Shovan Panigrahi – Proposals

Proposal 1: *'Career Conclave'* **for Placement Preparation**

This proposal is aimed at helping all students who will be sitting for placements so as to provide them with comprehensive and exhaustive means of preparation beginning from the semester before they sit for placements to the point of placements.

Proposal 2: Undergraduate Research Platform

This proposal is aimed at increasing the culture of research among the undergraduate students as provide students to work on their own idea and award those students who show significant progress in the short term research work undertaken by them. A portal will also be made in this regard which details will be discussed later.

Proposal 3: Training of Mess Workers and Setting of Balanced Diet by a Dietician

Poor quality of mess food, and an unhealthy mess diet is a problem faced by a large chunk of the student population. This proposal is aimed at teaching the mess workers to cook food in a better manner by professional chefs. Broad guidelines for the mess menu will be set up by a dietician so that students can choose a balanced and nutritious diet for themselves. I spoke to **Prof. Surjya Kanta Pal, Chairman, Hall Management Centre**, and he was enthusiastic of the idea of having training for mess workers. I have also contacted a chef who is ready to train mess workers.

Proposal 4: Digital KGP

A major aspect of digitization is maintaining digital patient profiles for all patients and I propose to do the same for all students in BC Roy Technology Hospital for instant access to medical history of the student. This data can also be used to detect the outbreak of contagious diseases and issue timely alerts. Also, the data can be analysed to determine which doctors are the most in demand and which slots are the busiest to more effectively allocate resources. In today's day and age, every organization is moving to a paperless system of administration. Not only is a more environment friendly move, it also increases the convenience both for administration and users. In IIT Kharagpur, the various forms that need to be submitted will be ported to the digital medium, and through the ERP they will be forwarded to the various concerned authorities who will digitally sign it. This will increase the convenience for students and reduce the paper trail.

Currently, for submission of forms for issues like guest house booking, swimming pool slots, gym slots, bona fide certificate, elective change, no dues certificate, application for grade card and various other facilities available to students, signatures of a various authority figures are required.

This is often a long winding and inconvenient process, which takes up the students' time unnecessarily. As most authority figures are available only during office hours of 9 am to 5 pm, often students are unable to quickly get the bureaucratic work done as they have classes during that time. All these processes can be digitalized. I have spoken to Chhanda Chakraborti, Chairman of BC Roy Technology

Hospital and Dr. Seema Roy, Senior Medical Officer (Administration), BC Roy Technology Hospital, and they said it was necessary to implement such a move. I also spoke to Mr. Anupam Kar, product manager at ERP who said this is a good idea and can be roled out in phases.

Proposal 5: Regular Workshops for the people on campus by different societies over the entire year

This proposal is aimed at providing all students with opportunities throughout the year to pursue their area of interest and make use of the various opportunities that IIT Kharagpur has to offer. The various societies on campus will conduct workshops which will be open to all through the year based on a pre-decided timeline. In this manner students will have a chance to pursue their field of interest at different times in the year even if they miss out on society selections at the beginning of the year.

Proposal 1: 'Career Conclave' for Placement Preparation

Placements are one of the most important part of any student's stay at IIT Kharagpur.

The spring semester before the final year for students should be used to guide students in the methods of preparation as it will provide a much needed base for students going into the next semester. Moreover, students have to attend PPTs, apply for companies and give placement tests in the autumn semester. Thus, they will be able to prepare in a better manner if they already have a strong base and know what they will be facing. This will also prevent last minute hassle and tension regarding preparation as well as anticipation and logistics issues as students will now be more assured about the whole process thus ensuring efficiency and a more confident state of mind.

Prof. Debasis Deb, Chairman, Career Development Centre, also said that students will benefit in placements immensely if a dedicated method for preparation is developed.

Proposal

A Career Conclave will be organized under the aegis of the Career Development Centre.

I plan to organize preparatory seminars under the aegis of Career Development Centre where the students sitting for placements will be told of the intricacies of preparing for interviews of the various sectors including consultancy, finance, core, startups, analytics, research etc. Talks shall be delivered by alumni/professionals/students concerned with the respective sectors.

