NGL Project: Sub-project “Flipped Classroom”
Final report

Course “Organization Theory” (FÖ1039)

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Borlänge, 2015-03-02
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1. Information about the course

Credits: 7.5 ECTS-credits
Duration: Week 44, 2014 - Week 3, 2015
Rate of studies: 50%
Location: Borlänge
Language: English
Course coordinator: Lenka Klimplová
Video lectures and statistics: Robert Barcik
Number of students participating in obligatory seminars: 25
Composition of students: 16 students from “Systemvetenskapliga programmet” (3rd year), 9 exchange (Erasmus) students

2. Description of the course structure

10 weeks (46-03), 50% rate of studies course, included:

- An introductory lecture where the “flipped classroom” approach was explained to students
- 120 short video lectures, each about 3-12 minutes covering key concepts, models and theories (based on the course book Organizational Theory, Design, and Change by G. R. Jones)
- Multiple choice questions (quizzes) to test knowledge and understanding of key concepts, models and theories – using Fronter testing tools (overall almost 250 questions; students could do every quiz as many times as they wanted, see more information below)
- 6 non-obligatory classroom sessions (each 3 hours):
  o Students were requested to read 2-3 chapters from the course book for each session and/or watch videos to relevant chapters, answer a set of multiple choice questions on Fronter, prepare answers on discussion and overview questions and prepare answers on case studies prior each session. See the Appendix 1 for an example of instructions for classroom sessions.
  o Structure of classroom sessions:
    ▪ Answering questions which students have got while reading course literature and watching videos
    ▪ Reflecting on problematic concepts based on results from multiple choice questions
    ▪ Discussion and overview questions
    ▪ Case studies
- 2 obligatory seminars where students presented real organizational cases and their analysis using key concepts, models and theories
- Written examination with 2 parts: a) multiple choice questions, b) case studies to be analysed (questions based on questions discussed during the classroom sessions) to assess the learning outcomes ("Through attending the course, students should gain a general knowledge of the field of organization theory. This includes an understanding of the basic concepts of the field, and includes the ability to use these concepts for applied analysis of different types of organizations.")
3. Analysis of statistical data

3.1 Data

Statistics from the course Fronter room (watched videos, filling quizzes, exam results) and from YouTube (video of views, audience retention, gender of viewers) were used as data for this analysis. These statistics have not influenced assessment and grading of the students in any way and have been used purely for the analysis in order to improve possible future usage of the flipped classroom teaching. Anonymity of students is kept and no names of students are published within the analysis.

3.2 Analysis purpose

This analysis aims to answer the following questions:

- “Is flipped classroom, as performed, an effective teaching/learning approach?”
- “Is there a relationship between how much of study activity a student performs and his/her overall exam result?”
- “Is it possible, using flipped classroom teaching methods, to reveal deeper study patterns of students?”

3.3 Grouping of students

The whole class can be split into 3 groups according to students’ study activity which includes watching videos, filling quizzes, attending classroom sessions. The key parameter for grouping students is the percentage of video lectures watched (as an indicator showing student’s identification with flipped classroom learning). Data about number of video lectures watched were taken from Fronter statistics, and few shortcomings need be pointed out: a) statistics show whether a student open a video lecture, but one cannot be sure whether the student watch the video after opening the link; b) statistics do not show a repeated watching of videos or amount of time student spend watching video (these parameters are added later but only as aggregated data for the whole group, not individual cases). Before the final grouping of students, several alternatives with supporting variables (such as classroom sessions attendance or quizzes filling) were tested to achieve well-founded outcomes.

23 students were included into this analysis. These are the students who take part in the examination in January (February re-exam results are not taken into consideration) without outliers (6 students whose scores on axes of percentage of video watched and exam results were extreme).

After taking into consideration several above mentioned variables (watching videos, filling quizzes, attending classroom sessions), grouping has been done as follows:

- Green Group (watched more than 60% of video lectures) – 8 students
- Orange Group (watched more than 25% of video lectures) – 5 students
- Red Group (watched less than or equal to 25% of video lectures) – 10 students
3.4 General results

To begin with, it is necessary to take a student’s perspective and keep it in mind during the analysis. Student’s general motivation is to pass the course. As stated above, the written examination consisted of two parts: 1) Multiple choice questions accounting for 50% of the overall grade. As the preparation, students had the possibility to test themselves via Fronter where quizzes (sets of multiple-choice questions) have been available with similar-as-in-exam questions. 2) Analysis of cases accounting also for 50% of the overall grade. As the preparation, it has been recommended to read the course literature and watch videos and afterwards to come to the classroom sessions where similar-as-in-exam cases were discussed and analysed.

