

Benchmarking of Services in IISc

Welcome to IISc, circa 2008!

What is it that most students do when they are not in their labs or classrooms? Any guesses!? They are probably re-searching and certainly not Googling, but in the Book Store. Yes, at the Tata Book House, the campus book store! Book worms, plain book worms! Then, they will also perhaps gulp more cups of tea and coffee at the Tea and Coffee Kiosk, than going to the mess. And then, they will visit the Campus Xerox Centre to get some photocopies or catch up at the Juice Centre and stop by at SBI. If these are the top five services students have accessed most, then what is that students prefer to access more often? Well, they may actually like to visit the Bank, yes the SBI – IISc branch. We don't know if the recent scholarship hike is the reason behind this. They would then prefer to visit their Hostel, get some photocopies, visit the Tata Book House and sip more tea!

These have been some interesting (self) revelations as evinced from the first ever survey to assess the level of services and amenities accessed by the students. What are the services the students have availed? What among them, are they accessing most? What do they feel about the amenities on campus? How should we (students) be celebrating / contributing to the Centenary Year Celebrations? These were the question Voices Team asked itself initially and thus emerged this annual feature, 'Benchmarking of Services in IISc'. The survey was administered online using KwikSurveys.com, a free online survey tool. The survey was conducted during Monday, 28th January 2008 to Friday, 1st February 2008. In all, 230 students responded!

The Benchmarking has established Star Ratings to different service providers for their level of services. We have established the methodology for the analysis and have evolved with a Composite Index to rate the different level of service. Based on the Composite Index, the service providers are recognised with number of stars designated as Star Ratings. The service providers with highest Composite Index get  star rating while the service providers with lowest (or lesser) Composite Index get  star rating. It is desired that different service providers strive / compete with

As students of the Institute, we have availed various services from different departments/centres ranging from hostel accommodation to academic departments. The IISc VOICES Team thought it fit that we conduct a campus wide survey to assess the level of services and amenities accessed by the students. Hence, we conducted an online survey to catch the mood. Coinciding with the year of Centenary Celebrations, we believe this is perhaps the first of its kind on campus (and maybe among any other campuses too!). This effort is to sincerely assess the level of services as perceived by the students. We are grateful to the students who spent their time, by patiently answering the questions. The survey was carried out during Monday, 28th January 2008 to Friday, 1st February 2008. We received 230 responses in all, which is nearly 20 percent of the student community!

each other to achieve higher Star Rating. The star rating would be valid for the current year and would be revised in the next year’s Benchmarking exercise.

What are the Students accessing?

We asked the students, which are the services they have accessed / availed during the course of their stay on campus. The services that the students have accessed / availed the most were: Tata Book House, Tea Board, Campus Xerox Centre, Juice Centre and SBI. Similarly, the services like Travel Agency - Thomas Cook, Foreign Travel Grant Section, Alumni Association, Estate Office and Placement Centre were accessed least by the students. Indeed, there were no surprises that Tea Board emerged among the top 5 services (the Voices Team has its weekly meetings at the Tea Board). It was rather surprising that Foreign Travel Grant Section, Alumni Association and the Placement Centre were among the least accessed. This may be actually due to lesser awareness and visible activities by these centres. However, it may be noted that more than 200 students (belonging to M. Tech, M.E., M.DES and MBA - all from Faculty of Engineering) have been placed with the aid of Placement Centre during the current academic year. The results here, however, include the opinions of the research students (PhD and Int. PhD students’ responses contribute to about 70 % of the total responses) and thus very likely that they may have not actually explored accessing the Placement Centre. Yet, this certainly suggests that Alumni Association needs to be more proactive in reaching out to the students, while there has to be greater awareness on the Travel Grant (for up to Rs. 25,000) available from the Institute to the research students facilitating their participation in Seminars/Conferences at least once during their studentship.

Table 1: Services Accessed / Availed

Top 5	Bottom 5
Book Store - Tata Book House	Placement Centre
Cafeteria - Coffee and Tea Kiosk (Tea Board)	Campus Development Centre (Estate Office)
Campus Xerox Centre (next to TMC)	Alumni Association
Juice Centre	Finance - Foreign Travel Grant section
Banking - SBI	Travel Agency - Thomas Cook

In any case, there should not be any conclusions drawn here as these only indicate which are the services students have availed. We then asked them how often they were accessing these services.

