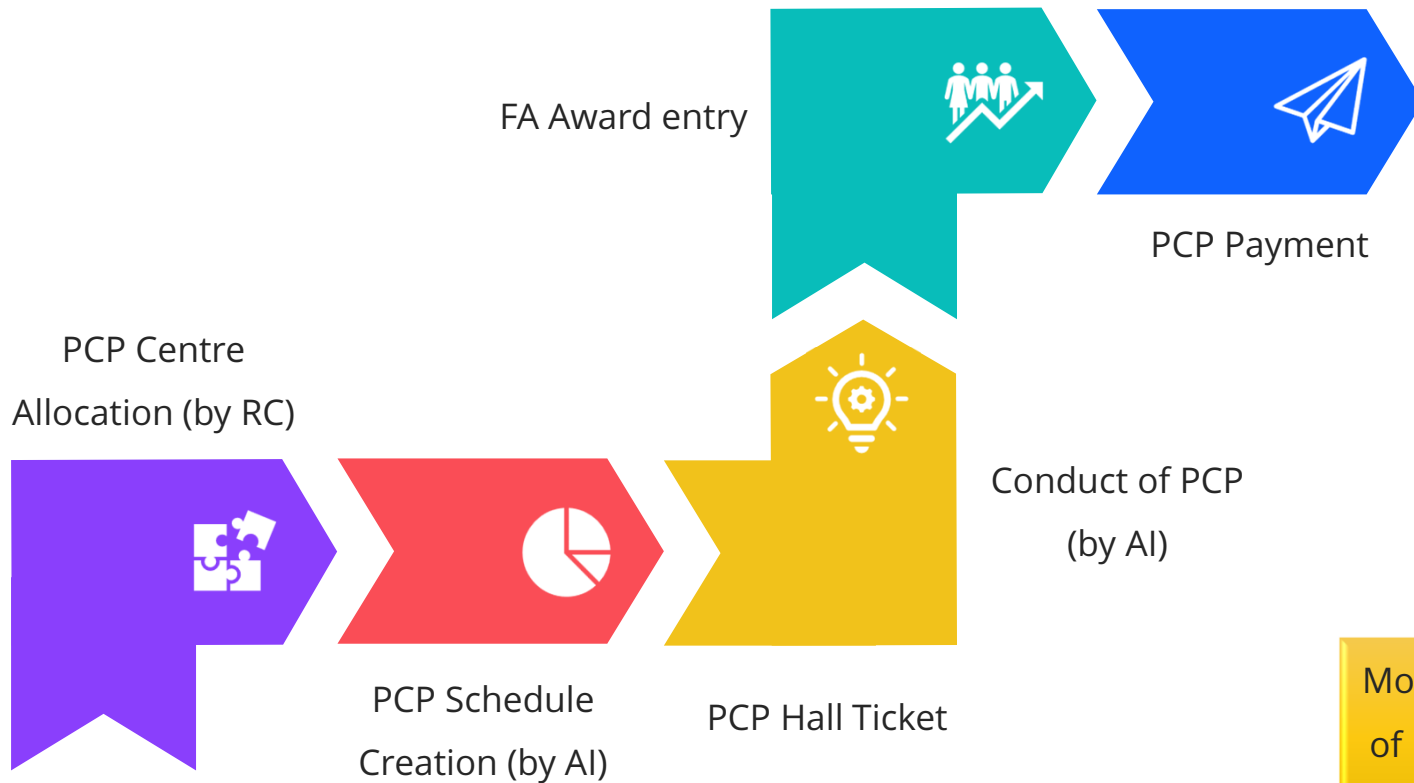
PCP payment to the study centre will be made only on the conduct of PCP by the study centre for NIOS learners and on uploading the PCP schedule online as per the norms

Point E

IP address, system environment of the device / laptop / computer / mobile IMEI will be monitored for security reasons & for further analysis to improve the system

Process of the system

PCP Management Information System



Components & Key Players

PCP Management Information System

**NIOS HQ, RC
&
Study Centres**



Students of NIOS
(PCP Hall Ticket /
SMS / Calls)



Study Centre
(PCP Schedule,
inform students,
conduct PCP)



Regional Centre
(PCP Allocation,
Monitoring through
AF)



