Abstract

Purpose: Experience and hard work are perhaps the key characteristics of a teacher as a pedagogue. Yet, a good teacher can be more than just an educator. The qualities that make a teacher as a role model are broad and intricate. We wanted to know what students and teachers believe are qualities in a good teacher, so we can set the standards for our own teaching philosophy.

Methods: In this study, students and teachers from Faculty of Information Technology and Faculty of Pharmacy, Uppsala University, Sweden and further students from Punjab University and Air University, Pakistan answered the questions qualities of a good teacher in the form of online survey. All responses in the survey were recorded as anonymous. We categorized the questions into three sections, namely, classical aspect, technology aspect and social cultural aspect. The results of this questionnaire were compiled into percentage rating of importance.

Results: The presented results will highlight the top five characteristics of a teacher from the perspective of students and the fellow teachers. For this case study, we have received 220 responses from three different institutions.

Keywords: Expectations; Pedagogical process; Use of technology; and Social cultural aspects
1 Introduction

We as humans are diverse, continually evolving and very adaptive to the changes in our environment. One of the reasons behind continues progression in our lives is the ability to transfer the knowledge from one generation to the next. That is why the role of an teacher has always been fundamental in human societies. Yet, a good teacher can be more than just an educator. The qualities that make a teacher as a role model are broad and intricate. It keeps changing with the advent of globalization and international atmosphere at Universities.

In this project we would like to identify the key characteristics of a good teacher by asking questions to different actors (fellow tutors and students) involved in the educational process. We aim to conduct a survey-based study. This study will help us to identify some key desirable characteristics according to the current educational system and can set the standards for our own teaching philosophy. This concept is not new and similar studies have been conducted in the past [1, 2, 3, 4]. Our aim is to revive this study to see if the growing numbers of technological advancements have by any means, influenced the desired role of the teacher?

In the first phase of the project we prepared questionnaire, “Expectation - Qualities of a good teacher” that will reflect some of the features highlighted in previous studies together with some newly evolved teaching practices. Questionnaire is explained in details under methods section. This form was answered by both students and the teachers and then we tried to rank the desired characteristics. At this stage we do not expect any major changes from the previous studies have already shown, but it would be very interesting to see if the growing use of technology influenced some features to be more prominent than others or if some new requirements have emerged over time? This part of the study was focused primarily on the Swedish educational landscape.

In the second part of this study we tried to identify if the characteristics of a good teacher differs with respect to social-cultural environments? For this purpose we compared our results acquired in the first part of the project with the results that we received from South Asian universities. For this we will use our established connections within the universities in Pakistan.

2 Methodology

2.1 Participants

The current study was conducted at Uppsala University in Sweden, Punjab University [6] and Air University [7] in Pakistan. At Uppsala University, two groups of participants, students (n=46) and teachers (n=50), from faculty of information technology and Faculty
of Pharmacy answered the questionnaire. At Punjab University and Air University, only students (n=126) were asked to answer the same questionnaire distributed in Sweden. The survey was open for a period of 2 weeks, so all the participants had the opportunity to take part in the study and had the option to withdraw from the study at any time. Principal questions regarding the key qualities of good teachers were the same for the participants. Additional question for teachers was regarding their teacher experience. See the appendix for complete questionnaire intended students (appendix A) and teachers (appendix B).

The study involves no commercial interests, and data collected were used only for this project purposes. All responses in the survey were recorded as anonymous. For these studies we were following the ethical guidelines as suggested by Vetenskapsrådet: http://codex.vr.se/en/forskningsetik.shtml

2.2 Data collection platform

For this project we have used Google Forms [5]. Google Forms started in 2008, its an extension of one of the Google's older project called Spreadsheet. It provides an easier and efficient way to distribute and collect responses from a variety of surveys and questionnaires. Google Forms also provides elementary level analysis capabilities and for advanced analysis, data can be exported into different formats. For this project, we created three questionnaires from Google Forms and then distributed links amongst our peers and students.

Without Google forms it would be very difficult to collect responses in such a short time. The use of Google Forms in this project is a real demonstration of how technology can accelerate the process in different areas of studies.

