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# Addressing the issues of low student enrollment — The case of the Kandy Regional Centre of the Open University of Sri Lanka

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## Abstract

*Research was conducted to investigate the reasons behind low enrollment to programmes offered by the Faculty of Engineering Technology (FET) of the Open University of Sri Lanka (OUSL) in Regional Centres away from the main campus. A preliminary study was conducted to identify the issues behind reduced enrollment, taking Kandy Regional Centre (KRC) as a case study. Preliminary study revealed that improvements are needed in five contrasting areas to improve the rate of enrollment. Necessary measures were undertaken to address the issues identified in the five areas and the enrollments in the academic years 2011 and 2012 were observed to have a significant increase. It was exploited whether the increased enrollment is due to the improvements adopted in the identified areas. Results of a questionnaire administered among new registrants to FET in KRC for the academic year 2012 indicate that the measures adopted have reached the potential learners increasing the rate of enrollment.*

## Introduction

Regional centres are intended to serve as resource centres of the OUSL in respective areas. They play a vital role behind the success of the University. The OUSL has six regional centres, within major population areas accessible to many students within the region as possible, providing educational opportunities to all who wish to realise their ambitions and fulfill their potential.

Although the engineering programmes through ODL offered by the OUSL have been successfully implemented via centre network, there have been fewer enrollments in past years in regional centres away from the main campus. Offering programmes in various engineering disciplines over the past years, these regional centres were unable to meet the expected new enrollment compared to the Colombo Regional Centre (CRC), which is the main campus of OUSL. As evident from **Figure 1**, the enrollment to engineering programmes in CRC is significantly high compared to enrollment in all other regional centres.

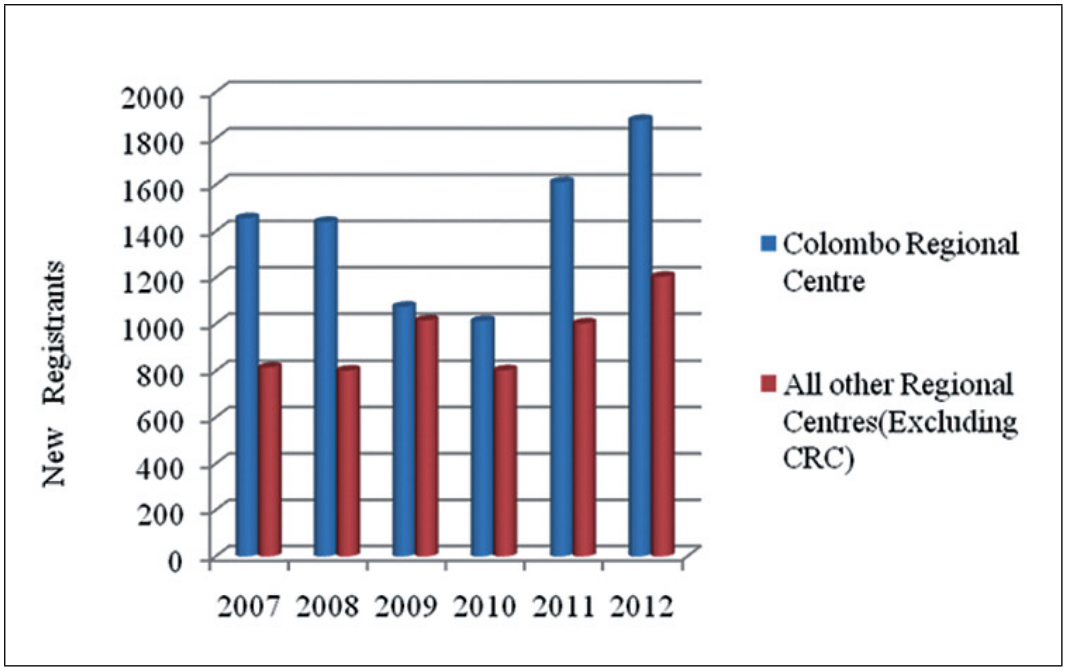


**Figure 1** New registrants from 2007 – 2012 Colombo vs. other regional centres

Recent studies reveal that only 10 per cent of the post secondary school learners who sit for GCE Advanced level examination are accommodated in to the conventional university system each year (University Grants Commission, 2011). A fraction is admitted to technical and vocational colleges leaving over 200,000 without opportunity for further education every year in Sri Lanka. OUSL, committed to provide university education for all should be absorbing majority of these students who become idle in the educational market. But the enrollment to OUSL engineering programmes has been less especially in regional centres in spite of the 'open entry' adopted by the FET.

