Unprepared and inactive students: what can we do about it?

Johanne Smith-Nielsen, Dept. of Psychology, University of Copenhagen.

Abstract

Background. Across university disciplines it is not unusual that students do not complete the assigned reading prior to lectures or classroom teaching. This is not only be frustrating for the teacher who has prepared in-class activities that require knowledge from the assigned literature. More importantly, it limits student learning because unprepared students tend to engage less in in-class activities and it limits the students in terms of critically discussing the literature on an adequate academic level.

In this TLHE project, this issue was addressed by changing the requirements for passing a seminar course for MA psychology students: to pass the course, 24 hours before to each class, the students were to hand in a short written assignment based on the assigned readings for the class. In addition, the teacher limited traditional lecturing to a minimum and increased in-class activities that required knowledge gained from the literature.

Methods. Survey questions (midway and by the end of the term) and a focus group interview was used to investigate the effect of the changed format.

Results. The changed format increased the time the students spent on individual processing of the material prior to classes. Based on the data, it is argued that in turn, this caused an increase in student engagement in class as well as increased learning. At the same time, the data indicated that multiple factors affect time spent on reading and student engagement. These were 1)in-class activities where gained knowledge is applied, 2)tight structuring of activities in class; 3)use of practice examples in group work; 4)activation and variation; 5)atmosphere in the classroom; 6)presentation of next week's topic and key points; 7)interest in the subject (students); 8)high expectations & engagement (teacher). An unexpected finding was that the changed format positively affected the students' academic reading strategies in terms of more efficient, yet more foused and thorough reading. Finally, it is discussed whether the rather tight structure of the format (in and out of class) could be a barrier for the development of independence and self-regulated learning strategies.

Introduction

"Nogen gange, bliver jeg nærmest irriteret over at jeg har læst (...) jeg møder op til undervisningen, og underviseren står bare i to timer står og viser powerpoints, hvor der står hvad der står i teksten – og hvor jeg så tænker 'så skulle jeg da godt nok ikke have læst – jeg fik det jo bare præsenteret'. Så bliver jeg mega-frustreret…"
(Laura, 25, psychology student, from focus group interview, Dec. 2019)

"Ja, lige præcis – det er jo derfor at de fleste læser bagefter – det er jo meget hurtigere at læse, når underviseren har udpeget hvad der er vigtigt"
(Ellen, 26, psychology student, from focus group interview, Dec. 2019)

The problem with students not completing the assigned reading prior to class is well known among university teachers. A class full of students who have not read is not only frustrating for the teacher, it also limits the possibilities for facilitating active learning in class where prior knowledge of the day's material is often required. However, as reflected in the quotes above, students are often not very motivated to read prior to class but instead use lectures to guide and make their reading more efficient. The present paper describes how I addressed this issue by changing the format and requirements in a seminar course in the fall semester 2019. With my "intervention", I aimed to affect the students' reading habbits so that instead of reading after coming to class, they should spend time with the texts prior to class, and my expectation was that this, in turn, would enhance student engagement in class.

Background

I have developed a seminar course for clinical psychology students (MA level, 7.5 ECTS). The format is classroom teaching, and typically, a class consists of 20-30 students. In the autumn semester 2019, I taught this course for the third time. The course is passed by 'active participation'. Active participation is defined by 75% mandatory attendance and by the teacher (me) in the course description. Examples of how to operationalize active participation at the various MA seminar courses at my department include mandatory student presentations, written reports on clinical cases, small written assignments demonstrating that the students have read the syllabus – and often a combination of such activities.

I have experimented with different formats that included student presentations based on self-selected literature together with four small written assignments ('response papers'; 3-4 pages each) handed during the semester that, taken together, documented that the students had read and understood the key points in the mandatory syllabus. Each response paper was to sum up and discuss a chunk of the articles from the syllabus. This format worked well in some ways, and the student evaluations were generally positive. However, one problem was that many of the students often showed up unprepared for class and then worked hard to write notes based on the activities in class – in particular my presentations.

This strategy probably helped the students focusing their reading of the texts when they wrote up their response papers afterwards. Indeed, the response papers sometimes reflected high levels of understanding of the topics from the curriculum. At the same time, however, this strategy limited the students' ability to engage actively in class in discussions of the day's reading. Moreover, it was often

the same small group of students that were active in class. Several of the students in the student evaluations also addressed these issues. One student wrote:

> *"...the discussions in class were often interesting but only a few of us participated, and often I had a feeling that most of my co-students were trying to hide themselves when the teacher encouraged us to discuss something"*

<div align="right">(Anonymous, from student evaluation, Dec.2016).</div>

Along the same lines, another student noted:

> *"Often group work feels a bit like a waste of time, especially if you end up sitting in a group where nobody has read the articles"*

<div align="right">(Anonymous, from student evaluation, May 2016).</div>

Another issued that frequently came up in the evaluations was that the students spent a lot of much time on writing up the four response papers, limiting their time for 'reading ahead'.

The problem with students not reading the assigned texts prior to class is common for psychology students (for example, (Clump, Bauer, & Bradley, 2004; Durwin & Sherman, 2008; Johnson & Kiviniemi, 2009) as well as for students across university disciplines around the world (for example, (Artis, 2008; Chang, 2010; Howard, 2004). Thus, it is not unusual that at least half of the MA students in a psychology class have not completed their reading before class (Clump et al., 2004; Starcher & Proffitt, 2011).

A desirable academic reading - and learning - process was described by Wandersee (1988) to include the following steps: (1) finding the meaning the author presents, (2) deciding upon its significance, (3) learning the meaning, (4) relating the concept to past experience, and (5) continuing to practice and review what was learned.

