

Student's views on attendance

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ABSTRACT: Is the attendance of students important for their results? Are there differences in attendance depending on the type of instruction? What is the reason that students decide not to attend their classes? As a first step in addressing these questions we have considered the view on attendance as expressed by the students.

We have analysed over 2500 answers to questions about attendance given by students in physics during five subsequent semesters. The students answered questions about why they chose to attend alternatively not attend, to what degree they attended as well as what would make them attend to a higher extent.

The largest groups of answers concern the teaching method, the teacher or different aspects of lack of time. Several of the changes suggested by the students to increase attendance coincide with criteria for research based teaching for effective learning.

1 INTRODUCTION

When campus based education is planned it is often implicitly assumed that the students will actually attend the sessions. Student centered learning and student active methods build on the continuous attendance and participation of the students. When students choose not to attend or miss some sessions the planning fails and the pedagogy and quality of the teaching is affected.

There exists a positive correlation between student attendance and their results and grades (Credé et al 2010). Results and grades correlate positively with other parameters such as motivation, study techniques, academic skills and time on task. The meta-study of Credé et al, involving 28 000 students, show however just a weak correlation between these student characteristics and attendance. The conclusion drawn is that student characteristics as well as attendance separately affect results. Friedman et al (2001) rejects several seemingly reasonable assumptions about student characteristics and attendance as myths.

Student active teaching might lead to increased attendance (Knight and Wood 2005, Deslauriers et al. 2011, Sharma et al. 2005). An increase in attendance with about 20% was seen as student active teaching was introduced (Knight and Wood 2005, Deslauriers et al. 2011). The reason for this is not clear but the authors speculate that some of the students who normally did not attend regularly found the student active sessions useful and hence chose to attend more.

Reasons given by students for non-attendance in previous studies is lack of time, that priority is given to other work with the course material or other courses, external factors like illness or other social reasons or that the students found the course boring or uninteresting (van Blerkom 1992, Massingham and Herrington 2006, O'Sullivan et al. 2015). Students often absent tended to more often justify their absence while students absent only on a few times instead gave excuses (O'Sullivan et al. 2015). The explanations students give for their absence reflected the current norms at the department. O'Sullivan et al. (2015) argues that it is important to understand the explanations given in their context and rather investigate why they are given than to take them literally.

The reasons given by the students in the study reported in Friedman et al. (2001) differs to some extent. Here 75% answered *I believe I should attend (not going makes me feel guilty)*. The most common reasons given for being absent was being ill or too tired.

The type of teaching as well as the amount varies between subjects and universities. The organisation of courses, the amount of teaching and other mandatory tasks might affect attendance. Further as noted in O'Sullivan et al. (2015) the degree of attendance might also reflect the current context and the expectations in the environment of the student.

Increasing the degree of attendance would be a way to improve the quality of the education for our students. To better understand how to do that we have investigated the student's view on the matter.

Our students all take physics courses but are enrolled in various different engineering programs or bachelor or master programs in science. Some take just one course in physics while others study for a degree in physics. Most students take three courses simultaneously and have quite a lot of scheduled teaching (sometimes all day from 8 to 17).

Questions on attendance were included in all course evaluations at the department of Physics and astronomy from the fall 2014. The students answered the questions *Why did you attend, alternatively not attend, the classes given?* and *What would make you attend to a higher extent?*. The students were also asked to give their degree of attendance on the particular course.

We have used data from autumn 2014 to autumn 2016. In total 2570 answers to course evaluations from 95 different courses were analysed. This comprised in total 2695 answers to the two free text questions asked. The answers were coded and then grouped into categories.

2 REASONS TO ATTEND

To obtain an estimate on the degree of attendance we asked the students to which degree they attended classes. The answers were given on a 5-level Likert scale where 5=*to a very high extent* and 1=*not at all*. 44% percent answered that they attended to a very high extent and the mean is 3.97. No other data on attendance than the student's answers were available.

In total 1040 students gave reasons for why they chose to attend. The largest categories of answers were labelled Good, Teacher, Interesting, Learning and Teaching method.

The answers in the category Good were answers simply referring to good teaching without characterising what made it good. Words as useful, valuable and high quality were also used¹.

In the category Teacher the students answer that the characteristics of the teacher make them attend. Often it is simply stated that the teacher was good or used pedagogical methods while some also give more specific reasons like *"The lectures were really good, the lecturer made me feel that SPECIFICALLY my learning was important. This made me actively want to attend the lectures."*. When the teacher is engaged and perceived as helpful, knowledgeable and good at explaining the students do not want to miss lectures, *"We in [...] had the best teacher for the exercise classes [...]. It felt incredibly stupid not to attend those classes. [...] was as a lecturer very pedagogical and good at giving feedback."*. According to the answers of our students the teacher is important for attendance, this might be contrasted with the results of Friedman et al (2001) and Massingham and Herrington (2006) where other reasons are more important.

