Chapter Four

AN ANALYSIS OF MANAGEMENT OF CHANGE IN SELECTED UNIVERSITIES

Change is inevitable.
In a progressive country Change is constant.
- Disreli Benjamin
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Chapter Four

AN ANALYSIS OF MANAGEMENT OF CHANGE IN SELECTED UNIVERSITIES

Introduction

A Researcher assumes that behind the collected data there is something more revealing than the figures themselves. He assumes that carefully thought out facts and figures, when related to the data, have significant meaning from which valid generalisation can be drawn. Facts and figures, by themselves, do not necessarily make scientific sense. They also involve subjective and objective elements in varying combinations. It is needed to perceptively penetrate the data, keeping in mind the objectives of the study and accomplish the purpose of investigation.

The data collected are processed in order to summarize the results. Data analysis seeks to determine how the units covered in the research project respond to items under investigation. The data culled, have been analyzed using the quantitatively methods and also statistical tools. The interpretation is based on the analysis of the data.

Documentary analyses, extensive discussions and intensive interviews are integral to the methodology of this research. Considering the objectives of the study, interview method supplementary to the other techniques, yields best results.

The analysis has been done under two sections viz. Management of Change with regard to the factors relating to the Internal Environment and the External Environment. Educational reform is a continuing and integrated process. Changes in administration, academic activities and financing are necessarily interlinked. They constitute a cumulative adjustment process, which is best carried out by administrators and academics by adopting a proactive approach.

The management of change with reference to the internal environment has been analysed under three sub sections.

The First sub section deals with the issues connected with university administration and functional
structure. The management of universities has become a difficult job because of various social, economic and political pressures on the system. The Government has introduced a few changes by bringing out a comprehensive legislation viz KSU Act 2000, and its effects have been analysed.

The Second subsection deals with change process in academic activities. The purpose, goals and objectives of the ‘curriculum’ in a perpetually changing environment have been examined. The other issues covered are introduction of the semester system, need for granting autonomy to the department, instructional techniques to make teaching a bipolar process, and teacher evaluation. The change mechanism working in the libraries and research labs have been examined. The need to make degrees relevant to the job market and improving the performance of the university students in national level competitive examinations are the other issues taken up here.

The third subsection examines the financial management in the universities. Changing circumstances have made the Governments desire that the universities increase their own contribution, by way of internal resources. Mobilisation of additional resources by the universities is imperative and a few measures have been examined. Steps have to be taken for judicious utilisation of resources. It has also become essential to devise a fee structure that bears a reasonable relationship between what a student pays and what is spent on his education. The issue of fee structure has been analysed with this objective in mind.

Several rapid changes in the external environment such as economic pressures and technological developments have emphasized the need to adapt to the changing circumstances. From a fairly predictable funding and demand environment, universities are finding themselves in a situation where they have to face competition not only from other types of institutions but also from transnational education providers. In the post GATS scenario, universities face some threats, as India is largely an importer of education. The effects of the GATS regulations on the universities, competition from autonomous colleges and informal mode of education have been analysed in this section. Some issues on the accreditation processes and the role of NAAC in the Post GATS scenario have been examined.
4.a. Management of Change in internal environment

4.1.1. Issues connected with University Administration

Educational administration of higher education has evolved over the decades and the present structure is outcome of historical events. The Government of India has developed the current administrative set-up based on the recommendation of different commissions and committees set up after independence.

The University Education Commission 1948 - 49 recommended a number of improvements in the administration of higher education in the country and most of these were implemented during the First and Second Plan period.

The Education Commission 1964 - 66 viewed the administration as an element in improvement of standards. The creation of the ‘All India Cadre of Educational Services’ with the possibility of educational administrators returning to teaching and the teacher going to administration was one of the most important recommendations of the commission. The State Education Departments as well as the committee of Members of Parliament turned down the proposal. They feared that such programs would lead to bureaucratization and increase in unproductive expenditure.

The National Policy on Education desires that the States with a larger number of universities should set up State Councils for Higher Education to review their performance and plan for innovations. The administrative arrangements should be strengthened to meet the priorities. Only a few States have set up these councils for higher education. The quantitative growth of affiliated colleges, university departments and also the enormous increase in the intake of students at all levels, have imposed a lot of strain on the system.

4.1.1. Functional Structure for universities

The present organizational structure of the university is plagued with certain problems. Traditional hierarchical structures suffer from built-in inflexibilities and rigidities. Jurisdictional disputes are common. Concentration of power in the hands of Administrators and the tendency to stick to the rules may cause delay in decision-making. Communication bottlenecks, may present difficulties to the general public, while dealing with the universities. (refer flow chart at the end of the chapter).

Adopting participative model as practiced by some universities in developed countries, is an alternative.
The participative style, if implemented in right spirit can make the system more active, responsive and efficient.

The Matrix organization structure is another alternative available. The matrix maybe visualized as involving the conventional, specialized divisions on its horizontal axis. On the vertical axis, it substitutes specific projects for the traditional scalar levels. Common provisions include a temporary structure, staffed by personnel together, for specific projects. The newer structure, while drawing support and assistance from the established line divisions, creates a distinctive new “web of relationships”. Examples include, what have been described as taskforce and project crews. They can bring the much needed capabilities together, where the action is “for the duration” until the problem is solved and the mission is accomplished. Members will view their assignment as short term.

The opinion of the respondents (group I) has been collected regarding ‘the organization structure most suitable for Indian universities’ and the results have been presented below;

Table: 4.01 : Opinion of the respondents (group I) on the functional structure suitable for Indian State universities

<table>
<thead>
<tr>
<th>S.No</th>
<th>Description</th>
<th>No..</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Traditional hierarchical model as at present.</td>
<td>42</td>
<td>35</td>
</tr>
<tr>
<td>2.</td>
<td>Participative approach with faculty and student participation in the western model.</td>
<td>47</td>
<td>39</td>
</tr>
<tr>
<td>3.</td>
<td>Matrix Organization structure— with conventional specialized divisions on the horizontal axis and task forces/project crews on the vertical.</td>
<td>17</td>
<td>14</td>
</tr>
<tr>
<td>4.</td>
<td>Can’t Say.</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>120</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Compiled from the filed survey

35 percent of the respondents preferred to continue with the present model. 39 percent of the respondents preferred the participative approach while only 14 percent opted for the Matrix organization structure with conventional specialized divisions on the horizontal axis and the task for force/project crews on the vertical. 12 percent of the respondents did not offer any opinion.

The present model has become the standard organizational structure of the universities for too long. For this reason, number of respondents felt that it is too late to bring in any structural changes. In their opinion, it may be far more important to build teamwork, rather than worry about perfect organization structure.

The present structure encourages sticking to the rules rather than achieving the results. For this reason, numbers of respondents have felt that the participative model is better suited for Indian universities.

There is no doubt that participative style, implemented in right spirit can make the system more efficient. The respondents have put forward following reasons for making the system more participative.

i. Complex problems of education require the best efforts of the teachers. The teacher understands the real problems of education and can guide the administration in solving them.

ii. With more participation the goals of the teachers and the institution gets synchronized. Sharing the responsibility and decentralization of power are necessary for healthy growth of the university.

Regarding the student participation, it has been pointed out that even the American departmental structure, generally has not permitted the direct participation of students in governance, although student participation through consultation is widespread.

The respondents have pointed out that in some cases, committees created under the participative model have come out with suggestions based on consensus. Merely adopting western models may not serve the objective.

The respondents who supported matrix organization structure feel that it will be very useful, to meet the demands of changing environment. The university departments will have to pool their resources to make optimum use of laboratories, computers and libraries. Modern technology needs extensive inter-disciplinary research programs. Departments also have to offer interdisciplinary courses. Under such conditions matrix organization structure may prove useful.
4.1.2. Issues Connected with Administration and Impact of KSU Act 2000

The Karnataka State universities Act 2000 is a comprehensive Act, which replaces the previous Act of 1976. The Act does not change the administrative structure of the universities. However, changes have been made with regard to the mode of appointment of different officers of the universities. The opinion of the respondents was collected, on the changes introduced in the Act and the procedure of appointment of different officers of the university.

**Appointment of the Vice-Chancellor**

The Act of 1976 provided for the appointment of Vice-Chancellor by the Chancellor from out of a panel of not less than three persons recommended by the search committee.

As per the Act of 2000, the Chancellor appoints the Vice-Chancellor from the panel with the concurrence of the State Government.

The respondents were asked whether they felt this is a significant change. The results are given here under;

**Table: 4.02, Appointment of Vice-Chancellor; KSU Act 1976 and KSU Act 2000. Opinion of the respondents (group I)**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Description</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Is the method of appointing the VC from the Old Act to New Act, a significant change?</td>
<td>61(51)</td>
<td>59(49)</td>
</tr>
</tbody>
</table>

*(Figures in brackets indicate percentages). Source: Compiled from the filed survey.*

51 percent of the respondents feel that the method of appointing the Vice-Chancellor is a significant change, while 49 percent feel that the change is not significant. The opinion is divided on the issue.

**Tenure of the Vice-Chancellor**

Various committees constituted by the Government of India have suggested varying tenures for the Vice-Chancellor. In Karnataka, a term of 3 years with a maximum of two terms was in vogue. KSU Act 2000 provides for a single term of 4 years with no second term, for the Vice-Chancellor. The opinion of the respondents were obtained regarding the tenure of the Vice-Chancellor.
Table: 4.03. Tenure of the Vice-Chancellor - Opinion of the respondents (group I).

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Description</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6 years (As per Dr. Radhakrishnan Committee report)</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>5 years (As per Kothari Committee report)</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>4 years (As per KSU Act -2000)</td>
<td>83</td>
<td>69</td>
</tr>
<tr>
<td>4</td>
<td>3 years (maximum 2 terms as per old KSU Act)</td>
<td>19</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td><strong>Total Number</strong></td>
<td><strong>120</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Compiled from the filed survey.

69 percent of the respondents gave their support to the new system while only 16 percent preferred the old system of tenure. The longer tenure of 5 years and 6 years recommended by different committees received a combined support of only 15 percent of the respondents.

Appointment of the Registrar.

i. The Act of 1976 had empowered the Vice-Chancellor to appoint the Registrar with the approval of the syndicate.

ii. The Act of 2000, empowers the Government to appoint an officer of All India Services working in super time scale to be the Registrar of a university. The opinion of the respondents was collected to study the effect of change in the method of appointment of the Registrar.

Table: 4.04. Appointment of Registrar-Opinion of the respondents (group I)

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Description</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>It will result in better co-ordination with Govt.</td>
<td>67(56)</td>
<td>53(44)</td>
</tr>
<tr>
<td>2</td>
<td>As Registrar is not from academic community, he will find it difficult to gain their confidence.</td>
<td>29(24)</td>
<td>91(76)</td>
</tr>
<tr>
<td>3</td>
<td>The change needs observation for some more years.</td>
<td>72(60)</td>
<td>48(40)</td>
</tr>
</tbody>
</table>

Total No: 120. (Figures in brackets indicate percentages).

Source: Compiled from the filed survey.
56 percent of the respondents feel that this move will result in better coordination with the Government; 76 percent feel that the Registrar being from outside will make no difference to his gaining confidence of the academic community; 60 percent feel that the change needs observation for some more years.

**Appointment of Registrar (Evaluation)**

As per the old Act, the VC was empowered to appoint the Registrar (Evaluation) with the approval of the syndicate.

The new Act empowers the Government to appoint an officer of Karnataka Administrative Services or a senior member of the faculty of any University to be the Registrar (Evaluation) of a University.

The opinion of the respondents was collected regarding their views on the suitability of a candidate based on the background.

**Table: 4.05: Most suitable candidate for the post of Registrar (Evaluation) - Opinion of the respondents (group I).**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Description</th>
<th>No</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic with a flair for administration is most suited.</td>
<td>70</td>
<td>58</td>
</tr>
<tr>
<td>2</td>
<td>Civil servant with a development oriented academic perspective better suited.</td>
<td>25</td>
<td>21</td>
</tr>
<tr>
<td>3</td>
<td>Either of them is suited.</td>
<td>25</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Total No</td>
<td>120</td>
<td>100</td>
</tr>
</tbody>
</table>

*Source: Compiled from the filed survey.*

58 percent of the respondents feel that an academic with flair of administration is most suited for the post, while 21 percent feel that a civil servant with the development oriented academic perspective is better suited. 21 percent of the respondents felt that either of them is suited.

The new Act does not provide for representation from the Academic Council to the Syndicate and vice-versa. 70 percent of the respondents did not support this change.
Conclusion

An expert committee was constituted by the Government of Karnataka to examine and anticipate changes in the nature of university education that may be needed in future, and conceive a policy framework to deal with the new scenario in an effective manner. The committee was asked to formulate guidelines to minimize adhocism in the functioning of the universities. The task force submitted its 224 page report to the State Government on 20th September 2004. It has recommended wide ranging reforms in the governance of universities, examination system, the granting of autonomy to the colleges, research to enhance the quality and relevance of higher education etc. Regarding the governance, a major recommendation of the task force is that a committee headed by the High Court Chief Justice should be constituted to select candidates for the post of Vice-Chancellor of various universities. A Cabinet sub-committee will be constituted to study the recommendations of the task force and place its suggestions before cabinet.

4.1.3. Recruitment of Teachers and teacher: student ratio

The recruitment of both teaching and non-teaching staff is done under Sections 53, 54, 55, 56 and 57 of the KSU Act 2000 and as per UGC norms prescribed from time to time. The Teachers in university departments in addition to teaching, have to conduct their own research and guide research scholars. Though, the universities have to follow the guidelines issued by the UGC for recruitment of teachers, in pursuance of economy measures imposed by the State Government, vacant teaching posts in the departments are not filled. Bangalore University has teaching Staff numbering 420 although the sanctioned strength is 552. Other universities are also facing similar problems.

The data collected by the researcher shows that, the teacher: student ratio is deteriorating, while the number of P.G. students and P.G. programs have shown an increasing trend. The data of the two older universities (Bangalore and Karnataka) is shown in the Table 4.06 and 4.07.

The data indicates the variation in teacher: student ratio among different departments. The universities are striving to start more and more interdisciplinary courses and hence no conclusion can be drawn by comparison of the ratios. No doubt, high teacher: student ratios are impediments for the change process as there is a need to start new courses and also give added impetus to research.

In courses such as Biotechnology, Environmental Science, Computer Science and Management education, universities have been forced to introduce a system of hiring guest faculty to meet the
teaching requirements. Total reliance on guest faculty is not desirable. The university has to conduct the examinations and announce results in time. The guest faculty may not be able to give their undivided attention to the requirements of the course and this may affect the calendar of activities of the university.

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Experience of the Bangalore University:

The Bangalore University incurs an annual expenditure of 1.2 crores on guest faculty. No new posts have been created for new courses - Electrical Sciences, Microbiology, Biotechnology, and Environmental Science, Apparel Technology and Management, Electronic Media, Visual Arts, Women’s Studies - recently introduced by the Bangalore University. Guest faculty members and coordinators from other department are managing the courses.

Shortage of staff has affected the number of evaluators too. There are just 15 qualified evaluators for MBA Courses at Bangalore University, who have to evaluate about 22,000 answers scripts at every semester end.

The Academic Council of Bangalore University in its meeting dated 25th June 2004 decided not to permit affiliated colleges to start courses in M.Sc (Psychology), M.Sc (Psychology Counseling), MBA, Computer Science and MSW for sole reason that there was shortage of ‘suitable evaluators’. In the subjects of Psychology and Psychology Counseling, the University has only four evaluators in its panel. Each semester there are more than 1000 answer papers to evaluate. Further, practical examinations have to be conducted for the 80 batches of 8-9 students each, which may take at least two months to get completed. This puts great pressure on the calendar of activities.

The Medium Term Fiscal Policy of the State Government has exempted education sector from recruitment ban. However it desires that 20% of the retiring posts should be abolished every year. For the change process to succeed, the universities have to strive to get sanctioned posts to the departments where inadequacies exist and also attract the guest faculty as subject specialists, wherever needed.
Table 4.06. Bangalore University - Teacher: Student Ratio in PG Departments

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Year</th>
<th>PG Programs</th>
<th>Teacher: student ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1964</td>
<td>14</td>
<td>9</td>
</tr>
<tr>
<td>2</td>
<td>1974</td>
<td>28</td>
<td>11</td>
</tr>
<tr>
<td>3</td>
<td>1984</td>
<td>28</td>
<td>16</td>
</tr>
<tr>
<td>4</td>
<td>1994</td>
<td>38</td>
<td>16</td>
</tr>
<tr>
<td>5</td>
<td>2001</td>
<td>57</td>
<td>17</td>
</tr>
</tbody>
</table>

Source: Data collected from the University.

Table 4.07. Karnataka University - Teacher: Student Ratio

<table>
<thead>
<tr>
<th></th>
<th>University Departments</th>
<th>Affiliated Colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Students</td>
<td>1342</td>
<td>3269</td>
</tr>
<tr>
<td>No of Teachers</td>
<td>302</td>
<td>274</td>
</tr>
<tr>
<td>Teacher: Student Ratio</td>
<td>4</td>
<td>12</td>
</tr>
</tbody>
</table>

Source: Data collected from the University.
4b. Management of Change in Academic activity.

4.2.1. Curricular reforms and development.
4.2.2. Semester System. And continuous evaluation.
4.2.3. Autonomy to Departments.
4.2.4. Instructional Techniques.
4.2.5. Teacher evaluation.
4.2.6. Changing role of the library
4.2.7. Industry University Cooperation in the field of Research
4.2.8. Relevance of degrees to the job market
4.2.9. Share of Karnataka Students in National level Competitive Examinations.
4.2. Management of Change in Academic activities

4.2.1. Curricular Reforms and Development

Etymologically ‘curriculum’ is derived from the Latin word ‘currere’ that means ‘to run’. Thus curriculum is a course on which one runs to reach a goal. However, modern meanings indicate that curriculum is wider in scope and not merely confined to syllabus. The syllabus prescribes the content of the teaching to be given and the curriculum prescribes the method to be used. The syllabus may be considered only a logical step in the improvement of the curriculum. In view of the fast pace of changes happening all round, the scope of activities in the curriculum may be potentially considered as broad as that of life itself.

Periodic restructuring of curriculum.

As higher education aims at production of qualified manpower and preparing students for a research career, curriculum should meet changing demands for the present and the future. Updating curriculum is a must to bring relevance from time to time.

The curricular reform in the State universities at present is in the nature of a one-time academic excise. The data collected shows that the curricula were revised every 3-5 years. The revision is done through expert committee meetings and then formalized through the Board of Studies, Faculty and the Academic Council. UGC guidelines are given due emphasis in the restructuring process.

While starting a new course, the Board of Studies initiates a new program and same is discussed and approved by the faculty. Finally Academic Council approves the program for implementation.

The Higher Education Minister – Government Of Karnataka has Stated that the syllabi for under graduate courses will be revised once in 3 years\(^1\). The syllabi may even be revised for every new batch (even if syllabus is not changed completely it may be revised at least to the extent of 15 to 20 percent.)\(^2\). By implication syllabi for post graduate courses will have to be revised to keep continuity.

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However, there are various constraints in bringing about this change.

a. 88 percent of the group II (students) supported frequent revision in syllabi. Their views on curriculum development are as under:

Table: 4.08 : Views of the respondents belonging to group II on periodic curriculum development.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Description</th>
<th>Yes</th>
<th>No</th>
<th>Can’t say</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>It avoids obsolescence due to steep rise in standards</td>
<td>65 (54)</td>
<td>42 (36)</td>
<td>12 (10)</td>
</tr>
<tr>
<td>2</td>
<td>Subjects should have a basic job orientation to them.</td>
<td>105 (88)</td>
<td>12 (10)</td>
<td>03 (02)</td>
</tr>
<tr>
<td>3</td>
<td>A component of ‘IT’ should be included in all courses from UG level irrespective of the stream being pursued</td>
<td>104 (87)</td>
<td>16 (13)</td>
<td>00 (00)</td>
</tr>
<tr>
<td>4</td>
<td>Curriculum of University should integrate international aspects in its degree and content</td>
<td>84 (70)</td>
<td>30 (25)</td>
<td>06 (5)</td>
</tr>
<tr>
<td>5</td>
<td>The proposed move will face bottlenecks in the form of faculty constraints.</td>
<td>60 (50)</td>
<td>35 (29)</td>
<td>25 (21)</td>
</tr>
</tbody>
</table>

*Total number of respondents: 120. (Figures in brackets indicate percentages).*

Source: Compiled from the filed survey.

The respondents desire that the periodic curriculum development should achieve the purpose of synchronizing the syllabi with developments happening elsewhere. The discussions the researcher had with the law students brought out the need for revising the curriculum in the light of liberalization and globalization. New concepts such as TRIPS, copyright, organ donation have come up. The Indian economy has been globalising, yet the legislation and consequently that curriculum of legal education has not kept pace with the changing needs. This presents a peculiar situation, where revamping of legal education has to happen side by side with the development of law. This also applies to a number of different faculties of the universities.

The researcher visited the National Law School of India University (NLSIU) and studied the initiatives taken up by them to overcome this handicap. The NLSIU has introduced 25 National Law reform round table programs which have given the students opportunities for creative and analytical engagement with cutting edge policy issues, while working with top minds in the country. The institute has introduced credit seminars, and research projects and developed a new vision for legal education, in the light of globalization.
b. Likely Constraints for restructuring of the curriculum

There are several constraints for smooth restructuring of the curriculum. The respondents belonging to group I were asked to mark, the likely constrains to bring about periodic changes in the curriculum, in the scale of 1-5. The results are presented in the following table.

4.09 Likely Constraints for restructuring of the curriculum

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Description</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Resources (financial) constraint.</td>
<td>2.3 (0.83)</td>
</tr>
<tr>
<td>2</td>
<td>Expertise (faculty) constraints both inside and outside.</td>
<td>3.6 (0.64)</td>
</tr>
<tr>
<td>3</td>
<td>Rigid administrative framework/structure.</td>
<td>2.7 (0.57)</td>
</tr>
<tr>
<td>4</td>
<td>Lack of support/active participation from student community.</td>
<td>1.9 (0.51)</td>
</tr>
</tbody>
</table>

Total number of respondents: 120. (Standard deviation in parenthesis).

Source: Compiled from the filed survey.

The mean scores indicate that expertise constraints, (both inside and out side) need more attention than the other items. The other observations of the respondents are:

1. The Government has desired periodic changes in the curriculum. Hence the respondents do not anticipate 'resources' would be a constraint.

2. The respondents have identified some key areas which should be given due attention in curriculum development.

   i. Multi disciplinary approach is gaining importance. Integration of disciplines will be the key in the present situation.

   ii. The universities will have to reorient themselves to be more sensitive to market needs and produce graduates to suit employers' demands. This means courses and curricula have to be 'market driven' stressing practical and applied value.

   iii. The common objective of the degree - initial preparation for professional practice or higher degree should be achieved.

   iv. Syllabus has to be relevant to keep pace with the fast changing world. Students should be able to contemplate the knowledge revolution and face it.
Number of emerging areas are interdisciplinary in nature. Curricular development as well as finding faculty (in some areas) could be a matter of concern. The researcher made a survey of curriculum development in management education. Establishing think tanks and conducting workshops with industry participation is a commonly adopted method. The leading institutions have also realized that the only way to counter the WTO regime is to internationalize the syllabi and the degree. Number of electives on offer is going up and the institutes also throw out a significant percentage of courses out, each trimester. IIM-A has about 50 elective courses on offer with nearly 20 additions in the last five years. In contrast, the State universities in Karnataka offer only three options on an average.

During his visit to the Bangalore University, the researcher came across a newly started course, where all the major related aspects of curriculum development have been incorporated. The details of the course offered by the Department of Mass Communication and Journalism are provided in the annexure 4.2.1.

The Electronics division of the Mangalore University offers the course in collaboration with leading electronics industries and national institutions.