In particular, steps 4 and 5 are vital for the development of meta-cognitive processes necessary for being able to critically discuss and apply complex knowledge, in other words, for developing as a self-regulated learner (Williamson, 2015; Zimmerman, 2002). The processes involved in steps 4 and 5 can (and should) to a large extend be further facilitated through active learning approaches in the classroom (Deslauriers, McCarty, Miller, Callaghan, & Kestin, 2019; Erickson, Marks, & Karcher, 2020; Freeman et al., 2014). However, learning activities that require knowledge application, critical reflection, and social interaction are not likely to be successful, if Wandersee's steps 1- 3 are skipped, and important learning opportunities are lost if most of the time in the classroom is spent on establishing a basic understanding of the material.

Therefore, the purpose of reading prior to class is not just for the students to better understand what the teacher is presenting in class and thus achieve better learning. Independent work with the material prior to class makes it possible to spend the often very limited time in the classroom on learning activities where the students apply and co-construct knowledge – activities that are shown to be essential for the students for high student achievement (Deslauriers et al., 2019). Indeed, a recent meta-analysis demonstrated that among a range of approaches to teaching, social interaction in the classroom (for example, discussions and and use of open-ended questions) was most strongly associated with student achievement (Schneider & Preckel, 2017).

Objectives and change of format

To address the issue with students not reading prior to class, and thereby limiting their abilities to engage actively and qualified in classroom activities, in the fall semester 2019, I changed the format of the response papers used in previous seminar courses:

To pass the course, 24 hours before each class (except from the first session) the students were required to hand in a short response paper (1-1,5 pages) that should summarize the assigned reading in a coherent narrative (despite that often several articles were included) and also present a critical question or reflection on the themes from the literature. This requirement replaced the four longer response papers. In total, the students were to hand in nine response papers together with a short final assignment based on self-selected literature. For the full description of the requirements to pass the course, including learning goals, follow this link.

Moreover, I changed the in-class activities by reducing my time spent on lecturing to a minimum and instead structured each session tight around exercises and discussions that required that the students had already worked with the day's texts. This approach was inspired by inspired by Starcher and Proffitt (2011) who found that requiring additional student preparation, for example written assignments, together with activities in the classroom that required that the students had read, were effective means of making students reading assigned literature.

According the learning goals, the principal aim with my teaching was to enhance the students' learning and abilities to critically discuss and apply knowledge on clinical psychological problems. Hence, I specifically aimed to

> (a) make the students spend more time on reading *before* each class – as opposed to after class when writing up response papers; and

> (b) thereby facilitate more active student learning *in class*, i.e. more qualified discussions and student work with case examples (e.g. video clips) using the models and theories presented in the literature – as opposed to more passive learning with me lecturing while using the cases to illustrate points from the literature. Figure 1 provides an illustration of the assumed model of change.
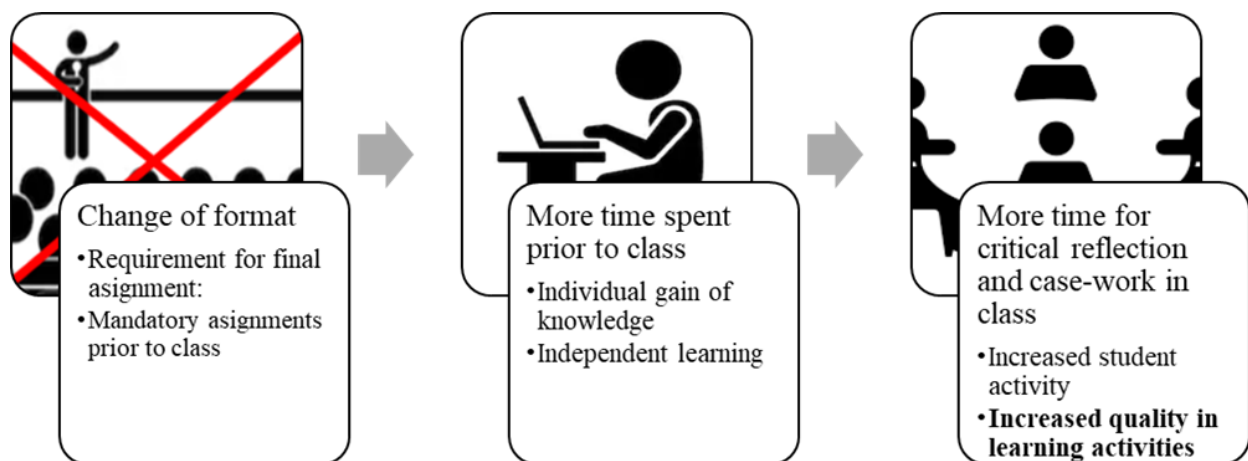

Figure 1.

Methods

Procedure and data collection

To evaluate whether the change of format had the intended effect, a combined quantitative and qualitative approach was used. First, three additional questions on using response papers handed in prior to class, together with an open-ended question where the students could elaborate on their answers, were added to the midway and to the final standard course evaluation. The mid-way evaluation was completed during teaching session 5, and the final evaluation during session 10. To ensure acceptable response rates, the students were asked to complete the evaluations in class. Second, by the end of the term, a focus group interview was conducted. Finally, three standard questions from the final course evaluation were used as a measure of the students' overall perception of how much they learned from the course, time spent on preparation, and active participation.