Timeline

This program will consist of three steps

Step1: Career path identification

This step consists of a drive in which seven different areas will be covered. Each day will consist of workshops/webinars conducted by reputed alumni/professionals/students in the respective sectors. This program is open for pre-final year students. The sectors are as follows:

> Finance
> Consulting
> Analytics and Coding
> Startup-related
> Core & Research
> Social and Teaching

In this conclave Alumni/professionals/students shall deliver the talk through interactive sessions/webinars. The sectors Finance , consulting, analytics, coding and teaching will have alumni/professionals/students coming down to Kharagpur to have face to face interaction sessions since, these domains are not part of regular curriculum.

Core and research Sector will consist of webinars organized individually with respect to the departments with **two different tracks: UG, PG & RS** Each webinars will have half an hour lecture or introductory session followed by a one hour Q & A sessions. The questions for the same will be collected prior to the webinar, filtered by the CDC team and sent to the speaking alum.

Step 2: Profile Matching and Buddy allocation

Senior Year Buddy (SYB): SYB is a final year student who is placed and still in campus.

This facilitates proper interaction between the buddy and the student. The placement process of students culminates with him filling a feedback form. His/her interest in buddy program would be known through this form. Feedback/interest from the students who attended the drive will be matched with the feedback received after the placement process. After profile matching, the buddy is allocated. Each student is asked to select two sectors on priority and the allocation will be done by the Career Development Centre. If the number of students is more than the capacity with respect to number of buddies then a rotational program is employed in which the students are divided into batches and interaction happens in different weeks/months. Each buddy will mentor a **maximum of 4 - 5 students** so as to ensure that proper attention is provided to the students and that the rotational program can be avoided.

Experienced Postgraduate and Research Scholar students would also be approached to mentor the students and provide their valuable input for career choices in research and aligned areas. This will provide a further opportunity for the students of IIT Kharagpur to learn from each other and appreciate each other's expertise.

Step 3: Mentorship

The mentorship period starts from mid-March and as we know the CV submission of the companies start from the month of August/September. This provides a six month mentorship period before the placement process. During the mentorship period, the buddy is encouraged to share his experience with the student and provide him concrete information like sharing reference materials, case practices etc. **Mentorship continues till the end of placement season.**

The Career Conclave will start in the spring semester for people who will be sitting for placements in the next semester. In that semester, people who have already been placed will conduct these workshops where the methods used by them in preparing for interviews of various companies and the pattern of interviews will be explained. These workshops will also include group discussion and personal interview sessions. There would also be sessions on CV Building, Communication and basic aptitude development.

A survey of placed students conducted by CDC showed that a majority of students felt that problem solving and communication skills were their major strengths.

Major Hurdles students perceive (As per survey conducted by CDC Post Placements December 2015) -

● CGPA
● Communication Skills
● POR
● Internship Experience
● Help / Advice from seniors

Major Strengths students perceive (As per survey conducted by CDC Post Placements December 2015) -

● Problem Solving Skills
● Communication Skills
● Personal Projects
● CGPA
● POR
● Help/Advice from Seniors

Such an initiative where students will use their experiences to help students who will be sitting for placements next semester will ensure that they will be well prepared.

By the autumn semester, the students sitting for placements will have a broad idea as to what to expect in placement interviews and tests. They can gain a first-hand insight into what is the requirement and expectation of each sector through the workshops and webinars conducted by our Alumni and the officials from different companies.

This is a model that is successfully deployed by IIM Calcutta to aid their students in preparing for placements, and various IIM Calcutta students have commented that this is one of the most useful method for preparation as it is very comprehensive.

Moreover, KGP has always relied on the culture of seniors helping out juniors. Thus, we should further this culture so that the entire KGP community benefits from it, and students are fully prepared to face and overcome one of the most important challenges of their student life.

