PERCEPTION OF STUDENTS TOWARDS EFFECTIVE TEACHING IN HIGHER EDUCATION: A MIXED ANALYSIS APPROACH

Indu Bala & Franky Rani

Research Scholar, Department of Education, Guru Nanak Dev University, Amritsar, Punjab, India
Assistant Professor (Supervisor) Department of Education, Guru Nanak Dev University, Amritsar, Punjab, India

Abstract

Higher education is the source or feeder system in all works of life and therefore supplies the much-needed human resources in management, planning, designing, teaching and research. Scientific and technological advancements and economic growth of a country are as dependent on higher education system. This paper presents an investigation carried out to determine the perception of students regarding effective teaching in higher education. The research was conducted using data, collected from 100 participants of Guru Nanak Dev University, Amritsar. A mixed analysis approach was used that includes both the qualitative as well as quantitative methods for data analysis. The findings of the study qualitatively showed that the gender wise overall 69% female students and 55% male students, Qualification wise 82% undergraduate students and 83% post-graduate students and the stream wise 59% arts, 59% science and 58% commerce students agree with the effective teaching in higher education. Further the results were strengthened by using quantitative data analysis. Quantitatively t-test was conducted on the data to verify the perception of participants and the results reveal that there is significant difference between the perceptions of the male and female student towards effective teaching in Higher education. Moreover, there is no significant difference of student’s perception on the basis of their academic qualification and streams towards effective teaching in higher education.

Keywords: Perception, Effective Teaching, Higher Education

INTRODUCTION

A sound higher education system plays an imperative role in the economic development and progress of a country. Higher education, in terms of its importance and consequence, enjoys a considerable position in the education system as it provides the people with recent acquaintance, advancements and skills to be advantageously employed. India has one of the third largest systems of higher education in the world which offers the provision of education and preparation in almost all aspects of human originality, creativity, training and logical-rational undertaking (Sudha, 2013). The Kothari Commission (1966) stated the following roles of the higher education institutions in the modern society

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1. To look and inform for new knowledge, also to engage enthusiastically and confidently in the search of truth, and to recreate the old knowledge and thinking in the light of new activities and searches;

2. To support the quality and social integrity, and to reduce social cultural differences through communication of education

3. To promote the teachers and students towards society generally, the attitudes and ethics needed for developing the “good life” in individuals and society (Government Of India, 1968).

Effective Teaching is most central part in higher education because it helps in student learning. Teaching is being seen as progressively more significant in relation to one of the research goals of higher education system. In 2006, the Canadian Council of Learning held in Canada to set up apparent, rational, and consistent goals for post-secondary education, many of which imitate on the quality of teaching and learning (Cappon, 2006). Indian higher education suffers quality as well as quantity challenges and also the crisis like shortage of high quality teachers (Bhushan, 2009; Kamran, 2004). Higher education in India was plagued with poor technology, infrastructure and human resources especially the skilful and competent teachers (Bora, 2012; Komow, Khanna, Raghav and Sharma, 2012; Roy, 2007; Singh, 2009). The emphasis should be given on quality improvement in classroom facilities, curriculum development, teacher effectiveness and role of the community and the stakeholders (Chauhan, 2016; Kaur, 2015; Thamarasseri, 2016).

The effective teaching in a changing higher education context and teaching excellence requires sound knowledge of one’s discipline and adds that excellent teachers are those who know how to convey concepts and how to help the students to overcome their learning difficulties. The understanding of effective teaching is important to ensure the quality of university teaching and learning and the ways in which teaching should be practised in the multiple overlapping contexts (Allan, Clarke and Jopling, 2009; Kreber, 2002; Samarawickrema, 2009). The appropriate teaching skills and practices in higher education settings require a good grasp of subject matter and knowing how to present it to students, thus emphasizing knowledge and presentation (Stephanou and Kyridis, 2012). Also, the teaching effectiveness to know that how well students learn the criterion, the students with four different instructional settings: Business, Sociology, Education, and Physical Education and identified five attributes of effective teacher: commitment to learners; recent knowledge of the material; organization and management of the classroom environment; their own will.
power to improve; and collaboration of work with others concluded that exemplary university
teaching is discernable and the quality of components that define it can be assessed (Saroyan,
and Amundsen, 2004). The significant relationship between the students’ attitude towards
mathematics and teacher’s knowledge of Mathematics content, communication ability and
use of appropriate teaching strategies and classroom management skills has been seen. It has
been also concluded that when the student’s perception of their teacher’s characteristics is
low, then the student’s attitude towards mathematics tends to be negative (Ampadu, 2012;
Etuk, Maria, Afangideh and Asukwo, 2013).

