



How to Write a Bachelor Thesis in (APA) Style

1. Abstract

Bachelor students at the Faculty of Psychology in Bergen are required to write their thesis according to the guidelines of scientific writing by the American Psychological Association (APA). These guidelines provide help with structuring the thesis, describing research methods, reporting findings, referencing, and using a clear scientific writing style. Despite its relevance, teaching the APA guidelines has been considered somewhat boring by both students and teaching staff – largely due to the technicality of the subject. The course project was to re-design the APA course such that students would become more involved. This was achieved, for instance, by exercises in which students had to discover the APA citation rules themselves, rather than teaching them in a lecture style. Subsequent students' evaluations showed overall high satisfaction with all measured aspects. Possible improvements are discussed.

2. Background

As part of the programme “Bachelor in General Psychology” at the Faculty of Psychology, students are required to write a Bachelor thesis. This typically takes place in 6th and final semester (module PSYK250). About ten to fifteen bachelor topics are offered to students who write their thesis in groups of up to three. The final mark of PSYK250 is solely based on the evaluation of the Bachelor thesis, with all students within a Bachelor group getting the same mark. Among the mandatory assignments in PSYK250 is attendance of a single-session, 3 hour APA course. The aim of the APA course is to provide the students with the guidelines for scientific publications as laid out by the American Psychological Association.

Originally, the APA guidelines were conceived to provide a uniform style for scientific publications with the idea that, on the one hand, it would ease communication between psychologists and, on the other hand, help raising the overall quality of those publications. In the meantime, not only psychology but behavioural and social sciences in general have largely adopted the APA guidelines as standard. According to the APA, 37000 articles and 1214 books are published each year (as of 2010) following the APA guidelines (American Psychological Association, 2010).

The guidelines provide clear and comprehensive advice on (a) how to structure a scientific publication, (b) how to report statistical results, (c) how to display findings in form of tables and figures, (d) how to avoid bias with respect to gender, sexual orientation, and disabilities, (e) how to use correct spelling, punctuation, and grammar, and (f) how to credit sources (referencing). This is of high importance for students, who in most cases have little experience with writing scientific publications in general and a Bachelor thesis in particular. Moreover, the vast majority of original research articles and teaching books that students read employ APA guidelines. As a consequence, those responsible for the Bachelor thesis module decided that the Bachelor thesis should also follow the APA guidelines (with a few exceptions when the UiB requires divergent formatting). Finally, writing a Bachelor thesis following the APA guidelines gives students first practice at professional scientific writing.



Due to the comprehensiveness and complexity of the APA guidelines, a separate teaching session that provides key aspects was deemed necessary. However, while learning the APA guidelines is certainly useful – if not essential in case students want to continue with a Master’s and PhD degree – the APA course has not been very popular and has often been branded as “boring”. For example, in 2015 the APA course received only intermediate student evaluations. When asked to self-rate how happy they were with the APA course on a scale from 1 to 4, where 1=“misfornøyd», 2=“middels fornøyd” , 3=“fornøyd”, and 4=“svært fornøyd”, 82% indicated they were only “middels fornøyd» or «fornøyd».

For the assignment of the basispedagogisk utdanning, I thus volunteered to teach the APA course. My main goal was to re-design it such that students become engaged and involved while learning the basic knowledge about how to write a Bachelor thesis using the APA guidelines. My specific subgoals were that students would learn about the origins and usefulness of the APA guidelines, how to structure a Bachelor thesis, what writing style should be adopted, when to reference, how to reference, why to reference, and how to avoid (self-)plagiarism.

3. Implementation of the teaching unit

3.1. Setting

The teaching session took place in the auditorium at VilVite. In total, 40 students were enrolled for the Bachelor thesis; 39 students came to the APA course. Attendance was mandatory. PowerPoint and a white board were used as teaching aids.