Participants for the focus group interview

During the introduction to the purpose of writing response papers in the first teaching session, I explained that it was the first time that I tried this format and that by the end of the course, I would invite them to participate in an interview to evaluate the effect of the change format. The purpose was to involve the students and to 'kick start' reflections on the new format from the beginning of the course. In session 9 (of 10), I invited students to volunteering for a focus group interview that took place after handing in the last assignment. Five students volunteered to participate in the interview. They all gave written informed consent to participate before the interview started, and after the interview, they fill in a short questionnaire on basic background information. For practical reasons, I conducted the interview myself. To prevent social desirability bias as much as possible, I started the interview by stressing that nothing they said could affect whether they passed the course or not.

Measures

Survey questions

The three questions added to the midway and final evaluation were: "Writing response papers prior to each class increases my time spent on preparation for each class - as compared with preparing for classes where I do not hand in response papers prior to class"; "Having written a response paper prior to class helps me participate more actively in discussions in class"; "Writing a response paper prior to class improves my learning outcome". They were all rated on a five-point Likert-like scale (response options from 'strongly disagree' to 'strongly agree'). The three questions used from the final standard course evaluation were 'How would you rate the teacher's ability to engage the students actively in the classes?'(five-pointe Likert-like scale ranging from 'unacceptable' 'to very good'); How many hours do you work on average per week with this course outside class?' (response options: 0-2; 2-4; 4-6; 6-8; More than 8); 'How much did you profit from this course all-in-all?' (five-pointe Likert-like scale ranging from 'unacceptable' to 'very much'). The student's responses to the midway and final evaluation survey are anonymous.

Focus group interview

To further explore the students' experiences with and differing perspectives on the changed format, an interview guide was developed. The interview guide was based on reviewing responses to the open-ended question (included in the midway evaluation survey) 'do you have further comments or suggestions for improvement?' and previous literature (Deslauriers et al., 2019; Erickson et al., 2020; Starcher & Proffitt, 2011). Apart from the proposed model of change (more time spent before class

→ more active participation → better learning) the aim was to explore how and when the student experienced that 'deep learning' is taking place (during reading, writing, or during class activities?). I was also interested in how they perceived the somewhat controlling and very structured aspect of the format, as well as their reflections on whether this structure could be a barrier for their development as self-regulated learners. The interview guide is enclosed in Appendix 1. The focus group interview was filmed and subsequently transcribed.

Analysis of focus group interview transcript
First, the whole interview was transcribed without any editing except from anonymizing the informants' names and any mentioning of co-students names. The full unedited transcript can be accessed here. Second, sections not relevant for the current inquiry were removed. Third, the transcript was content coded for themes, using (a) a 'top-down' approach in which all sections where *a priori* defined themes (via the interview guide) were identified and coded with a reference to relevant question number in the interview guide; and (b) a bottom-up approach where new themes were identified and new relevant topics emerged. The shortened transcript with codes can be accessed here.

Results

Twenty-seven students were enrolled into the course, however, one never showed up. All of the remaining 26 students completed the course. Of these, 85% ($n = 22$) completed the midway evaluation survey, and 73% ($n = 19$) completed the final standard course evaluation survey.

Time spent outside class
By the end of the term, 32 % ($n = 6$) of the students reported that they had spent 4-6 hours per week on the course outside class, 37% ($n = 7$) had spent 6-8 hours, and 32% ($n = 6$) had spent more than 8 hours per week outside class on reading and writing.
When reviewing the responses to the open questions in the final survey, many of the students expressed that they perceived workload in this course to be very high.

Active participation in class.
The majority of the students (84%, $n = 3$) rated the teacher's ability to engage the students actively as 'very good', 11% ($n =2$) rated 'good', and 5% ($n = 1$) rated 'neutral'.

Perceived learning. The majority (79%; $n = 15$) of the students answered that they had profited 'very much' from the course, 16% ($n = 3$) that they had profited 'much' from the course, and 5% ($n = 1$) answered that s/he had profited 'average' from the course.

Effects of response papers
The students' responses to the survey questions on the use of response papers are presented in Table 1. As expected, at both time points, the vast majority of the students answered that the requirement of handing in 1 – 1.5 written page about the day's readings increased the time, that the students spent on preparing for classes. Moreover, the responses indicated that writing response papers prior to class increased their active participation in class: at the mid-way evaluation, 86% ($n = 19$) of the students strongly agreed or agreed with this, and at the final evaluation, 95% ($n = 18$) of the students strongly agreed or agreed that this was the case. Finally, Table 1 demonstrates that the students' perceived learning improved by the changed format with 86% ($n = 19$) of the students at the mid-way evaluation,

and 90% ($n = 17$) at the final evaluation strongly agreeing or agreeing with the item 'writing response papers prior to classes improves my learning outcome'.

Table 1. Effect on time on preparation, active participation, and learning

	Mid-way survey (N = 22)		End of the course survey (N = 19)	
	%	n	%	n
More time on preparation				
Strongly agree	73	16	84	16
Agree	18	4	11	2
Neutral	8	2	5	1
Disagree	-	-	-	-
Strongly disagree	-	-	-	-
Increases active participation				
Strongly agree	54	12	42	8
Agree	32	7	53	10
Neutral	14	3	-	-
Disagree	-	-	5	1
Strongly disagree	-	-	-	-
Improved learning				
Strongly agree	54	12	37	7
Agree	32	7	53	10
Neutral	14	3	11	2
Disagree	-	-	-	-
Strongly disagree	-	-	-	-

Note. From survey questions included in anonymous student evaluations

Table 2. Informants, focus group interview

Student[1]	Age	Years studied	Key words[2]
Ellen	26	5.5	Relaxed, 'take it easy', studying half-time, has taken a leave ('longer than allowed'). Does not worry about exams, mostly reads what is interesting and does not spend time on readings that are not interesting.
Laura	25	4.5	'Chilled student'. Does not stress over exams and studying in general. If exams are written assignments: usually does not read the whole syllabus but awaits the exam questions and then decides what to focus on when reading.
Naja	24	4.5	Ambitious and focused. Reads a lot, also when it is not part of the curriculum. Often reads the syllabus more than once. Very interested in university politics. Uses her studies and psychology as a point of departure for a societal critique.
Anna	25	4,5	'Does her best to keep up with her studies'. Over the years as a student, learned that it is not possible to read everything, and has accepted this. When the subject is interesting, however, usually reads everything.