METHODOLOGY

2.1 Objectives
1. To analyse the perception of students towards effective teaching in higher education on
the basis of followings:
   1. Gender
   2. Qualification
   3. Streams
2. To compare the mean scores of perception of male and female students towards
effective teaching in higher education.
3. To compare the mean scores of perception of under graduate and post graduate students
towards effective teaching in higher education.
4. To compare the mean scores of perception of arts, science and commerce students
towards effective teaching in higher education.

2.2 Hypotheses
   H1: There is no significant difference between the perception of male and female
students towards effective teaching in higher education.
   H2: There is no significant difference between the perception of under graduate and post
graduate students towards effective teaching in higher education.
   H3: There is no significant difference between the perception of arts, science and
commerce student towards effective teaching in higher education.

2.3 Delimitations of the Study
   The present study is delimited to the Guru Nanak Dev University, Amritsar only.

2.4 Research Methodology
   The present study comes under the domain of descriptive research.

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2.5 Sample

A sample of 100 students was taken from Guru Nanak Dev University, Amritsar. All participants were students of higher education.

2.6 Research Tool

A Questionnaire with 25 statements was used to study the student’s perception of effective teaching towards higher education (To be prepared by the investigator). All the statements are positive in nature. The response pattern was designed as follows to record student’s perception:

1. In case of agreement showing satisfaction (Yes) and assigned the number 1.
2. In case of disagreement showing dissatisfaction (No) and assigned the number 0.

2.7 Statistical Techniques

A mixed analysis approach includes both the qualitative as well as quantitative methods were used for the analysis of data. Qualitative analysis carried out by using the response analysis method and Quantitatively the Statistical techniques like: Mean, Standard Deviation, t-test and ANOVA were used to analyse the data.

RESULTS

3.1 Analysis and Interpretation of Data

Objective-I

To analyse the perception of students towards effective teaching in higher education on the basis of followings:

a) Gender

The perception of male and female students towards effective teaching in higher education have been analysed and presented in following table and graph:

Table 3.1: Percentage Analysis of Perception of male and female students towards Effective Teaching in Higher Education (N (100) = 50 Female & 50 Male)