On certain types of courses, in particular those that students usually take outside their study programs, answers that relate to the student's interest in the topic are very common (the category Interesting).

Answers referring to the learning of the student were also quite common, *"I chose to follow the lectures since it is the best way for me to learn things."* (category Learning). Some students stated they followed the course since it was considered difficult (category Difficult) and that they felt that all help possible was important to learn the topic. Sometimes even the reputation of a course being difficult was enough to choose to attend. *"I knew when the course started that it would be a difficult course. Therefore I could just as well follow it as much as possible."* In a related category answers refer to that is more time effective to go to classes than work on the material alone (category Time). One student write *"I have a hard time understanding when I read by myself and if I would do that I would have to make my own summaries of the text at the same time which would take me a very long time, and time is something I am short of. Therefore it is more convenient to take notes at the lectures."*

Access to course material and notes online can affect attendance (Grabe 2005), a fact that sometimes make teachers hesitate to share material. Some students do mention getting information as a reason to attend (category Information). The students describe that they are afraid that they would otherwise miss important information but also that it is a way of understanding the level of the course, *"I have followed the classes because it is easier to understand what is required and what level of difficulty we are expected to be able to handle"*. To get lecture notes is only mentioned by a few, *"Valuable classes, not as valuable lectures but important to have notes."*

¹ Most of the answers were given in Swedish. The quotations in the text are translated from Swedish.

As in Friedman et al (2001) some state that it is a matter of principle to attend, examples of student answers are *"Because I think that one should be present at the lectures, no matter the quality of the teaching."* and *"I have it as a principle to attend everything in the schedule."*. 65 students (5%) have given some kind of principle as a reason for attendance, this is to be contrasted with just over 75% in the survey of Friedman et al (2001). One difference however is that the students in that study chose from pre-defined alternatives, and could pick several, while our students had to come up with their reasons themselves.

Other answers concern the teaching method, student active teaching is mentioned as a reason to attend as well as variation in the teaching methods (category Teaching Method). A clear structure of the taught sessions (category Structure), a good choice of content (category Content), the possibility to ask questions (category Ask) and the fact that the teaching fits well with what the student refer to as their learning style (category Learning style) are other reasons given. A smaller number of students give reasons of the type *"If I do not attend there is a risk that I do not study at all"* (category Self discipline).