Some institutions have been successful in offering innovative courses despite many constraints. The researcher observed that the University College of Law, Karnataka University offers a unique five-year B.A. LLB (Honors) courses. The honors course contains subjects not provided for by the Bar Council. They include Legal Methods and Criminal Law II, the latter covering crimes not coming under the purview of the Indian Penal Code, such as economic crimes.

3. Ready and quick administrative support is essential for smooth restructuring of the curriculum. One of the side effects of frequent revision of syllabi would be the problem of conducting examinations for students who have studied old syllabi. This would increase the examination related workload of the universities

4. Leaving a free end in the Syllabus

It is felt that radical change in mindset is required as far as the syllabus is concerned. Revamping the syllabus once in three years or even once every year may not serve the required objective. The syllabus should leave a free end for the teachers to include the latest changes to the subject. Subjects such as Biotechnology and Genetic Engineering, throw up new possibilities at frequent intervals one cannot wait till the matter gets printed in text and reference books.
c. Flexibility for opting courses

The rigidity in the choices of the subjects offered does not equip the students with skills to specifically deal with situations which are continuously changing and require interdisciplinary approaches. The views of the respondents on this issue have been summarized below;

Table: 4.10 Flexibility for opting courses - Opinion of the respondents

<table>
<thead>
<tr>
<th>S.No</th>
<th>Description</th>
<th>Group I</th>
<th></th>
<th>Group II</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Can't Say</td>
<td>Yes</td>
</tr>
<tr>
<td>1</td>
<td>Flexibility for opting courses, which are offered by the institution.</td>
<td>91 (76)</td>
<td>29 (24)</td>
<td>(0)</td>
<td>92 (77)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Figures in brackets indicate percentages). Source: Compiled from the filed survey.

Most of the respondents feel that students should have the flexibility for opting courses, which are offered by the institution.

The study of the evolution of a few interdisciplinary courses, indicate the need to adopt a flexible approach, in permitting the choice of courses. Information Science and Bio Technology have emerged in a big way in the last decade. Bio-tech boom calls for informatics solutions. Biological data burgeoning over the past few years has accelerated the need for informatics solution. For e.g. a subject like Bio-informatics is a hybrid of life sciences and technology. It has two aspects – computational and experimental. Processes like gene analysis and drug discovery are essentially computing challenges to day. To excel in this field the student should have knowledge of Biology, Computer Science, Mathematics, Statistics and Bio-chemistry.

Current trends indicate that the universities are bound to go for a “Cafeteria System”. Some young universities like Kuvempu University and others have made an attempt in this direction. There is a need for organizing interaction between academics and practitioners, to achieve the required flexibility.
Annexure 4.2.1

Features of ‘Electronic Media course’ offered by Dept of Mass communication & Journalism - Bangalore University.

1. Duration of the course - 2 years (4 semesters) first batch started from July 2002. The University admits 20 students for the MSc (electronic media) course.

2. 50 percent of the expenditures for starting the course is borne by the university, the other half is borne by the UGC. UGC assistance will be available for next five years (The University did not wait for UGC funds but drew financial resources from its own fund as the 1st batch of students had already enrolled for the course).

3. For the first time a course has been started by an Indian University for preparing students for TV medium. A team consisting of senior faculty and experts in the field has prepared the syllabus. Guest faculty will consist of experts in the field. Technicians of Doordarshan will provide practical training. The course has been designed in such a way that the student passing out of the course is ready for the world of work.

4. The equipments include three CCD Sony Studios Cameras for Studio shooting, three CCD Sony filed Cameras for outdoor shooting, set of digital video players, recorders, edit controllers, special effects features, studio monitors for post production, eight channel audio mixture for sound production, preview monitors and editing systems. The state of the art equipment was purchased at the cost of Rs 45 lakhs.

5. Students can go out, shoot and comeback with news programs. The Doordarshan has offered to air the student programs, if they reach professional standards.

6. Fees for the entire two years course will be Rs 60,000 (Rs. 15,000 per semester). Government assistance is available for students belonging to disadvantaged sections. for a similar course (duration 1 year) privated institutions are charging Rs. 1-1.25 lakhs by the way of fees.

7. All the students of the department can make use of the studio. With a view to augment resources, the studio is let out for rent during the evening and on holidays.
4.2.2 The Semester System and continuous Evaluation

The present system of annual examinations are the root cause of many problems. Effective teaching days in universities are lower than the UGC norm of 180 days. Due to inadequate teaching time, the teachers may not be able to do justice to their teaching duties. Annual examinations have increased the stress on students. Conduct of examination constitutes, major workload of the University.

The Government has directed all the universities in Karnataka to go in for semester system for the PG as well as UG courses, from the year 2003-4.

The Mysore University switched over to the semester system of examination for all post graduate courses, with effect from the academic year 2001-02. All other universities shifted to semester system for the PG courses, in stages.

For the undergraduate courses, Kuvempu University introduced the semester system from the academic year 2003-04. Mangalore University had initially proposed to shift to the semester system during 2004-05. In view of a few technical problems, the University reverted to the earlier system of yearly examinations.

The Inter University Board met on 29th September 2004 and had wide-ranging discussions on the introduction of semester system. The Board has decided that Karnataka University, Gulbarga University and Mangalore University will shift to the semester system in the academic year 2005-06.

Internal Assessment

At present, there is no uniformity regarding the methodology adopted for internal assessment. A few PG Departments of the Bangalore University have fixed 20 marks in each paper for internal assessment through tests/seminars/group discussions.

There can be different types of semester system depending upon the relative weightage given to internal assessment and the term end examinations. ‘Internal assessment’ means, the assessment of students by his teacher on his performance throughout the academic period. The teacher receives the feedback and the student comes to know the level of his learning. It also leads to better interaction
between the teacher and the student. This can improve the efficiency of the system. Internal assessment is based on periodic tests spread over the entire academic session. It can ensure continuity of evaluation, and hence it is likely to be more reliable and valid. As the system provides periodic feedback, the faculty can assess the effectiveness of their programs and bring about the necessary changes. The parents can keep watch on the progress of their wards and can render necessary help in time.

The opinion of the respondents was collected regarding their most preferred type of semester system and the results have been presented here below;

**Table: 4.11: Type of semester system preferred**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Description</th>
<th>Group I</th>
<th>Group II</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Semester system with continuous internal evaluation.</td>
<td>37(31)</td>
<td>30(25)</td>
</tr>
<tr>
<td>2.</td>
<td>Semester system with term end examination alone.</td>
<td>14(11)</td>
<td>16(13)</td>
</tr>
<tr>
<td>3.</td>
<td>Semester system with part internal assessment and part examination.</td>
<td>59(49)</td>
<td>68(57)</td>
</tr>
<tr>
<td>4.</td>
<td>Can’t Say.</td>
<td>10(9)</td>
<td>06(05)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>120(100)</td>
<td>120(100)</td>
</tr>
</tbody>
</table>

(Figures in brackets indicated percentages)

*Source: Compiled from the filed survey.*

**Pie diagram No. 4.03(group I) 4.04 (group II).**

![Pie diagram for Group I](image)

![Pie diagram for Group II](image)

*Source: above information*
Semester system with part assessment and part examinations is preferred by most of the respondents in both the groups. Semester system with continuous evaluation has been preferred next.

Semester system with term end examination alone, did not receive much support. The respondents feel that such a system may reduce the pressure of examination on students to some extent, while burden on the universities will increase. Examinations will have to be conducted twice and large numbers of papers have to be evaluated. Results have to be published well in time. Considering the examinations that have to be held for the previous schemes, universities will have to conduct examinations almost throughout the year.

Merely having two examinations instead of one will only increase the pressure on the students and the faculty. Disadvantages of such a system may not outweigh advantages.

There is some support for semester system with continuous evaluation. The respondents have cited the number of advantages of this system and the fact that all institutions of excellence in India have adopted this system.

While many believe that the continuous evaluation system is ideal one and attempts should be made to move into that system in the long run. It is not feasible to introduce the system at present because;

i. The system also presupposes various parameters; teacher: student ratio is one. Student numbers in a classroom are large particularly in city colleges.

ii. It may not be ideal for a system where sub-standard colleges coexist with very good ones.

iii. Most of the colleges have not got accredited (as on 31st March 2004 show only 315 colleges in Karnataka have received the accreditation status.)

iv. There may be a tendency to make internal assessment marks liberal; in some quarters it may be used as an instrument of boosting results.

A number of respondents have chosen part internal assessment and part examination system as a compromise. Their views are:

i. Students have to be prepared for internal assessment system.

ii. Once introduced the (part) internal assessment system needs to be monitored closely and further changes can be made based on the experience.
B. Grading system v/s awarding marks.

Typically, institutions which have favorable teacher: student ratio and limited number of students (for e.g. the IITs) have preferred grading system. Universities conduct examinations for thousands of students, which may present problems in introducing grading system. The opinion of the respondents on this issue is summarized here under.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Description</th>
<th>Group I</th>
<th>Group II</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Grading system is preferred</td>
<td>57(47)</td>
<td>51(43)</td>
</tr>
<tr>
<td>2.</td>
<td>Awarding marks is preferred</td>
<td>55(46)</td>
<td>46(38)</td>
</tr>
<tr>
<td>3.</td>
<td>Can’t Say.</td>
<td>06(07)</td>
<td>23(19)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>120(100)</td>
<td>120(100)</td>
</tr>
</tbody>
</table>

(Figures in brackets indicate percentages)

Source: Compiled from the filed survey.

The opinion is divided on the issue, both in case of group I as well as group II.

Some respondents expressed their reservations on the grading system. Grading system may encourage the students to compete with each other. The system should rather encourage the students to learn together. Grading system may suffer from the same drawbacks of the current system – it may have no relationship with subsequent academic performance or success in employment. In the opinion of the respondents the suitability of the system depends on type of the courses and uniformity in the level of learning capacities of the students. The grading system may be most suitable for the postgraduate courses.

C. Possibilities of favoritism.

In some cases internal assessment may suffer from liberal marking which may have no correlation with performance of the students in public examinations. Even those institutions/ departments/ teachers who exercise great care not to make internal assessment marks liberal, may have to fall in line with others. It may even be used as an instrument of boasting results. Some students may fear that the system maybe used as an instrument of controlling students.
The opinion of the Respondents on this issue has been presented below;

Table: 4.13. Possibility of internal assessment system leading to favoritism

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Description</th>
<th>Group I</th>
<th>Group II</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Such threat is not serious.</td>
<td>54(45)</td>
<td>40(33)</td>
</tr>
<tr>
<td>2.</td>
<td>Even if so, it will be better than the current system of examination.</td>
<td>40(33)</td>
<td>48(40)</td>
</tr>
<tr>
<td>3.</td>
<td>Can’t Say.</td>
<td>26(22)</td>
<td>32(27)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>120(100)</td>
<td>120(100)</td>
</tr>
</tbody>
</table>

(Figures in brackets indicate percentages)

Source: Compiled from the filed survey

The opinions of the respondents are divided on the issue. Significantly 22 percent of the respondents in group I and 27 percent of the respondents in the group II have not expressed any opinion.

To a related question (question 17 (d) of the student questionnaire) only 20 percent of the students feel that the present examination system gives full picture of students’ ability. Favoritism is not considered a major factor for the implementation of the internal assessment system. However, non-uniformity in the system of assessment (discussed in the section 4.22(E)) appears to be a major problem.

D. Increased workload

The semester system works best when teacher – student ratio is favorable. The teacher has to keep a keen watch on the progress of the students through internal assessment. The calendar of the events has to be adhered to which means that the curricular activities have to be completed in time. The examination related activities at the end of each term also add to the workload of the teachers. This has to be seen in the light of the recruitment policy of the Government.
The opinion of the respondents on this issue is presented below:

Table 4.14: Possibility of increased workload:

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Description</th>
<th>Group I</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Results in increased work load- present teachers strength insufficient.</td>
<td>68(57)</td>
</tr>
<tr>
<td>2.</td>
<td>Does not result in increased workload – present teachers strength sufficient.</td>
<td>30(25)</td>
</tr>
<tr>
<td>3.</td>
<td>Can’t Say.</td>
<td>22(18)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>120(100)</td>
</tr>
</tbody>
</table>

(Figures in brackets indicate percentages)

Source: Complied from the field survey

57 percent of the respondents feel that semester system results in increased workload and present teacher strength is insufficient. Numbers of respondents feel that the semester system demands a different type of work culture to be successful. Viewed from that angle present teacher strength would be insufficient.

E. Other problems

For success of the semester system, full cooperation of the students is a must. With this in view, the students were asked a few additional questions regarding problem areas for the success of the semester system. Their views are presented in the following table;

Table 4.15: Likely problem areas for the semester system-Opinion of the students.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Description</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Inadequacy of teacher - student ratio.</td>
<td>95 (79)</td>
<td>25(21)</td>
</tr>
<tr>
<td>2.</td>
<td>Inability to complete all activities of the semester including exams and results in time.</td>
<td>97(81)</td>
<td>23(19)</td>
</tr>
<tr>
<td>3.</td>
<td>Student unrest due to increased workload</td>
<td>72(66)</td>
<td>48(33)</td>
</tr>
<tr>
<td>4.</td>
<td>Non-uniformity in the system of grading.</td>
<td>64(53)</td>
<td>56(47)</td>
</tr>
<tr>
<td>5.</td>
<td>Insufficient time for extra curricular activities.</td>
<td>85(71)</td>
<td>35(29)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>120(100)</td>
<td>120(100)</td>
</tr>
</tbody>
</table>

(Figures in brackets indicate percentages).

Source: Compiled from the filed survey.
In the opinion of the students all the likely problem areas listed above are potential bottlenecks in the operation of the proposed system, but with varying degrees.

Inability to complete all activities of the semester including examinations and the results in time is considered a major bottleneck in the proposed the semester system. Our universities are spread over a wide geographic area. Law and order problems in a small geographic area, will affect the students of the entire university as a chain reaction will start and upset the entire calendar of activities. Quality may also suffer in the process.

If examination results are not declared in time, preparation of the students for the next examination will be affected. Carrying over the subject for the next semester will increase their burden, which may become unmanageable at some stage. Efforts of the university in restricting the number of subjects for carry over may lead to student unrest.

Non-uniformity in the system of assessment / grading is considered another problem area. The Cumulative Graded Point Average (CGPA) of students of Agriculture University when converted into marks (for State Government recruitment purposes) gives an abnormal picture. Number of respondents referred to the process of selection of high school teachers by the Government in 2001, which led to widespread discontent even though the selection procedure was transparent (It was the contention of some unsuccessful candidates that non-uniformity in the internal assessment procedure in the B.Ed courses resulted in selection list being dominated by students from a particular university.

Now the Government holds a Common Entrance Test for selection which carries a weightage of 70 percent. The relative weightage given to the B.Ed course has been reduced to 10 percent.). It was also pointed out that non-uniformity is a possibility of even in the present system and none of the selection procedures for Central Government recruitment /PG courses in institutions of national importance give weightage to marks obtained in the university examination. It is used only as a qualifying standard.

**Current examination process and changes observed**

It has been pointed out in various commission reports that universities have been overburdened as examination conducting bodies. The exam related functions are likely to increase with the introduction of the semester system. Universities have taken several steps to make the examinations process transparent. In 1998 - 99, the Bangalore University introduced the system of supplying ' Xerox
copies of the answer scripts on request’ to the students of all the degree courses. ‘Challenge the Valuation’ for the postgraduate courses have also been introduced. From the year 2000, the University has been announcing the results of all the examinations through the internet. Now, all the universities in the State are in a position to announce the examinations results, through the Internet.

The Bangalore University has a grievances cell attached to the examination wing. Though the University’s website, students can seek redress of grievances and clarification on queries pertaining to the examinations

**Computerization Processes**

Universities have been computerizing the examination procedures in order to maintain the time - schedule objectives and confidentiality in the evaluation process.

The computerization of some sections particularly the examination department has picked up speed in recent times. The researcher carefully studied the salient features of the software installed by different universities. The features include provision to limit access to different users using various security levels and the facility to capture backlog information of earlier examinations. There is online provision to verify absentees or those barred for malpractices. The software provides foolproof coding and decoding making it possible to declare results within a day from the date of evaluation. Various features of software make it possible to control malpractices occurring at different stages of the examination process. Cost incurred for annual tabulation and preparing marks card and degree certificates can be eliminated.

The researcher gathered from the concerned official that the investment on hardware, software and other infrastructure could be recovered with in a short span of 1-2 years. Substantial saving in recurring cost, up to 80% annually is possible.

**Changes for Future**

Computerization of the examination wings of the universities has brought about number of changes with regard to cost, structure and announcement of results. However, the present examination system suffers from various drawbacks. Lakhs of answer scripts have to be evaluated and with the introduction of semester system, examination related workload will further increase. Tabulation and other processes, may suffer from certain lapses and wrong doings, which may cause hardship to the
students and are detrimental to the image of the University.

The Inter University Board may constitute a committee to study the pros and cons of introducing online examination system, at least in a few postgraduate departments, to start with. It can be extended to other courses, based on the experience.

In the online examination system, the student can avoid writing lengthy and elaborate answers. It also helps growth of constructive ideas among students. The entry of Foreign Universities into the country, in the post-GATS scenario will pave the way for stiff competition. To get rid of number of ills plaguing the examination system and to maintain the quality of education, the on line method of examinations can be considered.

The Bangalore University has taken a lead in this regard by introducing on line examinations for P.G Diploma and Certificate Course in Community Based Rehabilitation and Development Course offered by its Distance Education Directorate.

4.2.3. Autonomy to the Departments

The university departments mainly devote themselves to teaching and research functions. The administrative and financial operations are centralized in the university. The departments have to approach the university administration, even for small financial requirements, which render the process time consuming and counter productive.

At present there is too much concentration of authority. It deprives the departments of the opportunity to take the initiative for creative actions. Conferring more autonomy will end rigid uniformity and create an elastic and dynamic system to promote innovative measures and reforms.

The questionnaire ascertains the opinion of the respondents, on conferring more autonomy to the departments, within the overall guidelines of the university.

95 percent of the respondents belonging to Spectrum II and Spectrum III feel that the departments are needed to be given more autonomy within the over all framework of the University. The opinion of the respondents regarding specific areas where autonomy needs to be given, is presented in the following table.
Table: 4.16: Autonomy to departments– mean scores for the respondents
(spectrum II and III) (Items were scored from 1 = least autonomy to 5 = maximum autonomy.)

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Description</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Autonomy to design its own courses.</td>
<td>4.2 (0.56)</td>
</tr>
<tr>
<td>b</td>
<td>Autonomy to offer academic programs.</td>
<td>4.3 (0.51)</td>
</tr>
<tr>
<td>c</td>
<td>Autonomy to conduct examinations.</td>
<td>1.9 (0.45)</td>
</tr>
<tr>
<td>d</td>
<td>Autonomy to undertake research.</td>
<td>4.0 (0.80)</td>
</tr>
<tr>
<td>e</td>
<td>Autonomy to raise resource and utilize them.</td>
<td>3.6 (0.64)</td>
</tr>
<tr>
<td>f</td>
<td>Autonomy in conducting curricular &amp; co-curricular activities.</td>
<td>3.2 (0.80)</td>
</tr>
</tbody>
</table>

Total number of respondents 60. (Standard deviation in parenthesis).

Source: Compiled from the filed survey.

4.05: Autonomy to departments– Bar Chart

In the opinion of the respondents, the desire for autonomy is highest in the areas of designing their own courses, offering academic programs and to undertake research. Autonomy to raise resources and utilize them is the next in the order. Desire for autonomy to conduct examinations, is the least.

4.2.4. Instructional Techniques

Teaching is essentially a bipolar process. Student participation and interaction should be the center of teaching-learning process. Students should be able to analyze the subject matter independently, which will improve their analytical skill and expression.

In our higher education scenario by and large there is only model of delivering the formulated curriculum.
Lecture method (with notes dictation) is the most popular method. In addition seminar method is followed to some extent. It is being increasingly realized that “telling and listening” are least effective of learning ways.

The questionnaire tries to get a first-hand knowledge, of various instructional methods followed. The results are summarized below:

Table:4.17 : Additional instructional techniques commonly used

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Description</th>
<th>Spectrum II &amp; III</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Case studies method.</td>
<td>24(40)</td>
<td>45(38)</td>
</tr>
<tr>
<td>2</td>
<td>Discussion method.</td>
<td>45(75)</td>
<td>79(66)</td>
</tr>
<tr>
<td>3</td>
<td>Tutorial method with assigned papers</td>
<td>28(47)</td>
<td>52(43)</td>
</tr>
<tr>
<td>4</td>
<td>Instructional media.</td>
<td>30(50)</td>
<td>48(40)</td>
</tr>
<tr>
<td>5</td>
<td>Field projects/visits.</td>
<td>27(45)</td>
<td>49(41)</td>
</tr>
<tr>
<td>6</td>
<td>e-learning.</td>
<td>24(40)</td>
<td>43(36)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>60(100)</td>
<td>120(100)</td>
</tr>
</tbody>
</table>

(Figures in brackets indicate percentages).

Source: Compiled from the filed survey.

The responses indicate that in addition to current methods (lecture method and seminar method), discussion method is most prominent.

Teachers use a teaching method based on the suitability of that method for a particular course and based on response of the students. Some respondents have expressed the opinion that our current examination system, which gives too much prominence to year end / term end examinations, is a major impediment in adopting different methods of teaching. The syllabus has to be covered in time, which makes lecture method most suitable. In the absence of internal assessment, it is difficult to motivate students for submission of quality term papers. It is also the opinion of the students that the pressure of performing well in the term end examination does not allow them to concentrate on number of activities, which may be useful in the long run, but cannot contribute to their short-term goals.
Instructional media (audio-visual and other non-printed materials)

The information and broadcasting ministry has recently allowed the universities to set up FM radio stations of their own for educational and connected activities. The radio is a cheaper medium and the range available for a FM Radio Station and the clarity make it an ideal medium for use as an instruction medium.

The new policy of the Central Govt would assist the universities in taking the education beyond the classroom. The radio station can air educative and informative programs. Expert interviews and recorded lectures can be aired for the benefit of the students.

E-Learning – Experience of other Institutions.

E-Learning enables anytime, anywhere learning, provides access to more information, enhances retention and enables knowledge management.

The researcher observed that IIMB has made tremendous strides in technology absorption. The classrooms are wired and students are encouraged to own computers, which they can connect to Internet modes available already in the hostel rooms. Internet connectivity is now taken for granted and everyone is connected, not just the faculty rooms with the classes but even the hostels and the faculty houses. From dial-up modems the institute has moved to ISDN and fiber optic connectivity. The institution has also invested heavily in Enterprise-wide Resource Planning (ERP), Knowledge Management (KM), Customer Relationship Management (CRM) and such State-of-the-art subject software to keep abreast international developments. A Center for Knowledge Management has been set up. Video-conferencing facilities are also available.

The researcher had an interaction with a faculty of Management Development Institute, Gurgaon and understands that the institute has connected its classroom to the hostels and allows the students to take up their tests and classroom assignments on the net.

Karnataka State universities have the Internet facilities at the level of Departments only. Efforts have been made to setup e-learning facilities through UGC initiative.
UGC’s initiative for e-learning.

The respondents have high hopes on the prospects of e-learning in the universities. UGC Info Net work is the biggest network dedicated exclusively for education in the world. All universities would get connected and come under UGC Info Net work. Free access to Internet and intranet facilities will be available to every student. Connectivity will also be available for 5000 colleges fulfilling certain UGC norms.

Development of their own multimedia courseware by the teachers

universities may help teachers to develop their own multimedia courseware. Quality material can be put on the digital mirror sites likely to be developed by UGC, in near future. If the process is carried forward it will be possible for India to cater to the International educational material market, as and when it develops. India has vast potential to capture this market.

Changing role of a teacher

Globalization is a phenomenon that is greatly affecting the society. The use of technology will significantly transform education and related fields. The role of teacher is also undergoing a change.

Following table gives the perceptions of the students on the changing role of the teacher.