Sigrid	23	3.5	'A perfectionist'. Went straight from high school to university and has completed the full program (30 ECTS) each semester. This has been hard, and has learned that it is difficult to be a perfectionist at university.

Note. [1]The students' names are anonymized. [2]The description is a shortened version of the students' response to the opening question in the interview: How would you describe yourself as a student?

Focus group interview

The five students who participated in the focus group interview were female, on their 7th or 8th semester, and had clinical psychology as their main program of their Master's in psychology. A short presentation of each student is provided in Table 2.

Tables 3, 4, and 5 provide an overview of the themes discussed in the focus group relevant for the current inquiry.

Table 3 gives an overview of the students' responses to the *a priori* defined themes defined by the interview guide.

Table 4 summaries 'Other factors important for time spent on reading and engagement in the classroom' that were discussed by the five students. These were:

1) Activities where gained knowledge was applied
2) Tight structuring of activities in class
3) Use of practice examples
4) Activation and variation
5) Atmosphere in the classroom
6) Presentation of next week's topic and key points
7) Interest in the subject (students)
8) High expectations & Engagement (Teacher)

Finally, Table 5 provides examples of the following themes that emerged:

1) Required assignments prior to class affects students' way of reading (more thoroughly & focused, but for some, also more surveying);
2) Required assignments prior to class affects how students' structure their time during the week;
3) Required assignments prior to class provide information to the teacher on what to focus on;
4) Factors preventing students to complete their reading prior to classes:
   a) Presenting already known material
   b) Not using the knowledge gained from the reading.

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Table 3. A priori defined themes

Theme	Examples
Mandatory asignments prior to class leads to learning on a deeper level during actitivites in class.	”Når man går ind i gruppearbejde og man ved at alle har læst, så synes jeg måske at man starter et andet sted. Når vi alle, sådan, har en grundforståelse…”(Ellen) ”Jeg tror, at man sparer noget tid i gruppearbejdet. Jeg har hvert fald flere gange tænkt, at hvis det jeg skrev i responspapiret var godt nok til at bestå responspapiret med, så var det også godt nok til at sige i gruppen. Så var jeg nok lidt mere sikker på de jeg sagde i gruppen. Så i gruppearbejdet synes jeg at vi brugte mindre tid på at sikre os at det vi havde forstået var korrekt. Og så havde vi mere tid til at diskutere noget der var mere praksisrelevant” (Sigrid). ”Jeg ved ikke om det har ændret indholdet i diskussionerne så meget. Måske sidder der nogle studerende på holdet, som aldrig ville have fået læst noget som helst. Og at det har gjort dem mere aktive. Men jeg havde ikke ageret anderledes i undervisningen.”(Naja)
When is learning taking place?	”…jeg ved ikke engang om det alene er undervisningen – eller om det er kombinationen af læsning, arbejdet med responspapir, gruppearbejdet (Anna), ”Nogen gange kommer der en pointe eller et point of view man slet ikke havde tænkt over, når man sidder i et gruppearbejde (…) Men jeg har også oplevelser af at lære rigtig meget bare ved at læse tingene…Altså, men det kræver at man faktiske *læser* det – ikke bare skimmer det. Men…jeg synes at der har fundet rigtig af denne her dybe læring sted i undervisningen, fordi det faglige niveau har været højt i undervisningen…så på den måde, føler jeg at meget af det jeg har lært, kommer fra undervisningen. (Naja) ”Jeg tror også at de responspapirer har været med til at konsolidere noget viden, men samtidig så sidder jeg og tænker på det med at bruge min viden i gruppearbejde Lærer jeg mest af at skrive de her responspapirer og få noget viden? Eller lærer jeg mest af at bruge min viden i et gruppearbejde? Noget af det jeg savner virkelig meget i mange fag på universitetet, det er at bruge pensum sammen med nogle andre…Og der synes jeg at gruppearbejdet og i det hele taget klassediskussionerne, hvis de fungerer, som de har gjort her, så er det nok dér jeg lærer mest…”(Ellen)
Students' attitude towards being pressured	Laura: …helt overordnet synes jeg at det har været fedt at blive presset til at læse hele pensum (…) Så selvom vi måske blev lidt skræmte over det [undervisers navn] sagde første gang, så gør det også at jeg tænker, nå, så må jeg lige oppe mig. ”Selvom jeg ikke normalt læser så meget, så har det været en meget positiv ting at læse forud for undervisningen. Det har været meget nyt for mig, og jeg har været meget bedre forberedt, jeg har forstået teksterne meget bedre, og jeg har været meget mere med i undervisningen.” (Ellen)
Too much structure is a barrier for independent learning?	”…jeg synes at det fjerner noget frihed fra det at være studerende, og det fjerner muligheden for, at hvis man studser over noget, og gerne vil læse mere i dén retning, (…) der er også en vigtig frihed i forhold til at kunne styre, hvornår man læser hvad (…)…det med at det har været så struktureret, har da ikke bidraget til selvstædighed, men det har bidraget til noget disciplin, tror jeg.”(Naja) ”…i den strukturerede undervisning er der stadig mulighed for selvstændighed, også selv om der er den der stramme struktur…Altså diskussionerne tager udgangspunkt i nogle bestemte spørgsmål, men de spørgsmål synes jeg stadig har lagt op til refleksion og diskussion, hvor man godt nok har mulighed for at være selvstændig…(Anna) ”Det med de responspapirer, der synes jeg at der er sådan lidt for og imod. Der har jo virkelig været lagt op til at man skulle tænke selv, til selvstændig refleksion og tænkning, altså når man skulle reflektere til sidst, hvor man skulle formulere hvad man undrede sig over, eller skulle være kritisk over for noget af det i teksterne…Altså det har været en mere selvstændig måde at studere på end jeg har prøvet i andre fag og i andre typer responspapirer…Fordi det tit har været helt ok bare at lave en redegørelse”(Laura).

