CHAPTER VI

TEACHERS AS PEDAGOGUES - INTER-ACTION WITH STUDENTS

INTRODUCTION

THE ORGANIZATION OF INSTRUCTION: A FRAMEWORK FOR INTER-ACTION

As is the practice common to University education in India, instruction at colleges affiliated to Bombay University, is organized almost exclusively through the medium of lectures. Typically the lecture is a 40 to 50 minutes' session during which the teacher explains an idea, or imparts information and, students listen or what is more common, take profuse notes that can later be crammed to prepare for an examination. The lecturer is expected to gear himself to the understanding of his students, and to cover the syllabus prescribed by the University in the course of the lectures. Although the lecture system does not provide for teacher-student interaction in the form of discussions, the teacher is free to ask and to invite questions and thus generate a measure of inter-action.

In principle, the lecture system as defined by the University for its affiliated colleges to follow allows for considerable variations and teachers are free to
adopt their own approach to teaching. They may treat their lectures as uninterrupted monologues or turn them into lecture-cum-discussion sessions by providing ample for questions and answers.

Lectures are supplemented with practicals for Science students and tutorials for Arts' students. Both practicals and tutorials are designed to provide for interaction between teachers and students. Practicals are laboratory sessions in the course of which Science students perform experiments under the close supervision of their demonstrators and teachers. A tutorial is a 40 to 50 minutes' period in the course of which a teacher is expected to involve a small group of students (not more than 25 at a time) in discussion of a theme or a topic related to subjects covered during the lectures. The topic for the tutorial is to be decided upon, mutually, by the teacher and the students concerned. Ideally all, or at least some, students from the batch are required to prepare a written assignment or do some appointed reading towards preparation for discussion at the tutorial. The teacher is expected to stimulate and guide discussions between students, and students are expected to participate actively. Thus, in principle, the tutorials are to be used as sessions for discussion on set topics and assignments. However, in practice
they may be turned into additional lectures to complete the syllabus, or converted into a session for doing exercises that prepare students for examinations.

The organization of class-room instruction has been described above. Equally important, from the point of view of understanding the influence of the organizational factor on the role of the teacher as a pedagogue, are the mechanisms provided for teachers to supervise their students throughout the year and to maintain contacts with their students outside the classroom. University regulations require that teachers spend at least four hours at the college each day, presumably to be available to students who may need them for consultation. However, the University does not have any system whereby students are assigned to teachers for academic guidance or supervision. Lectures, tutorials and practicals are the only occasions formally provided for students and teachers to come in contact with each other. Teachers are not required to maintain a continued record of their students' performance. Although students who desire to obtain such help and guidance from teachers are free to obtain it, the organizational structure does not provide for continued supervision or guidance of students on the part of the teachers. On the whole, unless teachers and students voluntarily reach out to each other, there is
very little in the system that provides for their inter-
action with each other.

It is against this background that we examine the
nature of the inter-action between teachers and students
in this Chapter. The Chapter consists of three Sections.
The first Section deals with inter-action between teachers
and their students in the classroom. The second Section
deals with inter-action outside the classroom and the
third Section deals with inter-action as evidenced in a
teacher's ability to follow the progress of their students
individually through the course of the year. In the
context of the organizational framework spelt out, class-
room interaction has been viewed in terms of whether
lectures are monologues on the part of teachers or whe-
ther they feature questions and answers, and whether tuto-
rials involve discussions in which students participate.
Inter-action outside the classroom has been viewed in
terms of whether teachers meet students outside the
classroom and whether they help them personally with
academic or personal work.

In each Section data on factors relevant to the
facet of inter-action under consideration have first
been presented, to provide a description of the sample
as a whole, and to indicate variations between the three
colleges. This description is followed by a discussion
in which the findings are viewed in the context of organizational features of the college and the University.

SECTION I - INTER-ACTION IN THE CLASSROOM

The nature of the inter-action between teachers and their students in the classroom may be gauged by the extent to which teachers ask and receive questions in the course of lectures and tutorials.

PATTERNS OF INTER-ACTION

Lectures

The majority, consisting of 92 (52%) out of 171 teachers interviewed, mention inter-action in the form of questions and answers in the course of lectures. However, only 22 (13%) teachers mention questions initiated by students. This indicates that although it is common practice for teachers to ask questions during the course of their lectures, it is uncommon for students to raise questions on their own. What is more illustrative of the quality of the inter-action in the classroom is the finding that practically all the 92 teachers, who mention inter-action in the form of questions and answers, say that it is invariably the same three or four students who repeatedly ask and answer questions. This conveys the impression that participation, on the part of the students is extremely limited,
and suggests that interaction is poor.

Table 22 - Distribution of Respondents by College and by whether Respondents Ask and Receive Questions in the Course of Their Lectures

<table>
<thead>
<tr>
<th>College</th>
<th>Neither ask nor receive questions</th>
<th>Only ask questions but do not receive</th>
<th>Ask and receive questions</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elphinstone</td>
<td>24(42)</td>
<td>21(37)</td>
<td>12(21)</td>
<td>57(100)</td>
</tr>
<tr>
<td>St. Xavier's</td>
<td>27(47)</td>
<td>21(37)</td>
<td>9(16)</td>
<td>57(100)</td>
</tr>
<tr>
<td>Ruia</td>
<td>28(49)</td>
<td>28(49)</td>
<td>1(2)</td>
<td>57(100)</td>
</tr>
<tr>
<td>Total</td>
<td>79(43)</td>
<td>70(39)</td>
<td>22(13)</td>
<td>171(100)</td>
</tr>
</tbody>
</table>

(Figures in brackets indicate percentages rounded to the nearest number)

(1) \(X^2\) Between

- \(EC\) and \(XC\) = 0.319 P.<.70
- \(EC\) and \(RC\) = 0.566 P.<.50
- \(RC\) and \(XC\) = 0.035 P.<.90