Timeline -

Timeline for the conclave would include the following -

24th Feb - 5th March 2016 : Career Conclave - Around 2 to 3 hours each day

● Friday (24th Feb) - Data Analytics
● Saturday (25th Feb) - Consulting-1
● Sunday (26th Feb) - Finance-1
● Monday (27th Feb) - Startups
● Tuesday (28th Feb) - Coding & Software

- Wednesday (1st March) - Social & Teaching
- Thursday (2nd March) - Aptitude & Communication
- Friday (3rd March) - Aptitude & Communication
- Saturday (4th March) - Consulting-2
- Sunday (5th March) - Finance-2

Core and Research Webinars would be conducted throughout the span of 10-days department-wise.

Aptitude and Communication sessions would include Mock Group Discussion, Mock Personal Interviews, CV Building and general preparation.

Timeline for Buddy Program -

A placed student's interest in buddy program would be known through the **feedback form** that a student would be required to fill after his placement. **[December 2016]**
Information Dissemination session by Chairman CDC / Alumni for Buddies **[end January 2017]**
Introductory Seminar for Buddy Program at the end of Career Conclave **[5th March 2017]**
After Career Conclave, **Google Form (CDC)** would be floated for pre-final year students to know their interest for buddy program **[1st week March 2017]**
 Buddy Allocation (Backend) **[2nd week March 2017]**
Release list of the allocated buddy to respective students **[Mid-March 2017]**
Buddy Feedback will be taken in case a mentee wish to change his allocated buddy to better suit his interest **[end April 2017]**

Budget (Additions)-

- Presently, we propose 10 speakers coming down to KGP for the Conclave.

- The number of speakers would be increased with respect to the budget.

- The estimated budget for each speaker is INR 20000. So, the total cost is INR 2,00,000. (12,000- To and fro Air fare + 8,000(Miscellaneous - Guest House, Conveyance etc))

- The budget can be considerably reduced since many companies / Alumni would themselves be ready to come down to Kharagpur/Alma Mater to conduct workshop. `

Groundwork

- I approached **Professor Debasis Deb**, **Chairman, Career Development Centre**, Mr. Amrut Rajkarne, Mr. Ankur Agarwal & Mr. Nikhil Garg, **Student Placement Coordinators** with the idea

and they were enthusiastic about implementing this as they have identified the same as one of the bottleneck problems in improving the placements.

- I have contacted various **Alumni** who expressed enthusiasm and interest in conducting such sessions for the students of IIT Kharagpur, either in person or through webinars.
- I also contacted **Seniors** who got placed this year and they agreed that it was a very good initiative and said that most seniors will be willing to help out their juniors in this manner after they have been placed.
- I have also approached different student run organisations already present at IIT Kharagpur including **Sarthak Badjatiya from B-Club** and **Naman Mitruka from Kharagpur Data Analytics Group** (KDAG) who will aid in conducting seminars and workshops.

Proposal 2: Undergraduate Research platform

Overview and need:

The research that happens at IIT Kharagpur is an important parameter which affects many criteria in World University Rankings. In the past few years, IIT Kharagpur has increased the emphasis on research and has aimed to become a top 20 university in the world in the engineering and technology criteria.

One important facet of emphasis on research is to encourage students to come up with their own ideas and innovate. Students need to be given a platform to work on their own research ideas and come up with solutions to the various problems present. Once students are given encouragement to pursue their own ideas, a culture of research will be inculcated in IIT Kharagpur among the undergraduate students which will highly benefit the students as well as IIT Kharagpur in the long run.

Thus it is very important for the institute to inculcate a culture of research where students' get to take up projects on their own research ideas.

In the India Rankings 2016 released, IIT Kharagpur was ranked 3rd in the Engineering sector. Director, IIT Kharagpur was very happy with the result but he also said IIT Kharagpur must make more effective use of its large student strength at all levels as an asset for growing up the research quality output.

To increase the culture of research among undergraduates, I propose the setting up of **'Undergraduate Research Platform'**.

To encourage Research & Development activities amongst the students, proposals will be invited every year in the month of August from the Undergraduate Students of IIT Kharagpur. The guiding spirit behind this initiative is to encourage students to think and innovate. The students should take initiative in identifying, studying and analyzing problems as well as formulating solutions. Under this scheme, students are required to submit the project proposal in association with identified faculty of the Department/Centre to act as an administrative facilitator and a guide. Proposal may be submitted by a student alone or by maximum of two students.