Table 4. Other factors important for time spent on reading and engagement in the classroom

Activities where gained knowledge was applied	"…at pensum er blevet brugt i undervisningen. (…) at jeg vidste at jeg ville komme til at sidde i noget gruppearbejde, hvor jeg ikke havde lyst til at sidde og ikke have læst. Det synes jeg er skide pinligt. (…) jeg bryder mig virkelig ikke om at sidde i et gruppearbejde, hvor jeg bare er sådan 'yes, nu kører vi', og så ende med to, der slet ikke har læst (griner) – så kan man jo ikke lave gruppearbejde."(Laura).
Tight structuring of activities in class	"…Men det [strukturen, red.] var også noget jeg skulle vænne mig til. I starten fik jeg sådan en lidt…djøffed følelse kravlende ned af rygraden (griner) men sådan, det har jo virket virkelig godt...(…) …når man ved at man har ti minutter, så bruger man også de ti minutter mere effektivt…" (…) Jeg føler at vores tid er blevet taget seriøst (Naja)
Use of practice examples	"…altså selvfølgelig er det vigtigt at læse teorien og forskningen…Men det der med at skulle læse om små børn og samspil…altså hvis vi aldrig får lov til at se det – så lukker vi af for det mest vigtige (Ellen) "…det der med 'hvordan ser det ud?' Hvordan udtrykker det sig i samspillet (…)…alle de eksempler, som har givet læsningen et ekstra lag. For mig er det ikke sikkert at læsning er nok til at jeg rigtigt forstår, hvordan det faktisk ser ud i praksis"(Anna)
Activation and variation	"…det dér med at ens lærer…stiller spørgsmål undervejs, (…) det med at man ved, at lige om lidt, så er der én der spørger mig om noget – det gør virkelig noget – så er man ligesom nødt til at høre efter og holde sig fokuseret" (Laura). "…det med at der nogen gange kom nogle eksempler, jeg ikke lige havde regnet med, fx [nævner eksempel] hvor der nærmest gik lidt teater i den – det var rart med den afveksling fra tavleundervisning, hvor man bare ligesom ved hvad der kommer (…)…så er der lige en video, så er der sådan et eksempel, så har vi lige noget på papir her…(…) Det synes jeg hjalp rigtig meget…at der har været så meget forskelligt… (Sigrid)
Atmosphere in the classroom	"…Det her forløb har været meget anderledes end meget anden undervisning jeg har deltaget i på universitetet. Der er jo mange hold, hvor ingen vil deltage i diskussionen, hvor ingen siger noget og hvor underviseren bare står og snakker. (…) Så ja, jeg har været meget bedre forberedt, og jeg har været meget mere med i undervisningen, men alle andre har også deltaget meget mere…" (Ellen)
Presentation of next week's topic and key points	"…Jeg har brugt [undervisers navn] fokuspunkter rigtig meget, når jeg har læst – altså dem vi fik ugen inden – så har [undervisers navn] hevet noget ud, og så har jeg ladet mig guide af det…sådan også for at få en fornemmelse af, hvad hver tekst handler om, og ift. hvad kan man være kritisk overfor..? For det kan godt være svært sådan lige at komme i gang…(Anna)
Interest in the subject (students)	"…Jeg har tænkt på at noget at det jeg ville sige i dag var meget sådan, at det at jeg har læst pensum har været rigtig meget drevet af min interesse" (Laura).
High expectations & Engagement (Teacher)	"Jeg synes virkelig at det er helt afgørende at man har en underviser, der også forventer noget af en. Jeg har haft flere fag på universitetet, hvor man får oplevelsen af at underviseren ikke forventer at man skal lave noget når man møder op. Hvor de fortæller lidt om hvad der står i teksterne, og ellers står og taler i to timer" (Ellen). Naja: Ja, jeg synes godt at man kan mærke at [teacher's name] også gerne har villet noget med sin undervisning, og at det har betydet noget for hende at levere god undervisning (…) Og min oplevelse er i hvert fald at når underviseren bare siger det højt, som der står i teksterne, så kommer man også til at sidde sådan her (læner sig tilbage og hænger med armene/viser en sløv/doven attitude) og lave alt muligt andet. Så jeg tror egentlig at det her med at det har været et så interaktivt hold skyldes mange faktorer.

