

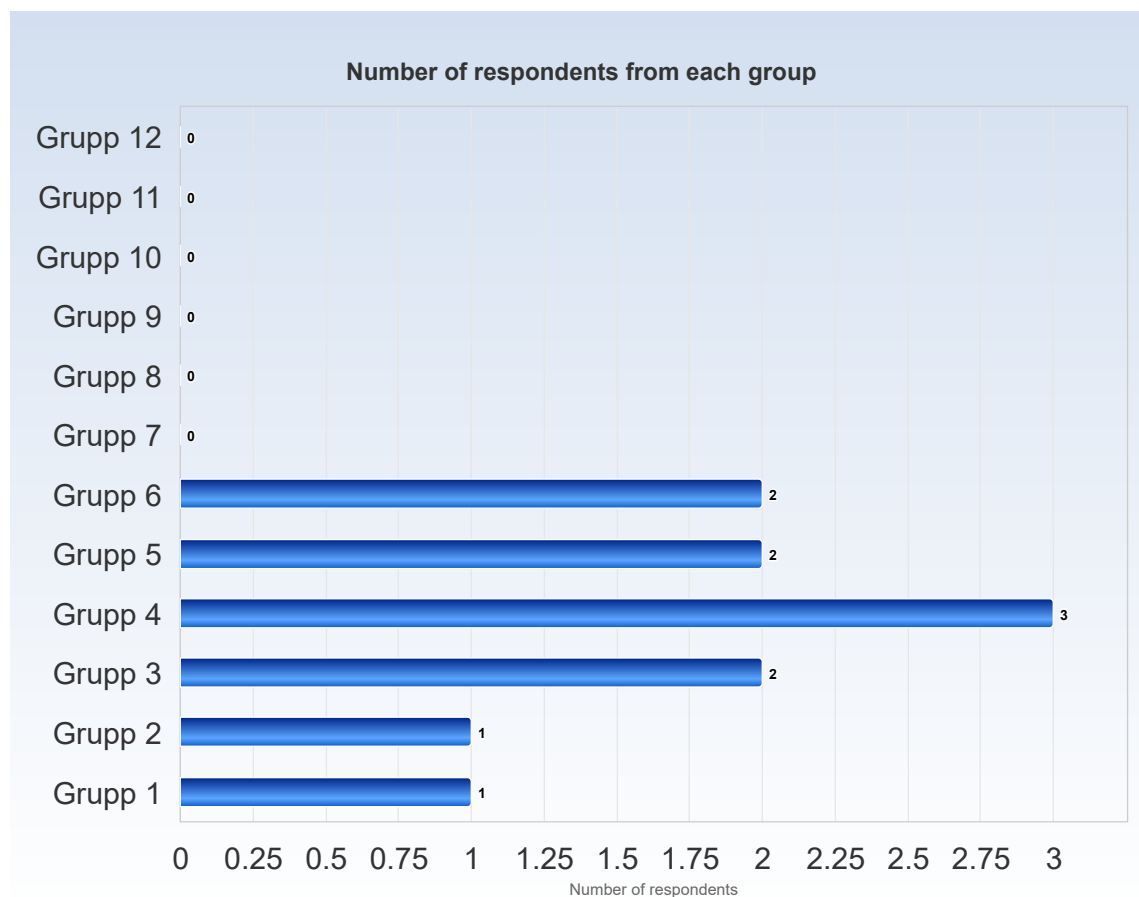
MH2039 - 2023-11-01

Antal respondenter: 23

Antal svar: 11

Svarsfrekvens: 47,83 %

GROUP MEMBERSHIP



Comments

Comments (GRUPPTILLHÖRIGHET)

Denna version av enkäten används om kursen har inkluderat olika grupper av kursdeltagare. Du bör då ha fått information om vilken grupp du ska välja nedan.

Välj din grupp i listan:: Grupp 1)

it worked but was a bit difficult and many setbacks

Comments (GRUPPTILLHÖRIGHET)

Denna version av enkäten används om kursen har inkluderat olika grupper av kursdeltagare. Du bör då ha fått information om vilken grupp du ska välja nedan.

Välj din grupp i listan:: Grupp 3)

The group dynamic was very important for the project to work well. I had lucky with a good group dynamic but not everyone did so it didnt't really work.