Table 2: Services Accessed / Availed Most

Top 5	Bottom 5
Banking - SBI	Students' Council
Hostel - Accommodation (Regular)	Campus Development Centre (Estate Office)
Campus Xerox Centre (next to TMC)	Finance - Foreign Travel Grant section
Book Store - Tata Book House	Alumni Association
Cafeteria - Coffee and Tea Kiosk (Tea Board)	Travel Agency - Thomas Cook

The services that were accessed most frequently did reveal a different order than those that were accessed without much change in their composition. It was interesting to note that Banking – SBI emerged as the top accessed service with Hostel (Accommodation) being the next most accessed service. Meanwhile, unlike the Placement Centre, which was less accessed, the Students’ Council seems to have been accessed less frequently. Perhaps, in view of the recent happenings on campus with respect to the Scholarship hike, payment of arrears, and the ‘consequent’ hike in tuition, hostel and other fees, the Administration, Students’ Council and the Banking – SBI may find renewed positions. Irrespective of such occasional incidents, the survey captures the mood in normal conditions. This being the first such exercise, there were some services that missed (See adjacent Box). However, amongst these, the Entrepreneurship Cell (Society for Innovation and Development – SID) seems to be completely off the knowledge of students. Some conclusions can be drawn here: service providers / faculty in-charge for certain services (Alumni Association, Entrepreneurship Cell) may need to revise strategies to reach as many students as possible.

We did miss some services to list in the questionnaire. And gratefully they were indeed pointed out! These included: CEDT Canteen, CES Library, Civil and Electrical Complaints, Grocery Shop, Hair Saloon, Janata Bazaar, Laundry Service, Stationary Shop near Juice Centre, Swimming Pool, Tailor Shop and Watch Repair Shop. And importantly, the General Computing Facility at SERC!

How are the Services?

Until now, we learnt what services were the students accessing and how often, this did not throw light on how satisfied they were with respect to the services offered. Thus, we asked students to rate the level of services on a 5-point scale: Excellent, Good, Neutral, Fair and Poor. The responses on the level of services reveal how satisfactory these services are though they may have been accessed less or less frequently. Certainly, the outcomes here were different from those obtained for what the students were accessing. For all those they are accessing most, they tend to have greater expectations and thus lower ratings. While for the services which have been accessed less (and less frequently), there have been better responses on the level of services. To factor in these variations, it was important that they were all normalised and collectively estimated as a composite index.

Hence, the scores obtained here were normalised with the total responses into level of services. The scores for access to different services and number of times of access based on percentile were normalised. The composite index was then computed based on the composite scores for access to different services, number of times of access and level of services. The composite index thus estimated only reveals the relative positions of the different level of services, than actually comparing to a hypothesised best level of service. Using the K-means Clustering algorithm, the composite index thus obtained was grouped into 4 clusters. The clusters thus obtained were assigned the corresponding Star Ratings. A detail explanation on this methodology is available. The methodology described here is a simpler method for estimating the composite index, than those normally employed. One of the popular methods used for benchmarking in the operations research is to employ techniques like Data Envelopment Analysis, which may be opted in the future exercises.

Unlike the services accessed and accessed frequently, the outcomes of the Star Ratings, shown in Table 3 were counter-intuitive. It was educative that all the Hostel services: Accommodation (Regular), Mess and the Guest Rooms have secured 4-star ratings along with the Tea Board, Gym Café and the Cycle Shop. Among the most debated services in the institute (though informally) are mostly related to the hostels on their level of services, and it was indeed surprising that they have secured the 4-star rating. The services accessed most like Tate Book House, Campus Xerox Centre and SBI slipped to 3-star ratings based on their level of services. Services like JRD Tata Memorial Library, Finance – Scholarship Section, Health Centre, Admission Section and the Students’ Council all secured 2-star rating. Services like Security, Placement Centre, Alumni Association, Travel Agencies – Jaybee and Thomas Cook secured 1-star ratings.

Table 3: Star Ratings for Services

Services / Amenities	Star Rating
Cafeteria - Coffee and Tea Kiosk (Tea Board)	★★★★
Hostel - Accommodation (Regular)	★★★★
Hostel - Mess	★★★★
Cafeteria - Gym Cafe	★★★★
Cycle Shop	★★★★
Hostel - Guest Rooms	★★★★
Book Store - Tata Book House	★★★
Campus Xerox Centre (next to TMC)	★★★
Banking - SBI	★★★
Cafeteria - Kabini Canteen	★★★
Academic Section	★★★
Cafeteria - Fresh and Hot	★★★
Juice Centre	★★
JRD Tata Memorial Library	★★
Cafeteria - India Coffee House (Coffee Board)	★★
Health Centre	★★
Admission Section	★★
Cafeteria - Faculty Club	★★
Travel Agency - Varsha Travels	★★
Finance - Scholarship Section	★★
Students Council	★★
Campus Development Centre (Estate Office)	★★
Gymkhana	★
Security Services	★
Banking - Canara Bank	★
Travel Agency - Jaybee	★
Placement Centre	★
Alumni Association	★
Finance - Foreign Travel Grant Section	★
Travel Agency - Thomas Cook	★