Table 5. Not *a priori* defined themes that emerged from the focus group interview data

Theme	Examples
Required assignments prior to class affects students' way of reading (more thoroughly & focused, but for some, also more surveying)	"Jeg synes faktisk at det gjorde mig bedre til begge dele. Både at læse grundigt, men også at læse mere overbliksagtigt fordi man hele tiden havde i hovedet at man skulle sige noget mere generelt om det det stod i artiklen, fordi man også var i gang med at finde ud af hvordan teksten stod i forhold til de andre to tekster som lige var på pensum til den gang – var der noget de var uenige om eller var der noget som handlede om samme emne?" (Sigrid).
Required assignments prior to class affects how students' structure their workweek	"Jeg tror at den der deadline har betydet noget for os alle sammen. Vi havde undervisning om onsdagen, og jeg kan ikke lave noget om mandagen.(…) så det betød at jeg skulle læse og skrive torsdag-fredag og evt. tirsdag formiddag….Så det var som om at det her fag bare fyldte hele ugen." (Ellen)
Required assignments prior to class provide information to the teacher on what to focus on.	"…Altså meget af det her ret tunge teori, hvor der var ret mange tekster på pensum..(…)…men alligevel der sagde [undervisers navn], 'det er de her pointer, der er vigtige (…) og så er det måske ikke så vigtigt at fremhæve alt det, som alle havde beskrevet og forstået…Det var egentlig meget befriende….fordi nogen gange kan man godt falde lidt ned i sådan en teorisump…."(Naja) "…jamen, der kunne jeg godt lide at [undervisers navn] brugte responspapirerne til at sikre, at hun ikke stod og gennemgik noget i undervisningen, som vi havde forstået, og at hun fremhævede de ting, som hun kunne se vi ikke havde forstået…"(Laura)
Factors preventing students to read prior to classes • Presenting already known material • Not using the knowledge gained from the reading	"…hvor jeg nærmest bliver irriteret over at jeg har læst, hvor jeg møder op til undervisningen, og hvor underviseren bare i to timer står og viser powerpoints, hvor der står hvad der står i teksten – og hvor jeg så tænker, så skulle jeg da godt nok ikke have læst – jeg fik det jo bare præsenteret. OG jeg bliver megafrustreret…arrgh, jeg ved det jo godt!!! "Ja, lige præcis – det er jo derfor at de fleste læser bagefter – det er jo meget hurtigere at læse, når underviseren har udpeget hvad der er vigtigt" (Ellen) "Jeg synes også bare nogen gange det kan være irriterende at møde op, og så handler det overhovedet ikke om det man har læst (…) og så skal man ikke bruge den til noget når man så kommer derover…" (Sigrid)

Discussion

The principal aim of the changed format described here, was to make students spent more hours on learning activities outside the classroom. The official estimated time that a student is expected to spend on a 7.5 ECTS course is 200 hours in total. With 30 hours spent on classroom teaching, this leaves about 170 hours for activities outside class. Depending on how the weekly workload (hours per teaching session, i.e. 10 sessions/10 weeks, or hours per week distributed over the semester = 14 weeks) is calculated, this yields at least 12 hours per week outside the classroom. In my class, only about one third of the students estimated that they spent more than eight hours out of class per week on the course. Nevertheless, survey data as well as interview data suggested that the students perceived the workload as very high, pointing to the need for aligning of expectations between teacher and students.

Data from the focus group interview generally confirmed the results from the survey and the proposed model. Thus, all of the five students talked about how the requirement of the response papers resulted in that they spent considerably more time on working with the material prior to class than they usually would, and four of the five mentioned that this was the first course where they had read all the texts in the syllabus.

> *"Hvis man nu skal være helt ærlig: For mig er det sådan, at det 100% har været pga. responspapirerne at jeg har været så grundig og at jeg har fået læst alle teksterne. Det havde jeg ikke gået gjort ellers. Så havde jeg læst måske nogle tekster til hver gang. Men helt klart ikke alle tre-fire tekster til hver gang."* (Ellen)

Although Naja and Laura both emphasized that they would probably had been equally active in class without having written the response papers, the hypothesis that the extra time spent on reading and working independently with the material prior to class would affect in-class student participation was also generally supported by the interview data (Table 3). However, when analyzing the interview data, it was clear that a range of factors were important for active participation and learning. Of note, all students stressed this point several times.

> *...på en eller anden måde har jeg ikke lyst til at give responspapiret for meget kredit for at jeg fik læst så meget. For jeg føler at jeg fik læst så meget fordi jeg virkelig syntes at det var spændende. Og jeg bange for at så kommer det ud at studerende kun læser, hvis vi skal have responspapirer (...). Jeg kunne godt have læst meget mere overfladisk og så have lavet de responspapirer, og det kunne godt have været sådan i et andet fag. Så for mig handlede det om jeg bare syntes at det var vildt spændende (Laura).*

As shown in Table 4, the factors discussed by the students were 1) Activities where gained knowledge is applied, 2) Tight structuring of activities in class; 3) Use of practice examples; 4)Activation & variation; 5)Atmosphere in the classroom; 6)Presentation of next week's topic and key points; 7)Interest in the subject (students); 8)High expectations & Engagement (Teacher). The factors mentioned most frequently were Activation & variation and (not surprisingly) Interest in the subject. These results are in line with the existing literature (Schneider & Preckel, 2017) and point to a range of possible strategies that can be employed to stimulate student participation and engagement in and outside the classroom.

Apart from the *a priori* defined themes, several other themes worth mentioning emerged from the interview data (Table 5). Of note, the assigned response papers did not only affect how the students structured and planned their workweek, the change of format also changed *how* the students read. Interestingly, the students' reflections on how the response papers influenced their reading strategies, had several similarities with descriptions of self-regulated learning strategies described in educational literature (Zimmerman, 2002) and with Wandersee (1988)'s description of the processes involved in effective reading. Consider for example Naja's description of how she

planned her reading and writing as well as how she processed and reflected on the information from the readings:

> *"...ret hurtigt fandt jeg ud af at hvis jeg skulle have det til at fungere, så skulle aflevere tidligere end deadline og så skulle jeg sætte en dag af til at skrive det her papir. Og jeg fandt ud af at jeg skrev skide godt mandag mellem kl. 10 og 12, og så skrev jeg det dér. Og så havde jeg om fredagen læst alle teksterne og skrevet lidt ned undervejs – hvad syntes jeg var underligt? Og så hvis de svarede på det et andet sted, så kunne jeg strege det igen...Og det virkede virkelig godt...så at have weekenden til at gå og tænke lidt over de her ting, og så bare sætte sig ned og få det gjort mandag formiddag. Men det gjorde også at det her har været et fag, der har figureret mere i min fritid end det normalt ville" (Naja)*