For Computation of \(X^2\)
Respondent have been Categorized into Those who neither Ask nor Receive questions and Others

(ii) \(X^2\) Between

- \(EC\) and \(XC\) = 5.253 P.<.99
- \(EC\) and \(RC\) = 7.0154 P.<.05
- \(RC\) and \(XC\) = 10.5057 P.<.70

For Computation of \(X^2\)
Respondents have been Categorized into Those who Ask and Receive questions and Others

The impression is further supported by the fact that although the majority (52%) of the teachers do mention interaction in the form of questions and answers, 48 per cent of the teachers say that they do not interact at all. They state that the expressions on their students' faces and the general tone of attention in the class are the only clues by which they gauge their students' response to their lectures.
Variations between the colleges indicate that the percentage of teachers who mention questions initiated by students is larger at Elphinstone and St. Xavier's than it is at Ruia. As may be seen from the Table, the difference between Elphinstone and Ruia is statistically significant.

Tutorials

One hundred and nine out of the 171 teachers interviewed are required to conduct tutorials. Of these 68 (62%) describe their tutorials as discussion sessions in which students participate. The other 41 (38%) state that they utilize the tutorial hour, either to complete, or do in greater detail, portions of the syllabus that they could not complete in the course of the lectures set for the purpose, or to do exercises or solve examination papers with students, or to explain the difficulties in the subject that their students come to them with.

From among the total number of teachers who are required to conduct tutorials at each college the percentage of those who use the tutorial session to initiate discussion among students is highest at St. Xavier's (69%), and closely followed by Elphinstone (67%).
Table 23 - Distribution of Respondents by College and by the Manner in Which They Use the Tutorial Session

<table>
<thead>
<tr>
<th>College</th>
<th>For discussion of topics</th>
<th>To complete parts of the course</th>
<th>To exercise &amp; solve problems</th>
<th>Total No. of teachers who are required to conduct tutorials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elphinstone</td>
<td>27 (63)</td>
<td>3 (7)</td>
<td>13 (30)</td>
<td>43 (100)</td>
</tr>
<tr>
<td>St. Xavier's</td>
<td>24 (67)</td>
<td>3 (8)</td>
<td>9 (25)</td>
<td>35 (100)</td>
</tr>
<tr>
<td>Ruia</td>
<td>17 (57)</td>
<td>1 (3)</td>
<td>12 (40)</td>
<td>30 (100)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>68 (63)</strong></td>
<td><strong>7 (6)</strong></td>
<td><strong>34 (31)</strong></td>
<td><strong>109 (100)</strong></td>
</tr>
</tbody>
</table>

(Figures in brackets indicate percentages rounded to the nearest number)

\[ X^2 \text{ between EO and XC} = 0.1236 \quad P < .80 \]
\[ EO \text{ and RC} = 0.2763 \quad P < .70 \]
\[ RC \text{ and XC} = 10.56 \quad P < .01 \]

For computation of \( X^2 \) respondents have been categorised into "Those Who use the Tutorial Session for Discussion of Topics and Themes Related to the Course" and "Others".

Ruia stands apart as the college at which only 48 percent of the teachers taking tutorials utilize the tutorial session for discussion with students. The difference between Ruia and St. Xavier's is statistically significant.
Inter-college comparisons indicate that interaction in the classroom is most limited at Ruia. It is practically identical at Elphinstone and St. Xavier's.

On the whole, the data on the lectures and the tutorials indicate that interaction between teachers and students in the classroom is limited. As mentioned in the introduction to this Chapter, this fact of a limited interaction between teachers and students may be explained in terms of several factors. Some, deriving from University organization, others deriving from the general social context in which teachers function and yet others deriving from features in the structural organization of the colleges in which teachers function.

FACTORS INFLUENCING INTER-ACTION

Features In The University Organization Inhibiting Inter-action

We can identify at least five features in the structure of the University organization as possible explanations for the limited interaction observed. These factors are: large classes, compulsory attendance, the absence of mechanisms by which a teacher may control his class, the pressure to cover the syllabus within a stipulated time and the character of the examinations.
Large Classes: It is difficult for lecturers to establish with a large audience, the kind of rapport that is necessary for the lecture to take on the informality of questions and answers or discussions. Data indicate that most of the teachers interviewed, teach large classes and we may attribute the low level of interaction between teachers and students to the fact that teachers have to handle large classes. (Ref. Table 24)

Footnote 1. The University decides the maximum size of the students that a college may have on its rolls and the maximum number of students that a college may accommodate in a class. It defines the minimum number of periods that need to be provided for each subject at each level and the maximum number of teaching hours that a college may allocate to a teacher. Within these maxima and minima, college authorities are, in principle, free to determine their own pattern regarding the size of the classes and the number of lecture-periods to be allocated to a subject. Colleges are free to have small classes and to allocate for the courses taught as many lecture-periods as teachers require.

However, this hypothetical freedom is almost nullified by a seemingly unrelated factor viz., the norms regarding fees and salaries imposed upon colleges by the University. According to University rules, colleges cannot charge their students fees in excess of the amount set by the University. Nor can colleges pay their teachers salary scales other than those fixed by the University. The income from fees is not adequate to sustain or to run a college. While the return from properties in which the funds for running the colleges have been invested has remained fairly constant through the years, the expenditure on running the colleges has increased enormously. Moreover, it continues to rise steadily with the rising cost of living. Since the onus of providing funds to bridge the gap between income and expenditure is largely upon the management of the college, most colleges are forced to function on deficit budgets. This is particularly true of the old colleges.
Although the poor interaction between teachers and students in the classroom may generally be attributed to large classes, it is necessary to take into account two other factors in the University organization that make for a classroom situation which is not particularly conducive to interaction. These two factors are compulsory attendance and the absence of mechanisms by which teachers may control their students.