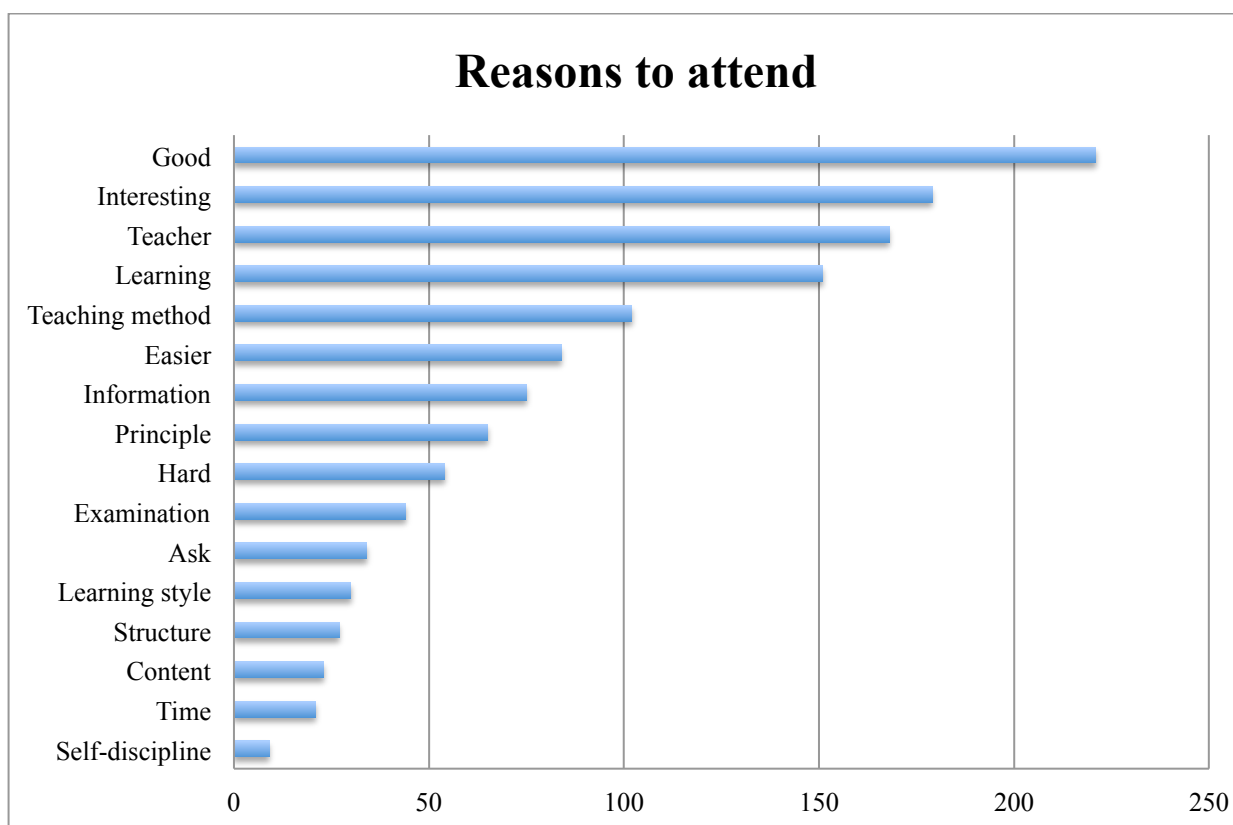


Fig. 1. The students' answers to the question "Why did you chose to attend?". The figure shows the number of answers grouped into each category.

3 REASONS NOT TO ATTEND AND CHANGES THAT WOULD INCREASE ATTENDANCE

768 students chose to give reasons for their absence from scheduled classes. The largest categories of answers (fig. 2) are related to the teaching method, time, personal reasons, conflicts in the schedule and the teacher.