The effect of the changed format on the students' way of reading was an unexpected finding, and stresses the importance of the need for building skills in effective reading of academic texts in university students. Consider also the following conversation from the focus group interview:

> *"...det har virkelig været svært. (...) Men da vi så kom ind i det, så blev det en hjælp for mig til at få læst og få læst teksterne godt. Eller på en anden måde, fordi det kræver mere af ens teknik og måde at læse teksterne på, når man skal kunne sige noget om det..." (Anna)*

> *"Ja, man bliver i hvert fald nødt til at læse det mere grundigt end ellers – eller i hvert fald mere grundigt end jeg ellers ville have læst, (...) for ellers ville jeg ikke kunne sige skrive noget om det... (Ellen)*

> *"Sådan havde jeg det faktisk ikke..Jeg tror efterhånden jeg blev ret god til at finde ud at fokusere min læsning. Og hele tiden zoome ud og sige: Hvad er det nu jeg skal bruge den her artikel til at sige noget om? Og så bladre lidt igennem og sige noget lidt mere overbliksagtigt." (Laura)*

> *"Jeg synes faktisk at det gjorde mig bedre til begge dele. Både at læse grundigt, men også at læse mere overbliksagtigt fordi man hele tiden havde i hovedet at man skulle sige noget mere generelt om det det stod i artiklen, fordi man også var i gang med at finde ud af hvordan teksten stod i forhold til de andre to tekster som lige var på pensum til den gang (...) Og det kan andre gange være lidt svært at finde ud af, når man læser til andre fag – hvad skal man lige fokusere på? Så kan man enten få læst alt for overfladisk eller alt for grundigt" (Sigrid).*

An important purpose of the interview was to explore the students' perspectives on whether the rather tight structuring of the whole course (the requirement of response papers prior to each in combination with a tight structure on in-class activities) would be a barrier for the development of independent and self-regulated learning strategies (Table 3). As argued previously, this is an important overall aim of the teaching within the social sciences (Williamson, 2015; Zimmerman, 2002). In case the changed format would result in less independence and less self-regulation, we should consider alternative strategies for increasing time spent on the assigned readings and in-class student engagement. However, based on the interview data together with the examples provided in Table 3, it can be argued that that although the tight structure does limit the students' freedom in terms of deciding what to prioritize their time and energy on – it is still possible to foster independent and critical thinking. Below is an example of how the students discussed the issue.

> *"Det med de der responspapirer, det er jo meget styret ift. hvis vi skal være selvregulerende (griner)" (Ellen)*

> *"..det er sådan lidt for og imod. Der har jo virkelig været lagt op til at man skulle tænke selv, til selvstændig refleksion og tænkning, altså når man skulle reflektere til sidst, hvor man skulle formulere hvad man undrede sig over, eller skulle være kritisk over for noget af det i teksterne...Altså det har været en mere selvstændig måde at studere på end jeg har prøvet i andre fag og i andre typer responspapirer...Fordi det tit har været helt ok bare at lave en redegørelse. Men det der med at der blev lagt op til at man godt må tænke selv, synes jeg har gjort det meget mere selvstændigt i min læsning...Og så er der det med at det at være universitetsstuderende er meget selvstændigt... og så er*

det altså fedt at møde op til noget undervisning, hvor der virkelig er struktur…Jeg får det sådan…Der er nogen, der virkelig tager min tid seriøst…(griner). (Laura)

"…Ja, og i den strukturerede undervisning er der stadig mulighed for selvstændighed, også selv om der er den der stramme struktur…Altså diskussionerne tager udgangspunkt i nogle bestemte spørgsmål, men de spørgsmål synes jeg stadig har lagt op til refleksion og diskussion, hvor man godt nok har mulighed for at være selvstændig…I stedet for at få et oplæg til gruppearbejdet som 'nu skal I snakke om denne her definition eller det her begreb…(Ellen)

"…end at få et spørgsmål, hvor man skal tænke selv…Så er det mere selvstændigt at skulle strukturere sin tid selv eller at få lov til at tænke selv?(Laura).

Another interesting topic repeatedly discussed by the students during the interview was factors that prevented students from reading the assigned readings prior to classes (Table 5). Two factors were most frequently mentioned: (1) If the teacher repeats what is said in the texts regardless of difficulty level and (2) on the other hand, if the teacher does not at all refer to the readings. This is important information to lecturers and teachers who are frustrated about unprepared students.

In sum, the survey data as well as the interview data indicate that writing response papers prior to class may improve student engagement in class and perceived learning. Based on the current data, however, it cannot be inferred that the changed format in fact improved student performance or competences as defined by the learning goals. Indeed, a recent review argues that students' evaluations of teaching effectiveness are often poor predictors of their actual learning (Carpenter, Witherby, & Tauber, 2020). At the same time, however, educational research demonstrates that active engagement in class is related to improved learning and meta-cognitive processes. For example, a recent large randomized controlled trial showed that what predicted students' performance, as reflected by grades on a final test, was whether their teacher had used active instruction during the course (Deslauriers et al., 2019). Whether the increased use of active learning approaches in the current format in fact results in better student learning is a subject for future research.