Table: 4.18: Perception of students on the changing role of a teacher

<table>
<thead>
<tr>
<th>S No</th>
<th>Description</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>To a great extent, the role of teacher will remain traditional.</td>
<td>20</td>
<td>16.7</td>
</tr>
<tr>
<td>2</td>
<td>With the globalization and appearance of NITs teacher will cease to be a speaker and become more of a tutor</td>
<td>18</td>
<td>15</td>
</tr>
<tr>
<td>3</td>
<td>With new ways such as multimedia, including CD-ROMs with sophisticated devices for self learning at one's own pace, teacher will become a guide to teach how to deal with information</td>
<td>64</td>
<td>53.3</td>
</tr>
<tr>
<td>4</td>
<td>Can't say.</td>
<td>18</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>120</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Compiled from the filed survey.
Only 16.7 percent of the respondents expected that the role of teacher will remain traditional, while most of the respondents expect it to change. 53.3 percent perceived the role of a teacher as a guide who teaches how to deal with information, with sophisticated devices providing self-learning at student’s own pace.

In the near future universities will have to digitize good lectures by the teachers so that they can be reproduced as and when they need it. All lecturers need not to be produced locally. Good lectures can be imported through internet, multimedia or live transmission. Lectures and direct contact will be valued highly but teacher’s role will increasingly include guiding the student rather than lecturing.

4.2.5. Teacher Evaluation

The two-fold purpose of teacher evaluation is personnel management and self-improvement.

The first purpose of teacher evaluation is to gather data supporting the institutional decisions on awards of contract continuation, promotion and tenure. The data generated by assessments provide evidence about the different ways in which the teachers have worked to support institutional goals and outcomes and connect rewards to the assessment.

The second purpose is to help the institution and teacher concerned, review performance and plan for future. It will be difficult to evaluate teaching properly with any well-developed tools and techniques

Methods of Evaluation.

Evaluation acts as a feedback to improve skills and capabilities. Students are of best sources to get information about the effectiveness of the teacher and his teachings methods.

In self-evaluation, the teacher gives his own assessment at the end of each year as per the guidelines issued.

Peers evaluation may reflect teacher’s involvement in updating course contents, interaction with surroundings, innovating work etc.

Publications both research and popular as well as participation in professional conference etc help in enhancing the university’s standing and credibility. Hence this could also be the basis for evaluation.
Evaluation of Teachers in Karnataka

The Government of Karnataka proposed to introduce teacher evaluation from the academic year 2002-3. The V.C’s were directed to place the assessment reports in the syndicate meeting.

Opinion of the respondents

The opinion of the respondents has been sought on different methods of teacher evaluation. The results have been summarized below:

Table: 4.19. "How the performance of teachers should be evaluated"? - Opinion of the respondents (group I).

<table>
<thead>
<tr>
<th>Details of issues</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>%</td>
</tr>
<tr>
<td>Student feedback surveys.</td>
<td>66</td>
<td>55</td>
</tr>
<tr>
<td>Self-appraisal by teachers</td>
<td>98</td>
<td>82</td>
</tr>
<tr>
<td>Assessment by peers.</td>
<td>32</td>
<td>27</td>
</tr>
<tr>
<td>Publications both research &amp; popular</td>
<td>46</td>
<td>38</td>
</tr>
<tr>
<td>Participation in professional conference.</td>
<td>44</td>
<td>37</td>
</tr>
<tr>
<td>Respondent size (N)</td>
<td>120</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Compiled from the filed survey.

82% of the respondents preferred self-appraisal by the teachers. There was some support for the student feedback surveys. The other three methods mentioned in the questionnaire viz. Assessment by peers, Publications both research & popular, Participation in professional conference, did not get much support, as evidenced by the above table. The respondents expressed number of reservations on each method, which have been arranged category wise.

i. Student feedback surveys:
As far as teaching is concerned, students are the best judges. But this method can not be brought in to any formal evaluation procedure. It will be useful only if students are free, frank and unbiased which is unlikely This feedback should be strictly between teacher and the student.

ii. Self-appraisal by teachers:

Unless criteria for excellence are laid down and recognized, it will remain a paper exercise. It works best in an open and transparent environment.

iii. Assessment by peers.

The respondents feel that this method works best in a research led academic atmosphere Formalization of the method is problematic as bias may be difficult to avoid.

iv. Publications both research and popular.

There may not be much relation between of number of papers published and quality.; decisions on quality of publications can be subjective; a single paper can be broken into number of papers; all collaborative authors may not have made significant contribution to claim credit of paper. Though citation of the research work by other researchers is an indication of the contribution, these are difficult to be brought in to a formalized assessment system.

v. Participation in professional conference:

Conferences carry different quality tags and not all conference papers are referred.

Opinion of the group II (students)

Students are the best sources to get information about the effectiveness of the teacher and his teaching methods. The Opinion of the students on teacher assessment is given below;

Table:4.20: Opinion of students on teacher assessment.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Description</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Do you have student feedback mechanism?.</td>
<td>30</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(25%)</td>
<td>(75 %)</td>
</tr>
<tr>
<td>2</td>
<td>Should student feedback mechanism be a part of the teacher assessment system?</td>
<td>78</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(65%)</td>
<td>(35%)</td>
</tr>
</tbody>
</table>

Total number of respondents 120. (Figures in brackets indicate percentages).
Source: Compiled from the filed survey.

75% of the students reported that they do not have student feedback mechanism in their institution. Interestingly, 65% of them supported making the student feedback mechanism a part of the teacher assessment system.

4.2.6. Changing Role of the Library.

The main objective of the university library is to identify, select and procure the relevant textbooks, journals, periodicals and other documents needed for the courses offered by the University and organize them to enable easy access, reference and reading by the faculty, research scholars and students.

Libraries are integral part of the educational system. Libraries are the information centers and storehouses of books and journals. The computerization of library services has become extremely important. Every aspect of the library can be computerized. Use of the nationwide library work can be a boon to the students. Adequate Internet facility is another area that is expected of a library.

Availability of funds to purchase textbooks/journals is the main issue concerning libraries.

Present age is an age of “information explosion“. The rich resources of information available in the world as a whole, certainly need to be tapped and exploited for productive use.

Computers and other electronic gadgets have a vital role to play in the libraries for various types of jobs and services such as circulation control, book acquisition, housekeeping jobs, etc.

In December 1988, the University grants Commission (UGC) brought out a report entitled development of Information and Library Network (INFLIBNET) to develop cooperation and coordination amongst libraries and information systems and services in the country.

The INFLIBNET program was instituted by UGC in 1991 to launch a major national effort to improve information access and transfer capabilities that support scholarship, learning, research and academic pursuits. It intended to provide information, transfer services, to improve interaction among academicians, using existing and emerging information technologies. Another objective of the program was to modernize libraries and information centers in the country and to establish a cooperative...
data, communication network for linking libraries, R&D and other national organizations.

The task force on "modernization of libraries in higher educational institutions" (constituted by Ministry of Human Resource Development in the year 2000) felt that

i. Not only the library Services should be computerized but all departments / faculties / schools in each universities should be interlinked through Local Area Network (LAN).

ii. Any records created by the universities libraries should become part of national bibliographic database and ultimately that of Global information infrastructure. Hence development of content should be done in MARC format and all existing databases should be converted to MARC format.

The questionnaire aims to understand the students' opinion on adequacy level of different components of the library system. The results are presented below;

Table: 4.21: Adequacy of library facility (mean scores of student sample).

<table>
<thead>
<tr>
<th>S. No</th>
<th>Components of library facility.</th>
<th>Bangalore University</th>
<th>Kuvempu University</th>
<th>Gulburga University</th>
<th>Over all. N=120</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Availability of textbooks and reference books in library.</td>
<td>3.1</td>
<td>2.7</td>
<td>2.6</td>
<td>2.8</td>
</tr>
<tr>
<td>2</td>
<td>Availability of funds for purchase of books.</td>
<td>3.0</td>
<td>2.9</td>
<td>2.5</td>
<td>2.8</td>
</tr>
<tr>
<td>3</td>
<td>Adequate Internet facility.</td>
<td>3.2</td>
<td>2.6</td>
<td>2.5</td>
<td>2.77</td>
</tr>
<tr>
<td>4</td>
<td>Suitability of library timings.</td>
<td>3.5</td>
<td>3.6</td>
<td>3.5</td>
<td>3.53</td>
</tr>
<tr>
<td>5</td>
<td>Suitability of library building.</td>
<td>3.6</td>
<td>3.4</td>
<td>3.2</td>
<td>3.07</td>
</tr>
</tbody>
</table>

The means are based on a score from 1 (least adequate) to 5 (highly adequate).

Source: Compiled from the filed survey.

The responses indicate that in the student opinion, library facilities are at reasonably adequate levels and there is scope for further improvement.

Out of the 264 universities libraries in the country only 20 libraries have obtained standards to the satisfaction of UGC. Out of 11,000 colleges and 264 university libraries, about 30 percent can be considered of average standards while those in 40 percent universities and colleges are below par.

The UGC in collaboration with Education Research Network (ERNET) has developed the UGC
Information Network for connecting all the universities in the country, which was inaugurated on 28th December 2002. UGC aims to ensure good connectivity by taking care of hardware maintenance, technical support and bandwidth for five years. Besides, the UGC Information Network would ensure Internet connectivity for 5000 colleges fulfilling certain UGC norms. Phase by phase all universities would get connected under the network. The idea is to provide free access to Internet and intranet facilities to every student.

**UGC e-journal consortium**

This is INFLIBNET’s project to obtain multi user national licenses from e-journal publishers and provide universities and colleges across India with vital academic information in electronic form. It brings to Indian universities the best scholarly periodicals from all fields of learning at no cost to the individual institutions. The scheme provides a treasure to University faculty and researchers and can be expanded at no incremental cost. UGC will subscribe to the research journals and the universities save their huge expenses on journals. This amount can be used in purchasing textbooks and reference books for the students.

The changes are occurring in the library system due to technological developments, at a fast phase. Universities libraries should aim to be in forefront of such movement.

**Paradigm shift in British Library.**

On a visit to British Library the researcher gathered that there is a paradigm shift to make it more of a 21st century on line – library. Desktop access to the library in terms of book renewal, reserving a book and many others can be done online. Virtual library service for people who do not have easy access to the library may become a reality by 2005.

**Change process in Bangalore University Library.**

The library has around 3 lakh books and gets nearly 350 journals. The Library has acquired library management software called SOUL developed by the UGC- INFLIBNET. Steps have been taken to integrate the circulation, Inter-Library –Loan (ILL) and other library services. The Library subscribes to “Inside Information on CD ROM disc,” Contents Pages of Science and...

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4. Address by TAV Murthy, Director of INFLIBNET center - UGC at a workshop organized by a UGC in Bangalore, reported in Prajavani dated 30th July, 2002
The Library has e-mail and internet browsing facilities.

The UGC has identified Bangalore University as a nodal center for its “Infonet” scheme. This means students here will have access to a number of online journals published overseas. Bangalore University is making all preparations to go online so that PG students will have access to a completely computerized library. Bar coding the collection of over 3 lakh books, both in the Central College campus and at Jnanabharathi is under progress.

The Bangalore University library has a collection of back volumes of journals, which date back to erstwhile Central College library, including issues published close to a century ago. The University has plans to digitalize these rare back volumes and some older books, for easy reference.

Along with the process of computerization, a stock verification of all library books is being taken up, for the first time in many years. Library Science students will be assisting in this as part of their project work.

**Change process in Mangalore University Library.**

The library has grown from a collection of 40,000 (1980) to nearly 1,60,000 documents. Although the total library building planned for 9000 square meters area, the first phase of 3250 square meters is complete.

The library subscribes to nearly 250 periodical titles and also gets 80 free journals. Inside information (II) database covers content pages of 60,000 core journals. These content pages, cover all articles from the most frequently requested journals at the British Library Document Supply Center UK. It covers full bibliographical information of each article covered in this database.

In addition the library receives abstract of 100 science & technology journals by Contents Pages Of Science & Technology (COPSAT). The service is rendered by INFLIBNET with the assistance from National Center for Science Information (NSCI) Bangalore.

The library has the infrastructure to retrieve information from ready made data bases available in compact discs and multimedia.

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5. Information gathered from UGC regional office at Bangalore

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The library users can have access to the available document information instantly from any one terminal available in the Library on Local Area Network (LAN). ‘Libsys’, Libraries Software is used by the University. Audio, Visual facilities which can play CD-ROM data bases, multi media, films, slides etc are available.

**Change process in Karnatak University Library**

The library has more than 3,60,000 books on a different disciplines. For research students the library provides services such as Contents Pages of Science and Technology (COPSAT), e-mail, Internet, Online Public Access Catalogue (OPAC). The university subscribes to about 450 periodicals (Journals, Magazines etc) both Indian and foreign. The library provides facilities such as Internet, CD-ROM services, fax services etc.

**Change process in Kuvempu University Library**

The Library has more than 60,000 books and subscribes to about 250 journals. It has moved in to new Library Building this year, which is expected to be developed in to one of most advanced library systems in the State.

The process of computerization of the library and introduction of other on line facilities to access International Journals and study material relevant to the courses is under progress.

**Change process in Mysore University Library**

The University library has about 6,80,000 books and subscribes to 430 periodicals. The Services offered by the library include Internet, CD-ROM services and fax services. The undergraduate library has about 1,80,000 books. ‘Vidyadhi - Indian library of Electronics Thesis’ created by the library is of particular interest to the researchers.

**Gulbarga University Library**

The library has about 2 lakhs books and gets more than 250 journals. The library has CD-Rom, e-mail and Internet facilities. The Internet facility enables sharing information resources with libraries of other universities. The library subscribes to a number of databases for the benefit of faculty and researchers.
Gulbarga University is one of the universities selected for the implementation of INFLIBNET program introduced by the UGC in the first phase.

CD-ROM data bases, creation of catalogue data base of books, serials and thesis / dissertations have been established. Computer Aided Information Retrieval Centre (CAIR) has taken up computerization of library holdings.

CD-ROM technology on stand-alone and multi user access by net working has been introduced to promote digital library concept. NICNET online library terminal has been established in the library.

The UGC has sanctioned a sum of Rs 1 crore for the up gradation of library of the university during 2004-05. The carpet area of library is proposed to be increased from 54000 square feet to 90000 square feet to house new facilities for the benefit of post-graduate and research students. A virtual learning resource center and a multimedia resource center with facilities for interactive learning and e-access to teaching material would be established. This could meet the objective of universal access, unrestricted by time and place.

A digital reposition of research and instructional material is proposed to be set up. Plans to establish an UGC Infonet resource and training facility are also on the anvil.

Other relevant matters.

The discussions held with officers of different university libraries brought out a major drawback in our examination system. Our system places too much stress on terminal examinations for which students depend more on notes and textbooks rather than reference books and journals. Students spend long hours reading books and journals, in case, semester papers / term papers / presentations / assignments are part of the assessment system. The students will definitely be interested in library work, if the teacher evaluates the term papers and assignments, based on the library work and the books consulted by them. This is a very important approach to make the students make full use of the facilities in the library. The constant feedback from them will make the system more responsive and relevant.
Industry-University Interface: Research.

Science and technology are ‘key factors’ in the development of a nation. In the era of ‘knowledge economies’, only research will determine the competitive edge and strength of a nation. Universities as source of future manpower have a very important role to play, as the world moves towards a ‘knowledge society’.

a. Research is basically of two types.

   i. Basic (or fundamental) research undertaken in a free State of inquiry solely to acquire knowledge.

   ii. Applied (or developmental) research undertaken to a knowledge or resource that has practical application to the problems of society.

Nature of Research activities undertaken by the universities in Karnataka

To understand the nature of research conducted by some university departments, their activities are briefly mentioned in the following paragraphs.

Bangalore University

The Department of Botany is conducting research in the field of Plant Tissue Culture, Reproductive Biology, Cytogenics, Environmental Biology, Plant Physiology etc. The department interacts with national laboratories such as NAL, NIMHANS etc.

UGC-DSA center in Fluid Mechanics of the Department of Mathematics has undertaken numerous research projects funded by different national agencies. The Center has collaboration research work with some of the university departments and institutions in the USA, Germany, Canada, UK and Japan. The Department of Chemistry is conducting collaborative research with institutions such has NIMHANS, ISRO, NAL, IISc, and University of Agricultural Sciences. Funds for research are received from UGC and other funding agencies.

The center of Applied Genetics, Bangalore University is the only center among Indian universities conducting research on Malaria and other Tropical Diseases.

Mangalore University
The Material Science Department has undertaken research projects for the Department of Science & Technology and Nuclear Science Center. The Department of Applied Zoology has ongoing projects for Department of Science and Technology, New Delhi.

Department of Bio Sciences has projects sanctioned by AICTE, Board of Research in Nuclear Sciences Mumbai, and Ministry of environment and Forests, New Delhi.

Marine Geology Department has undertaken research for Department of Ocean Development, Indian Navy, ISRO, DST.

**Research in Kuvempu University**

The area covered by the Kuvempu University is unique in terms of flora and fauna. The University has made attempts to make use of this rich and wide canvas for its research activities.

Department of Applied Botany has research links with Karnataka State Forest Department and CFTRI, Mysore. The Department of Chemistry has ongoing projects funded by the Department of Atomic Energy. The Department of Applied Geology is pursuing research activities in the area of environmental geology funded by Department of Science and Technology.

**Gulbarga University**

Zoology Department of the University is conducting research on projects sanctioned by national bodies such as Indian Council of Agricultural Research (ICAR), New Delhi.

The Environment Science Department has been doing research on ‘Rain Water Harvesting’.

The Microbiology Department has research projects sponsored by a few Central Government agencies.

The Department of Biotechnology achieved a new breakthrough in isolating microbial strains enriching soils.

The University has a tie up with Sunderland University of the United Kingdom in the area of Pharmaceutical Chemistry, for finding new drugs for leprosy and standardizing Ayurvedic drugs.

**Mysore University**

The department of applied botany has research projects sponsored by ICAR New Delhi, UGC,
The department of chemistry has research projects sponsored by UGC and AICTE. The department of geology has an Indo-Japanese project on activated carbon materials in progress. It also has projects sponsored by Department of Atomic Energy, Department of Science and Technology, UGC etc.

Karnatak University

The Department of Chemistry has collaborative program in the crystals structure determination of inorganic complexes and the heterocyclic components.

Department of Marine Biology has linkages with Nuclear power Corporation and the National Environmental Research Institute (NEERI).

The Department of Physics has linkages with BARC, TIFR, Mumbai, Solid State Physics Laboratory, New Delhi etc.

The dilemma of Fundamental Research and short-term goal oriented Research

There are relatively few universities in the world that produce major research discoveries and have the Laboratories and other facilities to support high-level research. These universities are located in the industrialized nations. In recent times, the time lag between fundamental discovery and its practical applications has greatly shortened. This explains why large industrial concerns in USA (such as General Motors and General Electric) make large investments in fundamental research

However, developing research capabilities in the Indian universities is considered important since much of the research done in the industrialized nations is of limited relevance to a developing country.

The opinion of respondents on the objectives of research in a university is given below:
Table: 4.22: Objectives of research—Opinion of the respondents

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Description</th>
<th>Group I</th>
<th>Group II</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>University should continue to be a center of fundamental Research.</td>
<td>26(22)</td>
<td>23(19)</td>
</tr>
<tr>
<td>2</td>
<td>University research should be selective and relevant, even if short term.</td>
<td>15(13)</td>
<td>17(14)</td>
</tr>
<tr>
<td>3</td>
<td>A combination of both the above.</td>
<td>73(61)</td>
<td>70(58)</td>
</tr>
<tr>
<td>4</td>
<td>Can't say.</td>
<td>06(4)</td>
<td>10(8)</td>
</tr>
<tr>
<td></td>
<td>Total Number</td>
<td>120(100)</td>
<td>120(100)</td>
</tr>
</tbody>
</table>

(Figures in brackets indicate percentages).

Source: Compiled from the filed survey.

Majority of the respondents feel the university should continue as a center of both fundamental research and research that is selective and relevant (even if short-term).

Segregation of academic science, from research in science laboratories, is one of reasons cited by the respondents, for the decline in publication of research papers. In contrast in a country like the USA, the research in applied science and academic science is carried out in the same set up. Greater interaction between the students, professors and scientists is possible in such a set up which creates the right atmosphere for fundamental research.

Research universities mainly perform research functions and produce huge research output. In Indian universities, teaching functions are given a more prominent role compared to research.

The respondents have emphasized strategic role of fundamental research in a developing country like India. This is the reason for their preference for combination of basic research and applied research.

Specific departments of Indian universities have built-up excellence in their chosen fields. The researcher came across a number of such departments during his visits to the universities. Polymers Science department of Karnataka University and Nuclear Science department of Mangalore university are just two examples that can be mentioned. On the basis of past performances, it should be possible to identify the research-oriented departments of universities and develop them into centers.
of excellence. MHRD has suggested that NAAC may identify 20 top departments in each discipline on all India basis. It may be possible to work out a mechanism to provide incentives to such departments rated high by the NAAC.

The Government has proposed to re-look at funding research in technical institutions, by linking productivity to performance. In future the IITs may receive funds, only if 50 percent of these are spent on research projects. While general research will also be given due weightage (5 percent), it will be far less than, that given for cutting edge work. Government may soon rework its policy with regard to research in universities.

The Council of Scientific and Industrial Research (CSIR) has established expensive laboratories all over India. However research in the laboratories and academic institutions lead their separate existence. Joint research by scientists, faculty and the students will put the CSIR Laboratories for maximum efficient use.

2. Procedure for industrial collaboration

The interaction between the industry and universities encourages innovation and optimally utilizes the resources available in both the systems.

Table: 4.23: Procedure for industrial collaboration-opinion of the respondents

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Description</th>
<th>Group I</th>
<th>Group II</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Present procedure is adequate.</td>
<td>08(7)</td>
<td>11(9)</td>
</tr>
<tr>
<td>2</td>
<td>There is need for more simplified and clear-cut procedure.</td>
<td>97(81)</td>
<td>89(74)</td>
</tr>
<tr>
<td>3</td>
<td>Can't say.</td>
<td>15(12)</td>
<td>20(17)</td>
</tr>
<tr>
<td></td>
<td>Total Number</td>
<td>120(100)</td>
<td>120(100)</td>
</tr>
</tbody>
</table>

(Figures in brackets indicate percentages)

Source: Compiled from the filed survey.

Majority of the respondents feel that there is need for more simplified and clear-cut procedure for industrial collaboration.

After intensive discussions the researcher identified some of the reasons for present procedure being inadequate.
i. People in private sector do not have much idea regarding the services the university can offer. Not having a standardized and categorized services list creates confusion.

ii. Research consultancy is not professionally organized; promotional activities are inadequate.

iii. Policy documentation in terms of activities performed, procedure to be followed for collaboration, the contact person responsible for a particular service etc not clearly spelt out.

iv. Universities are poorly served in terms of costing. Universities are non-profit organizations. The infrastructure is created through UGC/State Government’s assistance. Hence calculating full cost allocation for a particular activity is difficult.

3. **Facility to attract industry for research / project work.**

In the early stages, university research was mainly funded by Government / Government sponsored agencies. Priorities and character of university research acquired a particular tilt towards publications and scientific accomplishments. The transfer of research through publications route is less effective than direct collaboration with industry.

The opinion of respondents on the adequacy of facilities available at the university is given below.

**Table: 4.24 : Facility to attract industry for research / project work.**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Description</th>
<th>Group I</th>
<th>Group II</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Facilities are adequate.</td>
<td>17(14)</td>
<td>20(16)</td>
</tr>
<tr>
<td>2</td>
<td>Facilities are inadequate</td>
<td>90(75)</td>
<td>88(73)</td>
</tr>
<tr>
<td>3</td>
<td>Can't say.</td>
<td>13(11)</td>
<td>12(10)</td>
</tr>
<tr>
<td></td>
<td>Total Number</td>
<td>120(100)</td>
<td>120(100)</td>
</tr>
</tbody>
</table>

*(Figures in brackets indicate percentages)*

_Source: Compiled from the filed survey._

Majority of the respondents feel that the facilities to attract industries for research are inadequate.