Many students not only want to pass the course, but to pass it with investing as little time and energy as possible. It can be guessed from the statistics that students understood that it would be easier to collect points from multiple choice questions than from case analysis (even though it might not be true). Hence the pitchy presumption (which can be justified by statistics) can be made: Students who intended to pass the course with as little time and energy invested as possible focused on multiple choice questions and hence their preparation consisted mainly of quiz filling via Fronter. When we look at the relationship between a) Percentage of Video Lectures Watched and b) Number of Quiz Attempts, a strong negative pattern can be seen. The lesser video lectures a student watched, the more quiz attempts he/she made. As mentioned previously, this has been most likely (but unprovable with current data) done by a student in order to be the most time efficient passing the course (from his/her perspective).

The following table summarises the main outcomes of the analysis. It can be immediately grasped that there are relationships among the columns which will be explained later.

Table 1: Main statistical outcomes showing relationships between study activity and exam results (based on Fronter statistics)

<table>
<thead>
<tr>
<th></th>
<th>Videos</th>
<th>Quiz</th>
<th>Classroom Sessions</th>
<th>Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of Videos Watched by Each Student (in %)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green Group</td>
<td>89.35</td>
<td>17</td>
<td>6.59</td>
<td>2.50</td>
</tr>
<tr>
<td>Orange Group</td>
<td>37.04</td>
<td>20</td>
<td>7.05</td>
<td>1.40</td>
</tr>
<tr>
<td>Red Group</td>
<td>13.39</td>
<td>22</td>
<td>7.27</td>
<td>0.89</td>
</tr>
<tr>
<td>Average Number of Quiz Attempts per Student</td>
<td></td>
<td></td>
<td>Average Quiz Score per Student in Attempt (max 10)</td>
<td></td>
</tr>
<tr>
<td>Average number of Classroom Sessions Attended by Student</td>
<td></td>
<td></td>
<td>Exam - Multiple Choice Result (max 30)</td>
<td>Exam - Analysis of Cases Result (max 30)</td>
</tr>
<tr>
<td>Green Group</td>
<td></td>
<td></td>
<td>23.50</td>
<td>17.38</td>
</tr>
<tr>
<td>Orange Group</td>
<td></td>
<td></td>
<td>24.80</td>
<td>13.80</td>
</tr>
<tr>
<td>Red Group</td>
<td></td>
<td></td>
<td>22.00</td>
<td>10.60</td>
</tr>
</tbody>
</table>
3.4.1 Green group

These are the top-performers of the class. Group of 8 students out of which every student watches on average 89.35% of videos and their audience retention (how large share of video they kept watching) is 75.6% (based on YouTube statistics). During discussion with these students, several of these admitted that they rely purely on videos and do not read course literature. Students were able to perform the top results on the exam with average of 73% points. 7 out of 8 students have passed the exam, whilst 4 with a VG grade!

A very strong pattern can be seen in the Figure below where the percentage of chapter videos watched is displayed. On this Figure, 100% means that every student watched every video in a particular chapter (as seen in the Chapters 1 and 3). These students remained with slightly decreasing, though extremely high, activity until the end of the course with the least Chapter 14 accounted to 65%.

Figure 1: Percentage of video lectures watched per each chapter (Green group of students)

3.4.2 Orange group

One would presume that if a student falls under lower performing orange group, it means that this student is overly lower performing. As a deeper insight into the data reveals, this is not complete truth. As it can be seen from the Figure below, these students were just unable to hold high performing pace throughout the whole course. From the beginning (Chapters 1-9) these students engaged with the course under the same pattern as the Green group, however during the last two weeks of the course (the period just before and after Christmas) these students were just unable to follow the contents (Chapters 10-14). As it has been noted in course evaluation (see below) and also during personal interaction, many students considered course contents as challenging so it may be presumed that it just was “too much” for these students (taking into consideration the work for the other course in the same period and the Christmas break).
3.4.3 Red group

This group of students expressed comparably lower learning activity. However, some of these students were picky, not low performing! As it can be seen from the Figure below, there is a considerably high activity within the most difficult (as denoted by both students and lecturers) Chapters 8-10. Hence these students used video lectures only when they needed it, otherwise they relied on their own means of studying. These students may actually be highly satisfied with flipped teaching due to the fact that it was purely upon them how much of their working capacity they are going to assign to the course.