If the project is completed, the students will be issued certification from the institute which will be beneficial to the students if they want to apply for research internships abroad and for further studies. So, this initiative is not only beneficial for furthering the pride of this institute, but will also help encourage and inculcate a spirit of research among the students and will also provide concrete benefits.

Timeline

Announcement of invitation of proposals will be made during August.

Students will be required to submit proposals as per notified duly forwarded by the facilitator(s) and concerned Head(s) of the Department till end of September.

Shortlisting of proposals will be carried out by the Dean, Undergraduate Studies and a notification will be made by mid-October regarding the same.

The students will have to start work on the project by the beginning of December and be required to complete their projects as per notified schedule and submit final report by the end of February.

Students will submit one progress report at the end of December to the facilitator, and a final completion report at end of February.

Thereafter, the same facilitator evaluates their progress in the project during March, and only those students, who are found to have completed their work satisfactorily, will be finally awarded.

The successful students can collect their certificates after submitting the certification through their facilitators that all bills related to the concerned project have been settled during April in the following year.

Online Portal

An online portal will be created where students can see the updates related to URP. Also, all the students can see the work done so far under the initiative of URP. Also, this portal will list the sponsored projects going on in the institute. Thus, the visibility of these projects will also increase.

This portal will also list all the sponsored research projects on campus to increase the visibility of the projects happening among the student community.

Selection criteria

All the proposals will be submitted by the end of September. The facilitator will give the marks to each of the reports and the top few as decided by the maximum cap will be selected based on the following criteria

Innovativeness – 20 marks

Impact – 20 marks

Feasibility – 20 marks

Budget and Maximum Cap

They will be provided honorarium (Rs.1500/- per week per student) & approved grant (upto a maximum of Rs.25,000/-) to carry out the proposed research (during December-February). The maximum cap on the number of students to be selected will depend on the maximum budget allotted by the institute. The final amount will be decided only after the consultation of the Dean, Undergraduate studies.

Award Criteria

Facilitators will submit a report which will recommend whether the student should be awarded the certification based on the completed report submitted by the students and the work done by them.

People met

I have spoken **to Dean, Undergraduate Studies** and he showed a positive response to such a move as it will serve the purpose of encouraging students to take up their own research ideas and try and work on them to reach tangible goals and solutions.

I have also spoken to **Dean, Sponsored Research and Industrial Consultancy** and he also agreed that a portal with the list of projects will increase the visibility and knowledge among the students about the sponsored project that the institute has taken up.

Groundwork regarding Portal

I have spoken to the following students regarding the proposal for development of the portal in the initial stages. These students have a proper background in this field and their profiles can be mailed to you if requested.

Sidhartha Satapathy

Krishna Sai Rohith Kanuparthi

Samuel Suraj Bushi

Proposal 3: Training of Mess Workers and Setting of Balanced Diet by a Dietician

Overview & need:

Training of mess workers by professional chefs to deal with the problem of poor quality of cooking, and getting a dietician to set up a broad guideline for the mess menu so that a healthy and nutritious mess menu can be chosen by the students.

Poor mess food is a major issue faced by all students of IIT Kharagpur. In my interaction with various students, many students have complained that the mess food is not properly cooked.

In addition to that as the menu is not decided by a dietician, there is risk of students consuming an imbalanced diet is high.

The mess problem is a problem faced by everyone and it affects them directly.

Proposal

I propose that chefs should be called to train the mess workers so that the method of cooking is refined. They can also check the equipment that is being used and judge whether they are appropriate for a mess which serves the students of IIT Kharagpur.

As the quality of cooking is a constant complaint of the student, such a move will ensure that a step has been taken to train the workers. This will mean that the mess workers are now more in touch with what students expect from the mess and appropriate steps are taken to ensure what the correct method of cooking a certain type of food is.