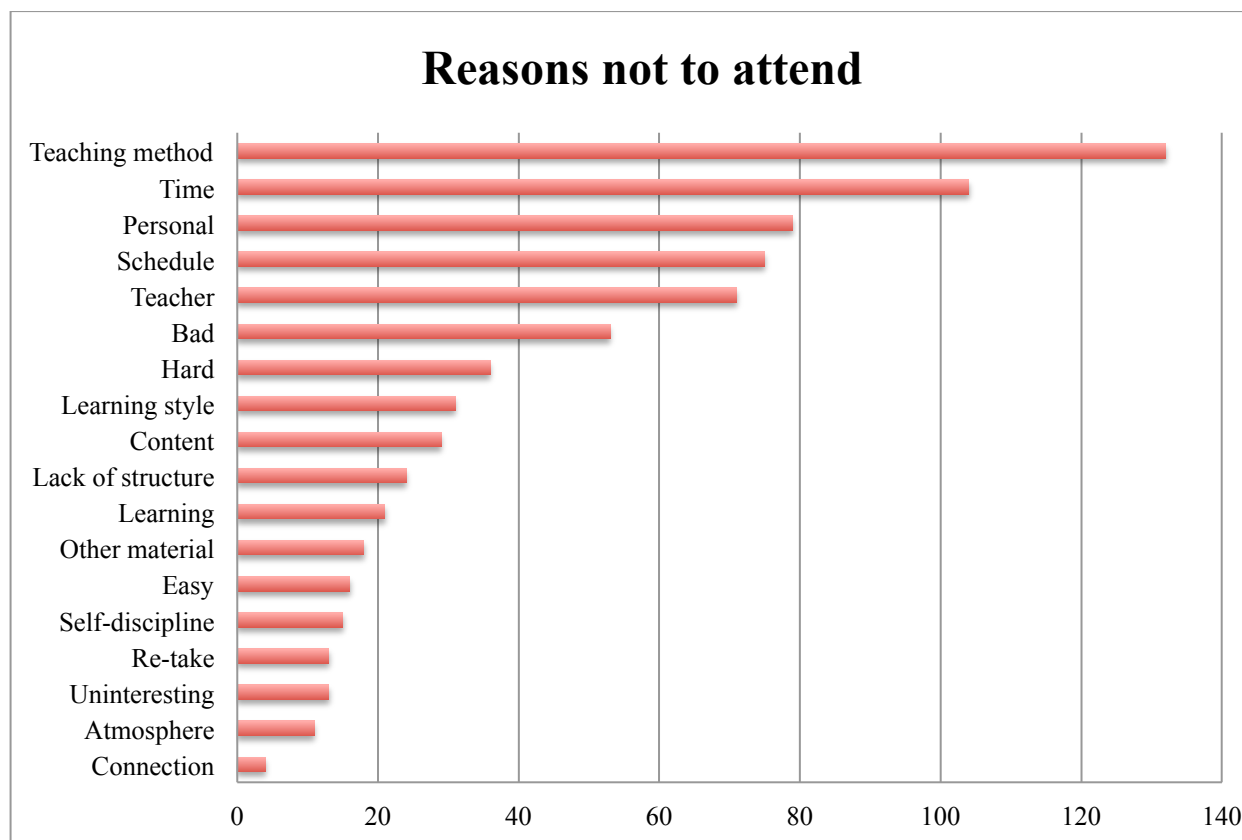


Fig. 2. The student's answers to the question "Why did you chose not to attend?". The figure shows the number of answers grouped into each category.

3.1 Teaching method

Many students mention active learning as important. The students write that they want to work with the course material and get help as they do so. Lectures without much interaction are mentioned as something that is not desirable, *"Too much lecturing for my taste. I prefer exercise sessions where you calculate, and think about a problem together for a change."*

The main change that would increase the attendance of the students is, according to their answers (Fig. 3), a change of teaching method to more student centered and active teaching. There is a will to use the schedule sessions for discussions with the teacher and the other participants, to get feedback on the learning and as an opportunity for asking questions. Examples of teaching methods one would like to see more is problem based learning, conceptual questions with clickers, peer-instruction and, in general, a variation of the activities used in the classroom. There is also a wish for more dynamical teaching that could be influenced by the students during the course. Some representative answers are *"I would like more discussions and student participation. To actively explore the subject. Like a study circle with the teacher as an expert who would push us in the right direction."*, *"The lecture should involve the students more, for example with smaller tasks to solve. Nobody manage to listen to somebody talking for 2x45 min."* and *"A total change in the system here in Sweden (i.e. not classes, but instead tutorials with tutors floating around to answer questions and students working individually or in groups depending on their own preferences)"*.

What the students express would make them attend more coincide to a large extent with criteria for effective teaching (Chickering and Gamson 1987, Wieman and Gilbert 2014). Criteria that are mentioned by our students are discussions in smaller groups, feedback on learning, hand-in problems and preparatory questions before the classes. The answers may very well reflect the fact that the students are in an environment where quality of teaching is discussed (O'Sullivan et al 2015). The reasons they give for not attending, or attending to a larger extent, are acceptable answers in the social context.

The category Content is related but here the answers concern directly the type of material taught. One might for example ask for more examples instead of general theory but do not suggest to change the way the material is delivered.