3.2. Procedure, timing, and rationale

I divided the APA course in three blocks. The first block focused on teaching basic information, for instance, (a) what is APA style, (b) what is the format the UiB requires for Bachelor theses, and (c) which elements does an empirical Bachelor thesis as well as a literature review comprise (i.e., title page, abstract, introduction, methods, results, discussion, references, appendix). I described each of these elements in further detail, for instance, how are statistical findings presented in the form of tables and figures in the results section. Finally, I provided the students with a handful of general scientific writing style tips, for example, to avoid long and complicated sentences and to use active voice instead of passive voice. Although this block was mostly teaching-centered, I attempted to involve students by asking open questions to the audience (“What does APA stand for?”, “Why do you think these guidelines have been prepared?”, Why is it important to discuss limitations and weaknesses of the Bachelor thesis?”). After this block, there was a break of ten minutes.

The second block focused on referencing. At first, I asked the students to change seating such that Bachelor group members were sitting together. This was meant to strengthen the students’ team spirit and to give them a chance to discuss specific issues regarding their Bachelor thesis within their own group. Subsequently, the students were invited to provide arguments *why* we need to cite references. First, students discussed this question within their group (ca. 5 minutes), then they shared their thoughts in the plenum. The plenum discussion was guided by me. Next, I provided information about what counts as (self-) plagiarism and what the consequences of (self-) plagiarism could be. Then, students were invited again to discuss within the Bachelor groups *when* we need to cite. After ca. 3 minutes the answers were shared in the plenum, the discussion was guided by me.



Finally, I gave the students an exercise. Rather than lecturing them the APA referencing rules, I asked the students to explore and discover the rules themselves. To this end, I had prepared a sample article in APA style which covered the most important referencing rules and instructed them to “Try to identify rules for both types of citations and make a list with rules.” The rationale was that by trying to uncover the referencing rules themselves, the students would (a) become more engaged and (b) show deeper levels of processing allowing for better memorizing (Craik & Lockhart, 1972; Craik & Tulving, 1975) – as opposed to passively listening to the lecturer. To help the students, I showed a number of questions on a PowerPoint slide while they were working on the exercise. For instance, “*What elements does an in-text citation have? In which order?*”, “*When do you use «et al.»*”, or “*When is a citation in brackets, when is it not?*”. Again, students worked in their Bachelor groups. While they were completing the exercise I walked through the lecture room and assisted when questions arose. This block was followed by a 10 min break.

The final block began by asking the students to report the referencing rules they had discovered. This was done in the plenum, but also PowerPoint slides and the white board were used to provide examples for correct use of APA guidelines. This took roughly 20-25 minutes. Subsequently, students were invited to take part in a second exercise: a quiz. I handed out the same scientific article that the students had used to discover the APA rules, but now I had manipulated the article such that in a number of instances the APA referencing rules had been violated. The students’ task was to “Find the mistakes!”. Again, students worked together in their respective Bachelor groups. After ca. 15 min, we went through all possible APA violations in the plenum. That is, the students were asked to tell the plenum which mistakes they found and why it was a mistake. The groups were further asked to count their score (i.e., how many mistakes they found), and the two winning teams received a reward (“kvikk lunsj”). The rationale was that students were meant to actively apply their knowledge about the APA referencing rules from the first exercise, thereby further deepening the level of processing. By announcing that there would a reward for the winning team in the end, I aimed to appeal to the students’ sense of playfulness and competitiveness. Towards the end, I told the students how to get access to the APA manual (online and via the UiB library) and provided them with electronic materials, like a pdf summary of the APA rules and an APA WORD template on MittUiB. Last but not least, I invited the students to complete an evaluation sheet for the APA course.