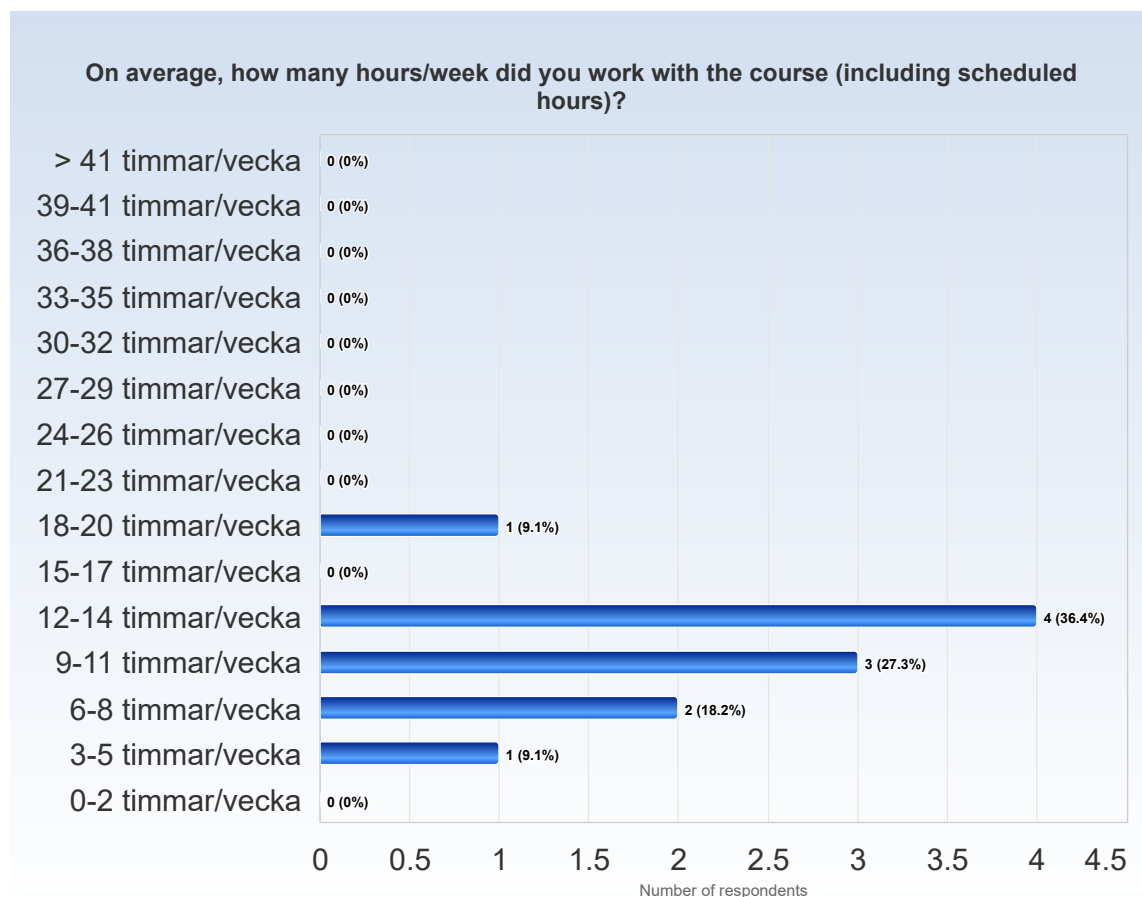
Comments (GRUPPTILLHÖRIGHET)

Denna version av enkäten används om kursen har inkluderat olika grupper av kursdeltagare. Du bör då ha fått information om vilken grupp du ska välja nedan.

Välj din grupp i listan:: Grupp 4)

The vanadium group

ESTIMATED WORKLOAD



Comments

Comments (I belonged to: Grupp 3)

The workload could have been a bit more by including more things to learn.

Comments (I belonged to: Grupp 4)

It was ideal.

In the later part of the course the more time I had to put into the project

Comments (I belonged to: Grupp 5)

Overall I think the course load was a bit low, perhaps require more work for the project.

The project takes the major part of the time in comparison with preparing the exam. But, in my opinion, researching is a good tool to obtain knowledge.

Comments (I belonged to: Grupp 6)

The first weeks of the course I spent ~10 h on the course/week but the last weeks I spent >28h on the course/week.