NIOS HQ
(Monitoring through
Portal and
Observers)

PCP Monitoring

Android Mobile App

Version 1.0



Minimum functional requirements for PCP monitoring



01

Study Centre must create PCP batches for each session and upload the PCP schedule on the portal from their dashboard

02

Database of Academic Facilitators shall be created on the web portal before implementation of the PCP monitoring system

03

All Study Centres must upload the Geo coordinates of the study centre using the Android Mobile App provided by NIOS

04

Geo fencing : PCP monitoring mobile app can be used only within the range of area as per the Geo rules implemented by NIOS

Features of Mobile App



Two layered Authentication

The mobile app is powered by two layers of authentication.

- a) User credentials
- b) Scan QR code

Security & Privacy



Geo-fencing

The mobile app works within the specified range of the Geo-coordinates of the Study Centre

Accessibility



Auto Sync with Web Portal & Device Responsive

The data is two way synched between the portal and the mobile app

Operability & Responsiveness

https://www.figma.com/proto/PF52bgs0fUEFX7T1hfEtRM/NIOS_AVI_Mobile_App_V1?page-id=0%3A1&node-id=12%3A2&viewport=288%2C48%2C0.65&scaling=scale-down&starting-point-node-id=2%3A2



Mobile app can be used by:

a) Study Centre for uploading the Geo coordinates and uploading the photos

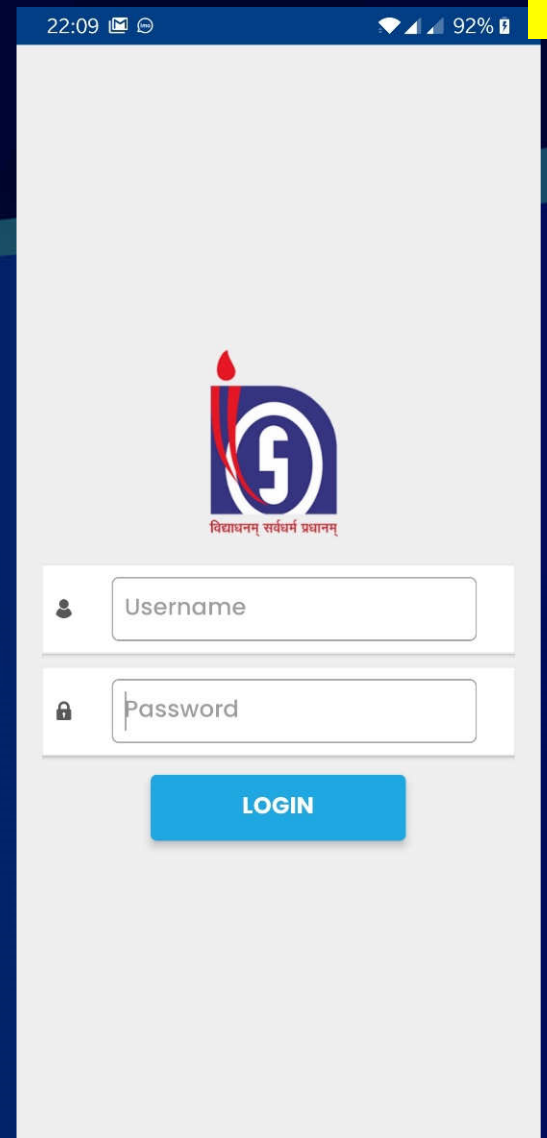
b) Academic facilitator/officials nominated by NIOS for PCP monitoring while visiting study centre




Process:

AI/Academic facilitator will visit the study centre and login into the mobile app by providing the credentials (username and password) assigned by NIOS

This is first level of authentication



22:09 92%


विद्याधनम् सर्वधर्मं प्रथमानम्

LOGIN

Process:

After the successful login with the credentials, the AI/Academic facilitator will have to scan the QR code available in the login of the study centre