4. Evaluation

4.1. Student evaluation

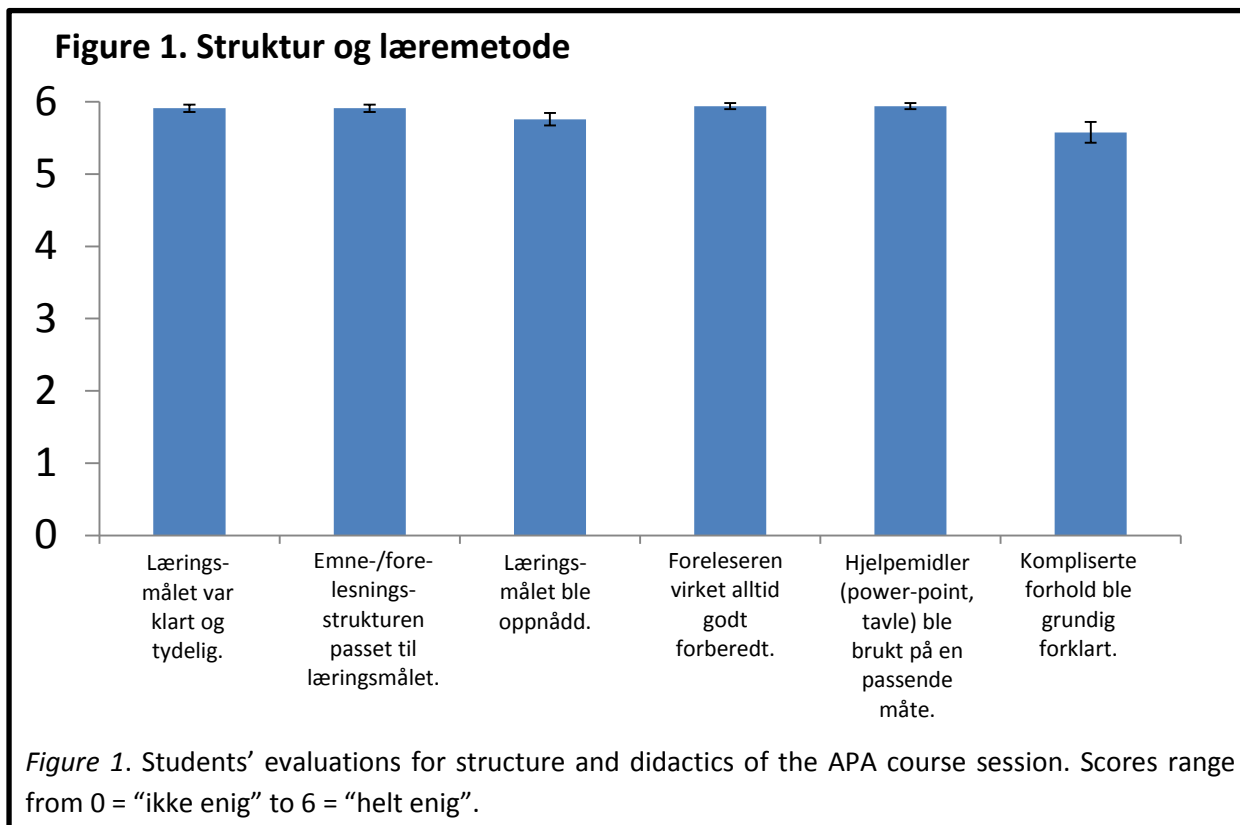
For the student feedback a Norwegian version (Westerhausen, 2015) of an established international questionnaire (Trier Inventar zur Lehrevaluation, TRIL) for self-evaluation was employed. The original TRIL (Gollwitzer & Schlotz, 2003; Gollwitzer et al., 2006) consists of 37 items, in total. Items #21 to #33 (numbering here and below according to the original version) were removed for the present course work, because they were not applicable (for example, they referred to students’ presentations which were not part of the course work). For all items from #1 to #20 a six-step response scale is provided, allowing a rating of the provided statements from “does not apply at all” (“ikke enig”) to “does fully apply” („helt enig”). The four dimensions assessed by the main items are factoranalytically derived and are named as follows: (1) structure and didactics (“struktur og læremetode), (2) inspiration and motivation (engasjement og motivering), (3) lecturer-student interaction (interaksjon og kommunikasjon), (4) personal gain (“personlig utbytte”). In addition, the

questionnaire comprises one item asking for a summarizing overall evaluation of the lecture/seminar (“Alt i alt har jeg hatt utbytte av å ta emnet/å gå på forelesningen(e)”) and two open, text-based questions aimed to provide feedback to the lecturer (“Hva likte du spesielt godt ved emnet/forelesningen(e)”; “Hva likte du minst, og hva kan forbedres?”).

