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SDU

The Lecturer Training Programme

Development Project: Improving the report writing process in 1. semester Pharmacy

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The pedagogical challenge

In the 1. semester course "Pharmacy introductory course" at the Pharmacy education, the students have not previously written a scientific report at university level and experience the first 3 reports in "Pharmacy introductory course" as a difficult and confusing challenge. At the same time, the assessors of the reports receive reports which is understandable of somewhat low academic level and where sometimes the smallest formalities have not been adhered to. This usually results in the reports not passing, frustrating the students.

This have resulted in the reports being seen in a negative light, as a chore that must be passed or the students possibly have given up on it before the assessment.

Problem formulation

In my development project I wish to experiment with and study the effect of changing the first hand-in of each report from an assessment situation to a feedback situation, adding and instructing the students in the use of an assessment rubric and adding a peer review on the last report, before handing in the report for feedback and subsequent assessment.

To operationalise the problem formulation, I identified the following sub-questions:

- Can the introduction of assessment rubrics help the students to evaluate and improve their own reports?
- Can the introduction of peer review help the students improve the quality of writing?
- Can exercise classes, where the students use the rubrics to assess report examples contribute to the students using the rubrics on their own reports?
- Can the shift in the first hand in of each report from assessment to feedback, improve the students experience with writing reports?

Learning objectives

Course Learning Goals

- Give the competence to apply study and learning strategies to organize their own learning in relation to intended learning outcomes, learning activities and assessment tasks.
- Give the skills to establish working relations with fellow students and describe their own role as an active participant in the study program's social and academic activities.

- Give knowledge and understanding of concepts and principles in selected analytical methods described in pharmacopeia monographs.
- Give knowledge and understanding of the selected methods applicability and knowledge of potential errors related to these methods.
- Give knowledge and understanding of GLP.
- Give knowledge and understanding of substances water solubility.
- Give skills to handle analytical laboratory equipment such as analytical balance, volumetric flask, pH-meter, burette, UV-spectrophotometer, TLC plate ect.
- Give skills in GLP including to conduct laboratory notebook.
- Give skills to suitable pipetting, including function check and calibration.
- Give skills to calculate substance concentrations and dilution factors used to perform fx. stock solutions and standards that are used for drawing and application of standard curves.
- Give skills to calculate the precision of the applied quantitative procedures.
- Give skills to identify and determine concentrations of single compounds in solution by titration and by spectrophotometry.
- Give skills to prepare a detailed protocol for simple volumetric and gravimetric methods according to the description in monographs from pharmacopoeias.
- Give competences to discuss Ph. Eur's requirements to accuracy and precision related to the applied procedures including the basic single operations (fx. weigh, and volumetric measure of the single operations).
- Give competences to discuss issues in relation to regular analysis of drug substances/drugs.
- Give competences to independently plan and perform regular analytical laboratory experiments according to the laboratory security regulations and competences to document results according to the course guidelines in report writing.
- Give competence to be involved in workflows where focus is on GLP

Development project learning goals

My initiatives are designed to give the students the competencies to organize their own learning in relation to the intended learning outcomes and assessment tasks and to document laboratory results according to the course guidelines in report writing.
The assessment rubric is described by several in the field of assessment in higher education as a useful tool for grading and guiding students writing, but only when they have been instructed in the use of the rubric [1, 2]. Therefore, the students are instructed in an exercise class in using the rubrics on report examples, where they are grading the examples as part of active learning [3, 4] and made aware that their reports are graded similarly.
Each report they write can be handed in for feedback from the assessors and a chance to refine the report, before the assessment to close the gap between what they know and what we expect [5, 6] according to the course guidelines in report writing. For the last report they perform peer review for each other, to try to organize their own learning in accordance with the intended learning outcomes without needing teacher feedback and improve their understanding of the course guidelines in report writing [7-9].

Results from data collection methods and evaluation

The data I collected for the evaluation of the project was the assessment statistics of the reports from the students before and after the rubric/exercise class was introduced, so this year the assessment of the reports

was compared with assessments of reports from earlier years, and student surveys. A student focus interview was considered, but my own time did not allow for it due to considerably teaching responsibility.

The assessments of the reports were collected throughout the semester, and the surveys was held subsequent each feedback round from the reports.

The report assessments this year was collected as they were handed in, while reports from previous years was collected by looking at assessment statistics from the 2018 and '19 classes. The 2020 class was excluded due to missing data (transference from one online platform to another), significantly different assessment method and the COVID-19 pandemic. The survey was sent to the students via ItsLearning as a link to the surveys, written in Microsoft forms. The data was then converted and processed in Excel. In the first survey, only 9,8% of the students had answered. This rose to 12,7% in the second survey and fell to 11,8% for the last survey (n=102). This is a very low response rate, which can induce sampling bias [10].

The activities were be evaluated on whether the reports show an improvement in their implementation defined as how many assessments was necessary before a passing grade, and what the students perceived as the best learning tool for writing the reports.

The data will be presented at TAL 2022 and for either the pharmacy group or the whole KEFA section at FKF, whichever is possible.

Carrying out your initiatives and evaluation

Firstly, a lecture was held about the reports, what the formalities were, what each heading entailed, how many pages was allowed and how the assignment was framed (one hand-in to get feedback and one hand-in for final assessment). This went very well, although the amount of allowed pages caused some commotion. This was, however, foreseen, as they were used to a much larger page count in the gymnasia. Here, calmness and reassurance from the teacher, while still being firm on the conditions, is key [9].
Afterwards, the students received anonymized parts of reports (3 versions of an introduction, 3 versions of data processing, etc.), before the first exercise class devoted to report writing. In the first hour of the class, the students were then asked to go into their study groups to evaluate, with the assessment rubric as their guide (appendices 1), whether the part could pass and why/why not. This they had to write into online questionnaire anonymously, which we then went through in the second hour. In hindsight, the first part done in study groups could have been delegated to their devoted study group time (part of the study start course), which would have given them more time for the evaluation and writing feedback. We could then have devoted 2 hours with a teacher for a deeper discussion of why a part of the report does/does not pass, based on the assessment rubric. Furthermore, I would reduce the number of versions, or divide the groups to only look at the 3 versions of the same part of the reports, thereby lowering the workload, but still showing them what a difference there can be while still passing [1, 3, 4].

The second exercise class devoted to report writing, was to give the students a framed period dedicated to writing their individual reports, with possibility of getting help from an instructor. In this class, most students had problems with processing their data and the instructor helped them all individually with basically the same problems. To make this class more effective, I might change it, so it is more dedicated to general data processing, starting the exercise class by asking which part of the data processing the students have problems with and then go through these parts in plenum: Why is this done and how? What should we be aware of here?