University is a seat of ideas. They have to take the challenge of converting the ideas into opportunities and with the right mind set all obstacles can be over come.

In the opinion of the respondents, in number of areas such as microbiology, biology, chemistry etc.,
there are opportunities for moving technology from departments to the marketplace. Technology transfer activities can generate revenue that would in turn provide for more research activities.

4. Adopting Japan model in India.

In Japan, support to research in universities was poor and heavy undergraduate teaching duties made it difficult for academics to do any research. Ministry of education in 1991 established 14 joint industry-university research centers on the periphery of each university throughout the country to study - clean energy, artificial intelligence, precision manufacturing, biotechnology etc. The universities are now signing substantial contracts with private industries.

The opinion of the respondents on the suitability of the Japan model for India is summarized below;

Table: 4.25. Suitability of the Japan model - Opinion of the respondents

<table>
<thead>
<tr>
<th>S.No</th>
<th>Description</th>
<th>Group I</th>
<th>Group II</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>1</td>
<td>Japan has installed research parks, technology parks, incubation centers on the periphery of each university to build bridges between industry and universities. In your opinion, will this model achieve success in India?</td>
<td>91 (76)</td>
<td>05 (4)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>120(100)</td>
<td>120(100)</td>
</tr>
</tbody>
</table>

(Figures in brackets indicate percentages).

Source: Compiled from the filed survey.

Majority of the respondents feel that the Japan model will be a success in India.

On the suggestion given by one of the respondents, the researcher collected details about the Coimbatore R&D city. The Coimbatore based Bhartiya University (BU) and Electronics Corporation of Tamil Nadu Ltd (ELCOT) have proposed to establish a multi disciplinary R&D city and about 109 acres has been earmarked for this center. The IT companies would mostly fund the proposed

infrastructure. The University offers the research papers filed by the students to the IT companies who can develop products, processes or systems or use the skills of the faculty to conduct their own research with in the BU-ELCOT city. The university is also thinking of partnering with private IT companies on chem. -informatics, eco-informatics and bio- informatics.

60 multinational firms have set up their research and development outfits in India. A majority of them are in Bangalore, spread over a wide geographic area. International Technology Park has been established in Bangalore far away from the university. Indian Institute of Information Technology Bangalore (IIT-B) campus came up with in the park much later. Keeping this background in mind, the researcher, discussed the benefit of specialized Research Parks on the periphery of the universities. Following are the main benefits, in the opinion of the respondents:

i. Specialized research institutes on the periphery of the universities can absorb persons coming out from universities with fresh qualifications.

ii. Researchers in these laboratories get access to teaching young students; teachers get to know the latest developments. Teaching and research can be integrated in the field of higher education.

iii. Students get access to research in these labs, to broaden their outlook.

iv. Teaching, learning and research support each other. Each of these activities becomes powerful in combination with the others.

v. A link between academia and industry can generate “intellectual property”. This process, taken to its logical conclusion can make India a “knowledge base”.

Technology parks

Technology parks on the periphery of the universities perform similar functions. A respondent pointed out, the recent policy of union ministry of communications and information technology, in evolving a package to convert smaller cities and towns into vibrant IT hubs, to shift the focus from developed cities. Universities in the Karnataka are ideally positioned to take advantage of such a development. In view of cost considerations number of companies may consider shifting their facilities in the major centers, to new places. Business outsourcing parks can be set up on the periphery of universities (One such example, the researcher came across during the course of the study is the Software Technology Park set up at Manipal. This has been setup by Software Technology Park of
India (STPI). This region in addition to low cost infrastructure and real estate provides a ready-made pool of high skilled technical personnel for the IT industry. The Manipal IT corridor has potential to emerge as a major Information Technology center in the State).

The Universities and State Government may place proposals for consideration of the Central Government for establishing IT hubs on the periphery of our universities, in places, outside Bangalore.

**Incubation centers:**

In the long run universities may also aim for setting up incubation centers for incubating new ventures, at least in selective areas.

IIM-B-the and IISc have made some efforts in this direction and the details were collected by the researcher.

IIM-B has set up a center of excellence in entrepreneurial learning called NS Raghavan Center for Entrepreneurial Learning (NSRCEL) in October 1999. The purpose of the Center is to encourage students to act upon their ideas, energy and talent to produce global companies of the future and strengthen the country’s economy. The Center has incubated one company and is helping to three more now.

The researcher also understands that the Indian Institute of Science (IISc) is planning to set up an incubation center on the campus. Funding from various sources, including the international agencies, is being sought for the purpose.

Setting up incubation centers requires collective effort on part of all components of the university. The Government and corporate sponsorship has to be brought in; outside sources of capital have to be identified; and ‘venture capital community’ should be involved. This can be included in the long-range plan of the universities.

Improving research environment- views of the respondents:

i. Availability of abundant number of seats in professional colleges has resulted in decline in number of students choosing science, at the degree level. In addition, the IT human resources are at the expense of other vital sectors especially Science. To attract students to study pure science disciplines at collegiate level, more Scientist-Students meetings may be organized even in smaller places. More publicity needs to be given to various programs of the Ministry
of Science and Technology to attract students to study pure science.

ii. CSIR scientists may be encouraged to serve as adjunct faculty on academic programs. They may also take more active part in teacher refresher courses, curriculum development etc.

iii. Parallel honors degree courses can be introduced by the universities. These courses may stress upon research projects, and practical training to prepare researchers for the coming years.

iv. The universities may offer a 5-years integrated science course in order to encourage science at a higher level. The course work would encompass the conventional sciences, arts and social sciences. Admission will be after the PUC through a State level entrance test and at the end of 5-years the student would be awarded a PG Certificate.

v. Publication of journals: Publication of journals by the University departments acts as an incentive and gives sense of direction to the students and researchers. The Department of Botany, Bangalore University publishes a National level Research Journal, “Journal of Cytology and Genetics”. The Department is well recognized for its research activities in the areas of Cytology and Cytogenetics.

There are number of problems associated with the publication of journals. One of the major requirements is that the journal should be well circulated, to make the entire exercise fruitful. This hurdle can be overcome by considering publication of e-journals. Departments of a particular subject, of all the universities can collaborate to form a editorial committee and get a prototype ready for publication of e-magazine in that subject. The hard copy of the journal can be separately brought out.

vi. Opportunities In Research Outsourcing: The largest driver for outsourcing is the need to bring down costs. However Foreign Universities see India as a great place for cross cultural research. An association with them largely driven by partnerships can enable Indian universities gain considerably in the emerging scenario.

4.2.8. Relevance of degrees to the Job market.

There is a feeling that excessive emphasis is being given to general education. Number of students seek higher education, where the resources of the State and the individual are unproductively deployed. Most of the young graduates prefer salaried jobs, because of the importance they attach to fixed
monthly income, and other benefits.

A consultative meeting under the chairmanship of Dr. G Parthasarathi was unanimously of the view that jobs should be de-linked from the degrees. In the opinion of the committee, if the degrees are de-linked from the jobs, and a National Merit Examination were introduced, everybody would have a fair and equal opportunity for entering into a job of any level. This, they hoped, would reduce the indiscriminate enrolment in higher education and solve the problem of educated unemployment. De-linking of degrees from jobs coupled with facilities of non-formal education may improve the job opportunities for rural youths. The result would also match skills with jobs and provide vertical mobility for lower level workers through on the job training.

De-linking is seen by some people as a remedy for all ills of the education system and unemployment.

**Devaluation of Education.**

Employers may sometimes prefer persons with a higher education qualification, especially when they are available, at low rates. This would motivate the aspirants for jobs to better their educational qualification. This leads to a wild chase for degrees and further strengthens the link between degrees and jobs. The greater the degree of devaluation, the greater would be the desire to have additional qualifications.

There is also a suggestion that for non-professional (secretarial and administrative) jobs, degrees be de-linked with the jobs. The opposite view is that delinking will only be a formal change, without any real substance to it.

**Prescribing maximum rather than the minimum qualification.**

The recruitment policy suggested by Blang, et al. and JP Naik insists that recruitment services should be taken up before the students go for higher learning making the job of the person conditional upon, getting a satisfactory degree. The Government should also prescribe a maximum rather than a minimum qualification in order to prevent the possibility of graduates and even postgraduates taking the job meant only for matriculates.

The first part of the suggestion may not be practicable, but the changes suggested in the latter part could make the acquisition of degrees less attractive.

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7. *National Merit Examination, reports of a consultative meeting, National Institute of educational planning and administration, October, 1982.*
The opinion of respondents on the link between jobs and degrees has been summarized below;

Table: 4.26. Relation between jobs and degrees-opinion of the respondents
(group I and II)

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Description</th>
<th>Group I</th>
<th>Group II</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Non-professional (secretarial and administrative) jobs should be de-linked from degrees.</td>
<td>36(30)</td>
<td>17(14)</td>
</tr>
<tr>
<td>2.</td>
<td>Jobs should continue to be linked to degrees. De-linking will only be a formal change without any real substance to it.</td>
<td>61(51)</td>
<td>70(58)</td>
</tr>
<tr>
<td>3.</td>
<td>Govt. should prescribe a maximum qualification rather than minimum qualification for a particular job.</td>
<td>23(19)</td>
<td>22(18)</td>
</tr>
<tr>
<td>4.</td>
<td>Can’t Say.</td>
<td>00(00)</td>
<td>12(10)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>120(100)</td>
<td>120(100)</td>
</tr>
</tbody>
</table>

*Figures in brackets indicate percentages.*

*Source: Compiled from the filed survey.*

51 percent of the respondents in group I and 58 percent in group II feel that the job should continue to be linked to the degrees.

Number of respondents questioned the very assumption, on which the plea of de-linking has been made. Serious concerns were also expressed regarding the implications of de-linking on education as well as employment. Moreover the G Parthasarathi committee has recommended de-linking the degrees from the jobs and holding a national merit examination. There is no proposal for holding a National Merit Examination. De-linking cannot be seen as a remedy for all ills of the education and employment, at a stage when Indian economy is being increasingly globalized.

Some respondent felt that prescribing a maximum qualification rather than a minimum qualification

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can help. Government does not consider a higher qualification like B.Ed for recruitment of primary school teachers where D.Ed is the prescribed qualification.

2. **Vocationaisation at the degree level.**

70 percent of the respondents in group I and 76 percent of the respondents of group II agree that introduction of vocationaisation at the degree level, may help in giving proper perspective to the higher education.

The nationwide vocationaisation experiment began in 1978 as a program of the 5th five-year plan (1974-79). From 1993 vocationaisation has been introduced at the graduate level. UGC has introduced number of incentives to popularize the schemes. The researcher discussed with the respondents, the reasons for limited success of the scheme. As per the scheme, vocationaisation was combined in to the undergraduate structure. The students would have thought that, the vocationaisation was happening at the cost of regular course work, and did not prefer the same.

This indicates a different approach will have to be adopted to equip students with vocational skills.

3. **Offering ‘add-on’ skill oriented courses simultaneously with graduation course.**

In India, the enrolment of higher education constitute only 6% of the relevant age group and almost 90% of the students are in general education. In developed coimtries, 20 - 25% of the relevant age group of the population are in higher education and of this only 30% are in general education. Indian universities have to take some measures in equipping the students with skills and competencies, they require to be employable or to create their own jobs.

The opinion of the respondents on offering ‘add on’ courses has been summarized below;

**Table: 4.27: Offering ‘add on’ courses - Opinion of the respondents**

<table>
<thead>
<tr>
<th>S. No</th>
<th>Description</th>
<th>Group I</th>
<th>Group II</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Agree.</td>
<td>Do not agree.</td>
</tr>
<tr>
<td>1</td>
<td>Offering ‘add on’ skill oriented courses simultaneously with the graduation course.</td>
<td>108(90)</td>
<td>12(10)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>120(100)</td>
<td></td>
</tr>
</tbody>
</table>

*(Figures in brackets indicate percentages).*

*Source: Compiled from the field survey.*
An overwhelming percentage of the respondents agree that offering 'add on' skill reoriented courses simultaneously with graduation course will help.

In the opinion of the respondents, our university education is required to be more relevant to the needs of the market. ‘Add on’ courses mean that a student can work towards his degree and towards a diploma in an area of allied skill, simultaneously.

A majority of the 15,000 colleges in India are offering programs in the humanities, science and commerce. The idea of 'add on' courses makes the education relevant to the needs to the market. At the same time it is not done at the cost of the basic education that the students receive. A few universities in Karnataka have started offering skill oriented courses, and it can be expected that the innovation may be further refined and popularized, with the passage of time.

The Mangalore University has attempted to provide greater thrust to vocationisation of education, drawing on the assistance of UGC in this regard. It has introduced courses such as B.Sc with e-commerce, Computer Application, Electronic Equipment Maintenance, Office Management, Secretarial Practice and the Microbiology combinations.

4. Type of employment preferred of by group II (students).

The students were asked their preference among different sectors of employment. 39 percent of them preferred employment abroad, while 37 percent preferred employment in the private sector, as a first choice. Only 19 percent preferred employment in Government service as their first choice.

5. Employment opportunities in the globalization era.

With increasing globalisation levels of Indian economy there is a decline in the role of public sector as an employer. 68 percent of the respondents of group II felt that despite the decline in the role of public sector as an employer, employment opportunities would increase.

India is emerging as a services dominant economy. While agriculture and manufacturing sectors shall remain crucial for the country, the real growth in employment opportunities is likely to come from the services sector.

The job market is looking for graduates who are knowledge workers. Student should have sound foundation in their basic discipline and also possess skills linked to the changing economic and...
industrial scenario. The share of services in GDP is increasing and India has potential to become ‘service provider’ to the world. University students are ideally positioned to take advantage of the opportunity, provided they are ready for it.

4.2.9. Share of Karnataka Students in National level Competitive Examinations.

The students of Karnataka have excelled in almost all the spheres of educational activities. Yet, in many national level competitive examinations like Civil Services, UGC - NET examination etc, the share of successful candidates from Karnataka is quite low. For example during the period 1995-2000, only 196 students Karnataka University, and 121 students of Bangalore university qualified in the UGC-NET examination. UGC annual reports indicate that in the year 1999-2000 (2 examinations) 8200 candidates were successful in UGC-NET. This clearly indicates that the performance of students of Karnataka in this examination is very poor.

The questionnaire tries to ascertain the opinion of the respondents regarding the reasons for poor performance of Karnataka students in National level Competitive Examinations and remedial measures to be undertaken to improve the situation.

The results obtained are presented below:

Table: 4.28: Reason for poor performance of the Karnataka students in the national level competition examinations. - Opinion of the respondents of group II.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Description</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Less attention paid to secondary level education.(development of mind takes place in the 4-18 age group)</td>
<td>95 (79)</td>
<td>25 (21)</td>
</tr>
<tr>
<td>2</td>
<td>Lack of clear-cut personal goals.</td>
<td>86 (72)</td>
<td>34 (28)</td>
</tr>
<tr>
<td>3</td>
<td>Lack of motivation.</td>
<td>89 (74)</td>
<td>31 (26)</td>
</tr>
<tr>
<td>4</td>
<td>Lack of guidance.</td>
<td>84 (70)</td>
<td>36 (30)</td>
</tr>
<tr>
<td>5</td>
<td>High cost of professional training centers.</td>
<td>78 (65)</td>
<td>42 (35)</td>
</tr>
</tbody>
</table>

Total number of respondents:120. (Figures in brackets indicate percentages).

Source: Compiled from the filed survey.

Majority of the students feel that all the factors listed in the table are responsible for poor performance of Karnataka University students in National level competitive examinations. The researcher deeply probed into the matter and feels that several inherent imbalances in the education system are responsible for a number of problems. Some students have studied in institutions in rural/semi urban places, where colleges found it hard to attract good teachers. Medium of instruction at the high school level has been a source of disparity in performance. Economic and social backwardness, poor school education, geographical handicaps etc. were responsible for ‘low entry level capability’ of university students.

**Different avenues are open for the universities to help the students.**

The inherent imbalances can be corrected at the university level by developing additional innovative courses and student counseling. The opinion of the respondents on this issue is as under.

**Table: 4.29: Performance of students in the National Level Competitive Examinations—Opinion of the respondents**

<table>
<thead>
<tr>
<th>S. No</th>
<th>Description</th>
<th>Group I</th>
<th>Group II</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>1</td>
<td>Creating awareness.</td>
<td>95 (79)</td>
<td>25 (21)</td>
</tr>
<tr>
<td>2</td>
<td>Coaching for above examinations as a part of the curriculum.</td>
<td>36 (30)</td>
<td>43 (36)</td>
</tr>
<tr>
<td>3</td>
<td>Offering separate half yearly/yearly courses to prepare students for National Competitive examinations.</td>
<td>74 (62)</td>
<td>25 (21)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>120 (100)</td>
<td></td>
</tr>
</tbody>
</table>

*(Figures in brackets indicate percentages).*

*Source: Compiled from the filed survey.*
In the opinion of the respondents, creating awareness would motivate the university students to go for a long term planning, which is essential to achieve success in the national level competitions. Though there is support for offering separate courses to prepare students for competitive examination, the respondents do not agree for making it a part of curriculum.

Some North Indian universities have adopted the IAS syllabus for the degree courses so as to facilitate their students a smooth sailing into civil services. The success rate of students from these universities, appearing for IAS is reported to the high\textsuperscript{12}. There is not much support for this strategy from the respondents. In yet another example, the neighboring State of Tamil Nadu has set up special coaching for civil services at Madurai and Chennai. Most of the universities in Tamil Nadu have added a general knowledge paper as part IV at the undergraduate level.

Revised and updated syllabus includes job oriented subjects also\textsuperscript{13}. Christ College, Bangalore is running separate training programme for IAS in three streams: stream I (full-time intensive programme), stream II (evening programme) and stream III (for students pursuing second and third year of bachelor’s degree).

Some of the Karnataka State Universities have coaching centers which conduct coaching cum guidance classes for competitive examinations conducted by the UGC and the Central Government. Scope of these centers is limited at present. Universities should seek to identify the true potential of the students and broaden their minds, by providing opportunities for them to study subjects outside the regular curriculum. The students should be geared up to meet the challenges of the corporate world by learning interpersonal / communication skills to mould their personality.

\textsuperscript{12} Prof PS Seetharamu at the 90th Session of the Indian Science Congress, 6th January, 2003. Bangalore.
4.c. **Management of Change in University Finances.**

4.3.1. Mobilization of Resources.
4.3.2 Completion for Private & Foreign funding.
4.3.3 Methods to reduce non plan expenditure
4.3.4 Revision of Fee structure
4.3.5 Additional Taxation measures.
4.c. Management of Change in University Finances

Higher education is linked to national development. In the past, the Government could not increase the budget allocations to the desired six percent of the GNP, largely due to pressing demands for other developmental needs. The rate of cost escalation in the field of higher education is alarming and the Government may not be in a position to fund the entire cost of higher education in the near future. Inadequate financial resources will continue to be the major problem for the Indian higher education, for some more years to come.

Governments worldwide have been showing increasing reluctance to fund higher education. Universities are under pressure to mobilize resources on their own. This global trend has already touched India. IIMs and IITs have succeeded in mobilizing funds from their own resources, particularly in the last decade. In the coming days, pressure on the university system to reduce their dependence on Government funds will increase.

The Government in 1993 announced two big concessions to assist universities in income generation.

a. Whatever income they are able to generate will no longer be deducted from the Government/State grants given to them.

b. 100 percent tax exemption will be given to industry for donations made to universities. The only condition is that ‘the income generated should not be used for salaries’.

Resource mobilization in Karnataka State Universities:

Finance becomes crucial in the process of bringing change in the universities. Despite huge amounts spent on higher education by the Central and State Governments, the financial position of the universities is far from satisfactory. The UGC finds it difficult to extend the necessary support to new courses and departments and the State Government imposes various cuts, in view of budgetary constraints. The obligations of the universities are on the increase, and the resources are not able to keep pace with them. The universities will have to give their full attention to the problems of financial management and initiate measures for finding a solution.
Financing has a far reaching impact on the success of the change process in an University. An inadequate financing system adversely affects the performance of the university administration and hampers the development and academic growth of the University. Paucity of funds may prevent the University from starting a number of new courses; it may not be possible, to introduce many specialization in the existing courses. Funds constraints may also take away the freedom of departments to bring about changes in the curriculum, as regularly as they would like to. Academic / non-academic programs and quality of education provided by the University, depend to a great extent on the financial resources and efficient functioning of the financing system.

**Sources of university income.**

The universities are largely financed by the State and Central Governments and the remaining portion is financed from fees, endowment and other contributions.

The States are responsible for meeting the entire non-plan expenditure of the universities. The analysis of the financial Statements of the universities shows that the Karnataka Government is bearing the major burden of financing the State universities. The plan and non-plan amounts released to the State universities have been provided in the following table.

**Table.4.30 a: Mysore University - Receipts (Non Plan) Rs in lakhs.**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>State Government Grants</td>
<td>1723</td>
<td>1857</td>
<td>2385</td>
<td>3257</td>
<td>3003</td>
<td>3057</td>
</tr>
<tr>
<td>II</td>
<td>Internal Resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Administration/Registration/</td>
<td>195</td>
<td>174</td>
<td>224</td>
<td>284</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td></td>
<td>Affiliation Fee etc.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Receipts from self finance</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>155</td>
<td>180</td>
<td>190</td>
</tr>
<tr>
<td></td>
<td>c. scheme courses.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>d. Other Receipts</td>
<td>90</td>
<td>42</td>
<td>178</td>
<td>171</td>
<td>102</td>
<td>108</td>
</tr>
<tr>
<td></td>
<td>e. Examination fees</td>
<td>348</td>
<td>329</td>
<td>341</td>
<td>373</td>
<td>342</td>
<td>342</td>
</tr>
<tr>
<td>III</td>
<td>Total</td>
<td>2356</td>
<td>2402</td>
<td>3128</td>
<td>4239</td>
<td>3927</td>
<td>3997</td>
</tr>
</tbody>
</table>

159
b: Mysore University - Payments (Non Plan). Rs in lakhs.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pay &amp; Allowances</td>
<td>1606</td>
<td>1667</td>
<td>2296</td>
<td>2677</td>
<td>3026</td>
<td>2619</td>
</tr>
<tr>
<td>2</td>
<td>Pensionary Benifits</td>
<td>278</td>
<td>200</td>
<td>398</td>
<td>434</td>
<td>760</td>
<td>660</td>
</tr>
<tr>
<td>3</td>
<td>General Administrative Expenses</td>
<td>273</td>
<td>276</td>
<td>315</td>
<td>444</td>
<td>512</td>
<td>407</td>
</tr>
<tr>
<td>4</td>
<td>Academic Activities,</td>
<td>126</td>
<td>45</td>
<td>47</td>
<td>172</td>
<td>133</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Books &amp; Journals</td>
<td>20</td>
<td>10</td>
<td>5</td>
<td>12</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>b. Lab Chemicals &amp; Equipments</td>
<td>22</td>
<td>18</td>
<td>7</td>
<td>54</td>
<td>14</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>c. Others</td>
<td>10</td>
<td>14</td>
<td>7</td>
<td>51</td>
<td>107</td>
<td>117</td>
</tr>
<tr>
<td>5</td>
<td>Student Welfare Measure</td>
<td>83</td>
<td>97</td>
<td>113</td>
<td>130</td>
<td>134</td>
<td>137</td>
</tr>
<tr>
<td>6</td>
<td>Examination Activities</td>
<td>210</td>
<td>207</td>
<td>214</td>
<td>219</td>
<td>242</td>
<td>203</td>
</tr>
<tr>
<td>7</td>
<td>Other Expenditures</td>
<td>20</td>
<td>296</td>
<td>284</td>
<td>557</td>
<td>640</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Total</td>
<td>2502</td>
<td>2579</td>
<td>3355</td>
<td>4021</td>
<td>4806</td>
<td>4232</td>
</tr>
</tbody>
</table>

The UGC is responsible for the maintenance of specific standards in higher education and it provides plan grants on matching basis or sharing pattern to the State universities.