<table>
<thead>
<tr>
<th>Sr No.</th>
<th>Statements</th>
<th>Female</th>
<th>Male (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Ye %  N</td>
<td>Ye %  N</td>
</tr>
<tr>
<td></td>
<td></td>
<td>s a o</td>
<td>s a o</td>
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<tr>
<td></td>
<td></td>
<td>N g</td>
<td>N g</td>
</tr>
<tr>
<td></td>
<td></td>
<td>e N e</td>
<td>e N e</td>
</tr>
<tr>
<td>1</td>
<td>Teachers encourage me to look for links between the different units of the course.</td>
<td>44 8</td>
<td>06 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8 2</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Teachers provide handouts and other materials to understand the unit.</td>
<td>48 9</td>
<td>02 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 6</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Teachers encourage me to rethink my understanding of some aspects of</td>
<td>47 9</td>
<td>03 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 6</td>
<td></td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th></th>
<th></th>
<th>4</th>
<th>8</th>
<th>10</th>
<th>2</th>
<th>34</th>
<th>68</th>
<th>16</th>
<th>32</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Teachers provide plenty of examples and illustrations to help me to grasp things better</td>
<td>40</td>
<td>8</td>
<td>10</td>
<td>2</td>
<td>34</td>
<td>68</td>
<td>16</td>
<td>32</td>
</tr>
<tr>
<td>5</td>
<td>Teachers structure and present the unit content in ways that help me to understand</td>
<td>30</td>
<td>6</td>
<td>20</td>
<td>4</td>
<td>21</td>
<td>42</td>
<td>29</td>
<td>58</td>
</tr>
<tr>
<td>6</td>
<td>Teachers show genuine concern for student progress and needs</td>
<td>42</td>
<td>8</td>
<td>08</td>
<td>1</td>
<td>40</td>
<td>80</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>7</td>
<td>Teachers having skill at developing a class atmosphere conducive to learning</td>
<td>32</td>
<td>6</td>
<td>18</td>
<td>3</td>
<td>28</td>
<td>56</td>
<td>22</td>
<td>44</td>
</tr>
<tr>
<td>8</td>
<td>Teachers have good manner (e.g. friendly, helpful, professional, enthusiastic)</td>
<td>22</td>
<td>4</td>
<td>28</td>
<td>5</td>
<td>25</td>
<td>50</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>9</td>
<td>Teachers explain how knowledge is developed in the particular subject</td>
<td>25</td>
<td>5</td>
<td>25</td>
<td>5</td>
<td>11</td>
<td>22</td>
<td>39</td>
<td>78</td>
</tr>
<tr>
<td>10</td>
<td>Teachers discuss recent developments in the field of the course</td>
<td>43</td>
<td>8</td>
<td>07</td>
<td>1</td>
<td>39</td>
<td>78</td>
<td>11</td>
<td>22</td>
</tr>
<tr>
<td>11</td>
<td>Teachers emphasize conceptual understanding</td>
<td>30</td>
<td>6</td>
<td>20</td>
<td>4</td>
<td>16</td>
<td>32</td>
<td>34</td>
<td>68</td>
</tr>
<tr>
<td>12</td>
<td>Teachers try to share his/her enthusiasm about the course with us</td>
<td>39</td>
<td>7</td>
<td>11</td>
<td>2</td>
<td>36</td>
<td>72</td>
<td>14</td>
<td>28</td>
</tr>
<tr>
<td>13</td>
<td>Teachers patient in explaining things which seemed difficult to grasp</td>
<td>42</td>
<td>8</td>
<td>08</td>
<td>1</td>
<td>42</td>
<td>84</td>
<td>08</td>
<td>16</td>
</tr>
<tr>
<td>14</td>
<td>Teachers set tasks that are useful as learning experiences</td>
<td>20</td>
<td>4</td>
<td>30</td>
<td>6</td>
<td>08</td>
<td>16</td>
<td>42</td>
<td>84</td>
</tr>
<tr>
<td>15</td>
<td>Teachers discuss recent developments in the field of the course</td>
<td>43</td>
<td>8</td>
<td>07</td>
<td>1</td>
<td>39</td>
<td>78</td>
<td>11</td>
<td>22</td>
</tr>
<tr>
<td>16</td>
<td>Teachers help me to see how I am supposed to think and reach conclusions in the course</td>
<td>30</td>
<td>6</td>
<td>20</td>
<td>4</td>
<td>14</td>
<td>28</td>
<td>36</td>
<td>72</td>
</tr>
<tr>
<td>17</td>
<td>Teachers give feedback to improve my ways of learning and studying</td>
<td>10</td>
<td>2</td>
<td>40</td>
<td>8</td>
<td>04</td>
<td>08</td>
<td>46</td>
<td>92</td>
</tr>
<tr>
<td>18</td>
<td>Teachers give me the support I needed to complete the set work for the unit</td>
<td>32</td>
<td>6</td>
<td>18</td>
<td>3</td>
<td>20</td>
<td>40</td>
<td>30</td>
<td>60</td>
</tr>
<tr>
<td>19</td>
<td>Teachers give lectures that are easy to outline</td>
<td>46</td>
<td>9</td>
<td>04</td>
<td>0</td>
<td>48</td>
<td>96</td>
<td>02</td>
<td>04</td>
</tr>
<tr>
<td>20</td>
<td>Teachers are careful and precise in answering questions</td>
<td>46</td>
<td>9</td>
<td>04</td>
<td>0</td>
<td>44</td>
<td>88</td>
<td>06</td>
<td>12</td>
</tr>
<tr>
<td>21</td>
<td>Teachers encourage class discussion</td>
<td>40</td>
<td>8</td>
<td>10</td>
<td>2</td>
<td>40</td>
<td>80</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>22</td>
<td>Teachers state objectives for each class session</td>
<td>20</td>
<td>4</td>
<td>30</td>
<td>6</td>
<td>05</td>
<td>10</td>
<td>45</td>
<td>90</td>
</tr>
<tr>
<td>23</td>
<td>Teachers invite students to share their knowledge and experiences</td>
<td>35</td>
<td>7</td>
<td>15</td>
<td>3</td>
<td>10</td>
<td>20</td>
<td>40</td>
<td>80</td>
</tr>
<tr>
<td>24</td>
<td>Teachers invite criticism of his/her own ideas</td>
<td>10</td>
<td>2</td>
<td>40</td>
<td>8</td>
<td>01</td>
<td>02</td>
<td>49</td>
<td>98</td>
</tr>
<tr>
<td>25</td>
<td>Teachers have interest and concern in the quality of his/her teaching</td>
<td>49</td>
<td>9</td>
<td>01</td>
<td>0</td>
<td>45</td>
<td>90</td>
<td>05</td>
<td>10</td>
</tr>
</tbody>
</table>
Figure (a): Percentage Analysis of Perception of male and female students towards Effective Teaching in Higher Education