Finally, the students would hand in their reports for feedback and then assessment. They would get about a week from finishing the lab exercise, to the deadline for the first hand-in (feedback). They were encouraged to hand-in, even if the report was only partly finished, so they at least to receive a little feedback [5]. The feedback was then given within a week (ideally), by the assessors and the students then had a week after they received the feedback (all at the same time) to make the changes and hand-in for final assessment. The reports would then (again ideally) be graded within a week. To manage this, all instructors in the course must be an assessor who gave feedback and assessed reports. However, there was quite a difference in, how much each instructor gave feedback and how instructive It was. And even though the instructors were instructed in using the assessment rubric, it varied whether they did, and whether they send the report back with the rubric. This turned out to be problematic, as the students who did not receive a rubric for their report, did not know what was enough and what needed to be improved in their report. This shows that the next step is better alignment of the assessors: How much and what type of feedback is expected, how to use the assessment rubric and that it should always be given with the report [1, 2]. Both in the feedback phase, but also the assessment phase.
For the last report, the students had to give each other peer feedback, before the report was handed in for feedback from the instructors. First a lecture was held about what peer feedback was, why it is important and how to give constructive criticism, with some hands-on exercises. Afterward, the students then received their peers reports through ItsLearning. It went generally well, although the level of feedback varied vastly on the students. I had somewhat anticipated this, which was also why they had performed peer review on 3 reports and received feedback from 3 of their fellow students. Which reports they should give feedback on and who they received feedback from, was randomized. I also made it possible for the students to give feedback and receive anonymously, to encourage participation without judgement and reducing bias. This meant that ItsLearning did not tell, who you gave feedback or who you received feedback from, but the students themselves could, if they choose, still hand in reports with their name and give their name in the feedback. This choice was also made clear in the lecture about peer feedback. About 8% did not participate, which was a little more than the students who did not hand-in for the instructor feedback for the same report. A consideration here is to make it obligatory, although that would reduce the student's self-determination.

The students indicated in the evaluation (appendices 2), that the exercise classes did somewhat make it clear, what was needed for their report could pass. Interestingly, some students disagreed as to whether it was the class where they evaluated the examples, or the class where they would be writing their own reports, that was most helpful. This tells me, that both types of classes should stay, since some students get more out of one type than the other. 1 respondent would like a more in-depth explanation of what should have been improved in the examples, which would be possible with the changes I have considered. Another respondent would have preferred actual copies of earlier passed reports in the same topic. In the course, the students receive an exemplar report [3], but not a earlier passed report. This is in part due to GDPR and in part due to earlier experience of plagiarism from the students.
The survey also indicated, that even though the assessment rubric was somewhat useful for the students, it was the report template that was most helpful. This might be due to the inconsistency in whether they would receive the filled-out rubric with the feedback to their report and should be investigated further [2]. This is also supported by the answers to the question: "what can be done to improve the assessment rubric", where students primarily want a more consistent use of the rubric and more similar feedback style. As for the template, the most requested improvement is that it tells the student how much each of the parts must fill and the secondary is how to cite correctly and make a reference list. I have planned to make or find some instruction videos specifically for the citation and references. As for the amount each part should fill is harder, but I am going to consider general guidelines [2, 9]. As for the student evaluation about the peer feedback, the students also indicate that this helped them in improving their own reports, either from reading other

students' reports or due to the feedback they received on their own. Not as much as the report template, but still more than any of the exercise classes. Several of the students also wish for more peer feedback, writing that they would like it for all their reports in the course. This is interesting, considering that the feedback the year before was, that the students found it as an extra burden. It should also be added, that in the previous year, there was no additional instructor feedback. Due to the workload in the course, I would not increase the amount of peer feedback here. I would however look to collaborate with the later pharmacy courses to implement peer feedback on reports in their courses.

When comparing the quality of the reports as defined in which assessment attempt that the students get a passing grade, the most students passed the first assessment in 2021, compared to 2018 and 2019 (table 1).

Table 1: Percentage of reports which passed at the first, second or third assessment; percentage of not passed reports and absent reports. Data for report 1 in 2018 is absent due to incomplete registration in my first year of teaching, which may also have inflated the number of not passed students in the same year. 3. Assessment in 2021 is different from the 3. Assessment in 2018 and '19, as it is a reexam.

	2018 (n=77)		2019 (n=99)			2021 (n=102)		
	report 2	report 3	report 1	report 2	report 3	report 1	report 2	report 3
1. assessment (%)	3.9	1.3	5.1	5.1	5.1	67.3	62.4	74.3
2. assessment (%)	48.1	57.1	63.6	70.7	72.7	18.8	16.8	11.9
3. assessment (%)	31.2	11.7	25.3	11.1	10.1	5.0	7.9	3.0
Not passed (%)	6.5	6.5	0.0	3.0	2.0	3.0	5.9	3.0
Not handed in (%)	6.5	9.1	5.1	10.1	10.1	5.0	5.9	5.0

This is most likely due to the fact, that the first assessment in '21 is the second hand-in of the report, after the feedback round, while the first assessment in '18 and '19 was without feedback. If we instead compare the percentage of passed reports in the first assessment form '21, with the percentage of passed reports after second assessment in '18 and '19, they are a lot more equal. In comparing the 2. assessment in '21 with the 3. assessment in '19; the percentage of passed reports is also higher in '21, with exemption to report 1, where it is higher in '19. The 3. Assessment in '21 differed from the 3. Assessments in '18 and '19, by being a reexam instead of a third assessment in the first exam. In this reexam, only 15 out of the 22 students who had not passed 1 or more reports, or had not handed in, had registered. This results in the low passing percentages. When the percentages in the 3. Assessment is corrected to only reflect the number of students registered, there was in total 60% who passed and 40% who either didn't pass, was did not hand in or a combination of both. Meanwhile, the '19 reports have barely anyone that did not pass, unless they did not hand in. This is in part due to the COVID-19 situation, as reports 2 and 3 was actually graded in spring '20, and the then responsible teacher ruled that basically all reports must pass, unless they did not do any improvements between assessments or had not handed in.

In the end, the percentage of passed reports between '19 and '21 does not indicate a clear improvement in the writing skills of the students. However, there have not been complaints about nobody passing the first assessment, which was the base for including the assessment round. Furthermore, the assessment rubric has also made it more clear for the students and the assessors, when a report could pass and when it could not, which can possibly also have increased the number of reports that could not pass in the first 2 assessment rounds in '21. This only makes is clearer, that better implementation of the assessment rubric in both the students and assessors minds and improving the feedback from the assessors to the students is the next step to improve the students' abilities to write reports.