Is it the quality of the learner support (Ghosh, 2009) provided by other regional centres not up to standard? Or whether the fewer enrollments are due to the unawareness of the general public specifically about the engineering programmes, their quality and recognition? Research was conducted to investigate the reasons behind the low enrollment to engineering programmes at KRC. With the adaptation of necessary counter measures to identified problems, improved enrollment could be seen in the years 2011 and 2012 (**Figure 2**).

## About OUSL and its engineering programmes

The OUSL is the only national university which offers engineering programmes in the distance learning mode. It is one of the pioneers, among all academic institutions in the world in offering engineering programmes in distance education mode leading to the award of Advanced Certificate in Technology, Diploma in Technology, Bachelors Degree in Technology and Post Graduate degrees in the field of Engineering.

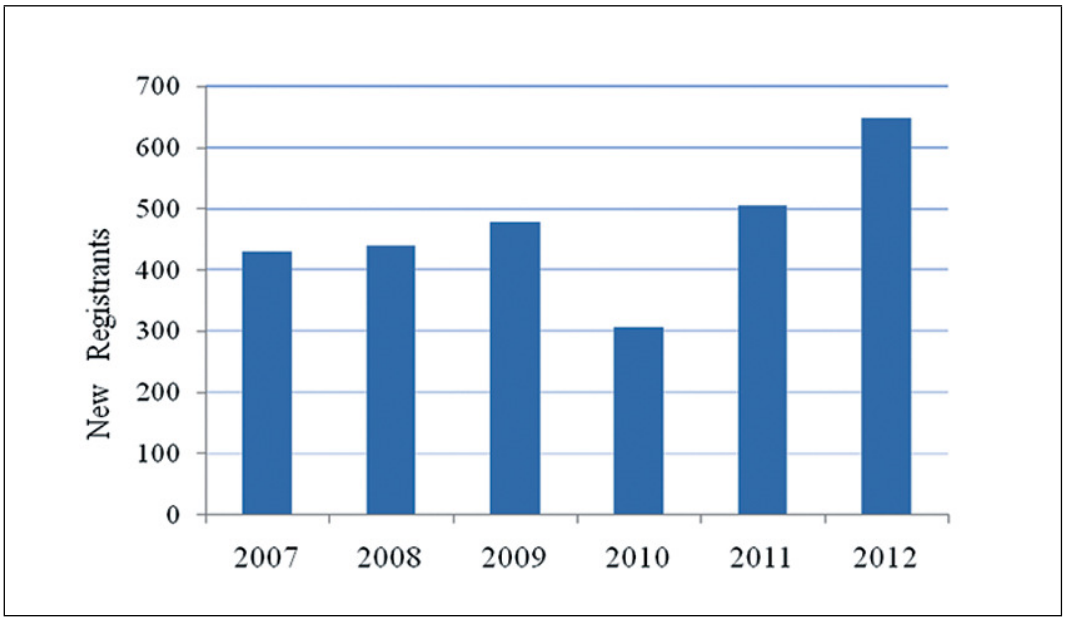


**Figure 2** Student enrollment for FET at KRC

FET of OUSL offers high quality programmes coupled with high standards, catering the student clientele, who wishes to have a recognised engineering qualification in specialisations such as civil, electrical, electronics and communication, computer, mechnical, mechatronics and textile Engineering. All the programmes are designed in such a way that the diplomats and graduates will be able to compete with those who have graduated from conventional universities in the common job market.

The Bachelor of Technology degree awarded by the OUSL has obtained full recognition by the Institution of Engineers — Sri Lanka, the premier professional body for engineers in Sri Lanka. Graduates with Bachelor of Technology degree are given associate membership of the IESL soon after graduation which is a privilege given only to graduates from the three conventional universities offering engineering programmes in Sri Lanka.