Figure 3: Percentage of video lectures watched per each chapter (Red group of students)
3.5 Interesting patterns

3.5.1 Last-minute learning

As it may be generally assumed, students are not studying consistently throughout the course and leave their duties for last-minute-learning and sometimes one night prior to the exam. This is proven by the statistics. In the Figure 4 several peaks and patterns may be seen:

- Most of the learning activity through videos occurred during the last four days of the course, prior to the exam (last-minute-learning).
- Several peaks over the whole period occurred one day prior to the classroom sessions and seminars (last-minute-learning).
- Flat area around the 23rd of December occurred during the Christmas time.

Last-minute-learning may not be considered as a necessarily bad thing. As many students noted, they had also other difficult courses running in the same period, so they simply moved their learning capacity as it was needed. This certainly plays in favour of flipped teaching which allows students to study whenever they want. It may also lead to generally lower stress level created by studies and generally higher satisfaction, as the students feel secure because they know that “the lectures are there” and they do not come to the classroom so often.

Figure 4: Relationships between course occasions and video views (statistics taken from YouTube views)

![Figure 4: Relationships between course occasions and video views](image)

3.5.2 Gender

It might be surprising but there are differences between the learning of males and females under flipped classroom. Males viewed more videos but their retention with the video was shorter compared to females (based on YouTube statistics). Females watched less videos compared to males but for much longer time. The green group (top-performers in video watching) consisted of 7 females and 1 male (there were 12 females and 11 males included in the analysis).
3.5.3 Exchange students
Exchange students showed a very high engagement with the concept of flipped teaching. Out of 9 exchange students, 5 watched more than 60% of videos, 3 more than 25% and 1 less of 25%. High interest in video lectures can also be displayed by average of 66 % of the video lectures watched by an exchange student compared to 47 % of the class-average.

A very similar positive pattern is displayed in classroom sessions attendance – every exchange student on average attended 2,6 out of 6 classroom sessions, compared to 1,5 as a class-average. (See more about classroom session attendance below.)

8 of the exchanged students have passed the exam on the first attempt, 2 of them with a VG grade.

3.6 Delivering feedback based on statistics
It would be possible to move flipped teaching a step further – to provide students with general as well as individual feedback and differentiate tasks during the classroom sessions based on how each student has prepared for the session (which can be seen from statistical outcomes, e.g. watched videos, audience retention, quiz results, etc.). The purpose of such activity is to deliver more relevant contents to students.

3.6.1 To deliver more relevant content in general
Students had a possibility to come to the classroom sessions where the course contents of the past week have been discussed for 3 hours. However thanks to the statistics provided by Fronter and YouTube, it was possible to determine which contents should be brought for discussion. It is possible to determine that this particular topic or concept should be discussed with students in depth because they have problems with it. The opposite might be seen from statistics as well - this concept is rather easy for students so it is not necessary to discuss it in classroom. (See an example of such a statistical report in the Appendix 2.)

Here is an example. Prior to the classroom session (6 hours prior), the data are collected about the video usage of the content which is the topic for the classroom session. This can include data about approximately 20 videos (for one classroom session). Then we treat each video as a single concept. We reveal that 10 students have been preparing for the classroom session and audience retention was at the average of 50 % (for all these 20 videos). We can immediately grasp extreme cases so for instance that some video had 90 % audience retention (see an example in Figure 5) and that this video has been viewed by all 10 students. We can assume that this concept is either tricky to understand for students or very interesting so they just keep watching it.
Figure 5: Data collection of audience retention on YouTube

Now we move to statistics from Fronter quizzes as these 10 students also tested themselves on questions related to concepts in the videos (see Figure 6 for an example of data collection of quiz success rate on Fronter).