2.3 Questionnaire and data analysis

We categorized the questions into three sections, namely, classical aspect, technology aspect and social cultural aspect. Questions are described in detail in table 1.
<table>
<thead>
<tr>
<th>Categories</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classical Expectations</td>
<td>How important is it for a good teacher to be prepared?</td>
</tr>
<tr>
<td></td>
<td>How important is it for a good teacher to be patient?</td>
</tr>
<tr>
<td></td>
<td>How important is it for a good teacher to be Enthusiastic?</td>
</tr>
<tr>
<td></td>
<td>How important is it for a good teacher to be flexible?</td>
</tr>
<tr>
<td></td>
<td>How important is it for a good teacher to be knowledgeable?</td>
</tr>
<tr>
<td></td>
<td>How important is it for a good teacher to be creative?</td>
</tr>
<tr>
<td></td>
<td>How important is it for a good teacher to be available?</td>
</tr>
<tr>
<td></td>
<td>How important is it for a good teacher to create safe learning environment?</td>
</tr>
<tr>
<td></td>
<td>How important is it for a good teacher to be a continual learner and grow as a teacher?</td>
</tr>
<tr>
<td>Technology</td>
<td>How important is it for a good teacher to use technology (slides, e-documents) in the lectures?</td>
</tr>
<tr>
<td></td>
<td>How important is it for a good teacher to be active and accessible via technical platforms (email, web portals and blogs)?</td>
</tr>
<tr>
<td>Social &amp; Cultural Aspects</td>
<td>How important is it for a good teacher to build strong student-teacher relationship?</td>
</tr>
<tr>
<td></td>
<td>How important is it for a good teacher to show they care about students?</td>
</tr>
<tr>
<td></td>
<td>How important is it for a good teacher to have high expectations from all the students?</td>
</tr>
</tbody>
</table>

Participants were allowed to vote the importance of a quality of good teacher as described in the following example:

```
How important is it for a good teacher to be knowledgeable?

- Not important
- Slightly important
- Somewhat important
- Very Important
- Most Important
```

The results of the questionnaire were compiled into percentage rating of importance and the top five characteristics/qualities that were voted "The most important" were chosen as the key qualities for a good teacher from students point of view as well as from the teachers.
3 Results and Discussion

Age, gender and qualifications of all the participants are detailed in table 2 and 3. Please note that the age of teachers were not included in teachers questionnaire (appendix B and table 3), rather we were interested in their academic teaching experience.

Table 2: Gender representation in collected response

<table>
<thead>
<tr>
<th></th>
<th>Sweden</th>
<th>Pakistan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Teachers</td>
<td>Student</td>
</tr>
<tr>
<td>Response</td>
<td>50</td>
<td>46</td>
</tr>
<tr>
<td>Male</td>
<td>51.0 %</td>
<td>71.7 %</td>
</tr>
<tr>
<td>Female</td>
<td>46.9 %</td>
<td>26.1 %</td>
</tr>
<tr>
<td>Other</td>
<td>2.0 %</td>
<td>2.2 %</td>
</tr>
</tbody>
</table>

Table 3: Response distribution based on qualification, age and experience

<table>
<thead>
<tr>
<th></th>
<th>Academic Qualification</th>
<th>Age / Teaching experience</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bachelor</td>
<td>Masters</td>
</tr>
<tr>
<td>Sweden</td>
<td>Teacher</td>
<td>0.0 %</td>
</tr>
<tr>
<td></td>
<td>Student</td>
<td>32.6 %</td>
</tr>
<tr>
<td>Pakistan</td>
<td>Student</td>
<td>69.0 %</td>
</tr>
</tbody>
</table>

Among students, majority of Swedes (65.2 %) were in their second cycle of studies (Masters) while from Pakistan, majority (69.0 %) were in their first cycle of studies (Bachelors). Among teachers, the population was equally divided with respect to their qualification, doctorate (50.2 %) and Masters (49.8 %). More details are mentioned in table 3.

3.1 Students belief

According to students response from Pakistan, these are the top five qualities that are credited (arranged in decreasing order, figure 1) for a good teacher:

1. Knowledgeable
2. Prepared
3. Continual learner
4. Available
5. Creative

With respect to the percentage rating of voted “The most important” the following five qualities are attributed (arranged in decreasing order, figure 2) for a good teacher, according to Swedish students:

1. Knowledgeable
2. Enthusiastic
3. Safe learning environment
4. Continual learner
5. Prepared

Figure 1: Pakistani students response

We observe some common prospective of students from different cycles of education as well as from different social cultural background. The characteristics of knowledgeable and being prepared described the competence or the ability of the teacher. Whereas the characteristics enthusiastic and continual learner describes the personality of the teacher from students point of view. Another requirement that predominantly visible from our survey is the use of technology by the teachers. Across the board, students prefer the use of e-slides, e-documents and teachers availability via online platforms.
These are the qualities perhaps the teachers and the education system should focus in order to improve the learning outcome and health environment in a classroom.