The presence of a dietician is necessary to decide a basic composition of a healthy diet for a student. Often what the students decide is not a healthy balance of all the nutrients which can be detrimental later on in life, as students eat in the mess for a major proportion of the meals that they have in IIT Kharagpur.

Since it is the job of the mess to provide the students good and healthy food, a proper diet plan must be set in place. This plan will not be exact, but will have broad guidelines as to which food items should be present in a necessary balanced meal, and students can now choose among those options for a meal instead of choosing from all the items that are available to them.

Having a dietician setting up a broad guideline will ensure that such a healthy combination of food items in a menu is present.

Thus, having training for mess workers will ensure that the poor quality of cooking is handled, and getting a dietician to set broad guidelines for the menu will ensure that students choose a healthy and nutritious composition for their mess menu.

Groundwork

I spoke to **Prof. Surjya Kanta Pal, Chairman, Hall Management Centre**, and he was enthusiastic of the idea of having training for mess workers and getting a dietician to set up broad guidelines for the menu. He said such a move will certainly be in the good interests of the students. He said the budget and exact duration of the training will be looked into later.

I have contacted **with chef Mr. Dhananjay Kumar** who was enthusiastic about the idea of collaborating with the institute in training of mess workers.

Proposal 4: Digital KGP

Overview:

In today's age, it has become extremely important for any organization to completely move to an IT enabled administrative infrastructure to reduce the paper trail and increase accountability.

Recently, even the Prime Minister of India, Mr. Narendra Modi recognized the importance of digitization by launching the 'Digital India' initiative to improve the online infrastructure to make services available to each and every citizen of the country.

In the report commission by the institute to KPMG to suggest reforms for the institute to realize the goals of 'Vision 2020', it was stated that having a completely IT enabled administrative infrastructure is the key to reduce bureaucratic delays and a major step forward for any campus in reducing the paper trail and 'Going Green'. Such an infrastructure is already present in top colleges of the world like Harvard and Yale.

In cases of hospitals, it has been seen in the recent past that all major hospitals are moving to digital method of record keeping for patient profile so that the entire case history of patient is instantly available. In countries like USA, medical records are constantly analysed to detect the outbreak of any disease.

Need

A major issue that the institute faces is that proper medical history of a student is not maintained. Often students do not use the assigned medical book and use the emergency slips. In this case the record of the medical history may not be maintained in the medical book of the student, and BC Roy only notes it down in registers. In case of an emergency, this will result in delays for searching the required record which may prove to be fatal. There is a need to keep a complete medical history for getting knowledge of previous medicine subscriptions as well. Moreover, due to lack of any means to quickly analyse data, timely alerts regarding the spread of contagious diseases cannot be issued. On speaking with Prof Chhanda Chakraborti, Chairman of BC Roy Technology Hospital and Dr. Seema Roy, Senior Medical Officer (Administration), BC Roy Technology Hospital, they also agreed that maintaining a patient profile is extremely necessary.

Currently, for submission of forms for issues like guest house booking, swimming pool slots, gym slots, bona fide certificate, elective change, no dues certificate, application for grade card and various other facilities available to students, signatures of a various authority figures are required.

This is often a long winding and inconvenient process, which takes up the students' time unnecessarily. As most authority figures are available only during office hours of 9 am to 5 pm, often students are unable to quickly get the bureaucratic work done as they have classes during that time.

As of now, the records for issuing of bonafide certificates, grade cards and other official documents are maintained in registers. This leads to the admin office maintaining large amounts of paper copies. This is highly inconvenient when a specific record needs to be searched.

For an institute like ours, which aims to be in the top 20 universities of the world by 2030, all administrative work should be maintained digitally for better record keeping and convenience. This is also a major direction in which an institute can reduce the paper consumption and move to a greener model.

What needs to be done and benefits?

I propose that the process of obtaining the signatures of various authority figures be ported to the digital medium, where the request for permission is sent to every concerned authority and they are notified of the same.

This reduces the inconvenience of students, and also makes it easier for record keeping purposes as the data from the filled form can be automatically recorded once the concerned authorities approve the application digitally.