The State Government provides each college with funds to meet deficits in its budget, but the grant of funds is based on the principle of 'matching'. This principle requires that the management produce 50 per cent of the share to cover the deficit expenditure in order to 'deserve' or 'earn' the grant from the State Government. The only way that colleges can face the situation is by maximizing the income from fees by admitting the maximum number of students permissible. Moreover, they find it necessary to have large classes, to limit the number of teachers employed and generally to plan on the optimum utilization of the faculty members. This in turn means that colleges are forced to increase the size of the classes to the maximum permissible and to give the teachers a maximum teaching load allowed. It also means cutting down the number of lectures provided for a subject down to the minimum required.

In fact if we analyse the fee and the salary structure carefully we find that it is almost as though the fee and salary structure is designed for an organizational system in which teachers are required to handle large classes, and a heavy teaching load and cover the course in a limited number of lectures.
Compulsory Attendance: According to University rules, attendance at lecture is compulsory. Students do not have the freedom to opt out of a class that they find unrewarding or uninteresting. And, as those who are acquainted with the situation in the classroom in an Indian college know, students who are uninterested and bored with a lecture are unattentive or restive in class, and difficult to control. They shuffle their feet, make disturbing sounds, fire volleys of paper arrows when the teacher turns his back to write on the blackboard and create a difficult classroom situation. Large classes aggravate the problems created by compulsory attendance. In a small class the teacher can easily identify the trouble makers. In a large class this is difficult.

However, even if teachers are able to identify the trouble makers there is very little that they can do to bring miscreants to book. They do not have recourse to mechanisms with which to control their students. At the most they may send the students out of class, mark them absent, or report them to the Principal. But a teacher, who repeatedly takes recourse to such action, loses favour with students and finds it even more difficult to control them. Partly because it is difficult to establish rapport
with a large class and partly because it is difficult to control students who are not really interested in attending a lecture. Teachers are not likely to hesitate to generate interaction. A silent group is easier to weld into discipline and attention, than one that is vocal and active. Given the situation that exists teachers conceived with maintaining order in the classroom are likely to be inclined to deliver a monologue rather than to initiate or encourage interaction.

**Limited Time**: Equally inhibiting to interaction, we may imagine, is the pressure to complete the syllabus within a set period of time. In the framework of the organizational structure that is laid down by the University for its affiliated colleges to follow, the number of lectures and tutorial hours to be allocated by a college for each subject, at each level of undergraduate education are specifically spelt out. In principle, colleges are free to add to this minimum. But in practice colleges are bound by a financial pattern that makes it economically impractical to provide, formally, for more than the minimum number of classes specified. In principle, again, colleges leave
teachers free to organize extra lectures on their own. But, in practice, teachers are restricted from taking extra lectures both, by the fact that their schedule of work, as it stands, is heavy and by the fact that colleges find it difficult to provide lecture rooms and other administrative facilities that are required for the extra lectures given voluntarily by teachers. The result is that the time budget recommended by the University is the one by which teachers eventually function and they find themselves rushed into covering the syllabus within a set time. The necessity to cover the syllabus within a set time inhibits interaction. Dialogue and discussion are effective as mechanisms for explanation and communication but they are time-consuming and difficult to employ as modes of instruction in a situation in which teachers are time bound.

Examinations: In the structure of the University organization examinations occupy an important position. They are the sole mechanism by which the calibre and the performance of students is evaluated and the sole criterion upon which their certification is based. The consequence of this is that examination requirements strongly influence the character of teaching and of learning. The character of University examinations, and the impact that they are likely to have upon the quality of teaching has been discussed at length in the following Chapter.
At this point it may suffice to state that the demands made by the examination system upon the students are such that it is the student’s capacity to accumulate information and to learn by rote rather than his understanding, in depth, of his subject that is rewarded at University examinations. Examinations structured in this fashion are not conducive to classroom interaction.

**The Students’ Examination-Oriented Expectations—An Obstacle to Interaction**

We may argue nevertheless that if teachers believe that their students are genuinely interested in the subject and eager to discuss and to share ideas, it would be possible, in some measure, for them to break through the organizational constraints to interaction.

Data indicate, however, that the teachers’ impression regarding the interest and the motivation of their students are hardly of a character to encourage them to cut across the barriers to interaction. The majority (72%) of the teachers believe that their students are primarily examination-oriented in their expectations. In fact 39 per cent of the 171 teachers interviewed believe that students are exclusively examination-oriented in their expectations (Ref. Table 3). Few teachers believe that their students are genuinely interested in their subjects. Asked to state the obstacles they face in teaching, 75 (44%) of the 171 teachers
interviewed mentioned that a lack of interest on the part of their students is the major obstacle they face.

School Backgrounds and Academic Traditions - Factors Inhibiting Interaction

School: Traceable to school education are the facts of undeveloped articulation of the students and their poor equipment in English.

By and large, school education in India does not equip students with the confidence to speak out in a group. This is particularly so of schools that prepare students for the S.S.C. course.* Moreover, although English continues to be the medium of instruction at colleges affiliated to Bombay University, the regional language medium schools, from which most of the students, some, do not provide for an adequate proficiency in English. As a result students, who because of their undeveloped capacities for articulation are already shy and diffident about speaking in a classroom, are further inhibited from expressing ideas or raising questions.

Tradition: While the students' diffidence about speaking in a group is rooted in their undeveloped

* I.S.C. course schools cultivate a somewhat different pattern of behaviour than S.S.C. schools. Generally, students from these schools are much more bold, outgoing and articulate than students from S.S.C. schools.
articulation and their poor equipment with the English language, their non-participant behaviour is supported by an academic tradition and culture that does not attach much significance to discussion and dialogue, and, by a version of the traditional norms governing interaction between elders and the young, which requires that students accept without question all that the teacher gives.