The scanning of QR code will work only in the Geo-fencing area



Welcome,

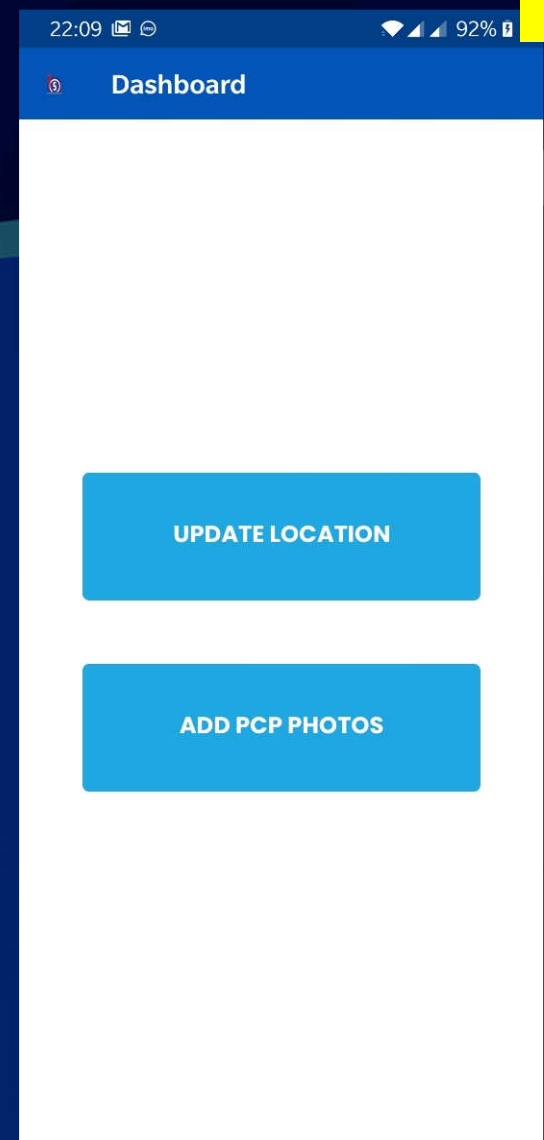
Please scan QR code to login



SCAN QR

Process:

Mobile app will ask for the Geo coordinates (if the Geo-coordinates are not available in database for the visited study centre)

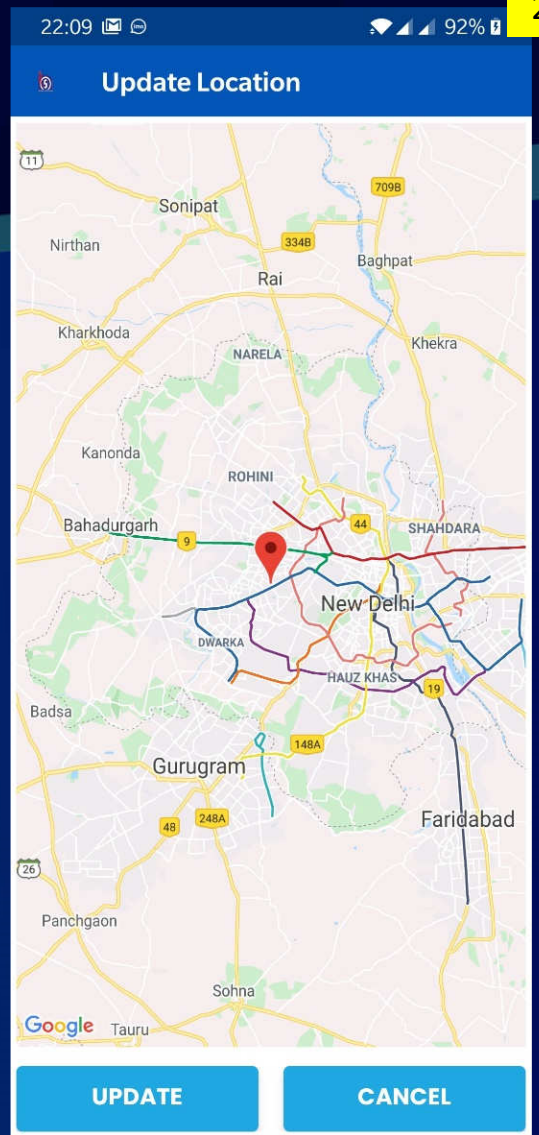




Process:

Mobile app will work within the range of Geo coordinates only.