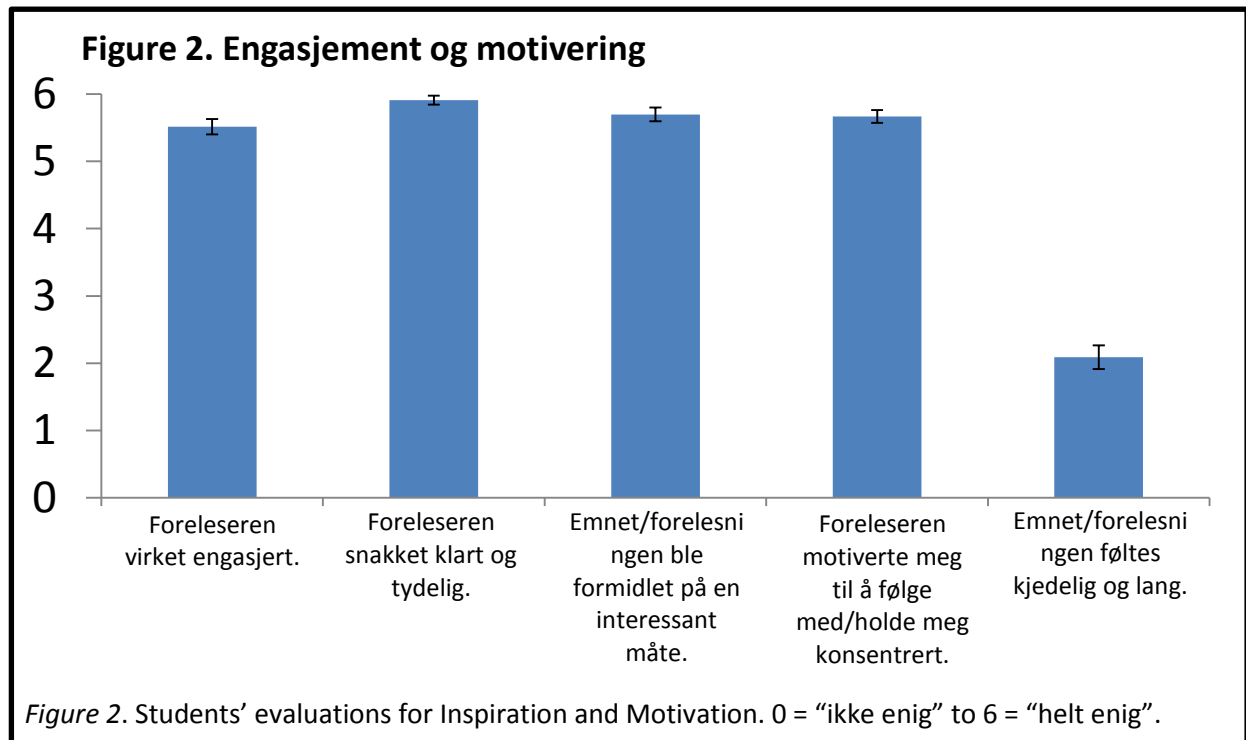
In total, 33 participants (out of 39, i.e., 85%) returned the TRIL. All 33 answering sheets were fully completed and entered analysis.