The FET has always been very adaptive to the requirements of the industry and society. It has been able to recognise the developments taking place and act accordingly. Qualifications such as Certificate in Industrial Studies, Diploma in Industrial Studies and Bachelor of Industrial Studies are very specific to the FET of the OUSL and reflect the innovative approach of the faculty in the design of academic programmes to suit the requirements of the industry (OUSL Newsletter, 2011). At present, there are four specialisations under the stream of industrial studies namely agriculture, apparel production and management, fashion design and product development and textile manufacture.

The faculty provides a progressive ladder of opportunities for lifelong learning, giving exemptions for specific courses to those who possess approved relevant qualifications. It has produced nearly 100 high quality, employable graduates in each academic year since the academic year 2008/09, who were readily absorbed into the country's working force.

## Kandy Regional Centre

KRC is situated in the second largest city of Sri Lanka. It was established in 1982 to cater to the higher educational needs of the people in the central province. It also manages the Study and Teaching Centres which come under the purview of Kandy administrative cluster located in Kurunegala, Kegalle, Hatton, Nuwaraeliya, Bandarawela, Badulla and Matale.

The engineering programmes was launched in KRC in 1987 where some face-to-face tuition, individual counselling, practical and lab sessions have taken place with a number of learners. During the past years, KRC has emerged as the second largest regional centre with 3,500 learners from which about 1,500 were enrolled in the engineering programmes. The major challenge faced by KRC was to provide the learners with necessary support services so that OUSL can reach learners at every door step within the region.

At the beginning, both learners and staff were much concerned about the inadequacy of the resources and facilities available at the regional centre such as inadequate lab equipment, lack of adequate library resources, teaching and learning environments, computer and Internet facility and student support services (Hill, 2009). KRC is now equipped with all the facilities required by a regional/study centre (Mills, 2009). It provides the following services to the learners enrolled in the engineering programmes.

- A place for individual study in appropriate surroundings and at appropriate times.
- Access to local guidance and counselling.
- Face-to-face teaching by highly qualified teachers from the region.
- Laboratory facilities.

- Library facilities.
- An opportunity for students to meet the administrative staff of the centre.
- An opportunity to meet fellow students on the same or a different course.
- A focus for student association activities.
- A source of information, guidance and counselling to the general public in a local area.
- Access to technology.
- Facilities for taking examinations.

## Reasons identified for low student enrollment of programmes offered by FET in KRC and remedial actions taken from academic year 2010

KRC is equipped with all the support and facilities that a regional centre should fulfill, However, considering the number of people without opportunities for university education in the region, the enrollment rate for engineering programmes was found to be less. An interview method was adopted among a sample of 300 from the potential learners who participated in pre-orientation sessions held in KRC and study centres in the Kandy cluster namely, Kurunegala, Kegalle, Hatton and Bandarawela in the year 2009. Findings revealed that improvements are needed in five contrasting areas in lieu of increasing enrollment:

i. Enhancing public awareness about programmes offered by the FET in the region.
ii. Educating public about the possibility of engineering education via ODL.
iii. Personal reasons.
iv. Academic support.
v. Student support services provided by the centre.

Focusing on the identified areas, necessary steps have been taken to improve the enrollment rate.

## Enhancing public awareness about programmes offered by the FET in the region

Is the general public in the region aware of the programmes offered by the FET? The major challenge faced by the FET in KRC was to educate the local people about the recognised engineering qualifications which could be obtained via the programmes offered by FET. An integrated marketing plan was launched in year 2010, which included the following steps to make the public aware of the FET in OUSL in the region.

- Participating in education fairs organised by the government as well as private organisations held in the region.
- Organising a large scale engineering exhibition in the premises of the KRC in year 2010.
- Conducting Open Days.
- Pre-orientation sessions.
- Awareness programmes in selected schools and technical colleges in the region.
- Posters, handbills and brochures were distributed among selected industrial zones in the region.
- Advertising through Media/Web.