Conclusion

Throughout this development project, it has been shown that the assessment reports do make it clearer for the students where their reports are lacking, although it requires that the assessment rubrics is used consistently by the instructors and is filled out for the student as part of the feedback on each report. The exercise classes, where the students should use the assessment rubric on report examples was in the evaluation indicated to be helpful, but that more in depth discussion of what improvements should be done on each example was needed. Furthermore, the students who did participate in the evaluation, answered that the peer review helped them evaluate the quality of their own reports, although whether it was from reading others reports or getting the feedback differed. Finally, the evaluation indicated, that the students was happy with handing in the reports for feedback first, before they handed the report in for assessment, although it was also dependent on the instructor giving the feedback and the amount of feedback that they received.

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Appendices 1: Assessment Rubric

Guide til læsning af Vurderingsrubriksen:

1. **Rækkerne "Formattering af rapporten" og "Referencehåndtering" gælder for hele rapporten. Resten af rækkerne hører specifikt til det givne afsnit i rapporten.**
2. **Alle punkter i en række skal være tjekket af i kolonnen acceptabelt, før der kontrolleres om en eller flere af punkterne i kolonnen "overbevisende" også opfyldes.**
3. **For at en rapport kan godkendes, skal 80% af punkterne i kolonnen "acceptabelt" som minimum være opfyldt.**

Vurdering af rapport			
Læringsaktivitet:	Ikke acceptabelt	Acceptabelt	Overbevisende
Formattering af rapporten	• Skrifttype og -størrelse ændrer sig i brødteksten. • Der er ingen overskrifter. • Nummerering af figurer eller tabeller mangler. • Der mangler henvisniger til tabeller eller figurer i teksten.	• Skrifttype og størrelse holdes ens i brødteksten. • Alle afsnit har overskrifter • Alle figurer og tabeller er nummereret. • Der henvises til tabeller og figurer i teksten.	• Alle overskrifter er tydelige. • Der er figurtekst under alle figurer og tabeltekst over alle tabeller med korrekt nummerering. • Teksten er flettet rundt om figurer og tabeller, hvor relevant.
Referencehåndtering	• Der er ikke brugt nogen kilder. • Der er ikke henvist i teksten til nogen af kilderne. • Henvisningen i teksten er en fodnote. • Referencelisten indeholder ingen informationer eller er ikke eksisterende.	• Pensum og den relevante farmakopé bruges some kilder. • Der henvises til kilden i teksten, mindst 1 gang hvor den er brugt. • Henvisningen er ikke en fodnote. • Referencelisten er overskuelig og indeholder de vigtigste informationer.	• Der bruges mange varierede og pålidelige kilder. • Der henvises til kilden i teksten, hver gang den er brugt. • Alle henvisninger er korrekt formatteret efter Vancouverstandarden.
Introduktion og teori	• Læseren er i tvivl om, hvilken teori der bruges og hvorfor den er relevant. • Teorien er ukorrekt eller med mange misforståelser. • Molekylestrukturer og reaktionsligninger mangler eller er ikke korrekt afstemt. • Ingen relevante efterbehandlingsspørgsmål er besvaret	• Læseren forstår hvilken teori der bruges i øvelsen og hvorfor. • Teorien er overvejende korrekt med kun få misforståelser. • Alle molekylestukturer og reaktionsligninger er korrekt skrevet op og afstemt. • Alle relevante efterbehandlingsspørgsmål er besvaret.	• Læseren forstår hvorfor øvelsen er vigtig. • Teorien er korrekt uden nogen misforståelser.
Formål	• Formålet med rapporten er ikke er relevant i forhold til rapportens introduktion.	• Formålet med rapporten er relevant ift. rapportens introduktion.	• Formålet med rapporten er relevant ift. rapportens introduktion og kort forklarer hvordan målet opnås.
Materialer og metode	• Materialelisten indeholder ingen eller kun få af de brugte materialer. • Intet udstyr er angivet med deres størrelse (feks. ml).	• Materialelisten indeholder de vigtigste brugte materialer. • Noget udstyr er angivet med deres størrelse (f.eks. ml).	• Materialelisten indeholder alle brugte materialer. • Alt udstyrer angivet med deres størrelse (f.eks. ml og tilhørende afvigelser.

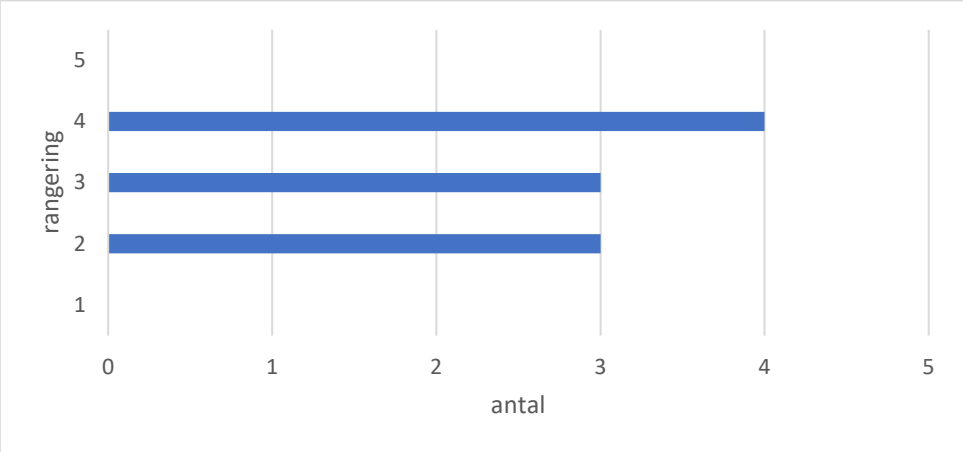
	• Metoden er skrevet så detaljer mangler og/eller ikke kan følges skridt for skridt. • Metoden er skrevet i punktform. • Metoden er skrevet i nutid.	• Metoden er skrevet så udførligt, at man kan følge den skridt for skridt. • Metoden er skrevet kort og præcist på essay-form i s-passiv.	• Metoden er skrevet så udførligt, at man kan følge den skridt for skridt. • Metoden er skrevet kort og præcist på essayform i datid.
Databehandling	• Der mangler beregninger. • Beregningerne bruger de forkerte formler og/eller enheder. • Der er ikke taget højde for antal betydende cifre.	• Alle beregninger er vist 1 gang og er kort forklaret. • Alle beregninger bruger de korrekte formler og enheder. • Alle tal er vist med ens antal betydende cifre.	• Alle gentagne beregninger er kort forklaret i tekst. • Alle beregninger kommer i den logisk korrekte rækkefølge (hvis en koncentration skal bruges til en videre beregning, skal koncentrationsberegningen vises først). • Alle tal er vist med korrekt antal betydende cifre.
Resultater	• Der mangler resultater. • Rådata og behandlede data præsenteres som resultater. • Resultatet er kun baseret på 1 datasæt	• Alle resultater er præsenteret med forklarende tekst. • Enkelte behandlede data kan være præsenteret. • Resultatet er baseret på 3 datasæt • Resultatet består af et gennemsnit ± standardafvigelse	• Alle resultater er præsenteret kort og præcist, med lidt forklarende tekst. • Der er ingen rå- eller behandlede data præsenteret • Resultatet består af det antal datasæt som er angivet i øvelsesvejledningen
Diskussion	• Der er ikke taget udgangspunkt i rapportens teoriafsnit. • Der er mangler kritisk stillingstagen til fejl eller usikkerheder og deres betydning for resultatet. • Der er ikke taget stilling til, hvad resultaterne betyder ift. rapportens formål. • Ingen relevante efterbehandlingsspørgsmål er besvaret.	• Der tages udgangspunkt i teorien, som forklaret i rapportens teoriafsnit. • Nogle relevante fejl og usikkerheder i metoden og udførslen er gennemgået. • Der tages stilling til, hvad resultaterne betyder i forhold til rapportens formål. • Alle relevante efterbehandlingsspørgsmål er besvaret.	• Alle relevante fejl og usikkerheder i metoden og udførslen er kritisk gennemgået og der tages stilling til, hvad dette betyder for resultatet. • Der bruges eksterne kilder, som understøtter forklaringerne der angives.
Konklusion	• Der Introduceres ny viden • Konklusionen mangler eller er ikke relevant i forhold til formålet.	• Beskriver hvad rapporten er kommet frem til. • Ingen ny viden præsenteret. • Er relevant i forhold til formålet	• Beskriver kort og præcist, hvad rapporten er kommet frem til. • Der er ingen ny viden præsenteret. • Kan læses i forlængelse af formålet.
Bilag	• Sikkerhedsbladet er ikke med eller kan ikke læses. • Der mangler rådata.	• Sikkerhedsbladet er med og i læsbar størrelse. • Alle rådata er stillet læsbart op i tabeller.	• Sikkerhedsblad er pænt scannet ind og i læsbar størrelse