4.1.1. Quantitative evaluation

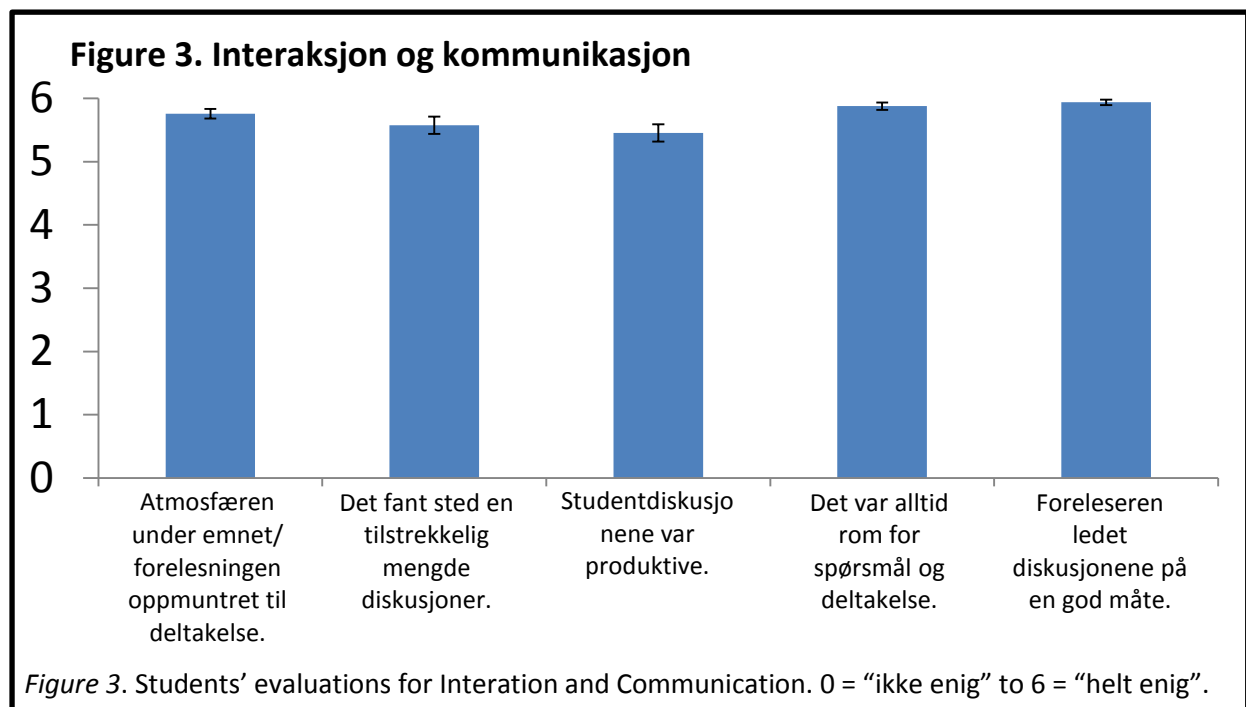
The students gave consistently high evaluations for *Structure and Didactics* (See Figure 1 below). They found that (1) “the teaching goals were clearly defined” ($M = 5.9$, Standard Deviation = 0.29), (2) “the structure of the APA course matched the teaching goals” ($M = 5.9$, $SD = 0.29$), (3) “the teaching goals were achieved” ($M = 5.8$, $SD = 0.50$), (4) “the lecturer always appeared well-prepared” ($M = 5.9$, $SD = 0.24$), (5) “teaching aids (e.g. power point, white/blackboard) were used appropriately” ($M = 5.9$, $SD = 0.24$), and (6) “Complicated issues were thoroughly explained” ($M = 5.6$, $SD = 0.83$).



The dimension *Inspiration and Motivation* also received generally high ratings (see Figure 2 below). Students thought that (1) “the lecturer was committed” ($M = 5.5$, $SD = 0.67$), (2) “the lecturer used a simple and clear language” ($M = 5.9$, $SD = 0.38$), (3) “the topic was presented in an interesting way” ($M = 5.7$, $SD = 0.59$), (4) “the lecturer motivated me to concentrate/stay focused” ($M = 5.7$, $SD = 0.54$). Students largely disagreed with the reversed final item “the topic/lecture felt boring/long” ($M = 2.1$, $SD = 1.01$).



Interaction and Communication received high ratings (see Figure 3 below). Students felt that (1) "the atmosphere encouraged to become engaged" ($M = 5.8, SD = 0.44$), (2) "there was sufficient time for discussions" ($M = 5.6, SD = 0.79$), (3) "the discussions among students were productive" ($M = 5.5, SD = 0.79$), (4) "there was always time for questions and discussions" ($M = 5.9, SD = 0.33$), and (5) "the lecturer led discussions in a good way" ($M = 5.9, SD = 0.24$).