Figure 6: Data collection of quiz success rate on Fronter (green means right answers, blue wrong ones)

The success rate of quiz questions will support our final decision. If students had low success rate on answering the questions related to that concept, we know that the concept is tricky and we should bring it to discussion during the classroom session. If students had high success rate of answering the concept, then the video was interesting for them so we can (but do not need to) bring this concept for discussion because students will like and be comfortable discussing it.

3.6.2 To deliver the right content to particular students

Students have different academic background and different personal interests and capabilities (including previous knowledge of the subject, capacity to study during the course, identification with the topic, etc.). This means that one-size-fits-all teaching is not appropriate (which is also one of the incentives for moving towards flipped teaching). Some students need lower pace of studying, while some require more demanding and challenging tasks in order to keep stimulated. And this is perfectly possible! Again, thanks to the statistics, it is possible to determine which students come how much prepared for the classroom sessions and hence treat them accordingly. Imagine the above-stated stratification into Green, Orange and Red
groups for every classroom session. Green group can receive the most demanding cases for study and work on their own, as they are motivated enough by themselves. On the other hand Red group may receive lower demanding tasks and a lecturer can spend more time with these students to help them improve. Moving this to a higher level, students (or groups) may receive tasks perfectly personalised for them, so that each student will work during a classroom session exactly on the cases he/she has problems with (even though he/she does not know about his/her unknowing of the concept). This can be called “personalisation through technology”.

Here is a possible example which has not been though integrated due to current low maturity of flipped learning. As mentioned in the section above, we can decide about “relevancy of content for discussion”. In other words, which concept should be brought to personal conversation and be spent more time with. This has been applied to a classroom as a one unit. Now it is only a matter of further diversification of classroom into several subunits. This does not necessarily have to be diversification according to “level of preparedness”. If, for instance, a classroom session covers 3 chapters from the book, some students simply prepare more (due to their preferences, time capacities or interest) for only one of these chapters. Now once we know (thanks to the statistics) that there are several units within the class, each well-prepared for different chapter and low-prepared for another, there is no point in delivery of “one-size-fits-all” discussion. We use Fronter statistics to determine namely which student should receive what content. We can supplement this diversification with YouTube and really “point a finger” at concepts that should be discussed with which group of students.

4. Evaluation based on survey among students and a summary of course coordinator’s view

Number of students participating in course evaluation: 16 (64 % of students taking part in the seminars), 4 of them did not reply on questions concerning the “flipped classroom”

Method of evaluation: Automatic internet-based survey (survey.du.se) - students were informed about the course evaluation survey at the last seminar and via Fronter

See the Appendix 3 for students’ answers from survey.du.se.

Overall, the “flipped classroom” seems to an effective teaching/learning approach – 75% of students stated that this approach (comparing to the traditional way of teaching) has (to certain extent) facilitated their learning.

Most of the students liked this approach and the overall set-up of the course with video lectures, non-obligatory classroom sessions and obligatory seminars.

4.1 Video lectures

Video lectures are one of the key elements of the flipped classroom. Most of the students (who participated in evaluation) watched them (half of them did not even read the course book and relied only on video lectures, see statistics in Appendix 3). Video lectures seem to facilitate students’ understanding of the key concepts, models and theories. Possibilities of their improvements are discussed below in the section
4.2 Classroom sessions (non-obligatory)

Students who participated in classroom sessions were positive about their contents and contributions to their studies ("helped to understand a theoretical part better"; "helped to clear the questions, if there were some after video lections", "interesting and helpful"). The only change suggested regarding the classroom sessions from those who participated in them is to include one more break (to have 2 short breaks within 3 hours session). The other option is to have more but shorter classroom sessions, e.g. 10 sessions, each 1.5-2 hours (not 6 sessions, each 3 hours).

What seems to be a weak point is that the participation in classroom sessions was quite low. It was only 6-10 students (out of 25) participating in each classroom session. The reason why students did not take part in classroom sessions seems to be the workload – amount of tasks which students were asked to prepare for each classroom session and uncomfortable feeling to come without preparation. Students seem not to be used to study continuously or they gave more attention to the other course they studied in the same period, and had not prepared for and attended classroom sessions. The question is how to increase the attendance. Should the classroom sessions be obligatory? Should active participation in them be a part of assessment? Or should the set-up stay as it is with the non-obligatory sessions which should facilitate learning for those who are really interested in and devote sufficient time to their studies? Answering these questions needs deeper discussion among teachers in the subject.