## Engineering education via ODL?

Historically and until recently, lectures, tutorials and laboratories have been delivered through the conventional ways of delivering engineering education (Fadzil & Muthusamy, 2003). Most of the public interested in engineering education knew that in a conventional university setting, students and teachers are brought together to interact face-to-face on various activities. Most of the people have a misconception about engineering education via ODL. Some were of the view that learning through ODL is expensive, it is done only through postal correspondence and the award at the end is of low quality. The awareness of the public on the ODL method is considered to be low (Abeysekera, 2011).

The following remedies were adopted in educating the target groups about ODL:

- 'Open days' were conducted where the public is invited to the regional centre to get familiarised with facilities available such as laboratories, computer centres, lecture halls and recreational activities. Lecturers, coordinators and experts from each field of study were available to clarify any questions raised by the potential learners.

- Post-orientation sessions (learning to learn sessions) — During the post registration period the new registrants were invited to KRC where they get familiarised with the aims, objectives and operative aspects of ODL. These sessions are conducted by experienced academics of the regional centre.

- Individual counselling prior to and at the beginning of the programme.

## Personal reasons

Several personal reasons have been identified in potential learners making them reluctant to enroll for the engineering programmes in KRC.

- Time constrain — An engineering student is required to devote at least four hours of self-study per day to complete the programme successfully due to the high standard maintained by FET. Potential students who are working will be discouraged to enroll.

- The regional centre is too far from residential areas.

- Financial constraints.

- Language barrier — Potential students are discouraged when they learn that the programmes are conducted in English except the foundation programme.

Potential learners were given good guidance to make the proper choice of study programme and course load. Temporary Residential Facility (TRF) situated in the premises of KRC can be provided for those who are coming from remote areas for attending approved academic activities. Prospective candidates were informed about the financial support given by the government and as well as OUSL for the needy and meritorious students. Those who are having difficulty in following programmes in English are assured of an English language course specially designed for engineering students which is delivered at the beginning of each programme.

## Academic support

Potential candidates have been misguided by false information that the regional centre lack qualified academic staff, laboratory facilities, information regarding theory and lab counselling, poor academic guidance and counselling, lack of face-to-face sessions and poor assessment feedback. Potential candidates were assured that the day schools and laboratory sessions are conducted using eminent teachers and industrialist from the same region. Effective pre-admission counselling sessions were arranged for potential learners and they were given good guidance to make the proper choice of study programme and course load.

## Student support services

Potential learners were concerned about the unavailability of publications related to various engineering disciplines in the library in KRC. Lack of cultural and recreational activities of students had a significant impact on student motivation. Unawareness about the information services provided by KRC, such as Elementary Computer Laboratory (ECL) and Nodes (National Online Distance Education Services) which is a fully equipped Information Centre, had an impact on the low enrollment rate. As remedial measures library facilities were upgraded giving special attention to publications on engineering sciences. Senior students of the faculty were encouraged by the academics to have more cultural activities with the help of the new students. Students were encouraged to use the playground and the sport goods available with Engineering Student Union. Information about NODES and ECL were well conveyed to potential learners at the pre-orientation sessions and awareness programmes.

## Survey method

A survey has been conducted among new registrants for engineering programmes at KRC in the academic year 2012/2013 to verify whether the improvements had reached the potential learners. To select a sample, stratified random sampling method was used. The above method was used in selecting students from the following programmes offered by FET: Foundation programme in Technology; Diploma in Technology/Industrial Studies; and Bachelor in Technology/Industrial Studies

Based on the five broad areas where improvements have been adopted in KRC, a structured questionnaire that consisted of 20 items was administered among the sample which consisted of 100 new students.

## Results and discussion

The responses obtained from the sample of 100 students are discussed as follows:

The sample comprised 63 per cent non-working students while the rest (37 per cent) were found to be employed. This explains the new trend of young school leavers registering for OUSL engineering programmes.