The UGC gives grants depending upon acceptance of development projects and special programs. Thus, contribution from the UGC constitutes a relatively small portion of the total receipts. The budgetary allocation and grants released by the UGC to the State Governments is provided in the following table.

Table 4.31: UGC Grants to Karnataka State Universities: 1997-2002

<table>
<thead>
<tr>
<th>Sl No.</th>
<th>Name of the University</th>
<th>Allocation for 1997-2002</th>
<th>Grants released upto 2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bangalore University</td>
<td>270</td>
<td>243</td>
</tr>
<tr>
<td>2</td>
<td>Karnataka University</td>
<td>270</td>
<td>243</td>
</tr>
<tr>
<td>3</td>
<td>Gulbarga University</td>
<td>221</td>
<td>199</td>
</tr>
<tr>
<td>4</td>
<td>Mangalore University</td>
<td>260</td>
<td>234</td>
</tr>
<tr>
<td>5</td>
<td>Mysore University</td>
<td>285</td>
<td>257</td>
</tr>
<tr>
<td>6</td>
<td>Kuvempu University</td>
<td>188</td>
<td>169</td>
</tr>
<tr>
<td>7</td>
<td>Kannada University</td>
<td>90</td>
<td>81</td>
</tr>
<tr>
<td>8</td>
<td>National Law School of India University</td>
<td>150</td>
<td>135</td>
</tr>
</tbody>
</table>

Universities receive research support, mainly from the National level research organizations and Government departments. Tuition fees/admission fees/registration fees and affiliation fees are generated by the universities under the head of internal resources. The fees from students are to some extent inelastic in nature and the universities have been trying to increase the contribution through self-financing courses.

The universities also show some savings under the budget head of examinations. However, with the introduction of semester system they may incur additional examination related expenses.

The universities having Distance Education Directorates have been able to raise resources from correspondence courses.

The details of sources of income and expenditure of all the six universities are provided in the annexure.

The special funds viz: donations, endowments etc, are given for a specific purpose and there is an obligation on part of the University to manage such funds according to the wishes of the donors. Among the State universities, University of Mysore held substantial value of Endowments (Rs 7.2 crores as on 31st March 2002).

As the Plan grants sanctioned by the State Government are insufficient for the developmental activities, Bangalore University has been continuously utilizing the internal resources of the university for Plan schemes. During the year 2001-02, a sum of Rs 780.49 lakhs was transferred from internal resources for Plan schemes, while the sum increased to Rs 1549 lakhs in 2002-03. Among the State universities, Bangalore University has been able to raise substantial internal resources. The budget estimates for the year 2004-05 show that the University expects to raise total revenue of Rs 85 crores from the various resources. Out of this, Rs 40 crores (47%) are from internal resources and 29.3 crores (35%), the expected contribution from the State Government. The overall picture shows that the universities continue to depend on the fiscal capacity of the State Government for the resources.

Presently, universities generate their own resources only to the extent of 5 to 10 percent of the budget. Unless universities are able to raise contribution from their own sources multi fold, the developmental activities and consequently quality of education will suffer. The questionnaire ascertains the relative importance given to various heads under which the resources are raised.
The questionnaire listed nine methods for mobilizing the resources and the respondents were asked to mark the degree of importance of each method on a scale of 1-5. The results are presented in the following table:

4.32 : Efforts to be made to mobilize resources in the future (Group I)

(Items were scored from 1 = least important to 5 = most important)

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Description</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Raising resources by rationalizing the fee.</td>
<td>3.5 (0.50)</td>
</tr>
<tr>
<td>b</td>
<td>Attracting foreign students with a differential fee.</td>
<td>3.1 (0.72)</td>
</tr>
<tr>
<td>c</td>
<td>Starting more Self-financing courses.</td>
<td>3.2 (0.67)</td>
</tr>
<tr>
<td>d</td>
<td>Grants from external agencies/Industry/Service Sectors.</td>
<td>4.2 (0.85)</td>
</tr>
<tr>
<td>e</td>
<td>Providing Consultancy services by the faculty.</td>
<td>2.2 (0.52)</td>
</tr>
<tr>
<td>f</td>
<td>Income from Intellectual property rights (patents &amp; books).</td>
<td>1.6 (0.46)</td>
</tr>
<tr>
<td>g</td>
<td>Creating supernumerary seats for NRI, NRI/ Industry sponsored students.</td>
<td>2.1(0.50)</td>
</tr>
<tr>
<td>h</td>
<td>Donations from Alumni association and philanthropists.</td>
<td>4.3(0.83)</td>
</tr>
<tr>
<td>i</td>
<td>Creating Endowments and Corpus funds.</td>
<td>4.2(0.70)</td>
</tr>
</tbody>
</table>

Total number of respondents 120. (Standard deviation in parenthesis).
Source: Compiled from the filed survey.

The respondents were not hopeful of generating income from intellectual property rights, providing consultancy services by the faculty or by creating supernumery seats for NRI/industry sponsored students.

Raising resources by rationalizing the fee, attracting foreign students with a differential fee and starting more self financing courses are considered 'reasonably important' by the respondents.

The universities have made some progress in generating resources through self financing courses. Mysore University has earned nearly 2 crores in the year 2003-04 by way of receipts from self-financing courses. For the year 2004-05, the University is offering admission to ten courses under fully self-financing schemes. These include Master of Information Management (MIM), Master of Financial Analysis and Management (MFAM), MA in Criminology and Forensic Science etc. The Bangalore University has generated a fee of Rs.1.27 crores in 2001-02 and expects to increase the contribution to 1.80 crores during 2003 -04. The Bangalore University has proposed to start self-

Grants from external agencies/industry/services sectors, donations from alumni association, philanthropists and creation of endowments and corpus funds have been considered ‘most important’ methods from which resources can be mobilized.

Number of respondents expressed their disappointment with regard to weak structure of Alumni associations in Indian universities unlike those in IITs or Foreign universities Worldover, Alumni are usually the Institution’s largest donors. Alumni associations enable ex-students to maintain continuous contact with their universities. In addition to providing Alumni with a sense of affiliation to their former ‘alma mater’, these associations also offer other benefits to members such as net working opportunities and professional development. Alumni associations also serve an important purpose for universities by assisting them in building the institution’s name both within the country and abroad. One suggestion that has been made is to give strong thrust to Alumni associations even at departmental level, as attaining a critical mass, wouldn’t be a problem.

Many industrial houses grew in last few decades. Service sector has shown tremendous growth in the last decade. They have been benefited by the educated manpower provided by the higher educational institutions. IITs and IIMs have made efforts & succeeded in mobilizing funds from industries/Alumni. Institutions supported by the Government have not received substantial donations and endowments in the past. To realize their full potential in fund-raising institutional mechanism is necessary. Policy should be set; priorities should be defined; coordinated efforts should be made; and there should be participation at all levels. Accreditation results should also be used to seek marketing advantages.

Universities have to take steps for mobilization of resources. Simultaneously, efforts should be made to eliminate the inefficiency in the financial system to optimize utilization of resources. The Government may have to consider some taxation measures to augment resources for higher education.

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necessary. Policy should be set; priorities should be defined; coordinated efforts should be made; and there should be participation at all levels. Accreditation results should also be used to seek marketing advantages.

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4.3.2. Resource utilization in Universities:

Expenditure in the Universities.

The pattern of expenditure in the universities generally consists of items such as payment of salaries to the teaching and non-teaching staff, expenditure on libraries, purchase of chemicals and other stores, acquisition of apparatus and equipment, expenditure incurred on furniture and fittings, expenditure on student amenities, conduct of examinations and other miscellaneous expenditure.

The major portion on the expenditure side corresponds to the payment of salaries and allowances to the teaching and non-teaching staff.

No definite pattern could be observed in the relative share of expenditure on the lab equipments and apparatus and it differed to the extent of allocation of funds for the purpose, during the year. On an average, this expense constitutes around 1% of the total expenditure.

The average expenditure on libraries is found to be around 1 - 1.5 % of the total expenditure.

Expenditure on the conduct of examinations accounts for, on an average 10 - 15 % of the total University budget.

The major conclusion that emerges from the foregoing analysis is that, staff salaries, general administrative expenses and expenditure on the conduct of examinations are the crucial components, accounting for most of the expenditure.

Problems faced by the Universities:

Salaries and allowances are the major items of non-plan expenditure. In case, the block grant given by the State Government is insufficient to meet the salaries and pensions, the university is forced to
utilize the internal resources of the university for the purpose, in addition to the grants received from the Government. In case the deficit cannot be met even after re-appropriation of funds under various Heads of Accounts, the university may go for over-draft facilities from banks to meet the situation. Simultaneously, the University may try to revise the various fees and the fees for self-finance courses, on actual basis. The University may also try to prune the expenditure by enforcing economy measures to avoid/reduce the deficit. The University may continue to make efforts for getting more grants from the State Governments to manage the deficit.

Numbers of Karnataka State universities are running deficit budgets. The deficit budgetary position of Mysore University is presented in the following table.

Table: 4.33: Comparative statistics of the financial deficit in Mysore University

<table>
<thead>
<tr>
<th>Financial Year</th>
<th>Deficit (Rs in lakhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998 -1999</td>
<td>164.42.</td>
</tr>
<tr>
<td>1999 - 2000</td>
<td>460.52.</td>
</tr>
<tr>
<td>2001 – 2002</td>
<td>738.33</td>
</tr>
<tr>
<td>2002 - 2003</td>
<td>235.08.</td>
</tr>
</tbody>
</table>

Source: Financial statement of the Mysore University.

The availability of finance also determines the scope of developmental activities of a University. Faced with a shortage of Rs 10 crores for its developments schemes in 2004 – 05, the Bangalore University has decided to undertake only schemes of priority.

Though the Government accepts the proposals on full share or matching share basis, usually there is a delay in the actual disbursements of funds. Universities, in the meanwhile, have little flexibility to deal with the situation. As far as the UGC is concerned, even though the grants are approved and sanction letters issued, the actual disbursement takes place after considerable time, as all formalities have to be completed.

Non-plan expenditure in universities is usually more than the plan expenditure. Across the board reduction in non-plan expenditure cannot be justified as there are number of non-negotiable components such as ‘salaries,’ which cannot be cut. In view of the recurrent constraint of resources, the need for regulating the non-plan expenditure is felt.
The study lists several methods for controlling non-plan expenditure.

Systematic manpower planning can involve methods to adopt a judicious mix of academic and non-academic staff to save costs in the long run.

De-centralization of departments and creation of spirit of self-sufficiency could enable the departments to have long term planning and develop vision for future. Decision-making and financial administration, in the current system is a very complex process. The system is geared towards solving existing problems or those that may arise in immediate future. To overcome this drawback, de-centralisation at the departmental level, is necessary.

While an incremental budget may not scrutinize the baseline, Zero Based Budgeting (ZBB) aims at eliminating low yield programs from the institutional activities. It requires periodical defence of all the systems/programs, to identify and eliminate those activities that are not necessary. The core of ZBB model lays in formalized comparison of alternative expenditures. Final budgets are prepared on the basis of decisions taken between alternatives.

The views of the respondents on the importance of each method of controlling the non-plan expenditure are given below:

**Table: 4.34. Efforts required to control non-plan expenditure—mean scores (group I)**

(Scored on a scale of 1 = least important to 5 = most important.)

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Description</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Systematic manpower planning.</td>
<td>3.0 (0.33)</td>
</tr>
<tr>
<td>b.</td>
<td>Zero based budgeting to improve performance at all levels.</td>
<td>3.6 (0.60)</td>
</tr>
<tr>
<td>c.</td>
<td>Cost effective analyses or elimination of schemes/projects which have lost their practical relevance.</td>
<td>2.8 (0.95)</td>
</tr>
<tr>
<td>d.</td>
<td>Decentralization of departments and the creation of spirit of self-sufficiency.</td>
<td>4.0 (0.52)</td>
</tr>
<tr>
<td>e.</td>
<td>Employing modern Office management techniques for intensive utilization of Staff.</td>
<td>4.2 (0.65)</td>
</tr>
<tr>
<td>f.</td>
<td>Encourage interdisciplinary utilization of faculty/visiting faculty.</td>
<td>3.8 (0.50)</td>
</tr>
<tr>
<td>g.</td>
<td>Introduce austerity drives and reduce unnecessary spending.</td>
<td>3.1 (0.50)</td>
</tr>
</tbody>
</table>

*Total number of respondents 120. (Standard deviation in parenthesis).*

*Source: Compiled from the filed survey.*
In the opinion of the respondents two methods which carry more importance than the others are;

i. Employing modern office management techniques that make intensive utilization of Staff.

ii. Decentralization of departments and creation of spirit of self-sufficiency.

Methods like encouraging interdisciplinary utilization of faculty/visiting faculty and zero based budgeting follow next in the order of preference.

Achieving the “total and comprehensive” computerization process has to be a major goal, in the view of the respondents. Universities in the State are making efforts in moving towards “paper free” administration. Mysore University is spending around Rs 10 lakhs towards “e-administration” program. Applicants for PG courses can get application forms “on line”. All departments have been computerized and heads of departments have been advised to deal with the university only through e-mail. The university is likely to reach the goal of total e-administration, in course of time.

Core of the effective institution of tomorrow is technology. The administrative systems of today will have to give way to Internet Centric Systems, which allow for self-service provided through the worldwide web. Students, faculty as well as employers can get information and monitor key performance indicators on a process oriented system. This will increase the efficiency of the system to a great extent.

**Introduction of Fund Based Accounting System (F-Bas) in Bangalore University.**

From the year 2004-05, Bangalore University would be adopting a Fund based (F-Bas) accounting system on the lines of Bangalore City Corporation to ensure that all the university funds are accounted for. This is the first time that an Indian university is introducing such a program.

F-Bas is basically a sophisticated double entry accounting system with accurate user cost, assets and liability tracking, and much more. F-Bas generates a balance sheet, which helps the university figure out exactly where its assets lie, what state they are in, and where resources have to be diverted. It also helps spot the emerging areas of revenue and expenditure. This system is extremely beneficial to an institution such as a university, which has multiple sources of funding. It is expected that the system will lead to greater accountability and transparency.
4.3.3. Revision of Fees structure

While the cost of higher education has been increasing, the fee structure has not kept pace with it. Present fees structure is unable to meet even partially, the cost of running the institution of higher education. It may also be noted that returns due to higher education in the form of individual earnings have increased.

Committee to examine the issue of fee hike

In the past, the University grants Commission had set up number of committees to examine the issue of fee hike in higher education institutions. Prominent among those are the Punnayya Committee on UGC funding of institutions of higher education (1992), the Pylee Committee on the unit cost of higher education and other related matters (1997), the Ananda Krishnan Committee to review the Maintenance Grants norms for Delhi Colleges (1999) and the Mahmood-ur- Rahman Committee to formulate revised fees structure in the Central and Deemed Universities (2000). The consensus among the recommendations of the various committees is that there is need for an upward revision of fee that has remained statuesque for long time.

Different models on pricing

i. Discriminating pricing

Discriminating pricing i.e. differential pricing based on family income (ability to pay) is proposed by Tilak14. Tilak notes that there are some advantages of discriminatory as against non-discriminatory pricing. It will reduce the perverse effects of public subsidization of education. It will ensure more equity and more resources for higher education. It will have no adverse effects on the quality of education as well as no impact on demand for higher education.

ii. Dual pricing or cross subsidization of courses.

Shah15 suggests some measures to rationalize fee structure to generate extra revenue within the existing set-up.

(i) The pricing or cross-subsidization of courses based on the institutional cost of courses, their marketability and payoffs and of course the economic status of students' families.

(ii) Costs of the conduct of examinations, auxiliary services and provision of hostel facilities by the universities have increased disproportionate to their charges, ending in deficit on revenue account. Even if these activities are performed at no profit no loss principle, substantial cost recovery can be effected easing financial stress.

iii Other methods on pricing

(a). Kothari suggests, “affordable pricing” with the intention of exploring the potential of resource mobilization through fees. Affordable pricing here is the pricing (average tuition fees) based on some proportion of the current per-capita income. (affordability for 70% to 80% of the students, with arrangement for financial assistance for the rest.) Its level is to be determined on the basis of the social economic composition of students availing higher education at present. Kothari feels that public sector financing along with enhanced fees seems to be the most desirable way out of the present impasse.

(b). Dandekar and Rath feel that the main cause of indiscipline and irresponsibility in the institutions of higher learning is the present structure. They demand reorganization of the structure, so that teachers earn their salaries as professionals and students bear the full cost for their higher education. The dependence on public funds should reduce and that on fees should increase. Only selective provisions of scholarship / loans etc may be permitted.

Dandekar feels, only courses with economic value will thrive and survive in the proposed system and hence Government should extend select support to subjects having social and cultural value. They want institutions to be more competitive and efficient, as they will enjoy complete autonomy under their scheme of reorganization.

Preferred model for fee structure

India spends around 4 percent of its GNP on education, as against 6 percent recommended by various education commissions. Governments are under pressure to accord high priority to universal elementary education and programs of total literacy. Governments-both State and Central, desire

that universities accept the challenge of raising resources on their own and from private sector.

Student fees are an important source of finance for education. Students fee in our universities bears no relation to unit costs. As the result of globalization, there is a leveling of costs and prices in all other sectors of economy. The issue needs careful analyses, as the fee structure should not introduce distortions in higher education sector and interests of the students of the weaker sections needs to be protected.

Opinion of the respondents on this issue is summarized below:

Table: 4.35 : Preferred model for fee structure - Opinion of the respondents

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Description</th>
<th>Group I</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Fees should be related to cost (even though full cost pricing may not be allowed) soft loan/scholarship to deserving.</td>
<td>50(42)</td>
<td>45(38)</td>
</tr>
<tr>
<td>2.</td>
<td>Discriminatory pricing (differential pricing based on ability to pay).</td>
<td>25(21)</td>
<td>21(18)</td>
</tr>
<tr>
<td>3.</td>
<td>Dual pricing or cross-subsidization of courses based on marketability and payoffs and economic status of students.</td>
<td>24(20)</td>
<td>14(11)</td>
</tr>
<tr>
<td>4.</td>
<td>Suggested no change in the fee structure, being the welfare State, let the Government pay.</td>
<td>21(17)</td>
<td>40(33)</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>120(100)</td>
<td>120(100)</td>
</tr>
</tbody>
</table>

(Figures in brackets indicate percentages).

Source: Compiled from the filed survey.

Only 17 percent of the respondents belonging to group I have opted for continuation of existing fee structure. While 83 percent have opted for a change, choosing one model or other.

The percentage of students opting for continuation of present fee structure is 33 percent. This is not surprising. In the 'India today' survey (Chapter I) the option of raising fee was least preferred by the people which was described by the magazine as "raising fee have received lowest priority. People want to gain, with little pain". Yet, it is significant that 67 percent of the students have opted for change in the method of charging fees.
Figures show that the percentage of fees in total income (of all educational institutions) has been coming down consistently over the years.

The researcher undertook a quick survey of fees charged for nursery education in Bangalore. A study of 10 nursery schools in extension areas of Bangalore, revealed that the average fee charged were Rs. 10,000 per year. Many students going for education provided by private schools pay market driven fees, after which, their fee is subsidized at university level.

A major problem in fee structure has been that all categories of students including those belonging to affluent classes are lumped together and common fee structure is followed.

The respondents desire that the Fees should be increased for at least those who can pay. At the same time no deserving student should suffer on account of fees. This requires very careful analyses and a combination of different models suggested above may provide suitable solution.

All public universities in the world provide subsidized education in varying degrees. However in a country like India, which still lag behind in certain vital parameters of development, the importance of fees cannot be over emphasized. Fees cannot be increased beyond the reasonable levels, considering inequalities of incomes and living standards.

**Unit costs**

Fees charged by the universities have no relation to unit costs. The unit cost of education in the universities of Karnataka is given below:

**Table: 4.36. Details of unit cost in Universities**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Name of the University</th>
<th>Unit cost for PG (Rs)</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bangalore University</td>
<td>22,742</td>
<td>1999-2000</td>
</tr>
<tr>
<td>2</td>
<td>Karnataka University</td>
<td>30,000(Sc)/17,000(Arts)</td>
<td>1998-99</td>
</tr>
<tr>
<td>3</td>
<td>Mysore University</td>
<td>25,000(Sc)/16,000(Arts)</td>
<td>1998-99</td>
</tr>
<tr>
<td>4</td>
<td>Kuvempu University</td>
<td>35,980</td>
<td>1999-2000</td>
</tr>
<tr>
<td>5</td>
<td>Mangalore University</td>
<td>25330</td>
<td>1997-98</td>
</tr>
<tr>
<td>6</td>
<td>Gulbarga University</td>
<td>31,300</td>
<td>1998-99</td>
</tr>
</tbody>
</table>

*Sources: university sources.*
The concept of unit costs denotes the amount of recurring expenditure spent per student in a given year. The researcher feels that unit cost calculated for the universities system as a whole does not give the full picture. It is desirable that unit costs are calculated for a particular program of study in that particular university. These unit costs indicate the costs of educating one student of a chosen course for one year. Unfortunately educational planning in India is not properly served by cost information and its analysis. While unit costs are very useful for planning and policy purposes, comparison of unit costs and fees charged for that course may give some ideas to the students and stakeholders.

Since unit costs are mainly used for comparisons, it is very important to exercise great deal of care in the computing unit costs.

Punnayya committee was unable to get required data from the universities and the difficulties experienced by them are recorded in its Report. Teacher: student ratio in a department, ratio of teaching: non-teaching Staff, nature of teaching and research activities, costs to be shared by the department, levels of non-plan expenditure etc are some of the factors responsible for variation in the unit cost, for different courses.

4.3.5. Taxation measures to augment resources for higher education.

Thought is being given to form a reliable and continuous source of financing higher education.

Following are some of the methods available in this regard.

a. Graduate tax-on graduate’s future incomes

A graduate tax is an additional tax on graduate’s future incomes, which would reduce the net public outlays on higher education

b. Graduate tax - on employers

Here graduate tax is an education specific tax to be levied from those who use the educated manpower. Private enterprises pay interest for the physical capital; they may also have to pay for the production of human capital, or interest on human capital in the form of graduate tax.

c. Higher Educational Cess

Educational Cess is an earmarked levy, payable by all the people in a given the region. Usually Educational Cess is levied as a fraction of some other tax.
According to the UGC proposal, the employers (Government or private), have to deduct the first salary of an employee to the education fund called Bharat Siksha Khosh. The fund in turn will be used to lend softer loans to the students.

Opinion of the Respondents

The preferences of the stakeholders among the different methods of taxation to augment resources for higher education sector were as under.

Table 4.37: Stakeholders preferences for method of tax collection for higher education sector

<table>
<thead>
<tr>
<th>S.No</th>
<th>Type of tax</th>
<th>Nos</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Educational cess</td>
<td>15</td>
<td>50</td>
</tr>
<tr>
<td>2</td>
<td>Graduate tax-on employers</td>
<td>4</td>
<td>13.33</td>
</tr>
<tr>
<td>3</td>
<td>Graduate tax-on future incomes</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Gurudakshina tax</td>
<td>8</td>
<td>26.67</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Compiled from the filed survey.

50% of the stakeholders prefer levying educational cess for financing higher education. UGC proposal of Gurudhakshina Tax was preferred by 26.67% of the respondents.

The opinion of the respondents on the merits and demerits of each suggested method of taxation is given below:

Educational Cess:

There is no cess/tax especially for higher education at present. This method is simple and easy to collect. It can be attached to professional tax. State Governments carry higher burden compared to Central Government (for higher education spending). State Government can utilize full benefits of higher educational cess collected.