4.3 Seminars (obligatory)

Analysing real organizational cases in seminars proved to be a very good way to facilitate students' understanding and application of relevant concepts and theories. The suggested improvement is to alter seminar instructions, and assign students with topics (key words) to be covered in their case analysis instead of giving them questions to be answered (not all questions could be answered for all types of organizations).

4.4 Fronter course materials

Fronter is an important tool within the "flipped classroom" approach. Materials on Fronter were in folders based on the format (one folder for all videos, one folder for all multiple-choice questions, one folder for instructions for classroom sessions, etc.). During the course, it proved to be better to structure the materials according to the classroom session topics (one folder with videos, multiple choice questions, classroom session instruction for a particular topic).

One of the essential parts of the course was a quiz for each session (a set of multiple-choice questions). At the beginning, students were not provided with right answers directly after completing the quiz on Fronter (they were given only percentage of the right answers). Right answers were provided in the classroom sessions. Students asked for having the right answers directly after completing the quiz, so the settings for quizzes have been changed during the course with a randomly selected set of questions for each topic. Students could do every quiz as many times as they want, and they use it as a preparation for the examination (one part of the exam was multiple-choice questions).
What has not been used almost at all (with only very few exceptions) was Fronter Forum. Although the students were encouraged to post any questions regarding reading or video contents or comments on case studies on Forum, they have not used it. This should also be thought through how to encourage students for participating in discussion in between classroom sessions.

4.5 Written examination
As stated above, the written examination conducted via Fronter testing tools consisted of 2 parts – multiple-choice questions (30 points) and analysis of case studies (30 points). Students could thus reach maximum of 60 points. Both parts tested the knowledge and understanding of the key concepts, models and theories, the second part (together with obligatory seminars) also assessed student’s ability to apply these concepts for case analyses.

To pass the exam, a minimum of 31 points was requested. As stated above, some of the students focused mostly on multiple-choice questions (average score of this part of the exam was 23,3 points comparing to the 14,5 point-average for case analysis) as perceived easier way how to collect the points. One of issue to be considered for the next course occasion is to request at least 50% of points from each of the two parts of the exam.

5. Possible (technical) improvements for future flipped teaching
During this pilot study of flipped teaching, several things have occurred that are in the need of improvement – especially of a technical manner.

5.1 Improving videos
It is almost impossible to make perfect videos on the first attempt. Sometimes it is only the direct feedback by students or from the statistical work that will reveal problems with the videos. Here is an example. As seen in the Figure 5 below, the audience retention starts to be considerably higher at the marked point which means that students returned several times to this part of the video. After reviewing this part of the video, Robert as a video-creator saw a space for improvement. At this particular point a small list of concepts has been discussed and it should have been given more attention, for instance by talking slower or more in-depth about it, as students found it tricky. This can also serve as an example of statistics which can be given to a lecturer before a classroom session, showing which parts of videos students re-watched, i.e. had a problem to understand.
Here is another example of a possible improvement. Below one can be seen a video, where a visual is in the need of improvement. Students concluded during the classroom session that this video was one of the most interesting (with audience retention of overwhelming 95% based on YouTube statistics). However, the students misunderstood the concept because the red line of words on the top (listing various crises) should have been moved below the red text which would be more logical for understanding the whole model. Based on this feedback received from the students during the classroom session, the video with new visual has been prepared.
5.2 Content storage platforms

Plenty of possibilities for improvements of flipped teaching lay in content storage platforms. For this course, Fronter along with YouTube have been used as content-storage-platforms. Both have significant problems.

**Fronter** is simply losing valuable data that can be used for later analysis. In technical words, it is not recording logs properly. Examples would include:

- It does not store the time student needed to do a quiz. We do not know if a student spent 5 or 50 minutes filling the quiz.
- It stores only the last use of contents. Imagine a video that is posted on Fronter. If a student XY watched this video several times, we will not know about it because Fronter remembers only his/her last use of this content.
- Neither Fronter does allow for bulk editing (editing of several items at the same time by one command) and so with larger amounts of data that a lecturer wants to upload or edit, this wastes a lot of his/her time (video links or quiz questions had to be added or edited one-at-a-time which happened several times during this course).
- Finally, it does not allow for data export or data display. In most cases (as in the case of reports for classroom sessions as well as this final report) it is necessary to export data manually which takes considerable amount of time.