While the general pattern of student-teacher interaction in the classroom as observed with reference to the sample as a whole, indicates the manner in which the organizational framework of the University, the expectations on the part of the students, the system of school education, and the academic culture in Indian society affect the teacher’s role, the variations between the pattern of interaction of each of the three colleges reflect the manner in which the colleges differ from each other with reference to the factors identified as being relevant to interaction.

Both Elphinstone and St. Xavier’s, the two colleges at which classroom interaction between teachers and students is somewhat more marked than it is at Ruia, happen to be colleges at which the number of teachers teaching large classes is smaller than it is at Ruia.
While most teachers, at all the three colleges are required to teach large classes, the number of those who are required to do so is definitely larger at Ruia.

Between St. Xavier's and Elphinstone interaction is more marked at Elphinstone. Not only does Elphinstone have the largest number of teachers teaching smaller classes, but it is also the only college at which tutorials are organized for all subjects, at all levels.

Table 24 - Distribution of Respondents by College and by Size of the Classes They Teach

<table>
<thead>
<tr>
<th>College</th>
<th>All or most classes of 100 students or more</th>
<th>50-100</th>
<th>25-50</th>
<th>Less than 25</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elphinstone</td>
<td>18 (31)</td>
<td>3 (6)</td>
<td>6 (11)</td>
<td>13 (22)</td>
<td>17 (31)</td>
</tr>
<tr>
<td>St. Xavier's</td>
<td>17 (31)</td>
<td>4 (8)</td>
<td>7 (12)</td>
<td>12 (21)</td>
<td>11 (19)</td>
</tr>
<tr>
<td>Ruia</td>
<td>29 (50)</td>
<td>3 (6)</td>
<td>6 (11)</td>
<td>8 (14)</td>
<td>11 (19)</td>
</tr>
<tr>
<td>Total</td>
<td>64 (100)</td>
<td>16 (37)</td>
<td>19 (11)</td>
<td>33 (20)</td>
<td>39 (23)</td>
</tr>
</tbody>
</table>

(Figures in brackets indicate percentages rounded to the nearest number)

\[ X^2 \text{ Between } EC \text{ and } XC = 0.04123 \text{ P} < .90 \]
\[ EC \text{ and } RC = 5.5490 \text{ P} < .02 \]
\[ RC \text{ and } XC = 3.3897 \text{ P} < .01 \]

For Computation of \( X^2 \) Respondents Have Been Categorized into "Those Who Have All or Most Classes of 100 Students or More" and "Others".
As such, it is the college at which teaching time for each subject is more liberally provided for and, therefore, the college at which the teachers are less likely to feel time-bound.

Again, statements regarding the objectives of the three colleges, made by their respective Principals, indicate that Elphinstone and St. Xavier's, the two colleges at which interaction in the classroom is markedly superior to what it is at Ruia, are distinctly less examination-oriented than Ruia.

Elphinstone and St. Xavier's also differ from Ruia in the composition of their student populations. Both the colleges have a substantially larger proportion of students educated at I.S.C. and English medium schools than Ruia. This difference between the three colleges is particularly significant in view of the finding that as many as 21 (95%) out of the 22 teachers who mention questions initiated by students belong to Elphinstone or St. Xavier's. Between Elphinstone and St. Xavier's, again the percentage of those who mention questions on the part of their students is much larger at Elphinstone (55%) than at St. Xavier's (40%). In this connection, it is important to note that the percentage of first class students is substantially larger among the entrants to Elphinstone as compared to the entrants to St. Xavier's.
This suggests that while interaction is greater at colleges where students come from English medium and I.S.C. schools than it is at colleges where they come from regional language S.S.C. schools, it is even more so where such students have a high level of performance.

SECTION II - INTERACTION OUTSIDE THE CLASSROOM

PATTERNS OBSERVED

The character of the contacts between teachers and students outside the classroom has been observed in terms of four factors, viz., whether teachers know their students by name; whether they help their students with academic difficulties outside the classroom; whether they help their students with personal problems, and whether their students visit them at home. Data on each of these factors have been presented below. On the whole, the data indicate that contacts between teachers and students outside the classroom are fairly limited. Their contacts with their Junior/Senior B.A. and B.Sc. students are somewhat less limited than their contacts with their First Year/Inter students.

Knowing Students By Name

One hundred and twenty-five (83%) out of 151 teachers teaching at the First Year/Inter level say that they know very few or none of their students by name, the number
of those who say this with reference to their Junior/Senior students is distinctly smaller (78 out of 158 - 50 per cent).

Twenty-six (17%) out of the 151 teachers teaching at the First Year/Inter level say that they know all or most of their students by name. As against this 80 (50%) out of the 158 teachers teaching at the Junior/Senior level say that they know all or most of their students by name.

Between the three colleges it is at St. Xavier's that the largest number of teachers know all or most of their First Year/Inter students, by name - (21 per cent as compared to 17 per cent at Elphinstone and 13 per cent at Ruia). However, at the Junior/Senior level the percentage of teachers who know all or most of their students by name is the largest at Ruia - (61 per cent as compared to 47 per cent at Elphinstone and 43 per cent at St. Xavier's). On the whole, Table 25 indicates that the pattern of responses is practically identical at Elphinstone and St. Xavier's. It is different at Ruia. There are two major differences between Ruia on the one hand and Elphinstone and St. Xavier's on the other. The number of teachers who know their First Year/Inter students is smaller at Ruia than at the other two colleges. On the other hand, the
Table 25 - Distribution of Respondents by College and by the Extent to Which They Know Their Students by Name.