However we have also observed some variations in students response, highlighting the social cultural aspects. In response to student-teacher relationship, around 75.0 % of the Pakistani students are in favor whereas Swedish students are not very convinced with this idea (around 30.0 % think it is important). Similar but a bit mild trend can be seen in the question regarding "care". Around 68.0 % of Pakistani students think it is important whereas less than 50 % of the Swedish students regard it as a required characteristic. This might be based on having strong vs weak institutional mechanism. In weak system, personalities become more prominent and people would like to interact with them whereas when the institutions are strong enough, people have more faith in the system rather than the personalities.

### 3.2 Teachers belief

According to teachers response in Sweden, these are the top five qualities that are credited (arranged in decreasing order, figure 3) for a good teacher:

1. Knowledgeable
2. Prepared
3. Continual learner
4. Safe learning environment

5. Enthusiastic

Figure 3: Swedish Teachers response

We observe similar pattern of desired qualities of good teacher between students and teachers prospective. Both acknowledge that the competence or ability characteristics such as knowledgeable about the content and being prepared are the key qualities of good teacher. Further importance to safe learning environment indicate that everybody is responsible in the classroom for fostering a healthy, safe and supportive learning environment such as students feel safe asking questions and contributing to discussions.

4 Conclusion

We observe some common prospects and differences in defining qualities of a good teacher from students and teachers point of view. Top five characteristics are knowledgeable, prepared, continual learner, enthusiastic and creating a safe learning environment. The use of technology appeared to be a growing trend. When presented with characteristics, students and teachers mostly share common believes in qualities of a good teacher. These findings match with previous results and help us to set the criterias to shape our own teaching philosophy.
5 Acknowledgments

We would like to acknowledge all the participants from Sweden and Pakistan for dedicating their valuable time and thoughtful input for our project. Also, we would to extend our acknowledgment to the academic teaching training course and the teachers for this opportunity and guidance throughout this trial.

References


Student Questionnaire

Survey: Expectation- Qualities of a good teacher

Thank you for your interest in this survey concerning qualities of a good teacher. The purpose of this survey is to explore expectations of a good teacher from student’s point of view. The study is part of a project for the Academic Teacher Training Course, held at Uppsala University in Sweden.

Your participation is voluntary. You are free to withdraw your participation from the study at any time. All responses in the survey will be recorded anonymously.

As a participant, you will be asked to complete an electronic survey on the internet. The survey takes approximately 3-5 minutes to complete.

The study involves no commercial interests, and data collected will be used only for scientific purposes. Thank you for your feedback. We really appreciate your time.

For this studies we are following the ethical guidelines as suggested by Vetenskapsrådet:  
http://codex.vr.se/en/forskningsetik.shtml

Thank you in advance,

Dr. Salman Toor (Researcher, Department of Information Technology, Uppsala University, Sweden)
Dr. Ram kumar Selvaraju (Postdoctoral researcher, Preclinical PET Platform, Uppsala University, Sweden)

* Required

1. Gender *
   Mark only one oval.
   - Male
   - Female
   - Others

2. Academic qualification *
   Mark only one oval.
   - Bachelors
   - Masters
   - Doctorate

3. Age *
   Mark only one oval.
   - 18 - 24
   - 25 - 34
   - 35 - 44
   - > 45
Appendix A - Student Questionnaire

4. How important is it for a good teacher to be prepared?
   Mark only one oval.
   - Not important
   - Slightly important
   - Somewhat important
   - Very important
   - The most important

5. How important is it for a good teacher to be patient?
   Mark only one oval.
   - Not important
   - Slightly important
   - Somewhat important
   - Very important
   - The most important

6. How important is it for a good teacher to be Enthusiastic?
   Mark only one oval.
   - Not important
   - Slightly important
   - Somewhat important
   - Very important
   - The most important

7. How important is it for a good teacher to be flexible?
   Mark only one oval.
   - Not important
   - Slightly important
   - Somewhat important
   - Very important
   - The most important

8. How important is it for a good teacher to be knowledgeable (understand what he/she teaching)?
   Mark only one oval.
   - Not important
   - Slightly important
   - Somewhat important
   - Very important
   - The most important
Appendix A - Student Questionnaire

9/28/2016

9. How important is it for a good teacher to use technology (slides, e-documents) in the lecture?
Mark only one oval.
☐ Not important
☐ Slightly important
☐ Somewhat important
☐ Very important
☐ The most important

10. How important is it for a good teacher to be active and accessible via technical platforms (email, university web portals, chat rooms, blogs, etc)?
Mark only one oval.
☐ Not important
☐ Slightly important
☐ Somewhat important
☐ Very important
☐ The most important

11. How important is it for a good teacher to be creative when planning lectures?
Mark only one oval.
☐ Not important
☐ Slightly important
☐ Somewhat important
☐ Very important
☐ The most important