Required: Renewed Focus on Research

For the research students, we asked them in their perception, what are the reasons for longer time for thesis submission? 31 % felt it is the 'lack of clarity of problem until the end of two years', followed by 17 % who felt it was due to 'inadequate training on research methodology'. These two top reasons clearly suggest that the essential ingredient for research training (especially for Integrated PhD, M. Sc (Engg.), PhDs) is felt lacking. Mostly, the problem definition stage is preceded before the Comprehensive Examination and after the Research Training Program (RTP). The norms indicate that research students should be facing the Comprehensive Examination within two years of their registration and by taking the minimum number of credits during the RTP. However, the 'lack of clarity of problem until the end of two years', seems to suggest that the time research students spend after the RTP to identify the problem under a particular supervisor or attached to a lab, they perhaps require more guidance. While, it may be interesting to analyse how many of students are really successful in meeting this deadline, it would be further worthwhile to analyse the delay caused post Comprehensive Examination. Further, 16 % attributed it to 'insufficient resources and infrastructure (lab equipments, chemical, etc.)', while 15 % ascribed it to their Supervisors. These were followed by 7 % who felt they had 'insufficient writing skills' and that 'results of ongoing research was published elsewhere resulting in redefining/choosing a new problem'. In any case, it is imperative that during the Research Training Program there has to be more thrust for equipping the research students to train adequately on the research methodologies. Specifically, there has to be greater thrust on aiding in identification of research problem and better training on research methodologies. Voices Team noted that there are indeed such courses offered in different divisions. Two such courses tailored specifically for the department/centre's interest are: one in the Department of Management Studies titled, 'Methodology of Management Research' and the other in Centre for Ecological Sciences titled, 'Quantitative Ecology: Models, Research design, and Inference'. In a nutshell, the verdict is that there has to be renewed thrust by the faculty to facilitate research students in defining their research problem aided by adequate training on research methodology thus enabling favourable ecosystem for research.

Table 4: Reasons for Longer Time for Thesis Submission (Research Students Only)

Lack of clarity of problem until end of two years	31 %
Inadequate training on research methodology	17 %
Insufficient resources and infrastructure (lab equipments, chemicals, etc.)	16 %
Due to Supervisor(s)	15 %
Results of ongoing research published elsewhere resulting in redefining/choosing a new problem	7 %
Insufficient writing skills	7 %
Others	6 %

What should we do for the Centenary Celebrations?

Deviating from the Benchmarking exercise, we also used the opportunity to get opinions from the students on the ensuing Centenary Year Celebrations beginning in May later this year. There were a myriad of responses. Only some of them have been listed here. Apart from the serious responses we did receive some very interesting (hilarious) responses too (see adjacent Box). Almost everybody on campus is aware of the forthcoming Centenary Year, and they are reminded about it when they gather for the flag hoisting during Republic Day by the Director as well. However, almost the entire student community (may be barring the Students' Council representatives) seemed to be unaware of any activity / or not

part of any initiative that was happening in this regard. This was also evident only last week when concerned Faculty and representatives for the Centenary Celebrations and Alumni Cell called on student volunteers to be part of this forthcoming event. It is also in this earnest Voices Team is planning for a Centenary Special issue due in May 2008. Apart from a special issue, Voices Team has plans to elicit a more structured response on this in the forthcoming months. Apart from those listed below, the most common flavour among the responses were: maintaining green cover on campus and keeping the campus clean, carrying on with the ongoing research with a renewed focus for the society and placing the institute on world map of science. We will be passing on all the responses to the concerned faculty in-charge of the Centenary Year Celebrations.

This is an open problem. Some PhD can be offered on this.

Definitely the way we are: doing good research work.

Hello Voices, increase the space over here I don't want to put half opinion here...