	• Rådata er stillet op, så man ikke kan identificere hvad de skal bruges til. • Øvelsesprotokollen er ikke med eller kan ikke læses.	• Der er rådata fra mindst 3 forskellige grupper. • Øvelsesprotokollen er sat ind og i læsbar størrelse.	• Alle rådata er stillet læsbart op i tabeller efter deløvelse. • Øvelsesprotokollen er pænt scannet ind og i læsbar størrelse

Appendices 2: Student Evaluations

Evaluation for Report 1 (10 respondents out of 102):

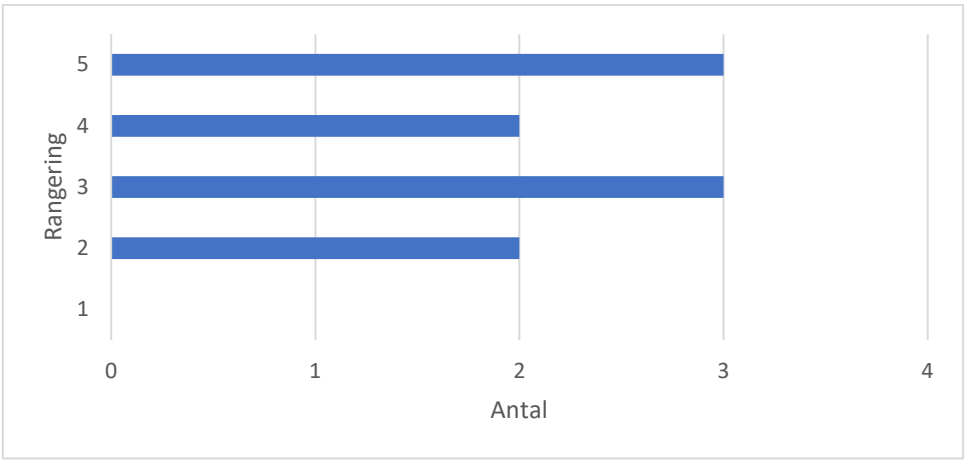
På en skala fra 1 til 5, hvor 1 er værst og 5 er bedst, hvor godt mener du at E-timen hvor man vurderede rapporteksempler gjorde dig opmærksom på, hvad der skulle til for at rapporten kan godkendes?



Nogen forslag til forbedring af E-timen?

- *"Et eller flere eksempler på den rapport vi skulle aflevere om tartrazin"*
- *"Vi vurderede de her eksempler på tekster, men tror det kunne havde været bedre hvis vi diskuteret konkret hvordan det kunne forbedres og ikke bare overordnet set. Det var også mange eksempler vi gennemgik, så det kan også være derfor vi ikke kom i dybden. Vi kunne eksempelvis læse en dårlig tekst og vi sammen i de her grupper skriver teksten om, og til sidst sammenligne vores tekst med hvordan teksten ideelt skal se ud."*

På en skal fra 1 til 5 (1 er værst, 5 er bedst), hvor godt følte du at vurderingsrubriksen guidede dig i rapportskrivningen?



Nogen forbedringsforslag til vurderingsrubriksen?

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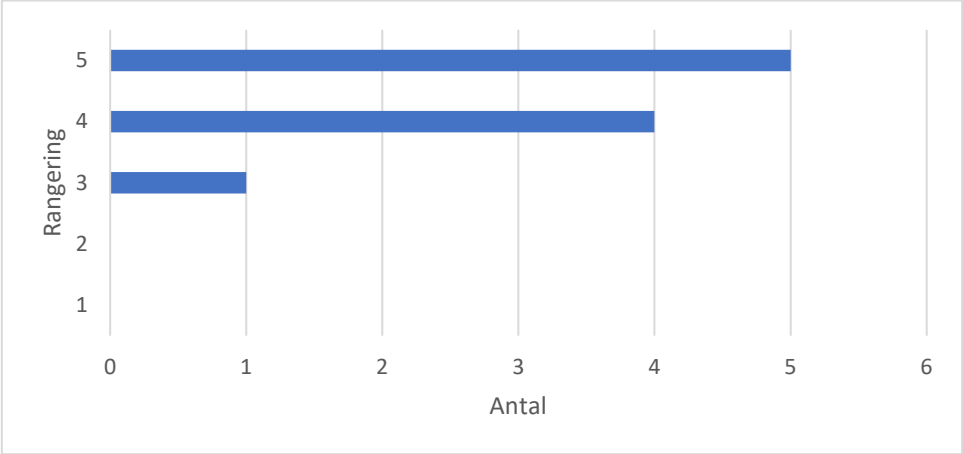
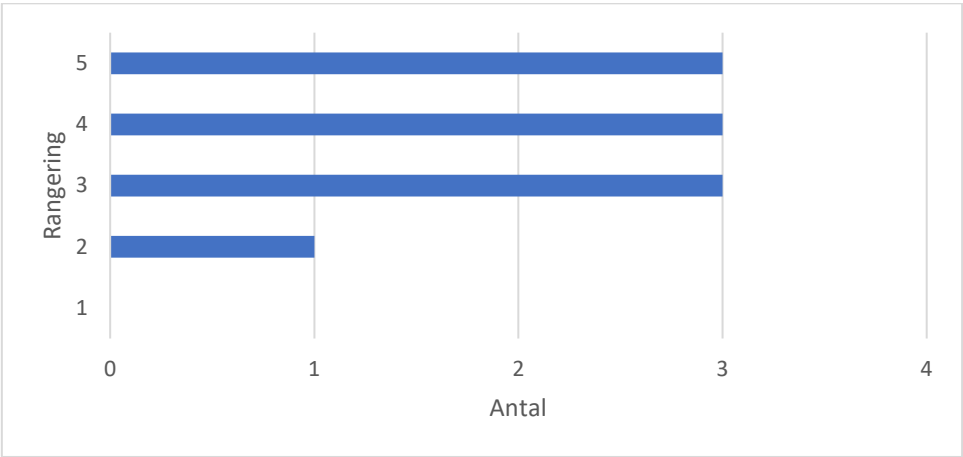
På en skala fra 1 til 5 (1 er værst og 5 er bedst) hvor godt følte du at rapportskabelonen guidede din rapportskrivning?