It is clear from the above table 3.1 and figure (a) which are showing that male and female student’s perception differs towards effective teaching in higher education. The statements according to their number in the questionnaire are 4, 5, 9, 11, 14, 15, 16, 17, 18, 22, 23, and 24 showing most of the difference in the perceptions of both male and female students. The female students showed effective perception than the male students in these statements that are 4) 80% female students and 68% male students agree that teachers provide plenty of examples and illustrations to help students to grasp things better, 5) the 60% female students said that teachers structure and present the unit content in ways that help students to understand, 9) again 50% female students agree that teachers explain how knowledge is developed in a particular subject whereas only 22% male students are agree with this, 11) the 60% female students and 32% male students agree with the teachers emphasize the conceptual understanding, 14) 40% female students agree that teachers set tasks that are useful as learning experiences whereas only 16% male students agree with this, 15) the 80% female students and 60% male students agree that teachers show genuine interest in improving his/ her teaching, 16) teacher help students to see how they supposed to think and reach the conclusions in the course, the 60% female students and 28% male students agree with this statement, 17) again the 20% female and only 08% male students agree that teachers give the feedback to improve the ways of learning and studying, 18) teachers give the student’s support they needed to complete the set work for the unit, 64% female and 40% male students agree with this, 22) the 40% female and 10% male students agree teachers state objectives for each class session, 23) the 70% female and 20% male students showing their agreement that teachers invite students to share their knowledge and experiences, and 24)
teachers invite criticism of his/ her own ideas, 20% female and only 02% male students agree with this.

Further, the male and female students are also showing very less difference in their perception for some statements numbered 1, 2, 3, 6, 7, 8, 10, 12, 19, 20, and 25. No doubt the students showed very less difference in their percentage of perceptions but again the female students are having effective perception than the male students. These statements include the 1) the 88% female and 76% male students showing their agreement that teachers encourage students to look for links between the different units of the course, 2) teachers provide handouts and other materials to understand the unit, 96% female and 92% male students agree with this, 3) again the 94% female and 90% male students show that teachers encourage students to rethink for understanding of some aspects of the course, 6) the 84% female and 80% male students agree that teachers show genuine concern for student progress and needs, 7) teachers having skills at developing a class atmosphere conducive to learning, 64% female and 56% male students agree with this, 8) the 44% female and 50% male students show that teacher has good manners(e.g. friendly, helpful, professional, enthusiastic), 10) 86% female and 78% male students agree that the teachers discuss recent developments in the field of the course, 12) teachers try to share his/ her enthusiasm about the course with students, 78% female and 72% male students agree with this, 19) teachers give lectures that are easy to outline, 92% female and 96% male students agree with this, 20) the 92% female and 88% female students agree that teacher is careful and precise in answering questioning, and 25) again the 98% female and 90% male students agree that teacher has interest and concern in the quality improvement of his/ her teaching.

However male and female students showed that same perception to some statements numbered as 13 and 21. These include the 13) both the 84% female and male students agree that teachers are patient in explaining things which seemed difficult to grasp and 21) teachers encourage class discussions, the 80% female and male students showing their agreement with this statement.
The above figure b) and c) are showing the overall percentage of perception of female students and the male students regarding effective teaching in higher education. The overall 69% female students and 55% male students agree that teaching is effective.

b) Qualification

The perception of under-graduate and post-graduate students towards effective teaching in higher education have been analysed and presented in following graph:

Figure (d): Percentage Analysis of Perception of Under-Graduate and Post-Graduate Students

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It is clear from the above figure (d) that all the statements showing very less percentage difference of perception of under-graduate and post-graduate students. The statement number 8 and 19 are not showing any difference in the percentage of perception of these students regarding effective teaching in higher education.

Figure (e) and (f): Pie Charts Showing the Overall Percentage of Perception of Under-graduate and Post-graduate Students

The above figure (e) and (f) is showing the overall percentage of perception of under-graduate students and post-graduate students regarding effective teaching in higher education. The overall 82% undergraduate students and 83% post-graduate students agree that teaching is effective.

c) Streams

The perception of arts, science and commerce students towards effective teaching in higher education have been analysed and presented in following graph:
Figure (g): Percentage Analysis of Perception of arts, science and commerce students towards Effective Teaching in Higher Education

It is clear from the above figure (g) that the all the statements showing very less percentage difference of perception of arts, science and commerce students. The statement number 2 does not show any difference in the percentage of perception of these students regarding effective teaching in higher education.