The *Personal Gain* was generally regarded positively (see Figure 4 below). Student mostly agreed that (1) "I think the lecture was interesting" ($M = 4.2, SD = 1.31$), (2) "the topic was relevant and of importance for me" ($M = 5.8, SD = 0.36$), (3) "I have learnt important things during the lecture"



($M = 5.7$, $SD = 0.59$), and (4) "My understanding of the topic has improved as a consequence of the lecture" ($M = 5.3$, $SD = 0.85$).

Figure 4. Personlig utbytte

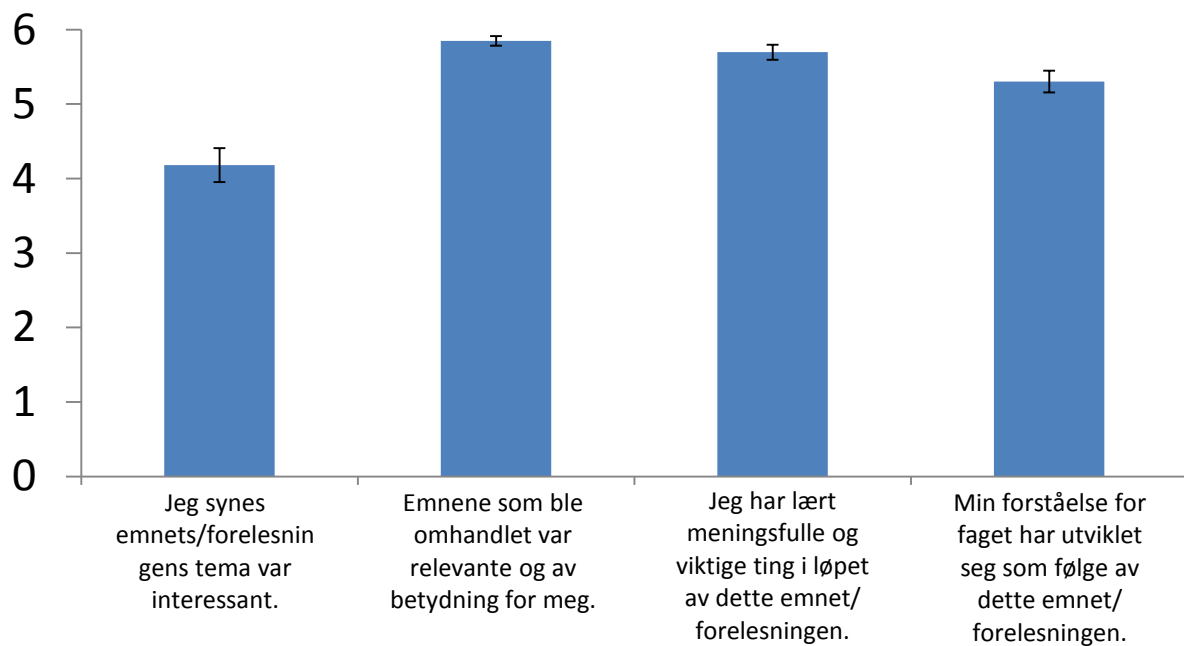


Figure 4. Students' evaluations for personal gain. 0 = "ikke enig" to 6 = "helt enig".

The mean in the overall evaluation ("All in all have I gained from the lecture") received a mean rating of 5.7 ($SD = 0.45$). None of the participants rated this item lower than 5 (see Figure 5 below).