Nogen forbedringsforslag til rapportskabelonen?

- *"Noget med hvor land de forskellige dele af rapporten forventes at fylde"*
- *"Hvis guidning til regning og deres formål ifht. rapport."*

På en skala fra 1 til 5 (1 er værst og 5 er bedst), hvor godt følte du at forelæsningen om rapportskrivning støttede op om rapportskrivningen?



Nogen forbedringsforslag til forelæsningen?

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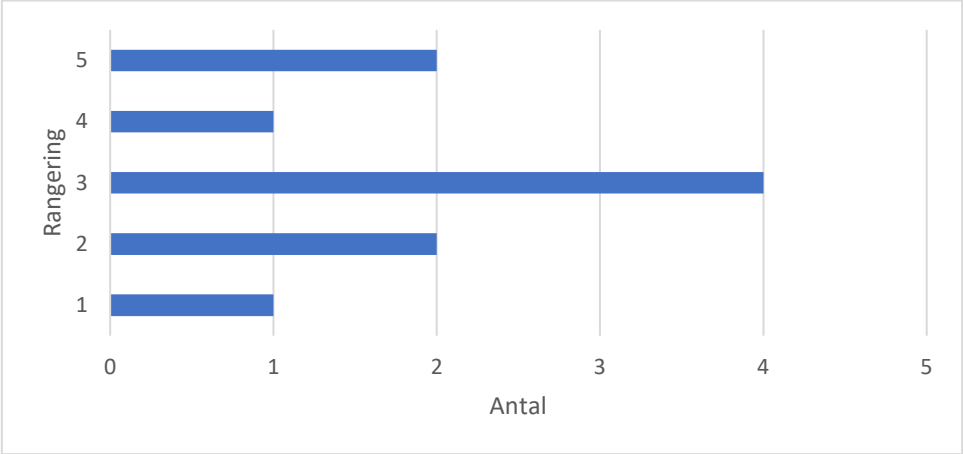
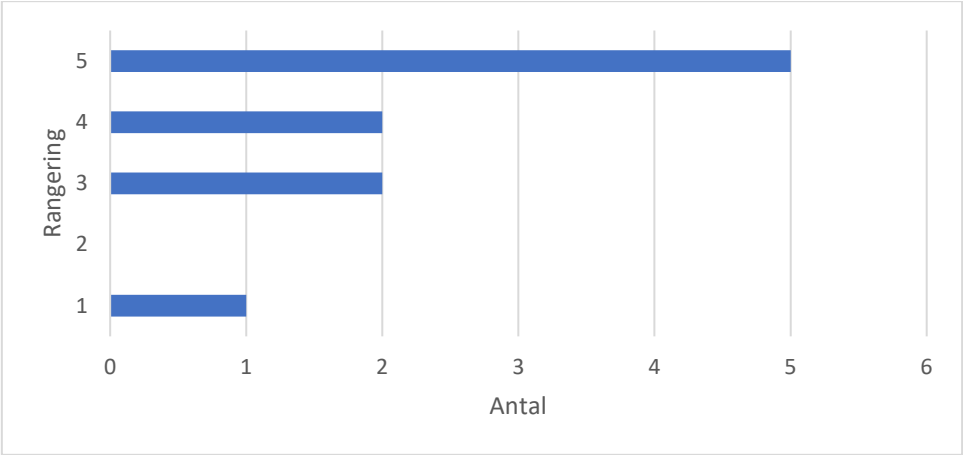
På en skala fra 1 til 5 (hvor 1 er værst og 5 er bedst), hvor meget følte du det hjalp at have en E-time til at skrive rapport i?



Nogen forbedringsforslag til E-timen hvor man skriver rapport?

- *"Jeg ved godt det ikke er spørgsmålet, men det var så fint med obligatorisk time til udregningerne, men til rapportskrivning foretrækker jeg mine egne rammer. Herhjemme i ro skriver jeg bedst"*
- *"Synes at, man kan hjælpes lidt mere."*
- *"kunne det være super fint hvis instruktur gennemgår udregning og deres formål til hele klassen og ikke individual. Fordi nogen som mig har ikke gruppen og føler man isoleret! Derfor har jeg ikke lyst til at deltage i E-Timen,Selvom jeg har bruge for den. Desuden man vil blevet klaret til skrive rapport og ikke bliver stressenede mere."*

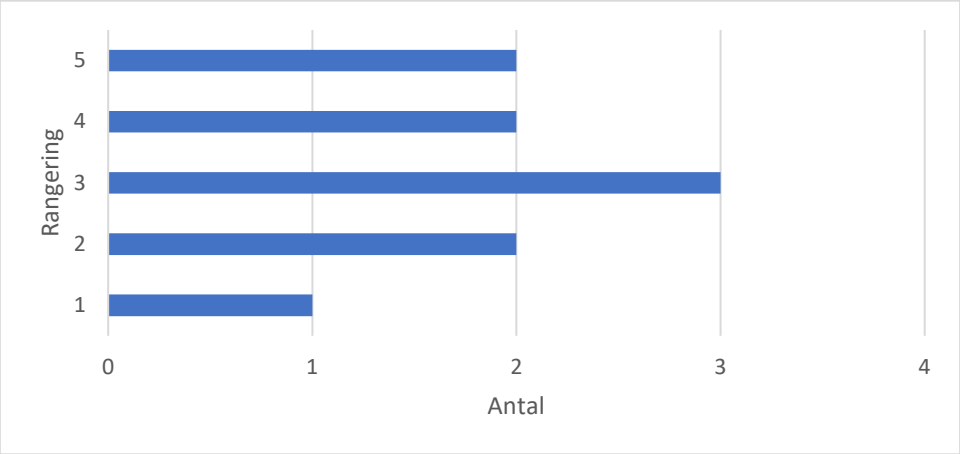
På en skala fra 1 til 5 (1 er værst og 5 er bedst), hvor hjælpsom har du fundet feedbacken du har fået til rapporten inden afleveringen til endelig bedømmelse?