<table>
<thead>
<tr>
<th>College</th>
<th>Those who know all or most of their students</th>
<th>Those who know some or a few</th>
<th>Those who know none</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A - First Year/Inter Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elphinstone</td>
<td>9 (17)</td>
<td>41 (79)</td>
<td>2 (4)</td>
<td>52 (100)</td>
</tr>
<tr>
<td>St. Xavier's</td>
<td>10 (21)</td>
<td>36 (77)</td>
<td>1 (2)</td>
<td>47 (100)</td>
</tr>
<tr>
<td>Ruia</td>
<td>7 (13)</td>
<td>44 (85)</td>
<td>1 (2)</td>
<td>52 (100)</td>
</tr>
<tr>
<td>Total</td>
<td>26 (17)</td>
<td>121 (80)</td>
<td>4 (3)</td>
<td>151 (100)</td>
</tr>
<tr>
<td>B - Junior/Senior Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elphinstone</td>
<td>24 (47)</td>
<td>27 (53)</td>
<td>-</td>
<td>51 (100)</td>
</tr>
<tr>
<td>St. Xavier's</td>
<td>23 (43)</td>
<td>29 (55)</td>
<td>1 (2)</td>
<td>53 (100)</td>
</tr>
<tr>
<td>Ruia</td>
<td>33 (61)</td>
<td>20 (37)</td>
<td>1 (2)</td>
<td>54 (100)</td>
</tr>
<tr>
<td>Total</td>
<td>80 (50)</td>
<td>76 (48)</td>
<td>2 (2)</td>
<td>158 (100)</td>
</tr>
</tbody>
</table>

(Figures in brackets indicate percentages rounded to the nearest number)

For Computation of $X^2$ Respondents have been Categorized as "Those Who Know all or Most of Their Students" and "Others".
number who know their Junior/Senior students is conspicuously larger at Ruia. As a result, the disparity between the teachers' contacts with their First Year/Inter students and their Junior/Senior students is markedly greater at Ruia than at Elphinstone or St. Xavier's.

Help with Academic Work

Asked to state the extent to which their students seek their help when faced with academic difficulties, the majority, 117 (69%) out of the 171 teachers interviewed, say that less than 10 per cent of their students come to them for help with academic difficulties. However, 28 (16%) teachers state that between 10 per cent and 20 per cent of their students come to them with academic difficulties and an almost equal number - 26 (15%), say that more than 50 per cent of their students do so.

The teachers were not asked to distinguish between their First Year/Inter and their Junior/Senior students in this matter, nevertheless most of the teachers specify that it is largely the Junior/Senior students who come for help. They also specify that generally students come for help immediately before the examination.
Table 26 - Distribution of Respondents by College and by Whether Their Students Come to Them Individually, For Help in Academic Work.

<table>
<thead>
<tr>
<th>College</th>
<th>More than 50% students come</th>
<th>10%-20%</th>
<th>Less than 10%</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elphinstone</td>
<td>8(14)</td>
<td>5(9)</td>
<td>44(78)</td>
<td>57(100)</td>
</tr>
<tr>
<td>St. Xavier's</td>
<td>10(18)</td>
<td>9(16)</td>
<td>38(67)</td>
<td>57(100)</td>
</tr>
<tr>
<td>Ruia</td>
<td>8(14)</td>
<td>14(25)</td>
<td>35(61)</td>
<td>57(100)</td>
</tr>
<tr>
<td>Total</td>
<td>26(15)</td>
<td>28(16)</td>
<td>117(69)</td>
<td>171(100)</td>
</tr>
</tbody>
</table>

(Figures in brackets indicate percentages rounded to the nearest number)

\[ X^2 \text{ Between EC and XC} = 1.5640 \quad P < .30 \]

\[ EC \text{ and RC} = 3.3392 \quad P < .10 \]

\[ RC \text{ and XC} = .342799 \quad P < .70 \]

For Computation of \( X^2 \) Respondents have been Categorized into "Those Who Help More Than 10 per cent and Those Who Help less than 10 per cent".

Inter-college comparisons indicate that the number of teachers who say that students come to them for help in academic work is the largest at Ruia. Whereas 39 percent of the teachers at Ruia say that more than 10 percent of their students come to them individually, only 34 percent of the teachers at St. Xavier's and 23 percent of the teachers at Elphinstone belong to this category.
Help With Personal Problems

The number of teachers who say that they have students coming to them for help with personal problems is considerably smaller than the number of those who say that their students come to them for help with academic work. Thirty-six (20%) out of the 171 teachers interviewed say that more than ten students seek their help each year. Sixty-five (38%) say that less than ten students seek their help each year. As against this, 70 (42%) teachers say that none of their students come for help with personal problems.

Table 27 - Distribution of Respondents by College and by Whether Their Students Come to Them for Help with Personal Problems.

<table>
<thead>
<tr>
<th>College</th>
<th>More than 10 students in the course of the year</th>
<th>Less than 10 in the course of the year</th>
<th>None</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elphinestone</td>
<td>11(19)</td>
<td>15(27)</td>
<td>31(64)</td>
<td>57(100)</td>
</tr>
<tr>
<td>St. Xavier's</td>
<td>12(21)</td>
<td>23(40)</td>
<td>22(39)</td>
<td>57(100)</td>
</tr>
<tr>
<td>Ruia</td>
<td>13(22)</td>
<td>27(47)</td>
<td>17(31)</td>
<td>57(100)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>36(20)</strong></td>
<td><strong>65(38)</strong></td>
<td><strong>70(42)</strong></td>
<td><strong>171(100)</strong></td>
</tr>
</tbody>
</table>

(Figures in brackets indicate percentages rounded to the nearest number)

\[ X^2 \text{ Between } EC \text{ and } XC = 2.8562 \text{ P.<.10} \]
\[ EC \text{ and } RC = 7.0533 P.<.01 \]
\[ RC \text{ and } XC = 0.9744 P.<.50 \]

For Computation of \( X^2 \) Respondents Have Been Categorized as "Those Who Have Some Students Visiting Them" and "Those Who Have None".
The number of those who say that their students come to them for help in personal problems, is, again, the largest at Ruia, and the smallest at Elphinstone. As many as 69 per cent of the teachers at Ruia say that at least some of their students come to them for help with personal problems. The corresponding figures for St. Xavier's and Elphinstone are 61 per cent and 46 per cent respectively.