This concept is called Geo fencing

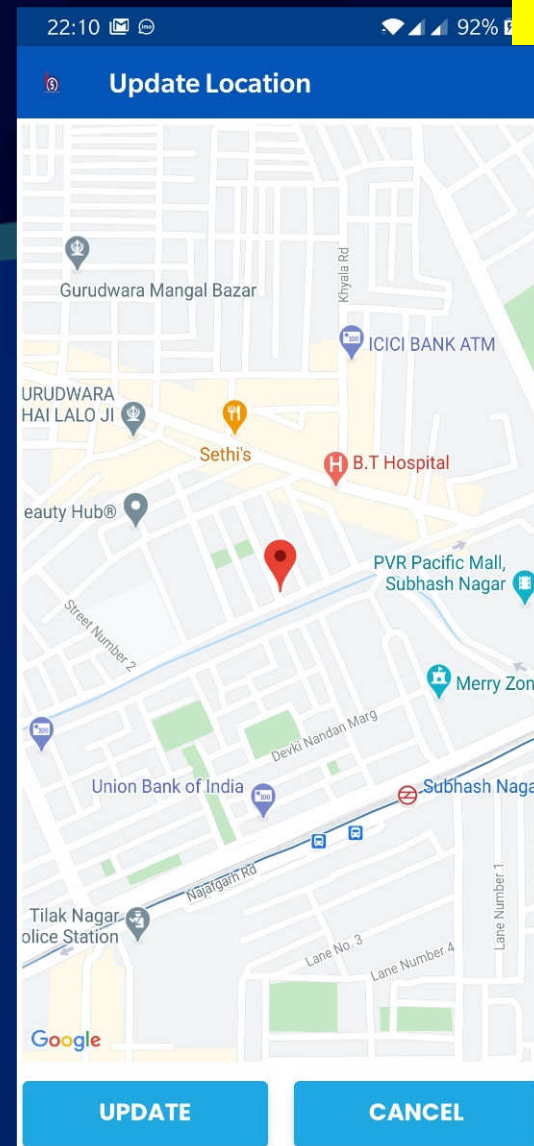




Process:

Mobile app will facilitate the user to move the pointer to a particular location and can update the current location as Geo coordinates.

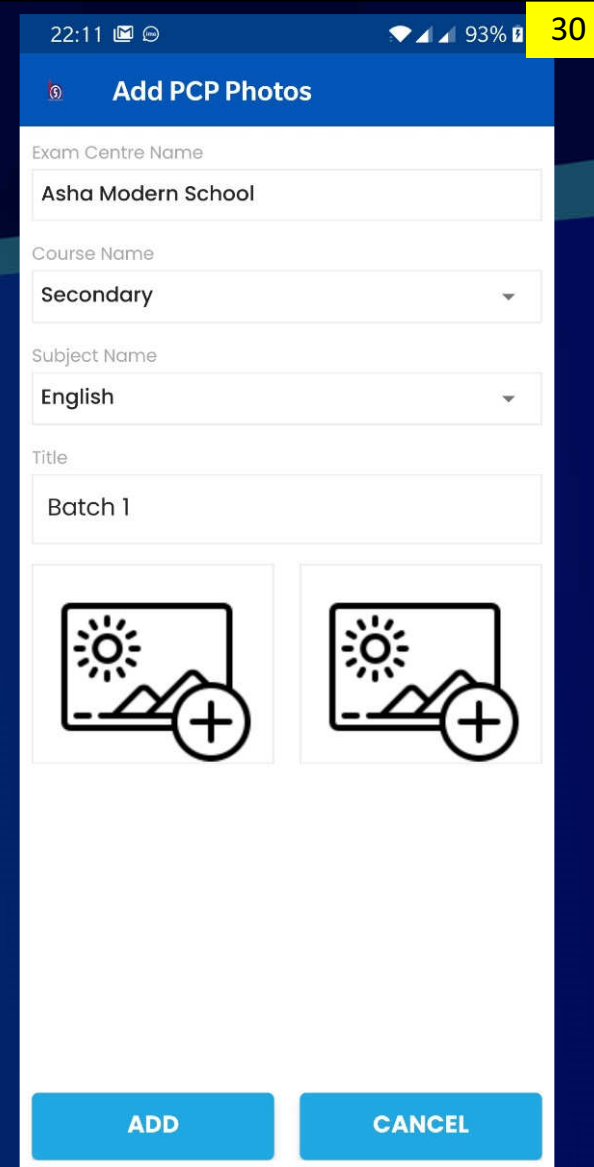
These Geo-coordinates will be the base for calculating the Geo fencing area




Process:

AI/Academic facilitator has to select the course (Sec. or Sr. Sec.), then select the subject and select batch from the list of batches available in through mobile app.