Nogen forbedringsforslag til feedbacken?

- *"Hellere 2x feedback, det er en stor hjælp"*
- *"Når jeg kombinerede feedbacken med de andres, var det fint. Men synes de fleste der rettede fokuserede lidt på forskellige ting, så det var svært at vurdere hvad der egentlig skal til for at bestå rapporten."*

På en skala fra 1 til 5 (hvor 1 er nemt og 5 er svært), hvor svært har du, rent fagligt, haft ved at skrive rapporten?

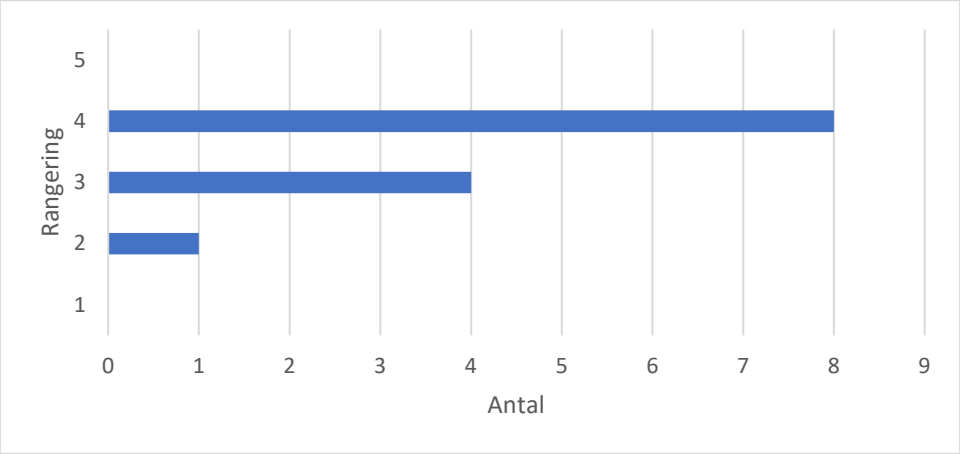


Hvad er din største "Aha"-oplevelse (den oplevelse, man kan have, når man pludselig får idéen til løsning af et problem eller opnår en ny erkendelse) ved at skrive rapport 1? Eller hvad bed du mest mærke i omkring undervisningen/skrivningen af rapport 1?

- *"Min Aha oplevelse var under rapportskrivning var da jeg fandt ud af, hvordan standardkurven laves."*
- *"Hvordan kravene til rapporten gjorde det nemmere at skrive den."*
- *"Undervisningsvideoer"*
- *"Hvor stor en betydning præcision egentlig har."*
- *" Gennemgår offentligt :)"*
- *"min største aha var, da jeg har set forelæsnings video. Videoen var en store hjælp til at skrive teori afsnit."*
- *"Da jeg læst mange artikler og bøger om UV-vis og tartrazin"*
- *"Diskussion skrivning"*
- *"Rapportskabelonen hjalp meget ift. skrivningen af rapport 1, idet man får et overblik over hvordan rapporten skrives og opstilles."*

Evaluation for Report 2 (13 respondents out of 102):

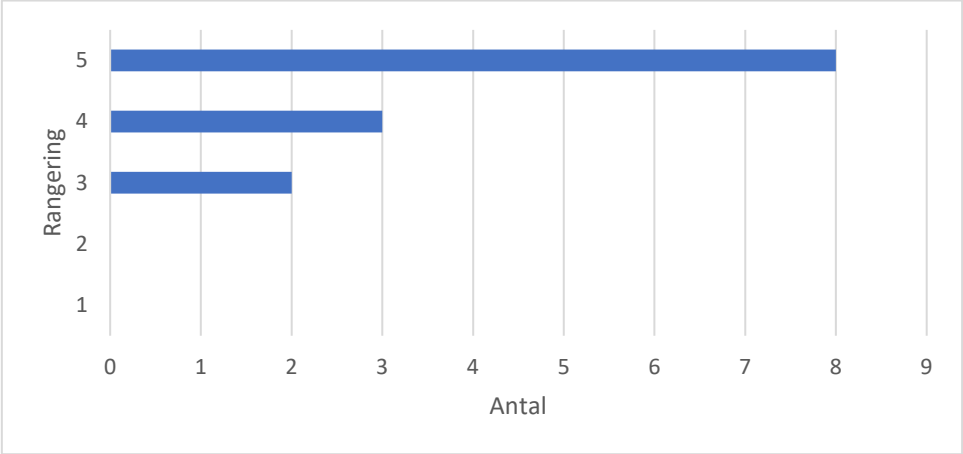
På en skala fra 1-5 (hvor 1 er værst og 5 er bedst), hvor godt føler du at E-time opgaverne har forberedt dig til at skrive rapport 2?



Har du nogen forslag til at forbedre E-timerne?

- *"Det var meget kludret og svært at kunne dele rapporterne, da både farmaci havde rapport 2 og 3, samt grundlæggende kemi også havde afleveringer ift. rapporter, så lidt uoverskueligt."*
- *"Det ved jeg ikke"*
- *"Der er meget selvstudie i e-timerne i forhold til de andre kurser. Det kunne med fordel være godt hvis holdet tog det op i fællesskab, hvis man havde svært ved at forstå et spørgsmål"*
- *"De kunne måske lægges lidt bedre, vi har været lidt uheldig at nogle af vores E-timer, som lærer os hvordan vi udregner ting til LAB, har lagt efter selve LAB"*
- *"Mere vejledning ift. Farmakopéen (indvinklet at finde rundt i) og fælles gennemgang af typeopgaver."*
- *"Noget der ville fungere godt, ville være at man gennemgik nogle af opgaverne fælles. Det har hjulpet rigtig meget i nogle af de andre kurser."*
- *"Nej"*
- *"Ikke umiddelbart"*

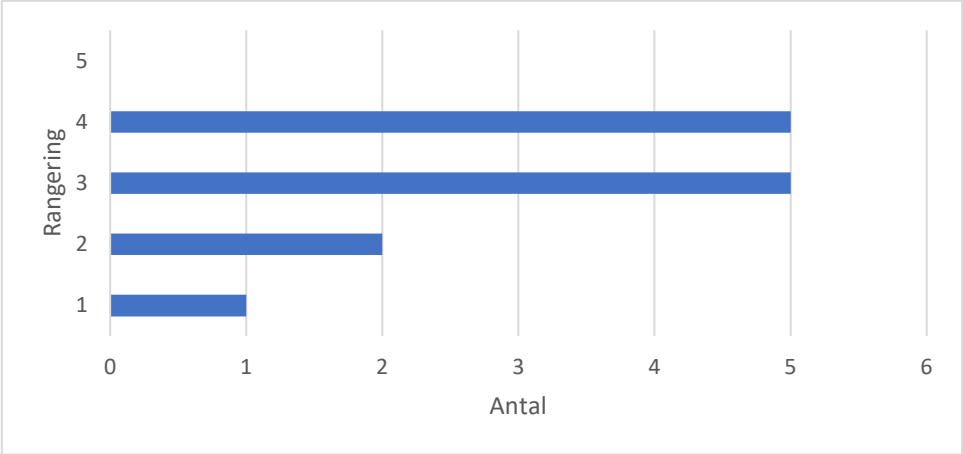
På en skala fra 1-5 (hvor 1 er værst og 5 er bedst), hvor godt føler du at rapportskemaet har hjulpet dig med at skrive rapport 2?