**Being Visited at Home**

It does not seem to be common for students to visit their teachers at home. A majority, 96 (56%) out of the 171 teachers interviewed, say that none of their students visit them at home, or that the number who do so is negligible. The number of those who have students visiting them at home is somewhat higher at St. Xavier's (55%) than at Ruia (51%) and much higher at both St. Xavier's and Ruia than it is at Elphinstone (26%).

The data on interaction between teachers and their students, outside the classroom generally indicate that such contacts are limited. They also indicate that teachers interact much more with their Junior/Senior students than with their First Year/Inter students.
Table 28 - Distribution of Respondents by College and by the Number of Students Who Visit Them at Home.

<table>
<thead>
<tr>
<th>College</th>
<th>More than 10 students</th>
<th>Between 5 and 10 students</th>
<th>Less than 5 students</th>
<th>None or Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elphinstone</td>
<td>2</td>
<td>7</td>
<td>6</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>(3)</td>
<td>(12)</td>
<td>(11)</td>
<td>(74)</td>
</tr>
<tr>
<td>St. Xavier's</td>
<td>3</td>
<td>16</td>
<td>12</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>(6)</td>
<td>(28)</td>
<td>(21)</td>
<td>(45)</td>
</tr>
<tr>
<td>Ruia</td>
<td>4</td>
<td>17</td>
<td>8</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>(7)</td>
<td>(34)</td>
<td>(14)</td>
<td>(49)</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>40</td>
<td>26</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td>(5)</td>
<td>(24)</td>
<td>(15)</td>
<td>(56)</td>
</tr>
</tbody>
</table>

(Figures in brackets indicate percentages rounded to the nearest number)

\[ X^2 \text{ Between } EC \text{ and } XC = 9.3299 \ P. < .01 \]
\[ EC \text{ and } RC = 7.2555 \ P. < .01 \]
\[ RC \text{ and } XC = 0.1407 \ P. < .80 \]

For Computation of \( X^2 \) Students have been Categorized into "Those Who Have Some Students Visiting Them" and "Those who have none".
Inter-college variations do not fall into a neat pattern. Nevertheless, the findings (Ref. Tables 25-28) broadly indicate that more teachers at Ruia than at Elphinstone or St. Xavier's have contacts with their students outside the classroom. Contacts seem to be poorest at Elphinstone. This means that the inter-college variations with regard to interaction between teachers and students outside the classroom present a picture that is exactly the reverse of what it is with regard to interaction in the classroom. These findings need to be examined in the context of the structure of the college organization.

Variations Between the Colleges and Institutional Structure of the College

The three colleges from which the teachers interviewed have been drawn, differ from each other in the extent to which their institutional structures provide for interaction between teachers and students outside the classroom.

Of the three colleges, St. Xavier's is the only college explicitly committed to the 'all round' development of youth. In keeping with the obligation to provide for something more than classroom instruction, the college, as mentioned earlier, conducts activities like Summer Schools, Vacation Camps and Socials. Thus St. Xavier's is the college which most consciously provides
for interaction outside the classroom. For this reason, and by reason of the fact that St. Xavier's happens to be one of the two colleges at which interaction in the classroom is superior, we are inclined to expect interaction between teachers and students outside the classroom to be more marked at St. Xavier's than at the other two colleges.

Between Elphinstone and Ruia we expect interaction outside the classroom to be superior at Elphinstone. This expectation is influenced by two factors. Firstly, interaction between teachers and students within the classroom is superior at Elphinstone to what it is at Ruia and we expect the same pattern to be repeated in the matter of interaction outside the classroom. Secondly, at least two administrative measures at Elphinstone are directed at facilitating contacts between teachers and students. These are, the allocation of the task of the supervision of extra-curricular activities to teachers and the enforcement of the requirement that teachers spend at least four hours at the college each day.

The findings do not conform to our expectations. It is at Ruia rather than at St. Xavier's or Elphinstone, that contacts between teachers and students outside the classroom are most marked. They are poorest at Elphinstone.
This means that neither the articulation of a commitment to the "all round education of the young", as at St. Xavier's college nor the implementation of administrative measures as at Elphinstone, are adequate to nurture contacts between teachers and students. At the same time the unexpected character of the findings point to some features in the institutional structure of the three colleges as possible factors in promoting or inhibiting contacts between teachers and students.

Temporary Tenure: Practically 30 out of 57 (52%) teachers at Elphinstone are on a temporary tenure as compared with 4 out of 57 (7%) at St. Xavier's and 1 out of 57 (2%) at Ruia. This suggests that one of the factors that could be responsible for the limited interaction between teachers and students at Elphinstone is the fact of the temporary character of the employment of a large number of teachers at Elphinstone. Teachers who have already served the college for a length of time or who are confident of a long-term career investment in the college are more likely to be involved with the college and, therefore, better motivated to maintain contacts with the students than teachers employed on a temporary basis.
**Bureaucratic Structure**: In considering the difference between Elphinstone on the one hand and St. Xavier's and Ruia on the other, we need also to take into account the fact that both the St. Xavier's and Ruia the colleges at which interaction between teachers and students is evident are private colleges. In view of this fact, we cannot rule out the possibility that the differences in the extent of the contact between teachers and students at St. Xavier's and Ruia, on the one hand, and the Elphinstone on the other, may be related to variations in their managements. It may, in fact, be argued that the poor interaction between teachers and students at Elphinstone reflects the bureaucratic set-up of the college. Or rather, that the impersonal and highly bureaucratic character of the administration and management of the college as a government organization stifles the development of inter-personal relationships.