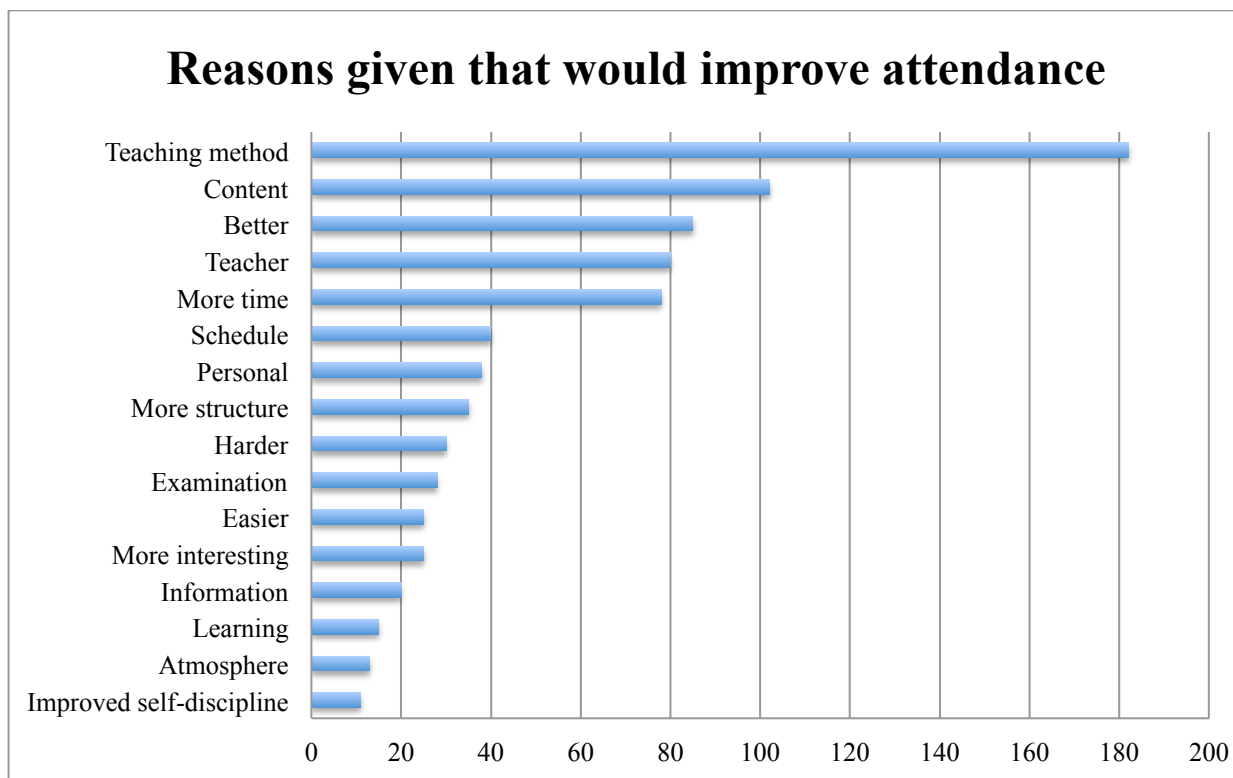


Fig. 3. The student's answers to the question "What would make you attend to a larger extent?". The figure shows the number of answers grouped into each category.

3.2 The role of the teacher

According to the students the teachers play an important role for attendance. Unprepared teachers, with badly structured classes, not being able to answer questions and who were not viewed as creating a friendly atmosphere in the classroom make student learning more difficult. Teachers not showing an interest and engagement in teaching also contributed to non-attendance. A better teacher is the fourth most common answer to the question of what would make the students attend more.

3.3 Lack of time

The category Time collect answers that is about it being more time effective not to attend classes and that a high workload on the course or in other courses that run in parallel results in cutting classes. Many students take three courses in parallel and when it gets stressful some chose to give less priority to one of the courses "I try to focus on one course at the time and it might happen that I postpone studies in certain courses.". 12% of the students answer that more time would make them attend more. The category Schedule also refers to one aspect of time though in that case it is rather a conflict of schedule rather than a total lack of time that is given as the reason for non-attendance.

3.4 Personal reasons

Personal reasons such as illness or social obligations as reasons for absence is one of the larger categories of answers but still correspond to just 10% of the answers. Both in Friedman (2001) and O'Sullivan 2015 the fraction of students stating similar reasons is much higher. We however asked the questions about attendance in the context of a course evaluation and the students might therefore have focused on aspects having to do with course improvements.

3.5 Difficult, easy or uninteresting courses and other reasons not to attend

If the taught sessions are too difficult that could be a reason to give them less priority, however classes perceived as too easy or simply too slow is also a reason to skip class (categories Hard and Easy in fig.

2). The way to improve attendance would then be to adjust the level of the course (categories Harder and Easier in fig. 3). Uninteresting courses are not fun to attend and to increase attendance it is for example suggested to give real life examples and show connections to other topics that are of interest to the student. This touches on the categories Content and Teaching methods but differs in that it is explicitly the interest in the subject that is lacking or need to increase to motivate a higher degree of attendance.

Just as good teaching is given as a reason for attendance bad teaching is given as a reason not to attend. Answers grouped into this category (Bad) do not specifically state what makes the teaching bad.

A smaller number of students mention other students creating a negative atmosphere in the classroom and disrupting classes as something that make them participate less (category Atmosphere).

To introduce different types of tests and examinations in and outside class is suggested as a way to increase motivation to attend (category Examination).

4 CONCLUSIONS

That the main reasons for attending class is good teaching, interesting topics and classes, good teachers and a feeling that one is learning something from attending is perhaps not very surprising. More unexpected is perhaps that what the students state would make them attend more is not simply just to create better teaching and replace the bad teachers with good ones but rather to improve the teaching methods.

A common suggestion is to introduce more student centered teaching methods aiming at active learning. Rather than attending passive lectures where they feel little learning takes place the students would study on their own. The student answers on what would make them attend to a larger extent show that they are quite aware of what constitutes effective teaching methods. Many of their suggestions are also in line with local policies at the university.

It is rather natural that we get many answers that points to ways to improve the course, teaching methods or the way the teacher act in the classroom as the questions on attendance was asked in course evaluations. The answers may also reflect the social context of the students who might be giving reasons that seems legitimate in this context (O'Sullivan 2015).

It is rather unclear if doing what the students suggest would actually lead to an increase in attendance levels. It would be very interesting to investigate systematically how attendance is related to the choice of teaching method. Do more student active teaching lead to a higher degree of attendance? Is there a relation between perceived quality and the degree of attendance?

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