Har du nogen forslag til at forbedre rapportskemaerne?

- *"Bare lidt mere generelt, tror jeg stadig folk er forvirret over hvor meget der skal stå i databehandling."*
- *"Nej det har jeg ikke"*
- *"Evt. formler der skal bruges, ellers er skemaerne meget gode."*
- *"Nej, det giver en god forståelse for, hvad man skal huske at have med."*
- *"Under referencer at lave et eksempel på hvordan man helt korrekt henviser til Farmakopeen"*
- *"Ikke umiddelbart"*

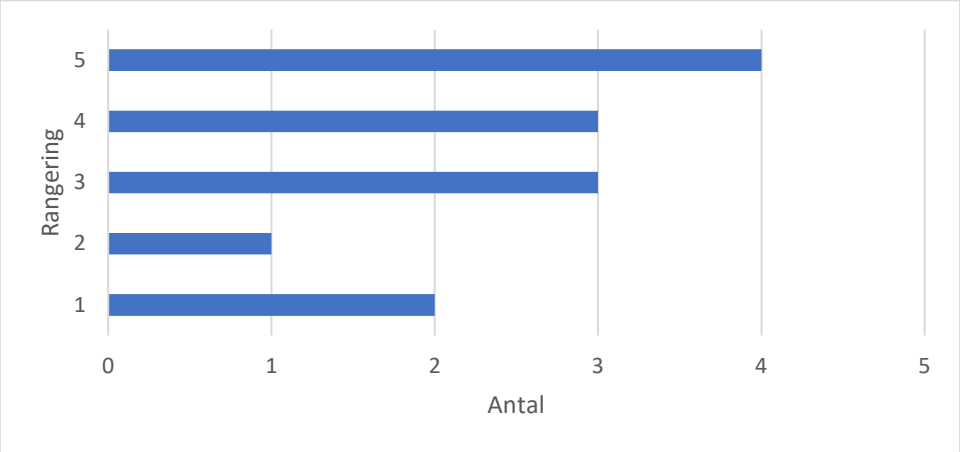
På en skala fra 1-5 (hvor 1 er værst og 5 er bedst), hvor godt føler du at vurderingsrubrikken har forberedt dig til at skrive rapport 2?



Har du nogen forslag til forbedringer af vurderingsrubrikken?

- *"Alle instruktor osv., retter forskelligt dermed også forskelligt hvor meget rubrikken bruges."*
- *"Nej"*
- *"Det virker lidt træls at såfremt der er noget som er uacceptabelt, så der ingen steder der kan vurderes overbevisende."*
- *"Nej"*
- *"Det er måske lidt svært at vurdere hvad der skal rettes i sin rapport, når feedback gives gennem vurderingsrubrikken."*

På en skala fra 1-5 (hvor 1 er værst og 5 er bedst), hvor godt føler du har feedbacken du fik til rapport 1 har hjulpet dig med at skrive rapport 2?

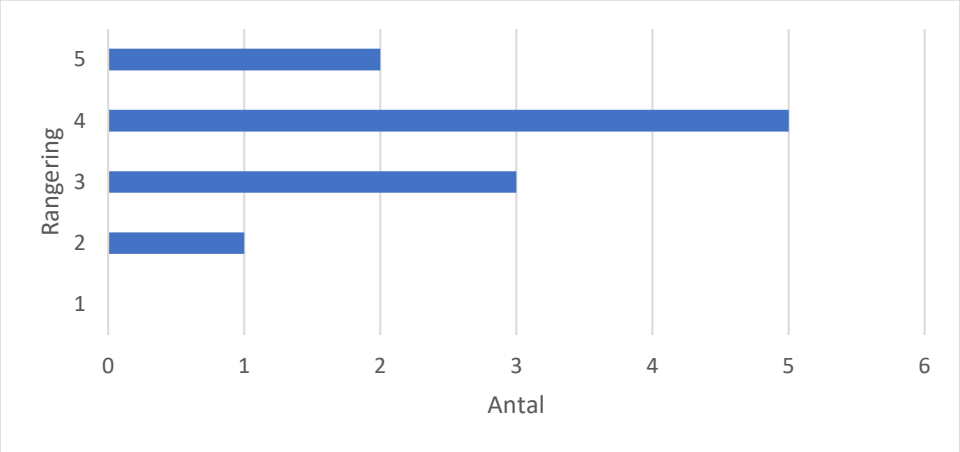


Har du nogen kommentarer til hvor godt du føler at feedbacken til rapport 1 har hjulpet dig med at skrive rapport 2?

- *"Det er okay, det er stadig svært, eftersom det ikke er samme person der retter, og dermed lægger de vægt på forskellige ting når der skal rettes."*
- *"Feedback var meget god, den var brugbar i alle resterende rapporter"*
- *"Man bliver mere bevidst om selv de små fejl, hvilket var ret svært i rapport 1"*
- *"De forskellige instruktor rette rapporter på hver deres måde og det kan være virkelig forvirrende for os der skriver rapporterne"*
- *"Peer Review er klart det bedste. Det virker bare. Gerne meget mere af det."*
- *"Der er meget stor forskel på, hvad de forskellige instruktorer ønsker, når man skal skrive en god rapport. Jeg har oplevet at få mange kommentarer i rapport 2, ved steder, hvor jeg har tilpasset mig den forrige instruktors ønsker. Derfor finder jeg det lidt udfordrende at blive klog på, hvordan man skriver en god rapport. Her kunne det være rart, hvis der var lidt flere ting, man var fælles om, når man retter. Bl.a. ift. layout og skrivemåde."*

Evaluation for Report 3 (11 respondents out of 102):