For example, in the case of a bona fide certificate, the student can submit a request to his faculty advisor, who may review and approve it and forward it to the Head of Department of the student who will approve it and send it to the academic section. On receiving an approved application, the academic section can provide the bona fide certificate to the student.

A similar request can be initiated for booking a room in the guest house. In addition to that, students will be able to see the availability of rooms on the internet itself for the dates they want to book the rooms, and based on that they can book the rooms.

By introducing record keeping on computers in BC Roy Hospital, a complete medical history of the student can be maintained easily. Thus, a complete patient profile which will have records of previous visits and subscriptions will be instantly available. Also, since this record will be kept on computers, it will much easier to sort and analyse the data, through which it can be found out which doctors are the most in demand and at which time slots is the hospital the busiest. In that manner, steps can be taken to call in these doctors for more visits and allocate resources in the hospital in a better manner. This was a major concern of the students as stated in a survey by Awaaz, and this step will help in solving that problem. Apart from that, timely alerts for contagious disease can be issued if any such pattern is available in the data that is being recorded.

Groundwork done

I have spoken to Chhanda Chakraborti, Chairman of BC Roy Technology Hospital and Dr. Seema Roy, Senior Medical Officer (Administration), BC Roy Technology Hospital, and they said it was necessary to implement such a move. I also spoke to Mr. Anupam Kar, product manager at ERP who said this is a good idea and can be roled out in phases.

Proposal 5: Regular Workshops for the people on campus by different societies over the entire year

Overview: Yearlong activities on campus by different societies to increase the opportunities available to students to explore their areas of interest.

Need

Currently, people who are not a part of any of the societies on campus, or even if they are a part of a few societies on campus, they are unable to explore other avenues of their interest.

Often they also miss out as most societies conduct selection right at the beginning of the year, where the student is unable to decide what he wants to take.

Even though the General Championship provides a student a platform to do this, it is often not possible for every person to take part in different events and learn from it.

Students also miss out on a chance to interact regularly batchmates and seniors on a regular basis in a relaxed environment

Procedure

I propose that the different societies under the Gymkhana conduct workshops for the students on campus so that students can explore their interests and gain more exposure.

I have spoken to the Governors of different societies, and most of them are willing to this for the betterment of the student population on campus.

A structured timeline will be drawn up once I meet with all the Governors next session based on their other commitments like the introductory workshop and any other outstation commitments. Once the timeline is decided by the in meeting with the Governors, it will be released via the Gymkhana website and the Gymkhana page so that students are aware of it from the beginning and the attendance level does not drop. Room and AV Cell bookings will be provided by the Gymkhana for these workshops.

Benefits

Conducting such workshops will ensure that wholesome development of students takes place and students who are not a part of different societies do not feel left out in terms of making full use of the various activities that IIT Kharagpur can offer. This is also beneficial to societies as they can spot talent that may have been missed out during fresher selections.

Students will also get a chance to interact with seniors who have different skillsets. Since workshops will be conducted throughout the year, more students will come in contact with different people and this will prove beneficial to them when the time comes when they have to ask for advice regarding internships/placements.

Under this proposal, the different activities that can be conducted are:

B-Club: B-Club conducts knowledge sessions based on different topics and follows it up with an activity like a case study, or data interpretation. This will keep the students aware of what is happening around them and also give them some basic knowledge regarding case studies and data interpretation which can turn out to be useful in the future.

TDS: Open to all workshops will be conducted on select weekends. This way students who are not a part of TDS, but are still interested in learning how to dance can do so. TDS will also conduct a workshop before the Amateur Junior Championship that it conducts so that people can learn a few basics and also take part in the competition.

Dramatics: Like the workshop that was conducted this year, similar workshop will be conducted in a combined manner by all the dramatics societies. Since it will be incorporated in central timeline it will ensure that clashes with a few events are avoided and the workshop can be conducted in a better and more structured manner.

Music: ETMS and WTMS can conduct open sessions where each session will be dedicated to a particular specialty, like vocals or a particular instrument.

Spectra: Workshops on different art forms and photoshop will be conducted.

Groundwork done

I have spoken to the Governors of above societies and they have agreed to host such workshops.