"Du spurgte 'hvornår lærer I?' Jeg har en kæmpe fornemmelse af at jeg lærer mere i fag, hvor eksamensformen er sådan her, hvor det på en måde til sidst bare er ét langt responspapir, end når jeg er orienteret mod en stor opgave til sidst…fx i [andet fag], hvor man hele semesteret ikke rigtig forstår hvor man er, og så læser man bare sindssygt meget op til sidst…Men også fordi man bliver hjulpet meget sådan her…det er en hjælp til at få fordelt arbejdsbyrden over hele semesteret. Jeg føler ikke at jeg har brug for en eksamen nu…jeg har jo netop været igennem hele pensum i løbet af semesteret…Og det der med at sidde til undervisningen og skrive det ned, jeg synes er interessant i stedet for at skrive med det dér filter, som jeg i hvert fald tit har, hvor jeg hele tiden tænker 'mon det her er relevant ift. eksamen? Sådan tror jeg at der er mange der tager noter. Hvor man skriver ting ned, som man tror er vigtigt ift. eksamen…Og så bliver det aldrig en refleksion over det man synes er spændende eller provokorende. Og det er det, der gør at jeg synes at jeg er meget mere selvstændig på det her fag, fordi…..alle mine noter er drevet af hvad jeg har syntes var spændende, og hvad jeg tror jeg kan bruge, når jeg kommer ud som færdig psykolog…Det er bare et helt andet filter…. (Laura)

Conclusion and implications for future practice:

- Written assignments based on the required readings handed in prior to class increase the time spent on individual processing of the material. In turn, this may enable students to better engage in active learning activities in class. Moreover, the changed format supported the students in developing effective reading strategies. In my future teaching, I will continue to use the format

presented in the present paper. Furthermore, I will consider ways of operationalizing the actual learning outcome.

- At the same time, the current project demonstrated that multiple factors play a role when fostering student engagement in class. As discussed, pressuring students to work more between classes through the required response papers was just a part of the explaination of why the students were very active during in-class activities in my seminar class (see Tables 4 & 5).
- Considering that the high workload was an issue stressed by the students in the survey as well as the interview, in my future teaching, I will consider (a) make sure that I make explicit how many hours students are expected to spend on taking an 7.5 ECTS course, and (b) make it more explicit that the response papers may be written in groups of two students. It is likely that this will reduce time spent per response paper.

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Appendix 1

Interview guide til fokusgruppeinterview vedr. brug af responspapirer på seminarhold til at facilitere aktiv deltagelse og øge læringsudbytte.

Question	Theme
1. Fortæl lidt om hvilken type studerende I er? (Flittige, engagerede, effektive, kritiske, osv.) – og hvorfor endte I på dette hold?	Start/warming up
2. Kan I ikke starte med helt overordet at sige lidt om, hvordan I har oplevet at skulle skrive responspapirer i dette semester?	General student experience
3. Formålet med responspapirerne er at støtte – men måske også presse – de studerende i at få læst pensum før undervisningen – hvad tænker I om det?	Being pressured to work harder before classes (student attitude)
4. Baggrunden for responspapirerne er bl.a. forskning, som viser, at en meget stor del af studerende på universiteter ikke læser pensum før undervisningen. Det er at lægge små opgaver forud for undervisningen, har vist sig at være en måde at forbedre forberedelse. Hvad tænker I om det? Har responspapirerne <u>faktisk</u> fået jer til at læse og forberede jer mere end i ellers ville have gjort?	Time spent on preparation
5. Det at give jer små obligatoriske opgaver, der demonstrerer at I har en vis viden om pensum, har haft til formål at gøre mere dybdegående læring mulig, når I kom til undervisningen, men kan I ikke diskutere hvornår I oplever I først og fremmest lærer noget? - når I læser tekster? - når I skriver tekster? - når I er til undervisning (og på hvilke tidspunkter i undervisningen?)	When is learning taking place?
6. Hensigten med respons-papirerne har været, at vi i undervisningen – i højere grad end hvis de studerende ikke havde læst – kan lave aktiviteter, som kræver at man har et vist niveau af viden. Tror I at aktiviteterne og diskussionerne i undervisningen (gruppearbejde, øvelser osv.) har haft et højere niveau, end de ville have haft, hvis ikke alle havde lavet responspapirer på forhånd?	Mandatory asignments prior to class leads to learning on a deeper level during actitivites in class.
7. Et meget overordnet formål med undervisning på universitetet er at støtte jeres udvikling ift. at blive 'independent eller 'self-regulated learners'. Et forløb som det I har været igennem, hvor undervisningen i høj grad har været styret, og hvor responspapirerne i høj grad har styret hvordan I har læst og forberedt jer – kunne man forestille sig at det hæmmer netop processen med at blive en selvstændigt tænkende akademiker, en 'self-regulated learner'?	Self-regulated learners: Too much structure prevent independent learning processes?
8. Når vi bruger mindre tid på at gennemgå stoffet, så får vi mere tid til gruppearbejde. Men fx ved midtvejsevalueringen var der et par stykker, som syntes at der næste var for meget gruppearbejde – der var også nogen, som syntes at det var passende. Hvad tænker I om det nu efter I har været igennem hele forløbet?	Reponse papers → more group work – Good or bad?
9. Har I tidligere prøvet at skulle aflevere noget på skrift før I blev undervist i stoffet? Hvordan fungerede det ift. dette format? (hvorfor/hvorfor ikke?)	Comparison with previous experiences
10. Her til sidst, vil I ikke diskutere hvordan I har oplevet den feedback I har fået på responspapirerne? Nogen gange har I fået kollektiv feedback og andre gange har I fået individuelle kommentarer – og andre gange har I ikke fået noget feedback, men jeg har bare brugt dem ift. at orientere mig i, hvad I havde forstået og ikke forstået…	Collective feedbac vs individual feedback on response papers.