Levy of tax on employer

So far the industry has enjoyed Government funded human capital without bearing its cost. By
levying this tax they can be made to share the cost. However, there will be problems regarding how it should be levied - on capital employed; or on profit; or on wage bills or depending on number of graduates employed. Employers may not be enthusiastic because they would like to specifically target the sector of their choice (example: IT, biotechnology, pharmacy etc) rather than pool their share to a general fund.

**Graduate tax - on future incomes of graduates**

This method does not seem to have been employed anywhere in the world. Plenty of back room work needs to be done for introducing this method. Only Central Government can take steps and not State Governments. This method is presently not on the agenda of Central Government. It needs lot of planning and administrative work.

**Gurudaksina tax**

Collection of one-month salary is too little, compared to subsidy provided by the Government. Loopholes and leakages will be difficult to avoid in this system. The administrative work involved may present some operational problems.

**Recent Development**

The Central Government in its Budget 2004-05 has proposed to levy a Cess of 2% on taxes to finance education. This Cess is expected to collect Rs 4000-5000 crores which will be used exclusively on primary education and mid day meals scheme.

The education system makes a significant claim on the States’ financial resources. There are no taxation measures to collect funds dedicated to higher education. The State may consider introduction of a cess exclusively to finance higher education. This may be linked and collected as part of professional tax.
### 4.31a: Karnataka University - Sources of Income (Rs in lakhs)

<table>
<thead>
<tr>
<th>Sl No.</th>
<th>Details of Receipts</th>
<th>2000-01</th>
<th>2001-02</th>
<th>2002-03</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>State Government Grants</td>
<td>3405</td>
<td>4011</td>
<td>4274</td>
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<tr>
<td>2</td>
<td>UGC Grants &amp; Special Grants</td>
<td>345</td>
<td>572</td>
<td>549</td>
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<td>3</td>
<td>Pension Funds</td>
<td>527</td>
<td>920</td>
<td>850</td>
</tr>
<tr>
<td>4</td>
<td>Other Funds/Grants</td>
<td>342</td>
<td>401</td>
<td>309</td>
</tr>
<tr>
<td>5</td>
<td>Internal Income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Fees etc</td>
<td></td>
<td>638</td>
<td>587</td>
<td>590</td>
</tr>
<tr>
<td>b. Examination Fees</td>
<td></td>
<td>530</td>
<td>479</td>
<td>467</td>
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<td>Total</td>
<td></td>
<td>5785</td>
<td>6970</td>
<td>7048</td>
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</table>

Source: Financial Statements of the University

### 4.31b: Karnataka University - Sources of Internal Income (Rs in lakhs)

<table>
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<th>2001-02</th>
<th>2002-03</th>
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<td>b. Examination Fees</td>
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<td>467</td>
</tr>
<tr>
<td>c. Affiliation Fee</td>
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<td>50</td>
</tr>
<tr>
<td>d. Self Financing &amp; Payment Seats</td>
<td>33</td>
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<td>60</td>
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<tr>
<td>e. Other Fees</td>
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<td>251</td>
<td>255</td>
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<td>f. Other Revenues</td>
<td>160</td>
<td>150</td>
<td>153</td>
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<td>Total</td>
<td>1168</td>
<td>1066</td>
<td>1065</td>
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</table>

### 4.31c: Karnataka University - Expenditure (Rs in lakhs)

<table>
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<th>Details of Receipts</th>
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<th>2001-02</th>
<th>2002-03</th>
</tr>
</thead>
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<td>2890</td>
<td>2789</td>
<td>3175</td>
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<td>2</td>
<td>Development works</td>
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<td>457</td>
<td>377</td>
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<tr>
<td>3</td>
<td>Library (Books)/Periodicals</td>
<td>41</td>
<td>59</td>
<td>59</td>
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<tr>
<td>4</td>
<td>Lab Chemicals &amp; Equipments</td>
<td>43</td>
<td>50</td>
<td>66</td>
</tr>
<tr>
<td>5</td>
<td>Examination Activities</td>
<td>648</td>
<td>558</td>
<td>554</td>
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<tr>
<td>6</td>
<td>General Administrative Expenses</td>
<td>2166</td>
<td>3395</td>
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### 4.31d: Gulbarga University - Receipts (Rs in lakhs)

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<td>920</td>
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<td>2</td>
<td>UGC Grants</td>
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</tr>
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<td></td>
<td>a. Special Scheme Grants</td>
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<td></td>
<td>b. Assistance Grants</td>
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<td>3</td>
<td>Other Receipts</td>
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<td>4</td>
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<td>504</td>
<td>631</td>
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<td>5</td>
<td>Other Resources</td>
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<td><strong>2231</strong></td>
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</table>

*Source: Financial Statements of the University*

### 4.31e: Gulbarga University - Expenditure (Rs in lakhs)

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<td>Pension Funds</td>
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<td>42</td>
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<td>Developmental Activities</td>
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<td>444</td>
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<tr>
<td></td>
<td>a. Relating to UGC &amp; Central Grants</td>
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<td>194</td>
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<tr>
<td></td>
<td>b. Others</td>
<td>232</td>
<td>152</td>
<td>149</td>
</tr>
<tr>
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<td>Debt Heads</td>
<td>7</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>Examination Activities</td>
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<tr>
<td>6</td>
<td>General Administrative Activities</td>
<td>273</td>
<td>320</td>
<td>332</td>
</tr>
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<td></td>
<td><strong>1742</strong></td>
<td><strong>1984</strong></td>
<td><strong>2056</strong></td>
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</table>

*Source: Financial Statements of the University*
4.31f: Bangalore University - Receipts (Plan & Non Plan ) Rs in lakhs

<table>
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<tr>
<th>SI No.</th>
<th>Details of Receipts</th>
<th>2000 - 01</th>
<th>2001 -02</th>
<th>2002 -03</th>
</tr>
</thead>
<tbody>
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<td>2955</td>
<td>3637</td>
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<td>4341</td>
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<td>3</td>
<td>Internal Resources</td>
<td>2306</td>
<td>3326</td>
<td>3588</td>
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<tr>
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<td>Employee Welfare Funds</td>
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<td>701</td>
<td>792</td>
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<td>Debts, Deposits &amp; Advances</td>
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<td>100</td>
<td>274</td>
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<td>130</td>
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<td></td>
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<td>8158</td>
<td>12761</td>
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</table>

4.31g: Bangalore University - Expenditure. Rs in lakhs.

<table>
<thead>
<tr>
<th>SI No.</th>
<th>Details of Expenditure</th>
<th>2000 - 01</th>
<th>2001 -02</th>
<th>2002 -03</th>
</tr>
</thead>
<tbody>
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<td>2402</td>
<td>2503</td>
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<td>Pensionary Benefits</td>
<td>719</td>
<td>799</td>
<td>880</td>
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<td>3</td>
<td>Works ,Schemes Assisted by UGC &amp; Others.</td>
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<td>927</td>
<td>3870</td>
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<tr>
<td>4</td>
<td>Development Scheme</td>
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<td>761</td>
<td>1549</td>
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<td>5</td>
<td>Library Books Journals</td>
<td>26</td>
<td>41</td>
<td>53</td>
</tr>
<tr>
<td>6</td>
<td>Examination Expenditure</td>
<td>583</td>
<td>652</td>
<td>622</td>
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<td>7</td>
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4.31h: Bangalore University - Internal Resources. Rs in lakhs

<table>
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<th>Details of Receipts</th>
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<th>2001 -02</th>
<th>2002 -03</th>
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<tr>
<td>1</td>
<td>Tuition Fees</td>
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<td>341</td>
<td>350</td>
</tr>
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<td>2</td>
<td>Affiliation Fees</td>
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<td>460</td>
<td>475</td>
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<td>3</td>
<td>Other Fees</td>
<td>463</td>
<td>523</td>
<td>643</td>
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<tr>
<td>4</td>
<td>Fees from Self Financing &amp; Payment Seats</td>
<td>0</td>
<td>127</td>
<td>155</td>
</tr>
<tr>
<td>5</td>
<td>Correspondence Fees</td>
<td>236</td>
<td>280</td>
<td>310</td>
</tr>
<tr>
<td>6</td>
<td>Other Avenues</td>
<td>111</td>
<td>482</td>
<td>480</td>
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<tr>
<td>Total</td>
<td></td>
<td>2306</td>
<td>3326</td>
<td>3586</td>
</tr>
</tbody>
</table>

Source: Financial Statements of the University
(Figures have been regrouped where necessary)
### 4.31i: Mangalore University - Receipts (Plan & Non Plan) Rs in lakhs

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>State Government Grants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Plan Grants</td>
<td>80</td>
<td>41</td>
<td>20</td>
<td>16</td>
<td>268</td>
<td></td>
</tr>
<tr>
<td>b. Non Plan Grants</td>
<td>558</td>
<td>731</td>
<td>1039</td>
<td>931</td>
<td>1450</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>UGC Grants</td>
<td>127</td>
<td>91</td>
<td>26</td>
<td>103</td>
<td>203</td>
</tr>
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<td>3</td>
<td>MHRD Grants</td>
<td>0</td>
<td>78</td>
<td>3</td>
<td>0</td>
<td>50</td>
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<td>4</td>
<td>Debts Funds</td>
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<td>322</td>
<td>307</td>
<td>515</td>
<td>309</td>
</tr>
<tr>
<td>5</td>
<td>Internal Resources</td>
<td>394</td>
<td>511</td>
<td>596</td>
<td>587</td>
<td>645</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1556</td>
<td>1774</td>
<td>1991</td>
<td>2152</td>
<td>2925</td>
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</table>

Source: Financial Statements of the University

### 4.31j: Mangalore University - Payments. Rs in lakhs.

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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pay &amp; Allowances</td>
<td>466</td>
<td>576</td>
<td>782</td>
<td>992</td>
<td>1196</td>
</tr>
<tr>
<td>2</td>
<td>Pensionary Benefits</td>
<td>2</td>
<td>20</td>
<td>77</td>
<td>55</td>
<td>62</td>
</tr>
<tr>
<td>3</td>
<td>Capital Expenditure</td>
<td>190</td>
<td>221</td>
<td>179</td>
<td>138</td>
<td>247</td>
</tr>
<tr>
<td>4</td>
<td>UGC Plan Expenditure</td>
<td>126</td>
<td>45</td>
<td>47</td>
<td>128</td>
<td>133</td>
</tr>
<tr>
<td>5</td>
<td>Lab / Teaching Material</td>
<td>40</td>
<td>15</td>
<td>18</td>
<td>12</td>
<td>55</td>
</tr>
<tr>
<td>6</td>
<td>Expenditure on Books / Journals</td>
<td>34</td>
<td>7</td>
<td>11</td>
<td>14</td>
<td>45</td>
</tr>
<tr>
<td>7</td>
<td>Deposits / Advances/Stores &amp; Suspense</td>
<td>320</td>
<td>317</td>
<td>334</td>
<td>421</td>
<td>390</td>
</tr>
<tr>
<td>8</td>
<td>Examination Expenditure</td>
<td>184</td>
<td>159</td>
<td>167</td>
<td>147</td>
<td>279</td>
</tr>
<tr>
<td>9</td>
<td>Other Expenditures.</td>
<td>223</td>
<td>296</td>
<td>284</td>
<td>292</td>
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<td><strong>Total</strong></td>
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<td>1656</td>
<td>1899</td>
<td>2199</td>
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</table>

Source: Financial Statements of the University

### 4.31k: Mangalore University - Internal Resources. Rs in lakhs

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<tbody>
<tr>
<td>1</td>
<td>Tuition Fees</td>
<td>8</td>
<td>8</td>
<td>15</td>
<td>17</td>
<td>29</td>
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<tr>
<td>2</td>
<td>Affiliation Fees</td>
<td>35</td>
<td>36</td>
<td>75</td>
<td>45</td>
<td>12</td>
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<tr>
<td>3</td>
<td>Other Fees</td>
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<td>111</td>
<td>138</td>
<td>122</td>
<td>166</td>
</tr>
<tr>
<td>4</td>
<td>Fees from Self Financing &amp; Payment Seats</td>
<td>22</td>
<td>71</td>
<td>69</td>
<td>71</td>
<td>87</td>
</tr>
<tr>
<td>5</td>
<td>Fee from Examination related activities</td>
<td>242</td>
<td>212</td>
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<td>229</td>
<td>232</td>
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<tr>
<td>6</td>
<td>Other Receipts</td>
<td>68</td>
<td>73</td>
<td>82</td>
<td>103</td>
<td>119</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>394</td>
<td>511</td>
<td>596</td>
<td>587</td>
<td>645</td>
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</table>

Source: Financial Statements of the University
### 4.31k: Kuvempu University - Receipts (Plan & Non Plan) Rs in lakhs

<table>
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<th></th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
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<td>1</td>
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<td>513</td>
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<td></td>
<td>a. Plan Grants</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Non Plan Grants</td>
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<td>950</td>
<td>900</td>
<td>1103</td>
</tr>
<tr>
<td>2</td>
<td>Internal Resources</td>
<td>384</td>
<td>459</td>
<td>461</td>
<td>536</td>
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<td></td>
<td>Total</td>
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<td>1650</td>
<td>1929</td>
<td>2152</td>
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</table>

**Source:** Financial Statements of the University

### 4.31m: Kuvempu University - Expenditure. Rs in lakhs.

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</thead>
<tbody>
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<td>1</td>
<td>Pay &amp; Allowances</td>
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<td>1056</td>
<td>961</td>
<td>1114</td>
</tr>
<tr>
<td>3</td>
<td>Development Works</td>
<td>176</td>
<td>81</td>
<td>321</td>
<td>343</td>
</tr>
<tr>
<td>5</td>
<td>Lab / Teaching Material</td>
<td>16</td>
<td>11</td>
<td>24</td>
<td>32</td>
</tr>
<tr>
<td>8</td>
<td>Examination Expenditure</td>
<td>178</td>
<td>186</td>
<td>209</td>
<td>180</td>
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<tr>
<td>9</td>
<td>Other Expenditures</td>
<td>194</td>
<td>288</td>
<td>441</td>
<td>483</td>
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<td></td>
<td>Total</td>
<td>1390</td>
<td>1624</td>
<td>1956</td>
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**Source:** Financial Statements of the University

### 4.31n: Kuvempu University - Internal Resources. Rs in lakhs

<table>
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<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tuition Fees</td>
<td>48</td>
<td>68</td>
<td>82</td>
<td>119</td>
</tr>
<tr>
<td>2</td>
<td>Affiliation Fees</td>
<td>15</td>
<td>19</td>
<td>20</td>
<td>22</td>
</tr>
<tr>
<td>3</td>
<td>Other Fees</td>
<td>109</td>
<td>168</td>
<td>149</td>
<td>165</td>
</tr>
<tr>
<td>4</td>
<td>Fee from Examination related activities</td>
<td>212</td>
<td>204</td>
<td>210</td>
<td>230</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>334</td>
<td>409</td>
<td>461</td>
<td>536</td>
</tr>
</tbody>
</table>

**Source:** Financial Statements of the University
4B. Management of change in external environment.
   4.4.1. University education in Post WTO-GATS scenario.
   4.4.2. Assessment and Accreditation effects on the university.
   4.4.3. Open University and Traditional University system.
   4.4.4. Autonomous Colleges and University system.

4C. Pointers to the future.

4D. Adoption of Karnataka State Universities to change.

4E. SWOT analysis of Karnataka State Universities.
4.4.1. University Education in Post WTO – GATS Scenario

Introduction

The General Agreement on Trade and Tariffs (GATT) was conceived and accepted on 30th October 1947 by 23 countries. These countries were then known as contracting parties. GATT started functioning on 1.1.1948. Its objective was to serve as a multinational treaty to smoothen and encourage world trade. The General Agreement on Trade in Services (GATS) is a comprehensive legal framework of rules and disciplines covering 161 service activities across 12 classified sectors. GATS came into force in 1996. GAT defines Services Trade as occurring through four possible modes of supply. They are Mode –1 (Cross border Supply), Mode –2 (Consumption Abroad), Mode-3 (Commercial Presence), and Mode –4 (Movement of Natural Persons).

India has signed all the WTO agreements under the single undertaking rule (Uruguay Round) and GATS is a part of this whole package. The member countries have a right to choose the sectors and the modes of supply in which they would undertake commitments.

GATS does not make it mandatory for member countries to open up all education categories. Based on the country’s assessment and prospective gains, specific categories can be opened up. Many countries have not made any commitments yet. However, the signing of GATS does commit the country to future steps of liberalization.

The USA has asked India to make full commitments for market access for higher education and training services, adult education and other education. Australia has asked India to make market access and national treatment commitments in private education services for all four modes of supply. India has neither made any commitments nor submitted any requests in the education services sector.

Geneva Framework agreement (July 2004)

The framework agreement was reached as per the mandate given in Doha 2001 Round.

The agreement lays a special emphasis on MODE–4 of services concerning transnational movements. Fifteen Non - IT services, including education are likely to gain from the deal. The agreement binds
the developed countries to make offers that are truly gainful to professionals from developing countries, besides liberalizing VISA Regime. MODE –4 i.e. the movement of natural persons is of particular interest to a country like India which has a large pool of well qualified persons in education services. The new provision, while giving a fillip to MODE –4, does not constrict the scope of the other MODES.

**Forms of Transnational Education.**

1. **Study Abroad**: Students from countries (A) to go to country (B) to live and study at an institution in country (B).

2. **Distance Education programs**: These programs are delivered through satellites, computers, correspondence or other technological means across national boundaries.

3. **Companies**: Companies provide training services and curriculum.

4. **Corporate programs**: Some large corporations offer programs which cross the national boundaries.

5. **Twinning arrangements**: An institution in country (A) having a collaborative relationship with an institution in country (B).

6. **Split site courses**: Offering part of the course work in the present institution in country (A) and part from an institution in country (B).

7. **Franchises**: An institution (A) approves an institution (B) in another country to provide one or more of A’s program to students in B’s country.

8. **Branch campuses**: Campuses are set by an institution in a country to provide its educational program to foreign students.
4.4.1. Indian Universities and GATS

a. Indian Students opting for higher education in developed countries

Traditionally USA and UK have been most favored destinations for Indian students. Availability of assistantships and scholarships during the period of study and job offers after completion of the courses were major attractions.

One of the major effects of globalization has been, the competition among the institutions in their efforts to recruit overseas students. Now a days Australia has been attracting Indian students in a big way, while other countries like Ireland, New Zealand and Singapore are making efforts to become a favored destination for Indian students.

The opinion of the respondents on this issue are summarized below;

Table: 4.38: Students opting for higher education in developed countries-Opinion of the respondents (group 1)

<table>
<thead>
<tr>
<th>S No.</th>
<th>Description.</th>
<th>Yes</th>
<th>No</th>
<th>Can’t say</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The Indian students, with the help of liberal education loans, may opt for higher education in developed countries. This may affect the merit students’ enrolment in our Universities.</td>
<td>50</td>
<td>42</td>
<td>28</td>
</tr>
</tbody>
</table>

Total: 120. (Figures in brackets indicate %).

Source: Compiled from field survey

The opinion of the respondents was divided on the issue. 42 % of the respondents felt that merit students’ enrolment in our Universities would get affected; 35 % felt otherwise; 28 % of the respondents did not express any opinion.

The respondents cited number of reasons why the students opt to study in developed countries.

The number of students eligible for graduate and postgraduate admission is increasing every year. Even those who secure high marks cannot get admission to a course/college of their choice. Admission
to foreign institutions has become relatively easy. Though scholarships have become fewer in number, Bank loans are available, on easy terms. Education abroad ensures better chances of finding employment there.

This could be the reason why those students who make it to the second rung institutions are also going abroad. Some countries like UK have allowed foreign students to work for two years after completing their graduation.

In most other countries students can avail part-time work during the week and full-time during vacations. This arrangement is very attractive for Indian students.

The respondents pointed out the trend of increase in the number of under graduate students going abroad (in 1999 there were 8598 Indian students in the USA which increased to 12,259 by 2001) which indicates that more and more affluent Indian families are opting for their children’s education abroad. India now represents 13% of the total number of international students and has emerged as the leading country of origin for internal students in the USA.

It is also felt that the number of students going abroad should be seen in the light of high volume of students in India higher education (nearly 94 lakhs). Seen from that angle, the effect on our Universities will be only modest.

Number of respondents did not express any opinion on this issue. Their collective view is summarized here under;

i. The student who opted for education abroad had merit (often students have to take various examinations; some countries also look at previous academic performance/ extracurricular activities).

ii. Obviously they had ability to pay.

From both the angles it is a loss to the country as well as to our Institutions. However, it also gives an indication on the availability of vast merit pool of youngsters in this country.

b. Attracting Students from the third world to India.

India’s share of global inbound education market is a meager 0.5 % and declining. Only Mysore University (apart from MAHE Manipal) figures among top 10 universities that are attracting foreign
students., according to a McKinsey report.

Universities abroad, as a matter of conscious policy, aim to have a good % of foreign students on their rolls.

India has failed to attract foreign students with high spending power. The majority of foreign students in India are either on scholarships or on exchange programs.

Table 4.39: Attracting students from the third world- Opinion of the respondents

<table>
<thead>
<tr>
<th>Spectrum</th>
<th>Yes</th>
<th>No</th>
<th>Can't say</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spectrum I</td>
<td>19</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Spectrum II</td>
<td>27</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Spectrum III</td>
<td>24</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Spectrum IV</td>
<td>23</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Overall</td>
<td>93(77%)</td>
<td>7(6%)</td>
<td>20(17%)</td>
</tr>
</tbody>
</table>

(Figures in brackets indicate %).

Source: Compiled from field survey.

77% of the respondents feel that India has an opportunity to attract students from the third world, considering the cost advantages compared to developed countries. In their opinion, India did not make sufficient attempts in the past, when the going was good. Now the Asian region has become fairly competitive. Moreover the courses offered by Indian Universities are ‘quantity heavy’ and emphasis is on theoretical training, which may not suit the requirements of many foreign students. To convert the opportunity into reality, a lot of work needs to be done.

The data gathered shows that in the field of Management Education, faculty: student ratios are highly favorable in India. Despite the advantages of high reputation, lower cost of education and favorable faculty: student ratios, Indian Business Schools have been unable to attract foreign students in significant numbers. This is a pointer regarding the difficulties likely to be faced by Indian Universities in attracting foreign students for general education.

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To attract foreign students, the bureaucratic procedures, should be simplified. A foreign student applying to an Indian University, has to go through a dozen steps and three ministries - MEA, MHA & HRD - before he can get enrolled on a student visa. In contrast visa norms in number of countries like France and New Zealand are very simple. Admission letter and sufficient funds automatically ensure a student visa.

c. India as an exporter of education

GATS regulations in the higher education sector, give significant benefits to the exporters. Importers of education would have little advantage in the proposed system.

Opinions of the respondents on the attractiveness of India as an education destination are given below;

Table: 4.40: India as a potential exporter of Education- Opinion of respondents of group I

<table>
<thead>
<tr>
<th>Description</th>
<th>Yes</th>
<th>No</th>
<th>Can’t say</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditionally teaching is India’s strength. India institutions can spread wings in the third world particularly South East Asia.</td>
<td>76</td>
<td>0</td>
<td>44</td>
</tr>
</tbody>
</table>

(Figures in brackets indicate %).

Source: Compiled from field survey.

63 % of the respondents felt and that the Indian institutions can spread wings abroad. 37 % to the respondents did not express any opinion.

In the 21st century in addition to trade, education will also play a major role in forging international relations. An education institution is a more lasting investment in the people of a country.

The respondents feel that several developing countries do not need the offers made by industrially advanced nations. They need higher education, which is more suited to their requirements and India is very advantageously placed in this connection. Indian educational institutions cannot afford to be inward looking. In a liberalized atmosphere, educational institutions have to think differently and change their approach. The respondents also feel that India’s blueprint for globalization should
include schools, universities, teachers training, English language, as also institutions in educational management. Industries associations such as FICCI and CII, who have considerable knowledge on international environment, should be actively involved in promoting Indian higher education. Effective marketing strategies should be adopted while establishing branch campuses of Indian Universities abroad.