12. How important is it for a good teacher to be available for his/her students?
Mark only one oval.
☐ Not important
☐ Slightly important
☐ Somewhat important
☐ Very important
☐ The most important

13. How important is it for a good teacher to build strong student-teacher relationship?
Mark only one oval.
☐ Not important
☐ Slightly important
☐ Somewhat important
☐ Very important
☐ The most important
Appendix A - Student Questionnaire

14. How important is it for a good teacher to show they care about his/her students?
Mark only one oval.
- Not important
- Slightly important
- Somewhat important
- Very important
- The most important

15. How important is it for a good teacher to have high expectation from all the students?
Mark only one oval.
- Not important
- Slightly important
- Somewhat important
- Very important
- The most important

16. How important is it for a good teacher to create safe learning environment, where students feel secure and comfortable?
Mark only one oval.
- Not important
- Slightly important
- Somewhat important
- Very important
- The most important

17. How important is it for a good teacher to be a continual learner and grow as a teacher?
Mark only one oval.
- Not important
- Slightly important
- Somewhat important
- Very important
- The most important
Teacher Questionnaire

Survey: Expectation- Qualities of a good teacher

Thank you for your interest in this survey concerning qualities of a good teacher. The purpose of this survey is to explore expectations of a good teacher from teacher’s point of view. The study is part of a project for the Academic Teacher Training Course, held at Uppsala University in Sweden.

Your participation is voluntary. You are free to withdraw your participation from the study at any time. All responses in the survey will be recorded anonymously.

As a participant, you will be asked to complete an electronic survey on the internet. The survey takes approximately 3-5 minutes to complete.

The study involves no commercial interests, and data collected will be used only for scientific purposes. Thank you for your feedback. We really appreciate your time.

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Thank you in advance,

Dr. Salman Toor (Researcher, Department of Information Technology, Uppsala University, Sweden)
Dr. Ram kumar Selvaraju (Postdoctoral researcher, Preclinical PET Platform, Uppsala University, Sweden)

* Required

1. Gender *
   Mark only one oval.
   - Male
   - Female
   - Others

2. Academic qualification *
   Mark only one oval.
   - Bachelors
   - Masters
   - Doctorate

3. Academic teaching experience (years) *
   Mark only one oval.
   - 2-5
   - 5-10
   - 11-15
   - >15
Appendix B - Teacher Questionnaire

4. How important is it for a good teacher to be patient?
   Mark only one oval.
   - Not important
   - Slightly important
   - Somewhat important
   - Very important
   - The most important

5. How important is it for a good teacher to be prepared?
   Mark only one oval.
   - Not important
   - Slightly important
   - Somewhat important
   - Very important
   - The most important

6. How important is it for a good teacher to be Enthusiastic?
   Mark only one oval.
   - Not important
   - Slightly important
   - Somewhat important
   - Very important
   - The most important

7. How important is it for a good teacher to be flexible?
   Mark only one oval.
   - Not important
   - Slightly important
   - Somewhat important
   - Very important
   - The most important

8. How important is it for a good teacher to be knowledgeable (understand what he/she teaching)?
   Mark only one oval.
   - Not important
   - Slightly important
   - Somewhat important
   - Very important
   - The most important
9. How important is it for a good teacher to use technology (slides and online-documents, etc) in the lecture?

Mark only one oval.

- Not important
- Slightly important
- Somewhat important
- Very important
- The most important

10. How important is it for a good teacher to be accessible via technical platforms (email, university web portals, chatrooms, blogs, etc)?

Mark only one oval.

- Not important
- Slightly important
- Somewhat important
- Very important
- The most important

11. How important is it for a good teacher to be creative when planning lectures?

Mark only one oval.

- Not important
- Slightly important
- Somewhat important
- Very important
- The most important

12. How important is it for a good teacher to be available for his/her students?

Mark only one oval.

- Not important
- Slightly important
- Somewhat important
- Very important
- The most important

13. How important is it for a good teacher to build strong student-teacher relationship?

Mark only one oval.

- Not important
- Slightly important
- Somewhat important
- Very important
- The most important
14. How important is it for a good teacher to show he/she care about his/her students?
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- Very important
- The most important

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Mark only one oval.
- Not important
- Slightly important
- Somewhat important
- Very important
- The most important

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Mark only one oval.
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- Slightly important
- Somewhat important
- Very important
- The most important

17. How important is it for a good teacher to be a continual learner and grow as a teacher?
Mark only one oval.
- Not important
- Slightly important
- Somewhat important
- Very important
- The most important