## The effectiveness of the marketing plan

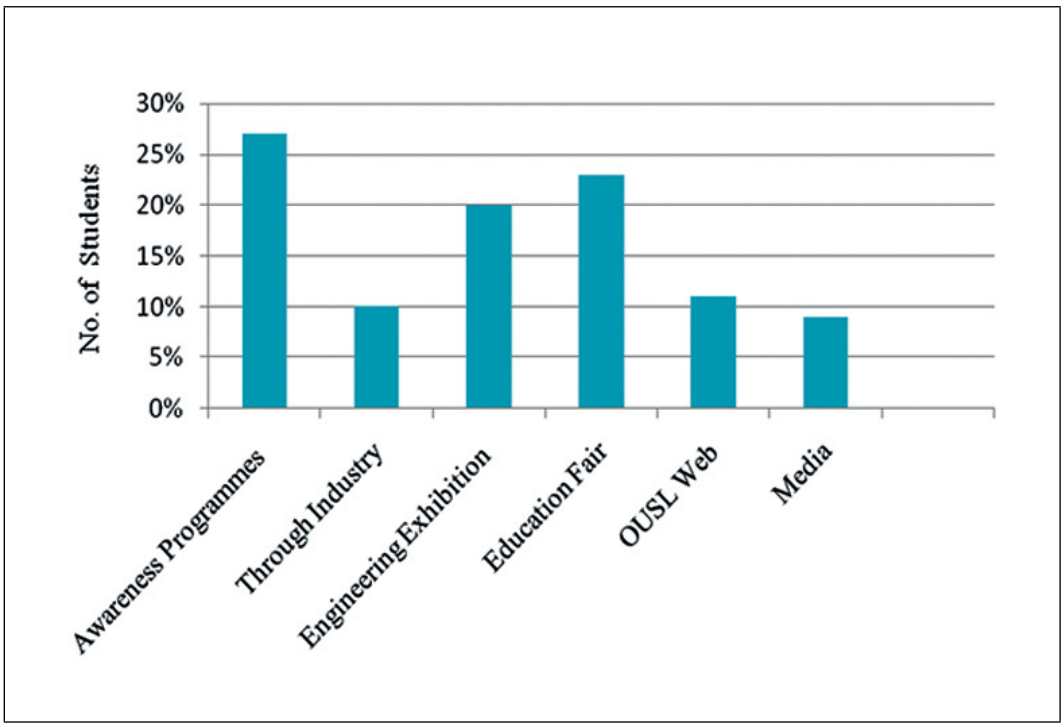


**Figure 3** The effectiveness of the marketing plan

From **Figure 3**, it is apparent that most of the learners got to know about the engineering programme in OUSL through the awareness programmes conducted in technical colleges/ schools (27 per cent). Education fairs held in the region, where OUSL participation attracted most of the visitors, which contributed significantly (23 per cent) to improve awareness about engineering programmes offered by OUSL. A much as 11 per cent of the learners gained knowledge about the engineering programmes by browsing the university website. Engineering exhibition which was held in KRC attracted potential learners interested in engineering education (20 per cent). Publicity through media also benefited the marketing process as 9 per cent of the respondents received information about the programme via media. Although the awareness through industry is only 10 per cent, this is expected to improve in the future, with the increase of OUSL diplomats and graduates in the industry.

## Knowledge about ODL method

All of the respondents were confident about the fact that engineering education can be obtained via ODL mode at the time of enrollment.