Figure 5. Overall evaluation

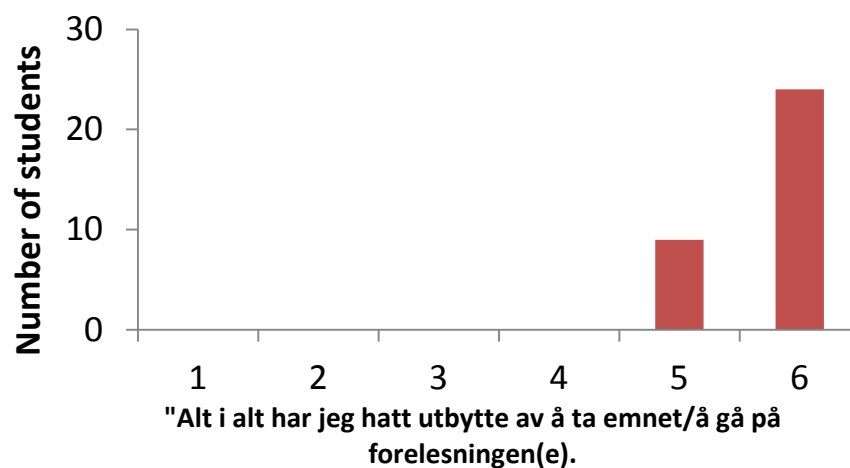


Figure 5. Number of students that rated the item with a score of 1="ikke enig" to 6="helt enig".

4.1.2. Qualitative evaluation

Hva likte du spesielt godt ved emnet/forelesningen(e)



27 out of 33 students answered this question. Eight students appreciated the exercises, six that the students had been actively involved, six students commented positively on the lecturer, five students found that the information was provided in a clear and comprehensible manner, and two appreciated personal writing tips.

Hva likte du minst, og hva kan forbedres?

Only 16 out of 33 students answered this question. Five students answered “don’t know”, “nothing” or that they liked everything (“likte alt”). Three students indicated that they found the topic generally boring (e.g., “tørt tema”). Two students found that the APA course should be shortened to 2h. Individual comments pertained to “breaks were too short”, “den grunnleggende gjennomgangen”, “lov til å delta på norsk”, “det mest kompliserte som jeg faktisk ville ha utdypet ble ikke utdypet”, “gikk litt fort gjennom noen ting”.

4.2. Personal reflections

The students were motivated to learn about the APA guidelines right from the start. They were open for discussions both within their groups and in the plenum. This made my life rather easy. The first block was very teacher-centered with little involvement of the students, but I noted that students were paying attention and taking a lot of notes. In my opinion the first exercise (“discover the APA rules yourself”) served as an ice-breaker. Some of the students seemed in fact quite enthusiastic about finding the APA referencing rules. My feeling was that it appealed to the students’ natural exploratory spirit. Likewise, the second exercise succeeded in engaging the students and made an obviously rather technical and boring topic entertaining and fun.

However, I also noted a few caveats and space for improvement in the future. First, the setting was not ideal for working in groups. I would have preferred, if students had the opportunity to sit around a table, facing each other. The lecture theatre, however, had no tables and students were facing the lecturer at all times. In the future, another room should be booked. Secondly, although the students were paying attention and I asked a few questions, I think the first block might need further improvements and a higher degree of student involvement. This may be difficult to realize as it involves teaching the students a few facts and background knowledge. However, one could try having them prepare some of the material at home and then have more discussions or exercises also on those aspects of the APA guidelines. Third, as students were eager to take notes, it would have been easier for them to have a printout of the slides of the PowerPoint presentation during the APA course. Since I was preparing them until the day before the lecture, this was not possible. In the future, the slides should be put on MittUiB well in advance. Finally, since the UiB and the faculty of psychology has a number of special formatting rules for the Bachelor thesis – in addition to the APA guidelines, it would be useful to provide a WORD template that also incorporates the UiB’s formatting. This template can be prepared in the future.

5. Summary

All in all, I feel that the main goal of the course project, that is, to not only provide the students with the technical knowledge how to write a Bachelor thesis using the APA guidelines but also to make it more interesting and engaging, has been achieved. The generally positive feedback supports this view, suggesting that the APA course has been perceived rather well by the students. As pointed out



in the personal reflection section above, however, I believe there is even further space for improvement.

Of crucial importance are also not only the students' ratings but their actual performance when applying the APA guidelines. That is, do they follow the APA guidelines equally well, worse, or better than in previous years? This could be further assessed by asking the examiners. Taken together, I hope and I am optimistic that in the future the APA course will be less of a "drag" for both students and teaching staff.

6. References

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