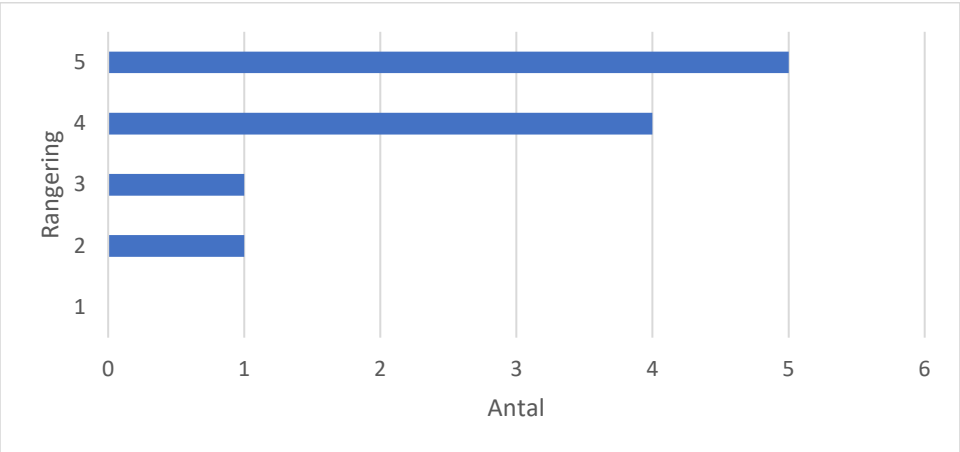
På en skala fra 1-5 (hvor 1 er værst og 5 er bedst), hvor godt føler du at E-time opgaverne har forberedt dig til at skrive rapport 3?



Har du nogen forslag til at forbedre E-timerne?

- *"At undervisere gennemgår opgaverne"*
- *"desværre var H3 så uheldig at E-timen der forbredde os til lab og rapporten kommer efter lab, dermed har den selvfølige hjulpet med forstå udregningerne bedre, men der må gerne så vidt det er muligt være mere fokus på at lægge E-timerne så de er inden lab."*
- *"at uddybe øvelses løsninger mere tydeligt."*
- *"at gøre besvarelse mere tydeligt, og uddyber øvelserne løsning."*
- *"Nej"*

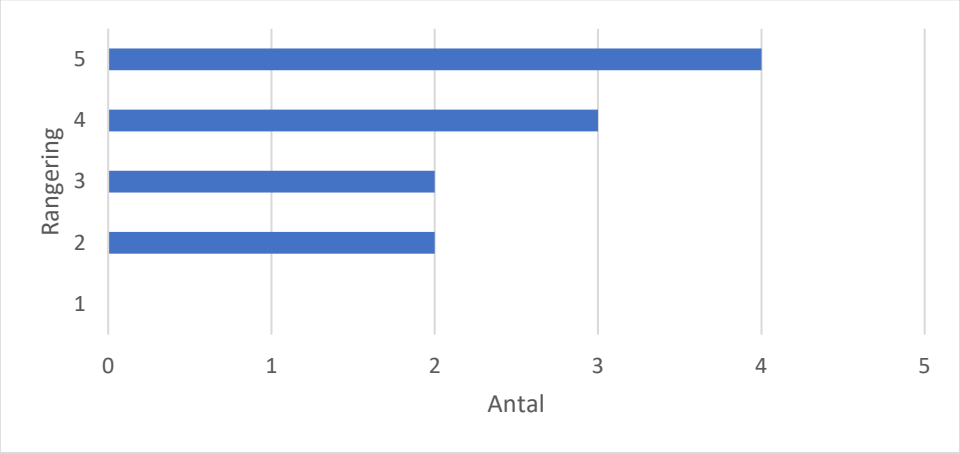
På en skala fra 1-5 (hvor 1 er værst og 5 er bedst), hvor godt føler du at rapportskemaet har hjulpet dig med at skrive rapport 3?



Har du nogen forslag til at forbedre rapportskemaerne?

- *"Nej"*
- *"at give klare informationer om kravene"*
- *"at give klar og specifik informationer om hvad der kræves."*
- *"Det kunne være en god ide, at vise en korrekt henvisning til Farmakopen - det får alle nemlig brug for"*

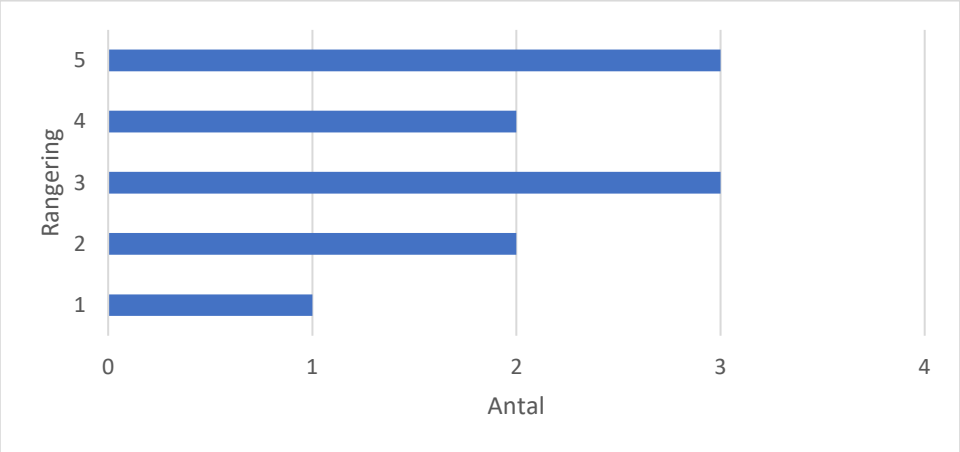
På en skala fra 1-5 (hvor 1 er værst og 5 er bedst), hvor godt føler du at vurderingsrubrikken har forberedt dig til at skrive rapport 3?



Har du nogen forslag til forbedringer af vurderingsrubrikken?

- *" nej, det er meget godt."*
- *" nej, det passer godt"*
- *" Nej"*

På en skala fra 1-5 (hvor 1 er værst og 5 er bedst), hvor godt føler du at peer review (både at give og modtage) har hjulpet dig med at skrive rapport 3?



Har du nogen forslag til at forbedre peer reviewet?

- *"Mere læsning"*
- *"Jeg syns peer review var en god ide, fordi så blev mange af ens "dumme" fejl fjernet. Det eneste der var lidt træls, var at det ikke var alle som var lige gode til at give feedback, så det var godt at mange fik feedback af 3 forskellige"*
- *" Det har fungeret fint men måske der havde været bedre at bruge denne mulighed fra den 1. eller 2. rapport. Jeg har haft der bedre at forstå mine fejl da jeg har fået konstruktive feedback fra de andre elever og jeg har forstået meget bedre mine alle mine fejl da jeg har set de rapporter fra de andre elever."*
- *"at anvende denne teknik hver gang vi indsender en rapport og på denne måde får vi bedre evne til at vurdere andres rapporter."*
- *"at have en rapport til peer reviewed, i enhver gange er der en rapport skal vi afleveres,"*
- *"Nej"*