**Locality**: The difference between St. Xavier's and Ruia is marginal. Nevertheless taking into consideration the fact that it is St. Xavier's college rather than Ruia college that is explicitly committed to the all-round development of the student, and that it is at St. Xavier's rather than at Ruia that informal gatherings and socials are specially organized to promote contacts between teachers and students, this difference is conspicuous. In looking for an explanation for the difference
between St. Xavier's and Ruia, one wonders whether the fact that Ruia is primarily a college that serves the local community could have any bearing on the superior teacher-student contacts at this college. Detailed data on the residence of the teachers are not available, but impressions indicate that more teachers from Ruia than from Elphinstone or St. Xavier's live in the locality immediately adjacent to the college. The fact that many of the students and the teachers belong to the same residential locality could be a factor which facilitates contacts between teachers and students.

**Homogeneity**: Similarly, the fact that the teachers and students at Ruia are far more homogeneous, culturally, in terms of religion and language than the teachers and the students at Elphinstone and St. Xavier's could also be a factor in promoting contacts.

**Homogeneity** in terms of class constitutes, it seems an important aspect of cultural homogeneity between teachers and students. This is illustrated by the statements made by some of the teachers at St. Xavier's and Elphinstone. At least four teachers at St. Xavier's and three teachers at Elphinstone made specific reference to the fact that they hesitate to correct or advise students who come from a westernized, upper class culture. They said that they feel uncomfortable advising such students
because of a few unpleasant experiences in which upper class students "put on superior airs" and "answered back" when the respondents tried to advise them. None of the teachers from Ruia made any comments to this effect. On the contrary they pointed out that although students hesitate to fraternize because they are shy, they are extremely respectful.

It is important, in view of these statements, to take into account the fact that whereas both Elphinstone and St. Xavier's cater heavily to the upper classes, Ruia caters to the middle class. Since teachers belong to the middle class, it is possible that class differences in terms of a style of life and of values inhibits interaction between teachers and students at Elphinstone and St. Xavier's. Interaction at Ruia may not be obstructed by such differences. In fact, the differences between interaction at Elphinstone and St. Xavier's on the one hand and Ruia on the other suggest that it is important to take up intensive studies into the manner in which styles of life and values function at factors facilitating or inhibiting interaction. It is important to examine the extent to which class differences restrict the relevance of teachers as role-models to their students and to analyse the manner in which feelings of class superiority or inferiority that
teachers and students may carry with respect to each other affect the teacher role and the student role.

On the whole findings indicate that the mechanisms that are formally provided to encourage contacts between teachers and students at colleges in the sample do not seem to be particularly effective in nurturing such contacts. They also suggest that the practice of a temporary tenure, bureaucratic character of organization and a situation in which teachers are sensitive to differences between themselves and their upper class students are unfavourable to interaction. On the other hand, findings suggest that interaction between teachers and students outside the classroom may be facilitated by the fact of their coming from the same locality and of their being more homogenous in culture. Findings also suggest that teachers probably interact more freely with students belonging to the same or similar social class or to a class that is somewhat lower in social status.

SECTION III - SUPERVISION DURING THE COURSE OF THE YEAR

The data on interaction between teachers and students in and outside the classroom offer an insight into one aspect of the nature of the relationship between teachers. The extent to which teachers are able to follow the academic progress of their students through the year offers an insight into another.
| College         | Can Largely Follow only | Only that | Only that | Follows the Progress of Students of Students' | Progress of of neat and Who come into Who | Meet the Worst for these who | Follows the Progress of Students of Students' | Progress of of neat and Who come into Who | Meet the Worst for these who | Follows the Progress of Students of Students' | Progress of of neat and Who come into Who | Meet the Worst for these who | Follows the Progress of Students of Students' | Progress of of neat and Who come into Who | Meet the Worst for these who | Follows the Progress of Students of Students' | Progress of of neat and Who come into Who | Meet the Worst for these who | Follows the Progress of Students of Students' | Progress of of neat and Who come into Who | Meet the Worst for these who | Follows the Progress of Students of Students' | Progress of of neat and Who come into Who | Meet the Worst for these who |
|-----------------|-------------------------|----------|----------|--------------------------------|------------------------------------------|-------------------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Elphinstone     | 23 (44)                 | 11 (21)  | 4 (8)    | 2 (4)                                       |                                          | 12 (23)                                    |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |
| St. Xavier's    | 17 (36)                 | 16 (34)  | 3 (6)    | 6 (12)                                      |                                          | 7 (15)                                     |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |
| Hola            | 3 (6)                   | 12 (22)  | 1 (2)    | 5 (10)                                      |                                          | 23 (47)                                    |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |
| Total           | 45 (50)                 | 39 (42)  | 8 (6)    | 11 (7)                                      |                                          | 68 (72)                                    |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |
| A - First Year/Intermediate Level |
| Elphinstone     | 23 (44)                 | 11 (21)  | 4 (8)    | 2 (4)                                       |                                          | 12 (23)                                    |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |
| St. Xavier's    | 17 (36)                 | 16 (34)  | 3 (6)    | 6 (12)                                      |                                          | 7 (15)                                     |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |
| Hola            | 3 (6)                   | 12 (22)  | 1 (2)    | 5 (10)                                      |                                          | 23 (47)                                    |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |
| Total           | 45 (50)                 | 39 (42)  | 8 (6)    | 11 (7)                                      |                                          | 68 (72)                                    |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |
| B - Junior/Senior Level |
| Elphinstone     | 23 (44)                 | 11 (21)  | 4 (8)    | 2 (4)                                       |                                          | 12 (23)                                    |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |
| St. Xavier's    | 17 (36)                 | 16 (34)  | 3 (6)    | 6 (12)                                      |                                          | 7 (15)                                     |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |
| Hola            | 3 (6)                   | 12 (22)  | 1 (2)    | 5 (10)                                      |                                          | 23 (47)                                    |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |
| Total           | 45 (50)                 | 39 (42)  | 8 (6)    | 11 (7)                                      |                                          | 68 (72)                                    |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |                                          |

(Figures in brackets indicate percentages rounded to the nearest number)
As seen in Table 29, our findings indicate that the extent to which teachers are able to follow the progress of their students differs, as between their First Year and Intermediate students on the one hand, and their Junior and Senior B.A. and B.Sc. students on the other. Many more teachers are able to follow the progress of the Junior/Senior students than to follow the progress of their First Year/Intermediate students. (Table 29).