IGNOU has made some effort in exporting education. IGNOU Act was amended in 1996 to enable the establishment of study centers outside India and to conduct its academic program through the distance mode. In 2002 IGNOU signed a MoU with UNESCO- Regional Bureau for Education in Africa (BREDA) to explore cooperation and joint action to support development of education and training in a sub-Saharan Africa.

In June 2004 Indian educational fair was held in East African Nations of Tanzania, Ethiopia and Kenya. As many as 18 Indian Universities participated in this promotional tour. Whenever the fair is held in the near future, a consortium of Karnataka State Universities may also actively participate. The inter-University board and government of Karnataka may take up a pilot study for establishing branch campuses of Karnataka State Universities in other countries. Mahatma Gandhi University, Kerala, has become the first Indian University to venture overseas by opening a branch campus at ‘Dubai Knowledge Village’.

Numbers of countries have been inviting Indian Universities to offer educational services in their country. Some of the countries suitable for exporting education are Dubai, Baharin, Nigeria, Zambia, Malaysia, Nepal and Sri Lanka.

d. Branding Indian Education

It has been have pointed out that number of countries which hold educational fairs in India viz UK, Australia, Germany etc have also been working on branding their education. India’s strong educational brands like IIT’s and IIM’s have evolved on their own over a course of time. Efforts have been made by the individual groups like Manipal group, Birla Institute of Technology, SP Jain Institute of Management in the Middle-East, South and Southeast Asia and other countries, to spread Indian Education. In contrast US, UK, Australia, New Zealand have followed a cooperative and government backed approach. It is important for the government to help promote “brand India” as a cost-effective multi cultural and a safe education destination.
e. Attracting Students from Developed Countries

In view of several drawbacks such as absence of marketing, rigid procedures and poor infrastructure facilities, India does not attract students from developed countries. A few respondents feel that there is scope for developing high value niche markets for programs in Arts and Culture, Dravidian languages, Sanskrit, Indian Philosophy etc for these students. The brand image created by the IT industry has developed a consciousness of India, all over the world, which could be used as a marketing advantage.

f. Threat from foreign open universities

Reputed foreign open universities using multimedia courses may lure more and more Indian students. The opinion of the respondents of group I is given below:

Table: 4.41: Threat from foreign open universities-Opinion of the respondents of group I.

<table>
<thead>
<tr>
<th>S No.</th>
<th>Description</th>
<th>Yes</th>
<th>No</th>
<th>Can't say</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Reputed foreign open universities using the multimedia distance education may manage to lure more and more students</td>
<td>72 (60)</td>
<td>16 (13)</td>
<td>32 (27)</td>
</tr>
</tbody>
</table>

Total: 120. (Figures in brackets indicate %).

Source: Compiled from field survey.

Majority of the respondents believe that the threat of reputed foreign universities using technology to their advantage to lure the students could be real.

Global Universities are bringing together different students and faculty from many nations via computer networks, satellite television and similar technological advances. The networking of the Universities and research bases and the creation of information superhighway have radically altered the structures, process and procedures of higher education.

Technology is developing fast. Already, Interactive Distance Learning (IDL) is a few steps ahead of e-learning. Once the DTH comes in, students will have the convenience of studying from home. Prospects of getting an international degree without incurring any traveling expenses could be real in
the near future. However the respondents feel that quality is very costly and affordability is a major 
factor in selection. However, the developments have to be watched, as technology can cause a 
crash in cost structure in the coming years.

India may find it difficult to devise control measures, to check the growth of foreign education 
service providers, given the current trends in privatization and liberalization of the economy. It is 
quite possible that some of the low-rung universities may come to India to fill up seats that remain 
vacant at home.

The government is yet to formulate required policy guidelines regarding operations of Foreign 
Universities in India. A proposal to amend the UGC act, to regulate operations of foreign universities 
in India, is being considered by the government.

However, it has been found that number of foreign colleges have come in registered as companies. 
One example is that of UK based Wigan & Leigh, which has established campuses in number of 
Indian cities. The University of Illinois linked Quantum Institute in New Delhi is another example.

4.42 Assessment and Accreditation effects on University

Introduction

The National Assessment and Accreditation Council (NAAC) assess and accredits institutes of 
higher learning with the objective of helping them to work continuously to improve the quality of 
education.

NAAC Process

NAAC has formulated a three-stage process for assessment and accreditation as given below:

- Preparation of the Self-study Report by the institution/department based on the parameters 
defined by NAAC
- Validation of the Self-study Report by a team of peers through on-site visit; presentation of 
detailed quality report to the institution and
- The final decision on assessment and accreditation by the Executive Committee (EC) of 
NAAC.
NAAC grading for the Karnataka State Universities.

All the six Universities in Karnataka have been accredited by NAAC. The grades obtained by them are given here under;

Table 4.42: NAAC grades obtained by Karnataka State Universities

<table>
<thead>
<tr>
<th>Sl No.</th>
<th>Name of the University</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bangalore University</td>
<td>5 star</td>
</tr>
<tr>
<td>2</td>
<td>Mysore University</td>
<td>5 star</td>
</tr>
<tr>
<td>3</td>
<td>Karnataka University</td>
<td>5 star</td>
</tr>
<tr>
<td>4</td>
<td>Mangalore university</td>
<td>4 star</td>
</tr>
<tr>
<td>5</td>
<td>Gulbarga University</td>
<td>5 star</td>
</tr>
<tr>
<td>6</td>
<td>Kuvempu University</td>
<td>3 star</td>
</tr>
</tbody>
</table>

Source: NAAC Documents

The assessment of NAAC has addressed itself to the fundamental characteristic of an institution of higher education whether the institution is functioning in totality with quality as the prime goal.

There has been a debate on the manner in which the assessment is to be completed - through internal mechanism (self assessment) or by external review (external audit). Successful internal assessment presupposes that minds are open and receptive to ideas. On the other hand members of the external of visiting teams may not be able to appreciate the goals, and traditions of an organization in relation to its functioning, during the course of a short visit. The process of assessment followed by NAAC in accordance with the internationally accepted practice, but with certain modifications to suit the Indian context.

i. Success of the NAAC Process and its suitability

Opinion of the respondents (Group I) on the success of the NAAC process in its mission. 55% of the respondents agreed that the NAAC process has succeeded in its mission, 16% had the opposite opinion, while 29% did not express any opinion.

Regarding the suitability of the process of assessment itself (combination of self appraisal and external review by the peers), an overwhelming 94% of the respondents (Group I) feel that the process is ideal under Indian conditions.
ii. Linking of UGC Funding with Accreditation

In the United Kingdom, institutions of higher education are funded only after assessment. In the USA accreditation is voluntary. However all institutions undergo the process to establish their status, as consumers require information on institutional performance and because federal assistance is available only to students attending accredited colleges.

The UGC, recently, has decided to link development grant with accreditation status. The questionnaire tries to ascertain the opinion of respondents on this development. The results obtained are as under:

Table 4.43: Opinion of the respondents on linking UGC funding with assessment outcome

<table>
<thead>
<tr>
<th>Response to Question</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Should be totally linked.</td>
<td>36</td>
<td>30</td>
</tr>
<tr>
<td>Partially linked.</td>
<td>52</td>
<td>43</td>
</tr>
<tr>
<td>Should not be linked.</td>
<td>21</td>
<td>18</td>
</tr>
<tr>
<td>Can’t say.</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>Number of respondents.</td>
<td>120</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Compiled from field survey.

73 % of the respondents feel that funding should be linked in some way to assessment outcome. Majority of them feel that funding should be partially linked to assessment outcome.

The main argument of not linking the funding to accreditation status is that the process does not improve the weak and less privileged institutions and bring them into mainstream. Since basic support is not cut, the institutions continue to exist and their condition will deteriorate year after year. A developing country like India, which heavily subsidizes higher education, cannot afford to allow a part of the system to become unproductive.

Secondly, the future of the students of these Universities may also suffer for no fault of theirs. Students in India at least in the degree level do not have much choice in choosing their Universities. They automatically become students of a university, by their college coming under jurisdiction of a university by its physical presence in that region.

Some respondents feared that the linking might result in creation of ‘elite’ among the institutions, as
better institutions keep getting better. India should aim for a system where lesser institutions improve at a faster rate, so that the diversity in standards that already exists, comes down to the extent possible.

Some respondents expressed the opinion that UGC’s development grants are given now only after assessment of performance at the beginning of every plan period and hence the proposed measure has only formalized the system. While it is a step forward, major changes in working of weak institutions cannot be expected.

There is also an opinion that UGC should go for ‘positive incentives’ method rather than ‘negative sanctions’ and these incentives should be made explicit and linked to grades obtained by the institutions.

Institutions of higher learning mainly depend on the support of state governments. Some respondents argued that integration of assessment reports and outcomes should help the state government decision-making process. This will be very effective in bringing about improvements in higher learning institutions. Use of positive incentives and support for ‘excellence’ by State Government, based on the assessment reports will accelerate the process of improvement in the long run.

A large number of respondents feel that non-monetary linkages will be effective in the long run compared to monetary linkages. Presently certain accreditation status is necessary for an affiliated institution for being declared as an autonomous institution / deemed university. In future Universities will look to raise funds from industries / service sector for which accreditation status will be a major marketing point; companies will visit universities for campus recruitment based on their accreditation status; even attracting corporate sector for research and consultancy services may be based on accreditation. It will be a major point in attracting international linkages. This process will be further strengthened once mutual recognition of accreditation agencies comes about.

The respondents also feel that both monetary and non-monetary linkages will be further strengthened with the coming of departmental accreditation. Better-accredited departments will attract students from other streams and universities. They may attract better funding, more particularly private. The sponsors may fund a number of research projects in such departments. They will strive to become a center of excellence by setting high goals with international benchmarking.
iii. Internal Quality Assurance Cell (IQAC)

NAAC expects that once the accreditation process is over, institutions should go for continuous self-monitoring for maintaining quality. NAAC has promoted the concept of Internal Quality Assurance Cell (IQAC) to encourage institutional self-examination. The researcher designed a questionnaire containing 12 sub-questions (annexure -iii of the appendix) to study the degree of changes that have taken place after the assessment and accreditation process. Only one university had established IQAC, which conducted a solitary meeting. Another university has established an academic audit cell, which in their opinion performs the same function as IQAC. This part of questionnaire could not be administered, under the circumstances.

NAAC accreditation process does not provide for a continuous supervision or periodical/mid-term review. NAAC performs the quality assurance function while the quality enhancement is expected to be taken care of by the institution concerned, through the quality circles.

In USA the accreditation is done for every 10 years. Periodic review reports are submitted during the intervening 5th year of the evaluation cycle. At present there are 8 major regional accreditation agencies and 20 professional organizations, which accredit approximately 3000 degree granting colleges and Universities. Considering the number of higher educational institutions in India (304 Universities and 15,342 colleges) taking up mid term review will be a gigantic task.

During the time of second cycle of accreditation the institution concerned would have to demonstrate how well it has used the earlier report, which may have a bearing on the grading. Valuable time may be lost, if waited till the start of second cycle. Moreover NAAC at the time of granting accreditation, expects the institution to continue to maintain the standards, and has some stake in the ongoing quality enhancement process.

Hence it is suggested that the institutions by the end of 3rd year of the evaluation cycle should submit a mid-term review report. With the increasing usage of electronic technology in the accreditation process, this should not increase the workload too much. It is suggested that this review report should only be a status report and NAAC is expected to act only in extreme cases.

39 % of the respondents preferred participative model of organizational structure for Indian Universities (Section 4.1.1). In our university structure no other activity provides scope for more participation than IQAC. This suggests the need for creating more awareness regarding the immense
potential and tremendous impact IQACs can make, in all spheres of university activities.

IQACs come across some problems, which require further research. Such problems may be suggested as topics for student projects. The students benefit as they get experience in handling a live case; the organization will benefit as the innovations suggested have roots in the culture that prevails within, and hence most likely to succeed.

Karnataka State Universities Act 2000 lay down that each University should constitute a planning and evaluation board, which should meet once in three months. The meeting of Inter-University board, which met on 23rd September 2002, resolved to implement this requirement. It is suggested that for evaluation activities of the board may get feedback from IQAC’s. This will enable streamlining the activities with regard to evaluation and stop unnecessary duplication of work. If this system is made operational and managed well, quality will certainly improve. NAAC may also suggest this model, which makes functioning of IQAC integral with the activities of planning and evaluation activities of the university, to other States.

iv. Accreditation Of Open Universities

NAAC and the Distance Education Council (DEC) have established a joint venture for accreditation of Open Universities and Correspondence Courses. A different methodology has been developed to assess the quality in functioning of a distance education program of the institutions. However, while assessing a traditional university, its distance education unit will be treated like any other department of studies through which the university offers alternative or complementary system of education. The delivery of study materials, managing the trafficking of assignments, personal contact programs, evaluations, gives distinctive character to the distance education department. In the dual mode institutions, the quality of the distance learning offered need not to be at the same level as that offered in the traditional mode. Hence it may be desirable that departmental accreditation maybe suitable for the directorate of schools of distance education of the conventional Universities and they may carry an accreditation status different from that of their parent Universities.

v. Role of NAAC in GATS scenario

Some respondents have expressed the fear that in the absence of regulations, foreign education providers cannot be controlled and eventually quality will suffer. It will be difficult to separate worthwhile programs from the low quality ones.
In “twining” an Indian institution ties up with a foreign institution to offer off shore degrees in India. In our system there are no checks and balances to ensure that the program has meaningful intellectual input and vigorous quality assurance systems are in place.

In franchising system, the Indian institution uses the foreign brand name and delivers education designed abroad, in India. The foreign sponsor does not play a direct role.

In 2001, the Association of Indian Universities (AIU) evaluated the results of a survey of 144 advertisements put out by foreign academic institutions in India, during the five-month period 46 of them lacked official recognition or accreditation in their own countries. 23 of the 26 Indian partners too were unrecognised.

Higher education has been included in the GATS and some high quality education providers and some dubious operators will be striking alliances and partnerships with Indian institutions. As global market place promotes the acceleration of international linkages, NAAC will have to consider a new role:

- Adding to existing market information to assist international and domestic students in making informed choices between institutions.
- Advise the government regarding setting up a mechanism for monitoring the quality of education provided by the foreign universities in India and ensuring that they follow up UNESCO principles of good practice.
- Advising institutions, which go for twining programs, on quality assurance systems that have to be in place.
- Ensuring accredited Indian institutions, which provide higher education across the borders, follow principles of good practice, so that quality is maintained at desired levels.
- To develop a new mandatory code of practice for all Indian education providers enrolling the international students. Only institutions that become signatories to the code of practice may be allowed to enroll international students.
- Use of electronic technology in a big way in the accreditation process.

4.4.3. Open University system and Traditional University system.

Correspondence / Distance Education was started in our country by the University of Delhi on an experimental basis in 1962. Its success led to the start of many other schools, Institutions and Directorates of Correspondence Education. Andra Pradesh Open University was established in 1982. It was followed by establishment of other Open Universities in the country starting with Indira Gandhi National Open University, New Delhi in 1985. A number of states have established Open Universities in India including Karnataka. A number of traditional Universities are offering various correspondence courses as a part of their activities. Presently there are 10 single mode open Universities and 64 dual mode distance education institutions in India.

i. The roles of formal and non-formal system – scenario 2010

Enrolment in the formal system shows a figure of 94 lakhs at present. MHRD estimates show that number of school going children has been increasing approximately at the rate of three per cent per year. The population eligible for primary and secondary education i.e; between the age of 5-15 years is 20.50 crores. The government aims for universalisation of primary education by 2007. This indicates that the pressure on the higher education sector will remain unabated in the future also.

At present the access ratio (i.e.; number of students divided by population in 17-23 age group) is 7.6 in India, while the developing countries have an access ratio of 35-55. In the coming years the developed countries may attempt to have universal higher education to maintain their competitiveness in global economic activities. India has to cover this huge gap, if she wants to better her economic status. The government is aiming for a double-digit access ratio by the end of 10th plan (2006-07). Even to achieve the access ratio of 10, 14 million students have to be brought in by the year 2007. It will not be possible for the formal system to take care of such a large number of students.

In view of this Open learning systems in India will have to perform two different functions.

i. Providing opportunities for the employed and for adults.

ii. Act as an alternative to the full time tertiary level institutions and cater to the needs of the relevant age group population.

The views of the respondents on likely changes with regard to the roles of formal and non-formal system by the year 2010 as been summarized below:

Table: 4.44. Share of formal and non-formal system by the year 2010 – Opinion of the respondents.(Group I)

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Description</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>With more than 50 % of total future intake, Open University system will make a major dent on the formal university system.</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>Formal system retains its supremacy and open system will have only a small share as at present.</td>
<td>52</td>
<td>43</td>
</tr>
<tr>
<td>3</td>
<td>Both and informal systems complement and supplement each other to meet the market needs both qualitatively and quantitatively.</td>
<td>54</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td><strong>Total Number</strong></td>
<td>120</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Compiled from the filed survey.

43 % of the respondents believe that the formal system will retain its supremacy and open system will have only a small share as at present.

Currently, a little less than 20 % of the students are enrolled in the non-formal system. The enrolment of the students of the relevant student population is only 7.6 % of the total enrolment. In case the current growth rates are maintained the enrolment in the formal system would rise to 110 lakhs plus at the end of plan period (2007). It was calculated that by the end of the 10th plan, about 40 % of the new enrolment should be in the non-formal sector.

The respondents who feel that the formal system will retain its supremacy, have put forward following views in support of their argument.

- Among the 10 single mode open Universities and 64 dual mode Universities in India, IGNOU is the biggest and IGNOU has an enrolment about 8 lakhs. In terms of resources and infrastructure none of the other institutions has a potential to attract such a large number of students.
• Single mode open Universities other than IGNOU may have to make huge investments to create facilities and this may not be possible. Major portion of the revenue earned by distance learning activities of the dual mode universities, is utilized as revenue income by the parent university to meet its other requirements. Re-allocation of this expense may not be possible.

• In the perception of the students, formal and informal systems of education are not alternatives to each other. Till such time the non-formal mode comes across as being equal to the regular colleges, in the perception of the students, the present situation will continue.

• The enrolment of students of relevant population cannot jump from present 7 to 8% to 40% in another 4 years.

• Unit cost of education in the distance education system is much lower than unit cost of traditional Universities. Education provided by the traditional system is highly subsidized while subsidy element is much low in Open University system. Students are also eligible for several other facilities like freeships, subsidized hostel facilities and scholarships in the traditional system. Opportunity cost foregone (by way of earning income) by the student of the relevant age group also may not be substantial due to acute unemployment problem.

On the other hand those who believe that Open University system will make a dent on the formal system had the following views:

• The ever-increasing number of students would require increase in the number of colleges. With the present policy of the government geared towards universalisation of primary education, most of the colleges will have to come up in the private sector. Even if number of colleges in the private sector increases, it would still be insufficient to meet the requirements. The colleges will have to drastically increase the fees to recover costs, as the subsidy element provided by the government may rapidly go down. Cost considerations may make the open education system attractive.

• With the use of electronic technology and increase in number of study centers, the Open University system has been able to provide cost effective and quality education to all sections of the students. (IGNOU has network 47 Regional centers and 1000 study of centers. KSOU has 52 study centers covering all districts of the state)

23. Percentage calculated using relevant population of students from annual reports of the UGC and DEC.
Governments in future may be forced to take some steps to strengthen the Open Universities. It may take steps like conversion of some colleges as nodal centers for open university with study centers therein; some courses may be offered in future only through distance education; scholarship/loan facility may be made available even to those students in the relevant age group pursuing higher education.

In the post GATS scenario reputed foreign open universities will enter India. They will operate on a ‘stand-alone’ basis or on a consortium basis or on a partnership basis with local open/traditional Universities or established media/technology corporation. This move will erode geographical barriers to the movement of knowledge and may enable the students to pursue their global ambitions. Thus Open University system will be more acceptable to the students of relevant population in future.

Some respondents believed that of the application of new technologies in the learning environment will slowly remove the distinction between conventional and distance education. Conventional education will make more use of online or e learning at all levels. Teachers will slowly adopt a role of supporting student learning. On the other hand Open University system will make use of rapid developments in interactive communication technologies, which gives the experience of face-to-face learning.

Thus both the systems will complement and supplement each other.

ii. Providing quality education - Open University vs. traditional University.

Higher education provided by the Universities is characterized by an environment that is teacher-centric. The students feel more comfortable with the traditional face-to-face environment of the classroom where quality may be assumed to have been to a larger extent assured by the teacher.

With the development in technology, education is changing from a teacher centric orientation to one that is learner centric. Three-way convergence of distance education, traditional education and electronic technologies has been made possible with the development of new instructional technologies.
The opinion of the respondents regarding the quality issues has been given below:

**Table: 4.45: Quality of education provided by traditional Universities and open Universities-**
**Future scenario-Opinion of the respondents.(Group I)**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Description</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Open University system is better placed in providing quality education with its learner-centered approach.</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>Regular University system is better placed in providing quality education with its the face-to-face interactions.</td>
<td>85</td>
<td>71</td>
</tr>
<tr>
<td>3</td>
<td>Both are equally well placed.</td>
<td>18</td>
<td>15</td>
</tr>
<tr>
<td>4</td>
<td>Can't say.</td>
<td>07</td>
<td>06</td>
</tr>
<tr>
<td></td>
<td><strong>Total Number</strong></td>
<td><strong>120</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

*Source: Compiled from the field survey.*

71% of the respondents felt that the regular university system is better placed in providing quality education, than the Open University system, while 15% of the respondents feel that both systems are equally placed.

Those who feel that the Open University system is better placed in providing quality education had the following points to make;

- The Open University system in India will have full range of delivery methods viz: print based, face-to-face, web based and e-learning. This will make system strive to improve quality.

- The number of people who own computers will increase in future. Through Internet information can be accessed and retrieved. People need to develop their skill to keep abreast with the latest developments in their professions. Web based learning and online programs can provide quality education for the working as well as student segments. There should not be any quality concerns.

The respondents who believe that traditional University is better placed in providing quality educations have stressed the following points:
• The Universities of the future may provide flexible learning. The teacher acts more as a facilitator, supporting student learning. Instead of regular face-to-face classrooms session, both the teachers and students will go for flexible synchronous communication. These steps will improve the quality of education.

• The Government will find it difficult to enforce regulations on transnational providers. To lure large profits, number of foreign education providers will adopt the distance education mode, which may bring this sector into disrepute due to quality problems.

4.4.4. Autonomous Colleges and the University System.

Indian higher education has shown phenomenal growth in terms of number of Universities, colleges and students. More than 80% of the students seek higher education in the affiliated colleges. The rigid system of affiliation under which colleges’ function is being recognized as major factor against change and progress. Under the ‘system of affiliation’ a particular university to which they are affiliated, governs the colleges. Although the system of affiliation has its own merits, the system does not motivate its components to be creative.

Autonomous colleges in KSU Act 2000

According to the Karnataka State Universities Act 2000, “The university may, with the prior concurrence of the state government, designate for such period as may be specified, an affiliated College, department or units as an autonomous college for any course of study, after following the procedure and subject to such conditions, as may be specified in the statutes made in this behalf and with a view to improve the quality of education and to introduce new and relevant courses of study”. The autonomous college so designated, shall be entitled to design the courses of studies, devise appropriate teaching methods, devise methods of evaluation/examination and tests pertaining to the award of degree or diploma by the university and frame rules of admission to students.

Academic council of the Bangalore University in its meeting held on 1st December 2002 decided to grant autonomous status to colleges affiliated to the university. Only colleges that have been recognized for at least 10 years and accredited by NAAC can apply for autonomous status.

The scrutinizing committee of the UGC has cleared the application of 40 colleges in Karnataka for autonomy. As a formality, the UGC would send another team of experts to these colleges to make
the recommendations to the government. It will be the responsibility of the state government to
grant autonomy to these colleges. There is a possibility that these colleges could get autonomy by
the year of 2005-06.