Figure (h), (i) and (j) Pie Charts Showing the Overall Percentage of Perception of Arts, Commerce and Science Students

The above figure (h), (i) and (j) is showing the overall percentage of perception of arts, science and commerce students regarding effective teaching in higher education. The overall 59% arts, 59% science and 58% commerce students agree with the effective teaching in higher education.

Hypothesis-I

There is no significant difference between the perception of male and female students towards effective teaching in higher education.

The value of means, standard deviation and t-value for the perception of male and female students towards effective teaching in higher education are shown in table 3.2.
Table 3.2: N, Mean, Standard Deviation and t-value of scores of perception of male and female students towards Effective Teaching in Higher Education

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t-value</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>48</td>
<td>14.10</td>
<td>6.349</td>
<td>2.09*</td>
<td>Significant</td>
</tr>
<tr>
<td>Female</td>
<td>52</td>
<td>16.54</td>
<td>7.180</td>
<td></td>
<td>Significant</td>
</tr>
</tbody>
</table>

*Significant at level 0.05

As shown by the Table 3.2 that the t-value for perception of male and female students regarding effective teaching in higher education came out to be 2.09 which is significant at 0.05 level. This significant value indicates that male and female students differ in their scores of perception. The high mean score is in favor of female students reveals that majority of the female students in the present sample agree that the teaching is effective as compared to their counterpart of male students. Thus the hypothesis that “There is no significant difference between the perception of male and female students towards effective teaching in higher education” was rejected leading to the conclusion that female students are showing agreement of their perception than male students towards effective teaching in higher education.

Hypothesis-II

There is no significant difference between the perception of under graduate and post graduate students towards effective teaching in higher education.

The value of means, standard deviation and t-value for the student’s perception and their academic qualification (under graduate UG and post graduate PG), towards effective teaching in higher education are shown in table 3.3

Table 3.3: N, Mean, Standard Deviation and t-value of scores of perception of under graduate and post graduate students towards Effective Teaching in Higher Education

<table>
<thead>
<tr>
<th>Qualification</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t-value</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>PG</td>
<td>32</td>
<td>15.22</td>
<td>6.705</td>
<td>0.153**</td>
<td>Non-significant</td>
</tr>
<tr>
<td>UG</td>
<td>68</td>
<td>15.44</td>
<td>6.993</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Non-significant at level 0.05

Table 3.3 shows that t-value was calculated for the above data of students according to their academic qualifications that is UG and PG which came out to be 0.153, which showed the non-significant t-value at 0.05 level of significance. Therefore the students are showing the non-significant difference with respect to their academic qualification towards effective teaching.
teaching in higher education. Thus the hypothesis “There is no significant difference between the perception of under graduate and post graduate students towards effective teaching in higher education” was accepted leading to the conclusion that the qualification wise students are showing same perception towards effective teaching in higher education.

Hypothesis-III

There is no significant difference between the perception of arts, science and commerce students towards effective teaching in higher education.

Table 3.4: Summary of analysis of variance Perception of arts, Science and Commerce students: One Way ANOVA

<table>
<thead>
<tr>
<th>SCORE</th>
<th>Sum Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>15.148</td>
<td>2</td>
<td>7.574</td>
<td>0.158*</td>
<td>Non-significant</td>
</tr>
<tr>
<td>Within Groups</td>
<td>4656.162</td>
<td>97</td>
<td>48.002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4671.310</td>
<td>99</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Non-significant at 0.05 level

Table 3.4: shows that the value of F comes out to be 0.158 which was calculated between the three groups that are arts, science and commerce students. This value is showing there is no significant difference between the perceptions of student’s streams wise towards Effective Teaching in higher education. Thus the hypothesis “There is no significant difference between the perception of arts, science and commerce students towards effective teaching in higher education” was accepted leading to the conclusion that students from different streams are having the same perception towards effective teaching in higher education.

CONCLUSION AND DISCUSSION

The findings in this study raised some questions for the researcher about the current state of teaching and the perception of students regarding effective teaching in higher education. The findings of the study both qualitatively and quantitatively reveal that female students in the present sample agree that the teaching is effective as compared to their counterpart male students. May be the reason behind this is female students are more sincere and male students neglect or non-serious regarding their studies. The other reason may be male students did not fill the questionnaire carefully and properly. No doubt with the measures of student’s perceptions of effective teaching in higher education, teachers can be trained to be more skilled, competent and knowledgeable in their work conditions. Teacher should also show the genuine concern for student’s progress and needs, set tasks that are useful as learning experiences and also encourage more class discussions.

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REFERENCES


