# Summary of Second brainstorming session 12 Feb 2013, 4–5.30 pm

#### (Summary prepared by Nutan Limaye and Dhamdhere)

DMD opened the session and briefly summarized the agenda

- Discussing the issue of student motivation (or the lack thereof)
- Enriching undergraduate studies at IIT
- Discussing/announcing a short plan of action of the future

The session started with a presentation made by Ballal. (Slides available.)

- 1. What is demotivation students not doing anything at all or they not doing what we want them to do?
- 2. Paradigm shift in the societal power structure, job market a big player? Expecting "saints" among students is unrealistic. Core jobs pay 2 to 3 times less than non-core jobs. Students naturally build their resume to fit non-core jobs – less emphasis on academics and more on other activities on campus.
- 3. Youngsters today have changed: there is a huge pressure to succeed (from peers, from parents, from society in general), definition of success has changed (highly correlated with money), the notion of instant gratification/recognition is becoming predominant (the kolaveri effect) as a result actions are geared towards these short-lived success goals.
- 4. Engineering curriculum needs to be revisited? We have been giving a lot of emphasis on analysis and instruction. Is it now the time to shift to synthesis and creativity? Students today come from small atomic families. They have been treated as equals at home and are much more independent, and being told what to do does not go down well with them. Will allowing them to be creative make them more motivated?

Mohanty (along with Shilpa Ranade and Narayanan) made a presentation regarding enriching undergraduate studies at IIT (slides available): Arts + creativity can help engineering education. Extracurriculars – chaotic engagement with arts. On the other hand, meaningful engagement with arts may result in less fragmented education. What is really arts – bringing self into the centre of the learning process. This may help reverse student demotivation.

After this an open discussion started. Sharma put forward a question: is IIT a gateway or destination? For the students this it is a gateway, and we want it to be a destination. The Teflon coating effect: students seek minimal interaction with the system, because they think of this system as just a route to get to bigger things. This may be the main cause of demotivation. To go from the analysis to the solution of the problem, we may want to bring in changes so that students start thinking of IITs as the destination – in a sense a place where they wish to interact with the system more.

(At this point there was a discussion between Agashe and Sharma. Agashe said that studets are bound to think of IITs this as a gateway. To which Sharma clarified what he meant by destination and gateway.)

Varsha pointed out that companies/placements dictate the whole game.

Nidhi wholeheartedly agreed with Varsha. She pointed out that an average student is better off not studying but doing managerial duties in various non-academic activities.

Nivedan said that there are only two reasons why he does any activity on campus: 1. it helps his career 2. it is cool

Ballal weighed in saying that we are not spending enough time with students in informal avenues, therefore we are not able to influence "what is cool" for them.

Vandana represented post-graduate (PhD?) students. She said that students want to spend more time with their advisors and engage in informal activities such as games etc. The students thought that this will increase their motivation.

Sharma said that we should stop thinking of students as one homogenous body.

Dhamdhere said that we need to specify a minimal "transformation" that the students' stay in IITB should bring in. It could have elements that are academic, personality development, and extra-curriculars. Such a specification may not have been necessary in the past, but we need to have such a specification and make sure that we realize this minimal transformation. A holistic view of student life in IITB needs to be taken.

Pandey said that we need to collect data and conduct studies to determine student attitudes and thinking.

## **Postscript**:

Dhamdhere suggested a 3-pronged approach for initiating and sustaining activities and dialogs:

- Building a database concerning aspects of the academic culture. It would involve collecting data and conducting analyses.
- Having an activity forum, which will have periodic activities concerning improving the academic culture.
- Having a core group for each activity.

He requested all present to send in their suggestions and also to volunteer for becoming a member of a core group.

Dhamdhere also presented plans for the first 2 activities:

- A panel discussion on Teaching and Learning in Mathematics courses, which is designed to cover the changes that have occurred in various aspects of maths teaching-and-learning over the last decade, and also provide a snapshot of its present status. It would be organized towards middle of March 2013.
- An expert seminar on issues in Teaching methodologies and techniques. In third week of March 2013.

### URLs:

- 1. URL for Prof Ballal's slides: http://www.cse.iitb.ac.in/~dmd/nbb\_demotivation\_slides\_12feb1
- 2. URL for Profs Mohanty-Ranade-Narayanan's slides: http://www.cse.iitb.ac.in/~dmd/Mohant
- 3. URL for Prof Yajnik's slides: http://www.cse.iitb.ac.in/~ dmd/Yajnik\_slides\_Academic\_cultur

#### List of attendees:

- 1. S D Agashe
- 2. Varsha Apte
- 3. N B Ballal

- 4. A Q Contractor
- 5. D M Dhamdhere
- 6. U N Gaitonde
- 7. S K Jha
- 8. C P Narayan
- 9. H Narayanan
- 10. T T Niranjan
- 11. Nivvedan S (Editorial team, Insight)
- 12. Nutan Limaye
- 13. Ashis Pandey
- 14. Shilpa Ranade
- 15. Virendra Sethi
- 16. Shiva Prasad
- 17. M Vinjamur
- 18. Nidhi Shanbhag (Editorial team, Insight)
- 19. Bandana Singha (GSec Academic Affairs (PG))