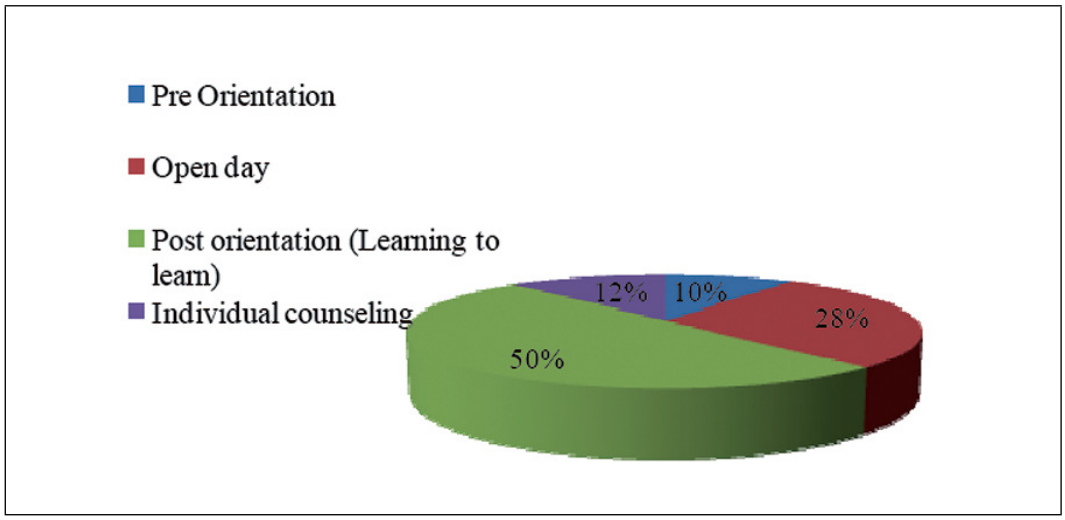


**Figure 4** Mode of gaining in-depth knowledge on ODL

Based on the survey, it was found that only five respondents from the sample of 100 had an in-depth knowledge about ODL method prior to enrollment. From the rest, 50 per cent of learners agreed that post-orientation (learning to learn sessions) well guided them to obtain an in-depth knowledge about ODL; 28 per cent responded that 'Open days' were useful in clarifying the misguided perceptions that they had. Individual counseling has contributed 12 per cent to make the learners aware of ODL mode of study. The contribution from pre-orientation sessions were low (10 per cent), which is acceptable as only a surface knowledge about ODL is given at these sessions held prior to enrollment.

## Benefits gained by learners of FET at KRC

The respondents were asked to rank the factors given in **Figure 5** according to the benefits that they receive from KRC. Under the ranking, it ranged from 1 (very important) to 5 (least important). From **Figure 5**, it can be seen that most of the learners (22 per cent) preferred to have academic activities in their own region, where they can interact with academic staff from their own region. KRC was attractive to the learners as the time and distance barrier is eliminated. Respondents were very much satisfied with financial and administrative functions carried out at KRC, indirectly saving their time and money. Peer group formation is quite important in a distance learning environment, where it is facilitated at KRC.

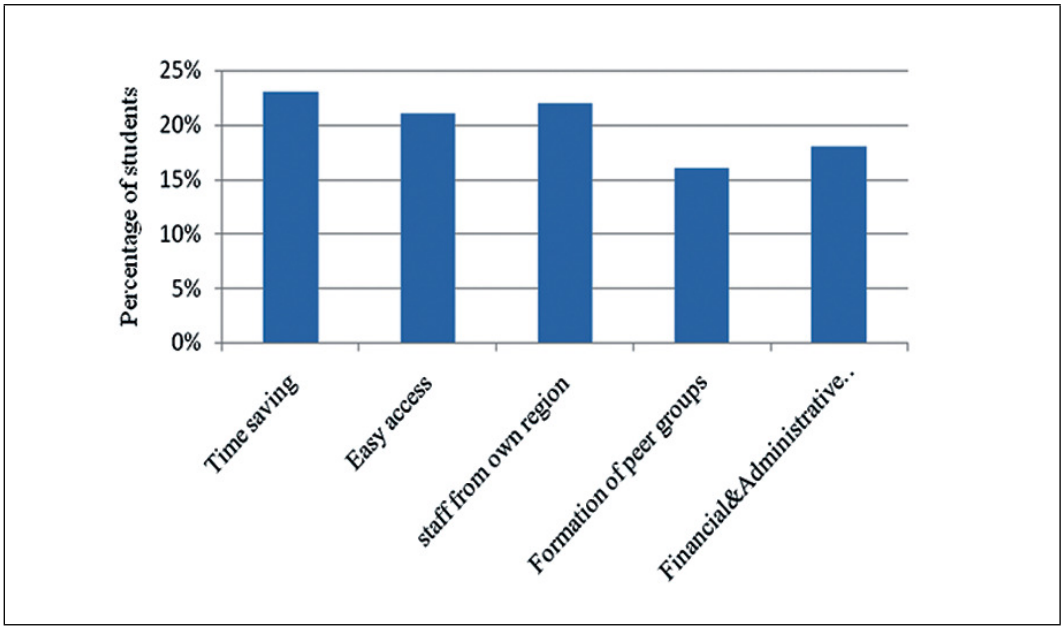


**Figure 5** Benefits gained by learners of FET at KRC

## Academic guidance and counselling services

A total of 83 per cent of the respondents were satisfied with the counselling that they have received in selection of study programme and choice of course load.