A. Autonomous colleges as threat to the university system.

Once some colleges under the university become autonomous entities, the role of the university will
undergo a change. It will no longer have the premier role in designing the curricula, holding examinations
and supervision vis-a-vis the college. In course of time, they will have to compete with regard to
attracting students, resources etc. The perceptions of the respondents on this issue are summarized
below:

Table: 4.4.6: Threat perception of autonomous colleges (Group I)

<table>
<thead>
<tr>
<th>S.No</th>
<th>Description</th>
<th>Spectrum I</th>
<th>Spectrum II</th>
<th>Spectrum III</th>
<th>Spectrum IV</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No threat to the University</td>
<td>15</td>
<td>20</td>
<td>12</td>
<td>14</td>
<td>61(50.8)</td>
</tr>
<tr>
<td>2</td>
<td>Threat to the University</td>
<td>6</td>
<td>5</td>
<td>11</td>
<td>9</td>
<td>31(25.8)</td>
</tr>
<tr>
<td>3</td>
<td>Cannot say</td>
<td>9</td>
<td>5</td>
<td>7</td>
<td>7</td>
<td>28(23.4)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>120</td>
</tr>
</tbody>
</table>

(Figures in brackets indicate %s). Source: Complied from the field study.

50.8 % of the respondents did not perceive any threat from the autonomous colleges to the Universities
system, while 25.8% felt otherwise. 23.4% of the respondents did not give any opinion.

The opinion of several respondents was related to the slow progress made in starting autonomous
colleges. Their views are summarized below;

- The UGC and the various committees’ reports have stressed on the concept of autonomous
colleges, yet there are very few autonomous colleges in the country. Even if, the process is
speeded up now, very few colleges may be granted the status. New colleges are affiliated to
the University every year.
• Colleges are sheltered by the university system. People have confidence on the Universities. An autonomous college in the field of general education may not receive the same response from the student community (as before). University system faces no threat.

• Universities have established their reputation all over India and even abroad. An autonomous college, however good it is, has to start from scratch. There is no immediate threat.

On the other hand those who felt the threat perception had equally appealing arguments, which are summarized below:

• Some of the colleges, which may apply for autonomous status, are older than the universities themselves and also have a good standing. If the best colleges go out of the system and are in direct competition with the system, it definitely constitutes a threat to the university system.

• In management education field, numbers of autonomous colleges are operating and some of them are competing to be in the same league as IIMs. The opinion polls conducted by reputed business magazines show that the autonomous colleges are in the forefront by securing good rankings.

Some respondents did not agree with both views. In their opinion it is too early to say whether autonomous colleges achieve success in the field of general education. Much will depend on the strategies that are likely to be adopted by them.

ii. Effect of competition on quality

There is need for higher education institutions to work vigorously to fulfill their responsibility towards quality. These higher bodies of education have to become the centers of innovation to meet the requirements and challenges of the changing environment. The parameter of quality is not merely synonymous with performance in terms of good results and placements. Innovative methods of teaching, variety of courses taught, extra curricular activities and extension work also continue to be parameters of quality. The opinion of the respondents on this issue are summarized below;
Table: 4.47: Effect of competition between autonomous colleges and university on quality of higher education (group 1)

<table>
<thead>
<tr>
<th>S.No</th>
<th>Description</th>
<th>Spectrum I</th>
<th>Spectrum II</th>
<th>Spectrum III</th>
<th>Spectrum IV</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Quality will improve</td>
<td>13</td>
<td>11</td>
<td>10</td>
<td>12</td>
<td>46(38)</td>
</tr>
<tr>
<td>2</td>
<td>Quality will deteriorate</td>
<td>6</td>
<td>9</td>
<td>9</td>
<td>8</td>
<td>32(27)</td>
</tr>
<tr>
<td>3</td>
<td>No change in quality</td>
<td>5</td>
<td>9</td>
<td>7</td>
<td>5</td>
<td>26(22)</td>
</tr>
<tr>
<td>4</td>
<td>Can't say.</td>
<td>6</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>16(13)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>120(100)</td>
</tr>
</tbody>
</table>

(Figures in brackets indicate %s). Source: Compiled from the field survey.

38% of the respondents feel that overall quality will improve because of the competition between autonomous colleges and universities; 27% feel that quality will deteriorate, while 22% perceive no change in quality. 13% of the respondents did not express any opinion.

The respondents as to their perception that quality will improve have placed a few arguments.

- The element of competitiveness introduced will have good effect on quality in the long run.

- Only colleges with a long history of recognition and enjoying accreditation status from NAAC can become autonomous institutions. As per the present system, the University performs supervisory role and has power to review the autonomy status or even revoke it. This ensures that quality is maintained.

- Autonomous colleges enjoy the academic freedom. Diversity of teaching methods as well as diversity of evaluation methods is adopted. This can promote creativity and innovation improving the quality of the system.

Few of the respondents felt that the quality of the education system will deteriorate. In their view many autonomous institutions in the field of management education have serious problems regarding faculty availability, quality of students and placement. This is evident from the surveys conducted by
the business magazines which have shown that gap between good schools and the rest, is widening. Further, for various reasons, examination system based on internal assessment in autonomous institutions may tend to be liberal leading to deterioration in quality.

iii. Competition for Private and foreign funding.

In the last few years, institutions of higher education have built and expanded alliances with each other and with the corporate sector. The cost for running the Institutions are escalating and mobilizing resources from external sources is imperative. The competition in the coming years is likely to cause the institutions to focus and advertise their unique systems. Opinion of the respondents on this issue is summarized below:

Tables 4.48: Autonomous colleges v/s Universities - Competition for inflow of private funding and foreign funding (Group 1)

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Spectrum I</th>
<th>Spectrum II</th>
<th>Spectrum III</th>
<th>Spectrum IV</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Autonomous colleges are better placed.</td>
<td>13</td>
<td>11</td>
<td>10</td>
<td>12</td>
<td>46(38)</td>
</tr>
<tr>
<td>2</td>
<td>Universities are better placed.</td>
<td>6</td>
<td>9</td>
<td>9</td>
<td>8</td>
<td>32 (27)</td>
</tr>
<tr>
<td>3</td>
<td>Both are equally placed.</td>
<td>5</td>
<td>9</td>
<td>7</td>
<td>5</td>
<td>26(22)</td>
</tr>
<tr>
<td>4</td>
<td>Can’t say.</td>
<td>6</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>16(13)</td>
</tr>
<tr>
<td></td>
<td>Total number.</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>120</td>
</tr>
</tbody>
</table>

(Figures in brackets indicate %s). Source: Compiled from the filed survey.

38% of the respondents feel that autonomous colleges are better placed than universities in attracting private funding and foreign funding. 27% feel that universities are better placed; while 22% feel that both are equally placed. 13% of the respondents did not offer any opinion.

General opinion of the respondents is that the autonomous colleges will be more focused in their approach. They can prepare their own plans and set their own targets. They can review, revise and update curricula continuously. Interdisciplinary, multi disciplinary and courses relevant to the needs of local industry can be started. Individual departments will also try to augment their facilities and try
to raise the required funds. All these activities taken together will place them in advantageous position with regard to funding.

Those respondents who feel that universities are better placed have the following arguments.

- Universities enjoy tremendous goodwill among its alumni who are very well placed in India as well as abroad.
- So far universities did not make concerted efforts in fund-raising. However, once they decide to make to move forward in this direction, success can surely be achieved.
- Numbers of departments in universities are well established and enjoy good reputation. This places them in advantageous position with regard to funding.

**iv. Offering ‘twinning’ and ‘split site’ courses**

‘Twinning arrangement’ means an Indian Institution working a collaborative relationship with an institution outside country. ‘Split site’ means offering part course work in the parent institution and the other part from an institution in India. The main attraction of these courses is that the degrees get an international touch and the students feel that they have an edge when they enter the job market.

Colleges such as Christ College, Bangalore are offering ‘twinning’ and ‘split site’ courses. The college is offering two international twining programs- one with Western Michigan University, USA and the other with Assumption University, Bangkok. Some Karnataka State Universities have entered in to MOUs with several Research Institutions/ Universities abroad. For e.g. the Bangalore University has entered in to MOUs with Florida State University and A&M University, Tallahallee, USA for partnership programs in Bio-technology and Bio-diversity.
The perceptions of the respondents on this issue are presented below:

Table: 4.49: Autonomous colleges v/s Universities - Offering ‘twining arrangements’ and ‘split site courses’ courses (Perceptions of Group I)

<table>
<thead>
<tr>
<th>S.No</th>
<th>Description</th>
<th>Spectrum I</th>
<th>Spectrum II</th>
<th>Spectrum III</th>
<th>Spectrum IV</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Autonomous colleges are better placed.</td>
<td>7</td>
<td>9</td>
<td>5</td>
<td>9</td>
<td>30(25)</td>
</tr>
<tr>
<td>2</td>
<td>Universities are better placed.</td>
<td>9</td>
<td>11</td>
<td>16</td>
<td>8</td>
<td>44 (37)</td>
</tr>
<tr>
<td>3</td>
<td>Both are equally placed.</td>
<td>11</td>
<td>9</td>
<td>7</td>
<td>10</td>
<td>37(31)</td>
</tr>
<tr>
<td>4</td>
<td>Can’t say.</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>9 (7)</td>
</tr>
<tr>
<td></td>
<td>Total number.</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>120</td>
</tr>
</tbody>
</table>

*Figures in brackets indicate %s. (Source- Complied from the filed survey)*

37 % of the respondents feel that universities are better placed in offering ‘twining arrangements’ and ‘split site courses’ compared to autonomous colleges. 25 % felt that the autonomous colleges are better placed. 31 % felt that both are equally placed, while 7 % of the respondents did not offer any opinion.

Those respondents who believe that the Universities are better placed with regard to attracting foreign institutions for ‘twining arrangements’ and ‘split site courses’, cite their advantages such as huge student strength, good reputation and high accreditation status.

The respondents who feel that autonomous colleges are better placed cited following factors;

- Being autonomous, the decision-making would be faster.
- They can focus on very few areas- areas of their strength.
- Autonomous colleges have freedom to have their own fee structure. These courses will be costly and ‘market fee’ will have to be charged.

The 10th Plan document of the UGC has outlined a scheme for sanction of special grants for “model colleges”. A College would be eligible if it boasts of the highest standard of educational facility, is
autonomous and accredited. The colleges would be identified as potential centers of excellence, given a grant for a period of 5 years and after that will be considered as model colleges. Autonomous nature of the college is an important condition for sanction of the grant. The UGC may link its grants to the Autonomous and Accredited status of the colleges, with a view to improve the quality of the education. Under such circumstances, the Karnataka colleges may lose out, as none of them have achieved autonomous status. The other southern states have a head start over Karnataka in this matter.

4.C. Pointers to the Future

i. Idea of Convergence

The researcher had wide-ranging discussions with eminent personalities the education field with regard to the direction the system is going to take in future and the steps needed to tackle the situation. The discussions point to the 'idea of convergence' elaborated here below.

a. Convergence or Triple play – the availability of the net, telephony, and video on demand is going to introduce profound changes in higher education scene. This represents the convergence of technology.

b. India educates far lesser % of the people belonging to the ‘relevant population’ compared to other developed countries. There is a need to increase this number, in case, India is to progress with regard to certain vital parameters of human development. The existing Universities (conventional) are overburdened and the government cannot drastically increase their number in view of financial constraints. Open Universities will have to attract a much higher % of the students of the relevant age group. There are certain anomalies in the system, which need correction, so that the students of the relevant age group think of Open University system as an alternative to the conventional system. This demands the need for convergence of both the systems in terms of infrastructure, technology and such other relevant considerations.

c. Globalization will result in a much closer co-operation among the universities in India and those situated abroad. Offering ‘twinning’/‘split sight’ courses, joint research etc are pointers in this direction. Exporters of education may demand ‘level playing field’ under GATS, which may result in greater structural compatibility with other universities in the world. As a precursor to such an eventuality, there is a need for internal reforms to create a level playing field to
Indian universities. It may be recalled that, in the decade of 1990s the Indian Industry demanded and got such a level playing field, which enabled it to face foreign competition in the globalization era. The State Government may take some initiatives to introduce internal reforms in Karnataka State Universities. Introduction of credit system, easy transfer of credit among the universities, collaboration among universities in offering courses and conducting research could be some of the early steps. The system has to be made open and flexible at all stages. Each university has to play to the areas of its strength and collaborate with others in areas where it is weak. The ultimate aim should be achieving excellence both in teaching and research and put infrastructure facilities to optimum use. Convergence of technology may bring traditional and open university systems closer and may result in both the systems complementing and supplementing each other both qualitatively and quantitatively. This indicates the convergence of the University system.

ii. Launch of Virtual Learning Campus (VLC) by Karnataka State Universities

This decade would see explosive growth in uses and applications of advanced information systems in organizations. The emerging broadband and satellite network services would make the organizations widely accessible over the web, thereby spanning virtual universities.

The Universities in Karnataka can create networked Institute of at least 75 to 80 institutions in the state from diverse fields, including a mix of higher education, research labs, health, agriculture and management to launch the virtual learning campus. To enhance the quality of higher education and research, the Karnataka State Universities have an opportunity to launch a Virtual Learning Campus (VLC) specifically in Karnataka, the scope of which can be enlarged later.

iii. Establishment of State Council of Higher Education

NPE, 1986 and POA, 1986 had envisaged establishment of State Council of Higher Education (SCHE) for:

* State level planning.

* Coordination of plans and programs within the state and with U. G.C. for maintenance of standards.

In pursuance of the recommendations in the policy and programs of action, UGC issued guidelines to State Governments and universities for establishment of SCHE's. The guidelines provide for the
composition power, powers and functions of the council’s. Considering the reluctance on part of the State Government’s the POA, 1992 states (Para 11.12.1)

“The slow progress of the schemes could be mainly attributed to the apprehensions to the state governments and directorates of college education regarding transfer of their powers and functions of SCHE’s and the non-availability of resources for establishing these bodies”.

Andhra Pradesh was the first state to establish a State Council for higher education. (1988). Subsequently three other States - Tamil Nadu, West Bengal and Uttar Pradesh have established the State Council of Higher Education.

Education is a concurrent subject. Coordination and determination of standards in institutions of higher education comes under the Central list. State Governments establish universities and regulate their functioning. But at the State-level, there is no mechanism to take an overall view of higher education, study its strength and weaknesses and advice the Government for necessary action.

During the course of the study, several gaps were observed in the higher education scenario of Karnataka, which, a council of higher education could have effectively filled. It would have been especially useful in performing the critical role of giving impetus for long-term planning in higher education.

Establishment of State Council for Higher Education (SCHE)

The SCHE, had it existed in Karnataka, could have undertaken a survey of the existing facilities for higher education in the state and its projected needs up to the year, say 2010. The information collected in the survey could have been used to develop, a computerized management information system (MIS) for decision-making in different areas of higher education. Inter-University board in its meeting held on 18th January 2003, felt that Universities in Karnataka have not been able to utilize the benefits of UGC scheme to the desired levels, compared to Universities in north India. The board decided to issue certain instructions to the resident commissioner of the government of Karnataka at Karnataka Bhavan. This role is performed by SCHE’s wherever they exist.

The study recommends setting up of State Council for Higher Education in the State of Karnataka. In the view of resources constraints the staff required might be drawn from departments like education, finance, industries and labor on deputation basis.
The suggested functions are:

a. Planning and coordination.
   - To forward developmental programs of universities/colleges to UGC and related follow-up work.
   - To assist NAAC on determination and maintenance of standards.
   - To prepare long-term and short-term programs in the sphere of higher education in the State.
   - To conduct studies on manpower requirement for the future in existing/new areas.
   - To promote cooperation and coordination among the educational institutions.
   - To formulate the principles for approval and sanctions to new educational institutions and the granting of autonomous status to colleges.

b. Academic functions.

c. Advisory functions.
   - Providing support for fund raising activities of the universities both in India and abroad.
   - To assist universities in attracting foreign students.
   - To advise the universities in their efforts as exporters of education / establishing branch campuses in other countries.


The Semester system will become synonymous with education calendar in all universities in Karnataka from the year 2005-06. It can be expected that this change will bring around reforms in the examination and evaluation system over a period of time. The university system in Karnataka has been threatened because of the onslaught of professional courses. This has made universities alive to the need of redesigning the syllabi and course structure. Starting of honors degree courses and five year integrated courses in science have been receiving the attention of the universities.

The UGC Info Net Work connecting all the universities and providing all students access to internet and intranet facilities will have a huge impact on design of courseware, mode of teaching, evaluation

and library system. The digital revolution and the use of digital resources in general is really the beginning of a change, in the way the teaching and student communities, think and present them.

During the year 2001-02, the UGC has recognized Karnataka University as ‘University with Potential for Excellence’. Specific departments of Karnataka State Universities have built up excellence in their chosen fields, which has been well recognized by the UGC and the stakeholders. For e.g. Polymer Science department of Karnataka University, Nuclear Science department of Mangalore University are well known for their achievement. The State Government has plans to reward and develop such departments. Surveys conducted by leading magazines such as India Today have recognized the pre-eminence of a few colleges belonging to Karnataka. The University Law College Bangalore has figured in the list of top ten law Colleges in the country.

11 colleges of Bangalore University are in the final stages of getting the autonomous status. The scrutinizing committee of the UGC has cleared the applications of 40 colleges in Karnataka for autonomy. Establishment of two new universities (Karnataka Women University based at Bijapur and Tumkur University) by the State and gradual conferment of autonomous status will help in reducing the burden on existing universities.

Universities have been making efforts to raise finances from their own sources. They have been adopting some innovative methods to increase the contribution from fees. For e.g. Mysore University has classified post graduate degree/diploma courses under three schemes, namely—Regular scheme called Scheme A, partially self finance scheme called Scheme B and fully self finance scheme. Generating private funds through donations/endowments/contributions have been receiving active attention.

The computerization of sections of administration, particularly the examination wing has picked up speed. The software installed has made it possible to control malpractices and declare results in time. Technology is making major inroads in all areas of the administration, which will enable the Universities to offer improved services. Bangalore University has become the first university in India to introduce the ‘Fund Based’ accounting system to improve efficiency, accountability and transparency. Bangalore University will have LAN facility in the early part of 2005.

The Government has introduced teacher evaluation system to emphasis on accountability.

All the Universities in Karnataka have got themselves evaluated and accredited by the NAAC. The
government has been focusing on improving quality of education. NAAC Assessment has become all the more necessary, as it is mandatory for financial support from the UGC and also to apply for autonomous status. The State Government has signed an MOU with NAAC, to jointly promote quality in higher education. The Government has drawn an action plan to complete the process of accreditation in four stages. 18 district level task forces have been constituted to ensure TQM in Collegiate Education. The State has taken steps to start learning centers in all government colleges to mould student's personalities and gear them up to meet the challenges in the corporate world.

4.E. SWOT Analysis of Karnataka State Universities

Strengths

- Number of school-going children has been increasing-aspirations of Indian youth to pursue higher education.
- India, one of the largest exporters of trained manpower in the world market-Karnataka is one of the advanced states in the country - Bangalore widely recognized as the intellectual capital of India- Bangalore also fastest growing bio-cluster in Asia - Scope for development of number of cities to be hubs of new economy companies.
- All Universities under K.S.U Act 2000 have been accredited by NAAC and received relatively high star grading.
- Increasing collaboration between the State Government and NAAC to promote quality improvement in Government Colleges.
- Increasing interest of business and industry to partner and collaborate with institutions.

Weakness

- Heavy dependence on the Government for funds.
- No autonomous colleges (in the field of general education) in Karnataka even though the scheme is in existence for about three decades.
- Problems of affiliating system,-constantly increasing number of colleges add to the administration and examination related workload.
- Wide variation in the level of the standards of affiliated colleges.
• Numbers of courses are started hurriedly in and unplanned manner, without permanent faculty and evaluators.
• Overall decline in the number of students opting for a career in the science.
• Rising graduate unemployment-mismatch between education (knowledge and skill development) and job requirements.
• Enrolment at doctoral levels less than 1 % while under graduate students make up nearly 90 % of total enrolments.
• Universities have autonomy only on a limited scale.
• Large number of engineering and other professional colleges (7080 CET seats left vacant during the year 2003-04 )- craze for IT courses-human resources for IT sector are at the cost of other sectors.
• Lack of adequate industry-university interaction.
• Some foreign colleges may go for Companies Act Provisions while operating in higher education field (where education becomes ‘trade’)

Opportunities

• Structural transformation of Services sector-growth of skill intensive and value added sectors-opportunity for Universities to prepare students for knowledge based Services.
• UGC information network-the first and the biggest network dedicated extensively for education in the world - will provide virtual enhancement of academic infrastructure.
• Can make use of GATS provisions to;
  Set up the educational campuses abroad.
  Offer educational programs in foreign countries through tie-ups or collaboration with their educational institutions.
• Current environment provides opportunities to increase contribution from user charges-more particularly fees-to a reasonable level.
• Networking of Universities, research institutions etc for mutual benefit, sharing of resources and undertaking project work.
• Alumni of Karnataka Universities well placed both in India and abroad - can obtain substantial support to their ‘Alma mater’.

• With a suitable marketing strategy can attract foreign students in large numbers.

• To move closer to industry both in private and public sector for long term funds, research support, training opportunities for students and development of curricula.

• Development of good departments in to ‘Center of Excellence’ under UGC and State Government schemes.

• Synchronizing education with the job market by offering ‘add on’ skill oriented courses.

• To enhance the quality of higher education and research, the Karnataka State Universities have a opportunity to launch a Virtual Learning Campus (VLC) specifically in Karnataka, the scope of which can be enlarged later.

Threats

• Government thinking on withdrawing grant in aid system for private colleges in stages may cause problems and disruption in academic work.

• Inclusion of higher education under GATS provides significant benefits to the exporters while importers do not have much advantage.

• In the emerging GATS scenario, competition from transnational education providers.

• Difficulties in meeting aspiration levels of students in an era where globalization has become one of the key frameworks for every aspect of development.

• Internationalization of Higher Education.

• Countries World over are making efforts to market themselves to Indian students – even under graduate students are going abroad in increasing numbers.

• Modern communication technologies can make distance education system, make a powerful impact in future.

• Some organizations may enter higher education sector perceiving it as a business opportunity.

Threat from other types of Universities
- Deemed Universities - UGC has liberalized the procedure for according the Deemed Status to Private Institutions, three years ago. So far 51 Institutions have been granted Deemed University Status in the country. Now the trend is likely to pickup speed in Karnataka.

- Private Universities - Two States, Uttar Pradesh and Chattisgarh have already enacted laws for the purpose of legalizing Private Universities and Andhra Pradesh is in the process of doing so. Number of States including the State of Karnataka are also thinking on similar lines. Amity University (22,000 students, 1500 strong faculty), ICFAI University have spread their wings all over India.

- Virtual Universities – The University which supports its research / educational and administrative activities which leap over boundaries of time and space can be termed as ‘Virtual University’. (For example in the USA, Michigan Virtual University (MVU) has been established in 1998).

- Corporate Universities – Access to the best knowledge / knowledgeable people is the secret leading to the success of many industries. This is obtained inside the Universities, where the people create, share and learn new knowledge. University established by a corporate becomes an arm of the Industry, although it is inherently strong enough to set its own terms of trade. Corporate Universities focus on world of work and operational competence.

- Enterprise University - This could be the result of private enterprise and initiative. Many of them may not only cover their costs, but also make profits, which are not necessarily reinvested in education. Education provided is at huge and long-term economic and non-economic cost to the society.
4.02: Decision Making Bodies of the Universities in Karnataka

- Chancellor
  - Pro Chancellor
    - Vice Chancellor
      - Syndicate
        - Syndicate Sub Committee
        - Finance Committee
        - Statutory Boards & Bodies
      - Academic Council
        - Faculties
          - B.O.S.
            - Dept. Council
        - Committee of the Academic Council