Same app can be extended for monitoring Vocational PCP



The screenshot shows a mobile application interface titled "Add PCP Photos". The interface is displayed on a smartphone screen with a status bar at the top showing the time 22:11, signal strength, Wi-Fi, and 93% battery. The app's title bar is blue with a white icon and the text "Add PCP Photos". Below the title bar, there are several input fields: "Exam Centre Name" with the value "Asha Modern School", "Course Name" with a dropdown menu showing "Secondary", "Subject Name" with a dropdown menu showing "English", and "Title" with the value "Batch 1". Below these fields, there are two identical icons representing a photo of a sun and a mountain range, each with a plus sign in a circle, indicating that photos can be added. At the bottom of the screen, there are two blue buttons: "ADD" and "CANCEL".



The list of batches will be displayed based on the PCP schedule uploaded by the study centre for the current session

The schedule will be listed for current date and time only

If schedule is not uploaded for current day & time, an error will be displayed

22:13 93%

31

Add PCP Photos

Exam Centre Name
Asha Modern School

Course Name
Secondary

Subject Name
English

Title

Alert
Batch not found for the selected subject. For add PCP Photos, Please add batch for the selected subject or change subject.

OK

ADD CANCEL

Upload photos from Study Centre

- Click and upload at least two photographs of the on-going PCP
- Uploaded photographs will be available in the panel of Study centre, Regional Centre and HQ for monitoring
- Date, time & Geo coordinates will be saved from the photographs clicked using the mobile app



PCP Monitoring – Web Portal

PCP Monitor

Q FILTER SEARCH

114-DEHRADUN Select Study Centre Select Type Select Course Select Trade

Select Subject Title From Date To Date Batch Name

Search Reset

SHOWING 1 – 10 OF 10 ITEMS.

#	Regional Centre	Type	Study Centre	Date Time	Course	Trade	Batch Name	Subject	Title	Geo Status	Action
1	DEHRADUN	Academic	210142-Hazarat Meeran Bheek Iqra I.college	01-01-1970 05:30:00					654 bgfhgfhgfh hgfh fghgfhgfhgfh	No	
2	DEHRADUN	Academic	210142-Hazarat Meeran Bheek Iqra I.college	01-01-1970 05:30:00					tert tret entre tret ret ert er tre trette t ert re tre tert er	No	
3	DEHRADUN	Academic	210142-Hazarat Meeran Bheek Iqra I.college	21-04-2020 13:20:26					reter ter tertreteryt ery tey try	No	
4	DEHRADUN	Academic	210152-Asha Modern School	09-09-2020 16:58:24	Senior Secondary			312-Physics	test	No	
5	DEHRADUN	Academic	210152-Asha Modern School	10-09-2020 18:09:02	Senior Secondary			312-Physics	This is a test title	Yes	
6	DEHRADUN	Academic	210152-Asha Modern School	11-09-2020 11:49:50	Senior Secondary			312-Physics	This is a test title	Yes	
7	DEHRADUN	Academic	210152-Asha Modern School	11-09-2020 11:59:03	Senior Secondary	20110131201		312-Physics	This is a test title	Yes	
8	DEHRADUN	Academic	210152-Asha Modern School	11-09-2020 11:59:32	Senior Secondary	20110131201		312-Physics	This is a test title	Yes	
9	DEHRADUN	Academic	210152-Asha Modern School	11-09-2020 12:00:02	Senior Secondary	20110131201		312-Physics	This is a test title	Yes	
10	DEHRADUN	Academic	210152-Asha Modern School	11-09-2020 12:02:50	Senior Secondary	20110131201		312-Physics	This is a test title	Yes	

PCP Monitoring – Web Portal

- PCP Photographs can be searched based on available filters like study centre, date of PCP, subject etc.
- Study centre, RC and HQ will be able to see photographs of PCP uploaded by Academic Facilitator



Thank You!

Improvement

Has no boundaries