**YouTube** is unreliable. All of the videos were stored on the largest video-sharing platform YouTube. It offers great possibilities for data mining and storage, however it is unreliable. Its servers have permanent 24h delay, so the lecturer cannot rely on immediate feedback from its statistics. This delay sometimes adds up to 72h which caused problems during this course as well. For this manner, it would be appropriate to have videos that will be used for flipped
teaching stored on another (paid) server which would solve these problems but would require certain investment.

6. Conclusions

Flipped classroom learning/teaching appears to be an effective and efficient way of learning/teaching, both for students and for lecturers. This way of teaching definitely brings more time for interactions among students and between students and lecturers as well as for more personalised/individualized approach to students' studying needs (see more in the section 3.6).

In general, the students like the concept of flipped classroom. As both the course evaluation and statistical data revealed, this way of teaching facilitates students' learning (though some students did not feel comfortable with this approach). The majority of students has understood that there are opportunities rather than duties when using flipped teaching, thus studied as much as they found appropriate and satisfying.

Moreover, due to the flexibility offered by flipped teaching, students were able to access the contents (and learn) regardless of place and time, re-watch lectures as many times as they wanted which might have helped to overcome language barrier (“The video lectures can be watched in the intimacy of own room and can be rewound unlimited amount of times.”) and they could use different means for learning (reading, watching videos, discussing with fellow-students and the lecturer in the classroom sessions, using online testing tools, etc.). Overall, flipped teaching brings better understanding of the key concepts, models and theories.

Of course, there is a space for improvements. Special focus should be placed especially on ways how to increase engagement of students (e.g. attendance in classroom sessions but also interaction among students outside the classrooms) and on possible technical improvements as presented above.
APPENDIX 1: Instructions for Classroom Session 3

1. Read the chapters 5 and 6 in Jones (2013)
2. Watch videos to the chapters 5 and 6
3. Make notes and bring them with you to the Classroom Session 3

*If you have got any questions regarding reading or video contents, or you would like to comment on some parts, you can do it on Fronter Forum - Classroom Session 3: Questions and Comments, no later than Tuesday 25/11, 13:00.*

4. Reply to multiple choice questions on Fronter - Course Materials - Quiz 3 (no later than Tuesday 25/11, 13:00)
5. Prepare answers on and be ready to discuss the following questions in Classroom Session 3

**Discussion and Overview Questions**

1. Choose a small organization in your city, such as a restaurant or school, and draw a chart showing its structure. Do you think the number of levels in its hierarchy and the span of control at each level is appropriate? Why or why not?
2. In what ways can the informal organization, norms, and values of an organizational culture affect the shape of an organization?
3. What factors determine the appropriate authority and control structure in (a) a research and development laboratory, (b) a large department store, or (c) a small manufacturing company?
4. When does bureaucracy become a problem in an organization? What can managers do to prevent bureaucratic problems from arising?

**Case Studies** (application of concepts, models, and theories)

I. **Read the case “How to Design a Hierarchy” on p. 166 and answer the following questions:**
   1. How would you go about analyzing the organizational hierarchy to decide which managerial positions should be cut first?
   2. How will you be able to ensure adequate supervision with fewer managers?
   3. What can you do to help make the downsizing process less painful for those who leave and for those who remain?

II. **Read the case “Which New Organizational Structure” on p. 197 and answer the following questions:**
   1. Debate the pros and cons of the different possible organizational structures you can think of in this case.
   2. Which structure will allow you to best achieve your goal at (a) lowest cost; (b) give you most responsiveness to customers; or (c) both?
APPENDIX 2: Statistical Report for Classroom Session 3

Data Collection: 6:00, 26.11.2014, 7 hours prior to Classroom Session

Prepared by Robert Barcik for the lecturer Lenka Klimplova

**Participation**

It seems that there will be 6 very well prepared students, 5 well prepared and 5 little prepared. The table below shows which students have watched what videos while preparing for this classroom session. In the most right corner one can see students' scores in the quiz for this session. In the lowest row one can see audience retention for a given video.

![Table showing video观看情况](image)

**Topics to be reviewed**

Generally students spent much less (40 % less) effort on Chapter 6, compared to Chapter 5 so it is recommended to spend more time on the review of Chapter 6.