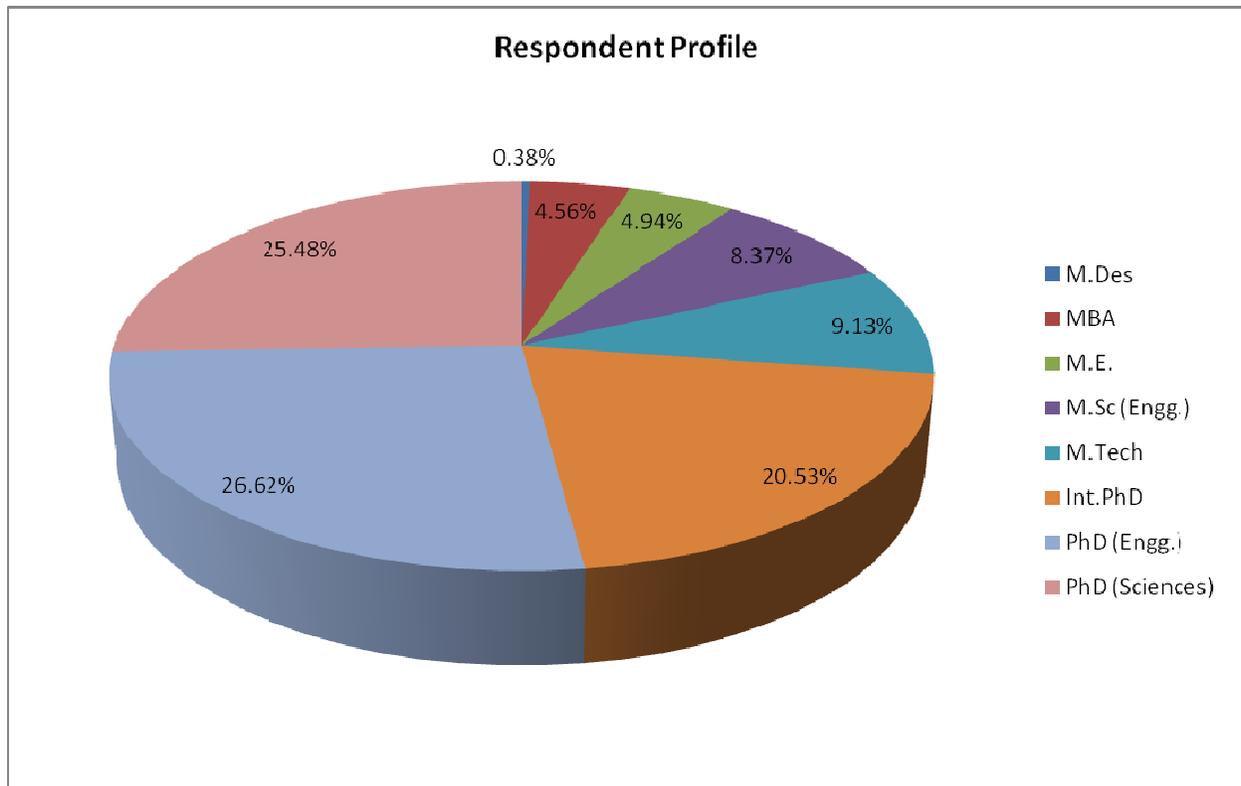
Submit our thesis ?