Forty (31%) of the 151 teachers teaching at the First Year/Intermediate level say that they are not at all able to follow the progress of students individually through the year. Forty-nine (32%) state that they are only able to keep track of the best and the worst students and of students who visit them, on their own, for academic guidance. An almost equal number 46 (30%) say that they are able to follow the progress of most of their students individually. Most of those who say that they are able to follow the progress of their First Year and their Intermediate students individually are teachers of science subjects, who can follow the progress of their students while they supervise practicals.

The percentage of those who say that they are unable to follow the progress of their Junior and Senior B.A. and B.Sc. students is substantially smaller. Only 20 (13%) out of the 158 teachers teaching at this stage
express their inability to follow the progress of their students individually. The majority (64%) say that they are able to follow the progress of all their students. The others (23%) say that they are able to keep track of the performance of their best students and their worst students, of those who come to them on their own for guidance, and those whom they take for tutorials.

Inter-college variations indicate that the number of those who say that they are largely able to follow the progress of their First Year/Inter students is larger at Elphinstone (44%) than at St. Xavier's (36%) and significantly larger at these two colleges than at Ruia (11%). Again responses with reference to the Junior/Senior level students are roughly similar at Elphinstone and St. Xavier's. But the difference between these two colleges and Ruia college is quite marked. The percentage of those who are not at all able to follow the progress of their students is significantly larger at Ruia college than at Elphinstone and St. Xavier's. On the whole, it is at Elphinstone that we find the largest percentage of teachers who say that they are able to follow the progress of their students, - both at the First Year/Inter level and at the Junior/Senior level. Correspondingly their percentage is second largest at St. Xavier's and smallest at Ruia.
It is interesting to note that in the matter of the teachers' ability to keep track of the progress of their students throughout the course of the year, the pattern, at each college approximates to the pattern of interaction within the classroom rather than to the pattern of the interaction outside the classroom. It is at Elphinstone, where we find the largest percentage of teachers mentioning interaction within the classroom that we also come across the largest percentage who mention their ability to keep in touch with the progress of their students. Not, at Ruia college which has the largest percentage who mention of interaction outside the classroom. As may be expected, this suggests that in situations which are conducive to classroom interaction between teachers and students are also conducive to the combined supervision, by teachers, of the academic progress of their students.

Since one of our primary concerns is to identify the relationship between the teacher role, and structural features in the University and the college system, the following table presents the respondents' description of the means by which they keep themselves informed by the students is significant.
Table 30 - Distribution of Respondents in Terms of the Means by Which They Are Able to Keep Themselves Informed of Their Students' Progress Through the Course of the Year.

<table>
<thead>
<tr>
<th>Through tutorials</th>
<th>Through personal ability</th>
<th>Through other written tests</th>
<th>Through contact with teachers' observations in class</th>
<th>Not able to follow progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elphinstone</td>
<td>26 (45)</td>
<td>7 (12)</td>
<td>13 (23)</td>
<td>5 (9)</td>
</tr>
<tr>
<td>St. Xavier's</td>
<td>9 (16)</td>
<td>17 (30)</td>
<td>12 (21)</td>
<td>9 (16)</td>
</tr>
<tr>
<td>Ruia</td>
<td>9 (16)</td>
<td>16 (29)</td>
<td>3 (16)</td>
<td>8 (14)</td>
</tr>
<tr>
<td>Total</td>
<td>44 (28)</td>
<td>40 (23)</td>
<td>34 (20)</td>
<td>22 (13)</td>
</tr>
</tbody>
</table>

(Figures in brackets indicate percentages rounded to the nearest number)

The table indicates that at Elphinstone college tutorials, practicals and other written assignments constitute the avenues through which teachers follow the progress of their students. At St. Xavier's college and Ruia college, on the other hand, the periodical tests seem to be the most effective channel for teachers to observe the progress of their students. The percentage of those who state that their estimate of their students' progress through the course of the year is based upon
their observation of their students in class is larger at Elphinstone college and St. Xavier's college than at Ruia college. On the other hand, the percentage of those who mention personal contact as the basis of their information is larger at St. Xavier's college and Ruia College than at Elphinstone college. It is useful to match these inter-college variations with variations in the structural features that have been mentioned as being relevant to interaction. The finding that more teachers at Elphinstone college than at St. Xavier's college or Ruia college quote tutorials and other assignment as the avenue through which they observe their students matches with the fact that tutorials are organized on a much more liberal scale at Elphinstone college than at St. Xavier's or Ruia. That periodical tests are quoted by a larger percentage at St. Xavier's and Ruia matches with the fact that periodical tests are more prominent a feature of the college routine at St. Xavier's and Ruia than at Elphinstone. The finding that the percentage of those who mention their observation of their students in class as the basis of their information regarding the continued progress of their students matches the fact that the number of teachers who teach smaller classes is distinctly larger at Elphinstone and St. Xavier's than at Ruia. Finally the finding that more teachers at St. Xavier's and Ruia than at Elphinstone rely on their personal contacts with
students to obtain an estimate of the students progress through the course of the year fits in with the finding that more teachers at St. Xavier's and Ruia than at Elphinstone have such contacts.

The correspondences that have been observed are important, not only because they indicate that, tutorials, periodical tests, small classes, and personal contacts between teachers and students facilitate the teachers' supervision of the progress of their students throughout the year but because they support our conjecture that tutorials, and small classes, generally facilitate interaction between teachers and students.