**Videos 5.7 and 5.8 Bureaucracy**

These videos have a considerable drop in views. Students find it boring and they have not learnt it. It is recommended to go through explanation of what “bureaucracy” is as well as advantages and disadvantages of “bureaucracy”.

**Video 5.3 Parkinson’s Law Problem**

Students love this video! There is doubled retention on this video than on average! If you want to have some topic to spin-off discussion from, this may be the appropriate one.
Video 5.10 IT, Empowerment and Self-Managed Teams

Students have “underestimated” this video and have not watched it. Now it depends on the lecturer’s view of importance of this concept. If you find it important, then bring it to the class again, if not then don’t push on it.

Video 6.3 Overview Structures

Students certainly have a problem to grasp the whole picture of various structures. It is definitely recommended to bring on the picture from the video and review it.
**Videos 6.4, 6.5 and 6.6 Product Structures**

Students generally spend 25% more time on these three videos about various product structures. They obviously have problem with understanding of these, compared to latter ones.

**Video 6.11 Network Structure**

Students also love this video. Doubled retention compared to average, so again this can be a good spin-off point for discussion.

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**Applying personalisation**

Below there is a proposal for personalising the classroom session. Group 1 represents the lowest-prepared group of students, Group 2 average prepared and Group 3 high-prepared. As there are 150 minutes for classroom session (excluding 30 minutes for breaks), each task is calculated for 30 minutes. Tasks are according to difficulty varying in colours – easy in green, medium in yellow and hard in blue.
<table>
<thead>
<tr>
<th>Task 1</th>
<th>Task 2</th>
<th>Task 3</th>
<th>Task 4</th>
<th>Task 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group 1</strong></td>
<td><strong>Group 2</strong></td>
<td><strong>Group 3</strong></td>
<td><strong>Group 1</strong></td>
<td><strong>Group 2</strong></td>
</tr>
<tr>
<td>Case “Which New Organizational Structure” on p. 197 and answer the following questions:</td>
<td>Case “How to Design a Hierarchy” on p. 166 and answer the following questions:</td>
<td>Choose a small organization in your city, such as a restaurant or school, and draw a chart showing its structure. Do you think the number of levels in its hierarchy and the span of control at each level is appropriate? Why or why not?</td>
<td><strong>Group 1</strong></td>
<td><strong>Group 2</strong></td>
</tr>
<tr>
<td>Debate the pros and cons of the different possible organizational structures you can think of in this case.</td>
<td>How would you go about analyzing the organizational hierarchy to decide which managerial positions should be cut first?</td>
<td>In what ways can the informal organization, norms, and values of an organizational culture affect the shape of an organization?</td>
<td><strong>Group 1</strong></td>
<td><strong>Group 2</strong></td>
</tr>
<tr>
<td>Which structure will allow you to best achieve your goal at (a) lowest cost; (b) give you most responsiveness to customers; or (c) both?</td>
<td>How will you be able to ensure adequate supervision with fewer managers?</td>
<td>What factors determine the appropriate authority and control structure in (a) a research and development laboratory, (b) a large department store, or (c) a small manufacturing company?</td>
<td><strong>Group 1</strong></td>
<td><strong>Group 2</strong></td>
</tr>
<tr>
<td>Read the section “The Ethical Dimension” on p. 197 and answer the questions stated there.</td>
<td>What can you do to help make the downsizing process less painful for those who leave and for those who remain?</td>
<td>When does bureaucracy become a problem in an organization? What can managers do to prevent bureaucratic problems from arising?</td>
<td><strong>Group 1</strong></td>
<td><strong>Group 2</strong></td>
</tr>
<tr>
<td>Read the section “The Ethical Dimension” on p. 197 and answer the questions stated there.</td>
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<td><strong>Group 1</strong></td>
<td><strong>Group 2</strong></td>
</tr>
</tbody>
</table>
APPENDIX 3: Students’ answers from survey.du.se

What do you feel has been most positive about the course? (selection of answers related to “flipped classroom” approach)

- Good setup of non-obligatory classroom sessions and quizzes. The seminars was a good way of confirming or learning the question you answered.
- Feedback from the teacher in the seminars.
- Good course structure with mandatory seminars and optional classroom sessions
- Virtually everything
- The fact that we could apply the knowledge from theory into practice in a form of case studies during classroom session as well as during seminars.
- interesting subject
- Great video lectures made it easy to understand the concepts. The classroom lessons was also good with the discussions and quizzes.
- The seminars and lectures have been good
- The seminars and the lectures with discussion is very good for Learning. Video lectures has also been very good.
- video lectures
- Working in groups Interesting and easy for understanding videos
- Classroom session and video lectures.
- The seminar feedback from the teacher
- In my opinion the most positive part of the course were the 2 seminars. They helped me a lot during the open questions of the final exam.