Table 5: Selected Responses for Centenary Celebrations

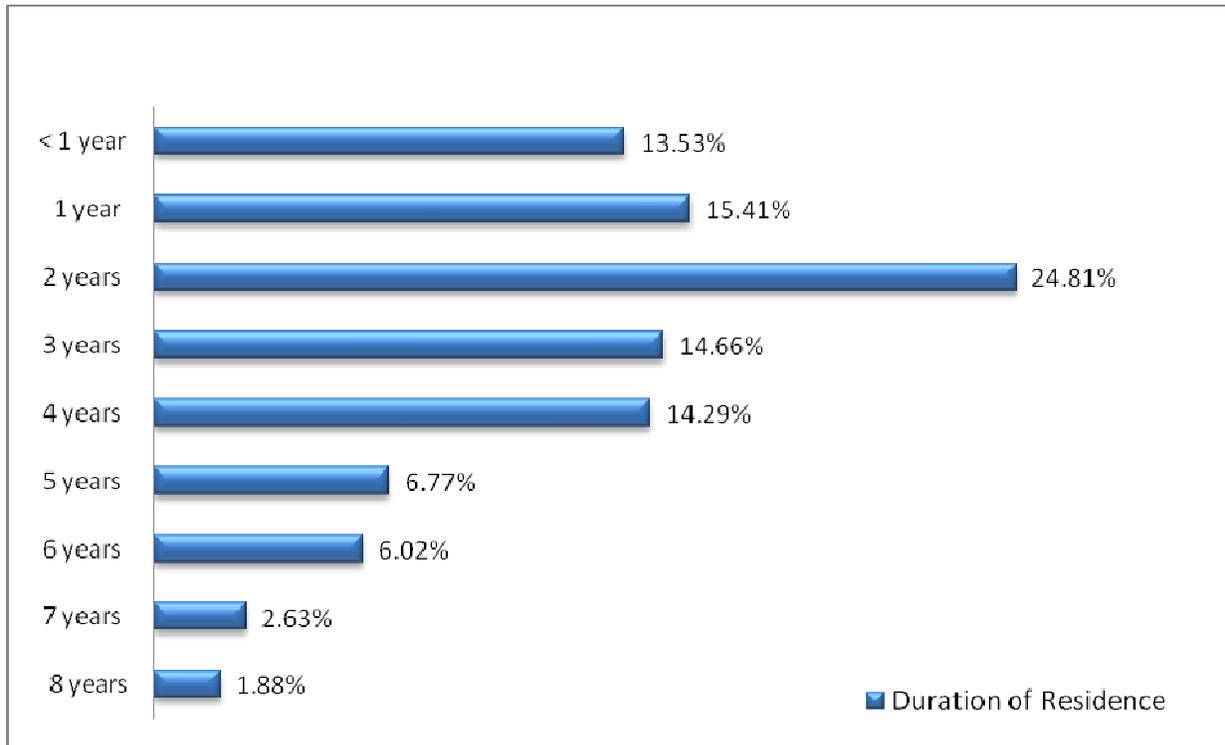
- We should be organizing some programs for school and college children
- Increase publications
- As a researcher/student looking at the future and NOT WORKING with PAST PROBLEMS
- Refocus our science towards achieving a more equal society
- By making the campus a more friendly, ecologically sensitive and aware place
- Show that you are sincere / honest to your work and love the institute
- By mentally breaking free from the professors mindset and working with passion
- By joining hands in making this place more beautiful and more active
- By planting trees
- What else! Except doing good work and little bit more social and responsible.
- Doing good, original work..., don't care for papers, do understanding-oriented work.
- By becoming good human beings first and then good researchers
- There should be more interaction between departments. Bring out a booklet on IISc history
- Be united, and take responsibilities where ever possible
- Involving students actively in the decision making process relating 2 students
- By pledging to be less indifferent to matters concerning betterment of IISc
- We should form a really good interactive student community...
- Awareness, participation and responsibility, change
- We should become more professional in our work, value time and be responsible.

- Clean the campus
- Introduce some cultural events apart from regular conferences etc.
- Organize a tech fest and quiz contests both online and on stage like in the IITs
- Cut down less trees, plant new trees and clean up campus
- Bring in industries to for increased collaboration with the academia
- Conduct Vibrations to celebrate. Let the world know IISc has completed 100 years
- Alumni-student interaction depending upon department
- Make students more aware about the visions of Swami Vivekananda, JRD Tata & JN Tata
- Work harder to resurrect IISc from going into oblivion in World Science
- Organize "Open-Days" for public to visit and evaluate our research
- By making faculty-student interaction more friendly and comfortable
- Being sincere to science, to keep the campus clean & pollution free
- Intra IISc symposium (for 3 days): All depts. participation: oral/poster sessions
- Improve campus cleanliness
- We the student community should organize various charity programs to help people
- By doing dedicated research, of course supervisor needs to participate actively
- Hard work, taking care of the high rank of the institute
- Students be actively part of the celebration program
- Contribute the best research output to the IISc journal, if at all we care for it
- Organizing running events (like marathon) for one month or so
- Showcasing the research we do and put it in perspective with contemporary research
- Carry out any special responsibilities if given

Who participated?



How long have they resided?



What Next?

The first ever exercise for Benchmarking of Services offered many insights and did throw some light on what are the services students were accessing, how often they access and how do they perceive their level of services. This resulted in arriving at the Star Ratings for the different services as well. Alongside this, we also deviated a bit in eliciting responses on the delay for thesis submission and for Centenary Year Celebrations from the students. As noted earlier, we plan to make this an annual feature and rate the services based on the responses from the students. The same would also be communicated to all the services that were considered during this Benchmarking exercise. As always, we seek comments/suggestions/criticisms on this exercise. Please mail them to <voices.iisc@gmail.com>.