### Student support services

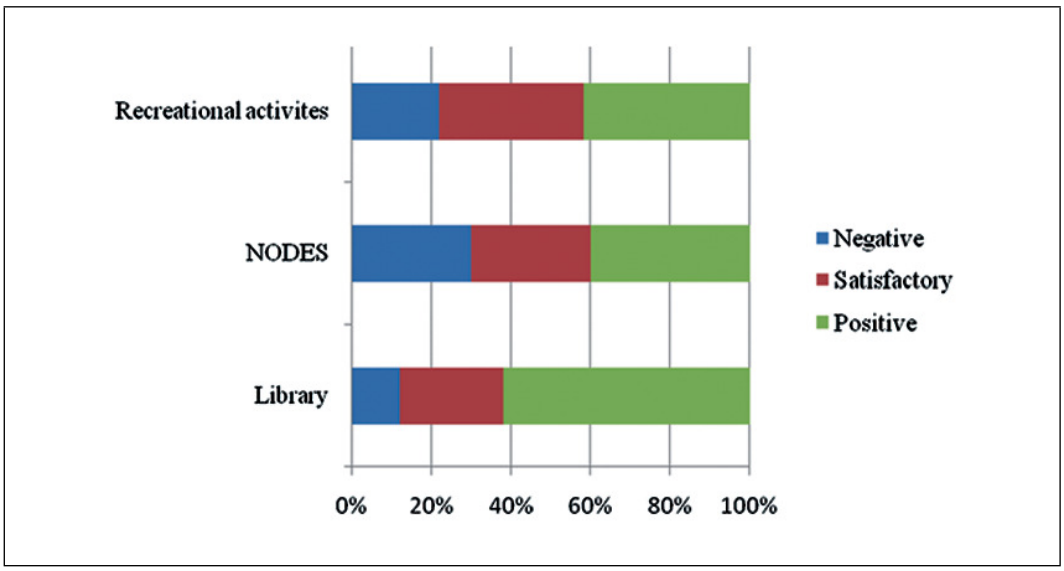


**Figure 6** Student support services provided by KRC

The respondents were asked to rank the their level of satisfaction on the above support services. Excellent and good ratings are expressed as positive responses while average rating is given as satistactory. Fair and poor ratings are considered as negative responses. **Figure 6** shows that 62 per cent of the respondents were fully satisfied with library facilities provided by the KRC. About 40 per cent were quite content with the service that they get from NODES facility while 30 per cent were found to be dissatisfied with the service rendered by NODES.

Majority of learners stated their positive satisfation towards all three basic student support services. It is evident from the results that KRC is successful in providing learners with an effective student support service.

## Conclusion

Improvements have been adopted in five different disciplines in view of increasing the enrollment rate of engineering programmes in KRC. Findings indicate that the improvements had reached the potential learners, motivating them to enroll for the programmes offered by FET. The challenge was to adopt the improvements utilising the existing infrastructural facilities of KRC. The awareness programmes conducted for potential learner communities in schools and technical colleges were very effective, attracting a considerable number of individuals without opportunities for university education in the region. Academic guidance and counselling provided by the academics, giving individual attention to each learner regarding the selection of programme, courses and course load has improved learner satisfaction. The unrealistic and misguided perceptions about engineering education via ODL were eliminated from potential learners by conducting workshops and personal counseling which had direct impact on rate of enrollment. The learners were satisfied with the enhancement of the quality of the academic and learner support services provided by KRC. The post-orientation sessions about ODL, where the learners were trained to become effective ODL learners will eventually reduce the rate of dropouts, which will indirectly affect the enrollment in the future.

It was found that an in-depth knowledge about ODL is very low in potential learners in the region. It is the responsibility of the higher education authorities to promote and educate the general public about ODL in order to enhance higher education opportunities in Sri Lanka.

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