What do you feel is in need of change? (selection of answers related to “flipped classroom” approach)

- dont like the flipped classroom would like to have lectures
- The “flipped classroom” system needs to be a bit improved in my opinion. I’ve had a feeling that we have to do quite a lot and in some cases it hasn’t been that much effective because I couldn’t understand the theory just by reading the book without any explanation and then it was difficult for me to participate in classroom sessions. Perhaps, if we had just a little bit less to do for classroom sessions, let’s say just one exercise less, it would be more productive because sometimes I have found myself not attending a classroom session just because I didn’t manage to complete all case studies.
- The fact that you had to prepare to the lectures. If you didn’t have time to do this you missed the lecture. It would have been better to been able to participate anyway.
- Simplify the preparations for each lecture. The part about examining a local company for each lecture is a little too much.
- There are many homeworks to do for each lecture. They should be reduced, at least at one case study at time, if not most of the students are not encourage to attend the, non mandatory, lectures.
Do you think that "flipped classroom" approach (comparing to the traditional way of teaching) has facilitated your learning? (It would be great, if you can comment in a commentary field on how this approach affected your ways of learning.)

1  Yes, definitely  
2  Yes, to certain extent  
3  Not really  
4  Not at all  

- would rather have traditional lectures  
- it was a great experience  
- You can listen to the lections several times.

How did you prepare for classes and exam?

1  Watching videos, then reading the book  
2  Reading the book, then watching videos  
3  Only reading the book  
4  Only watching videos  
5  Other ways (please, specify in commentary field)  

Did you attend the classroom sessions? Write yes, or no. Give reasons why you attended them, or why you did not attend them.

- no, to much to prepare before lesson.  
- Yes, I attended most of them but not each and every. The reason for not attending was usually the fact that I didn’t manage to complete case studies for a classroom sessions.  
- no  
- Yes because the was good to learn from.  
- no just one because I didn’t have time to prepare due to other course.  
- I attended some of them. It helped to understand a theoretical part better.  
- Yes They were interesting and helpful  
- Yes, they helped to clear the questions, if there were some after video lections.  
- no  
- I personally attended just the first lecture due to the many tasks of the assignments.

What is your view on video lectures? Can you recommend some ways how they can be improved? (e.g. length, graphics, English level)

- some of them was to long, hard to listen so long att someone with an accent.  
- graphics was good  
- I pretty much liked the videos. It is a summary of the most important points of a chapter and it is less time consuming than reading a chapter in the book.  
- they were too long, they should have been just powerpoints, its pointless sitting and watching someone draw  
- I think they are good enough.  
- clearer pictures  
- it was the best part of the course. you have done a great job!  
- Better pronunciation needs the author of videos  
- Yes, they were great!  
- The video lectures are definently too long, and the English level of the speaker could be way better; but in general, they are pretty ok.
What is your view on format of classroom sessions? E.g. was it a sufficient number (6 sessions per course), length (3-hours), instructions, contents, forms of discussion? (You can add any comments on classroom sessions here.)

- don't know
- I liked the format but I would prefer to have one more short brake during a session. Sometimes it has been quite difficult to be concentrated for 90 minutes.
- not present
- The could be a little shorter and more often to reduce the amount of chapters to cover in each lesson.
- don't have opinion
- Only one break during 3 hours lecture is not enough
- They were good, you got a good understanding about the subject. Maybe they could be 4 hours and a little bit longer break or one more break under this time.
- In my opinion 6 sessions, of 3 hours, are ok. The negative part of the sessions was the only break instead of 2.

Any other comments on this learning/teaching approach, not mentioned previously?

- Great job Lenka ;-
- -
- Not suitable for all