LEARNING EXPERIENCE

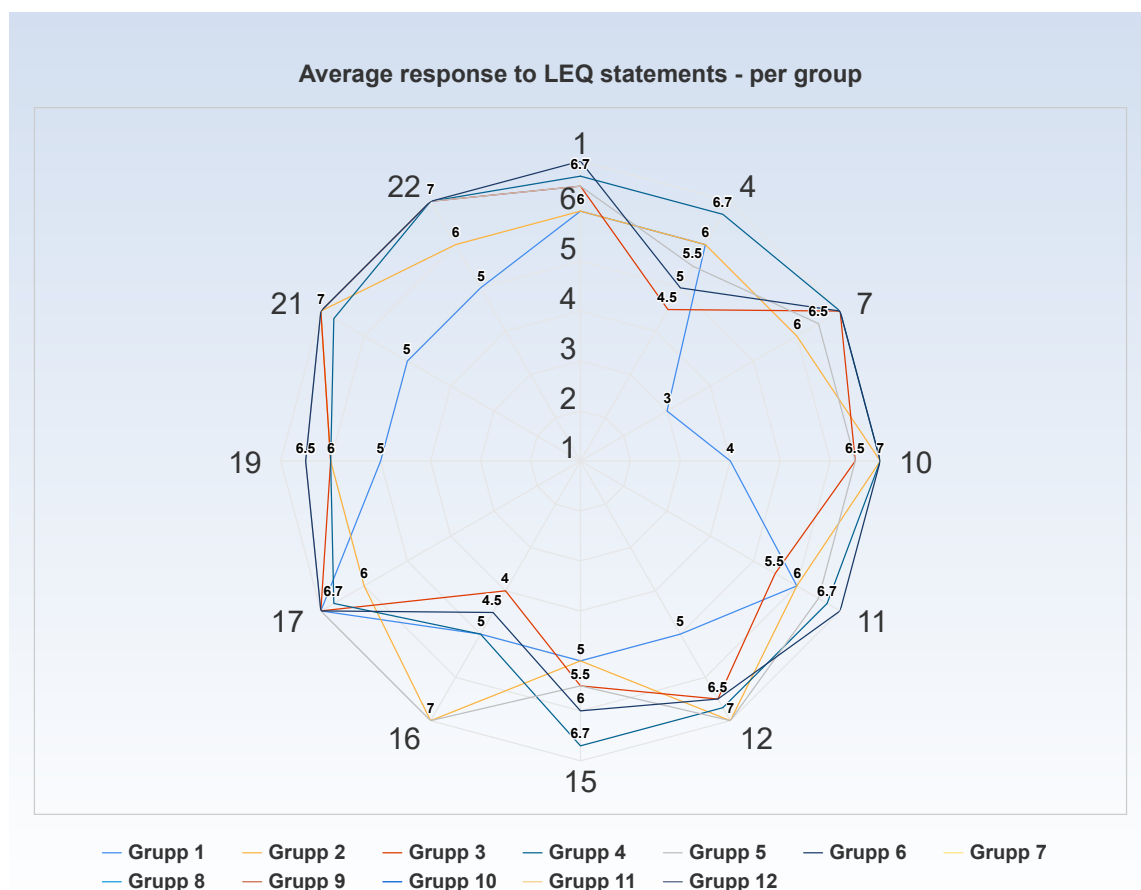
The polar diagrams below show the average response to the LEQ statements for different groups of respondents (only valid responses are included). The scale that is used in the diagrams is defined by:

1 = No, I strongly disagree with the statement

4 = I am neutral to the statement

7 = Yes, I strongly agree with the statement

Note! A group has to include at least 3 respondents in order to appear in a diagram.



KTH Learning Experience Questionnaire v3.1.4

Meaningfulness - emotional level

Stimulating tasks

1. I worked with interesting issues (a)

Exploration and own experience

2. I explored parts of the subject on my own (a)
3. I was able to learn by trying out my own ideas (b)

Challenge

4. The course was challenging in a stimulating way (c)

Belonging

5. I felt togetherness with others on the course (d)
6. The atmosphere on the course was open and inclusive (d)

Comprehensibility - cognitive level

Clear goals and organization

7. The intended learning outcomes helped me to understand what I was expected to achieve (e)
8. The course was organized in a way that supported my learning (e)

Understanding of subject matter

- 9. I understood what the teachers were talking about (f)
- 10. I was able to learn from concrete examples that I could relate to (g)
- 11. Understanding of key concepts had high priority (h)

Constructive alignment

- 12. The course activities helped me to achieve the intended learning outcomes efficiently (i)
- 13. I understood what I was expected to learn in order to obtain a certain grade (i)

Feedback and security

- 14. I received regular feedback that helped me to see my progress (j)
- 15. I could practice and receive feedback without being graded (j)
- 16. The assessment on the course was fair and honest (k)

Manageability - instrumental level

Sufficient background knowledge

- 17. My background knowledge was sufficient to follow the course (f)

Time to reflect

- 18. I regularly spent time to reflect on what I learned (l)

Variation and participation

- 19. The course activities enabled me to learn in different ways (m)
- 20. I had opportunities to influence the course activities (m)

Collaboration

- 21. I was able to learn by collaborating and discussing with others (n)

Support

22. I was able to get support if I needed it (c)

Learning factors from the literature that LEQ intends to examine

We tend to learn most effectively (in ways that make a sustained, substantial, and positive influence on the way we think, reflect, act or feel) when:

- a) We are trying to answer questions, solve problems or acquire skills that we find interesting, exciting or important
- b) We are able to speculate, test ideas (intellectually or practically) and learn from experience, even before we know much about the subject
- c) We are able to do so in a challenging and at the same time supportive environment
- d) We feel that we are part of a community and believe that other people have confidence in our ability to learn
- e) We understand the meaning of the intended learning outcomes, how the environment is organized, and what is expected of us
- f) We have adequate prior knowledge to deal with the current learning situation
- g) We are able to learn inductively by moving from concrete examples and experiences to general principles, rather than the reverse
- h) We are challenged to develop a true understanding of key concepts and gradually create a coherent whole from the content
- i) We believe that the work we are expected to do will help us to achieve the intended learning outcomes
- j) We are able to try, fail, and receive feedback before, and separate from, each summative assessment of our efforts

k) We believe that our work will be considered in an honest and fair way

l) We have sufficient time for learning and devote the time needed to do so

m) We believe that we have control over our own learning, and not that we are being manipulated

n) We are able to collaborate with other learners struggling with the same problems

Literature

Bain, K. (2004). *What the Best College Teachers Do*, Chapter 5, pp. 98-134. Cambridge: Harvard University Press.

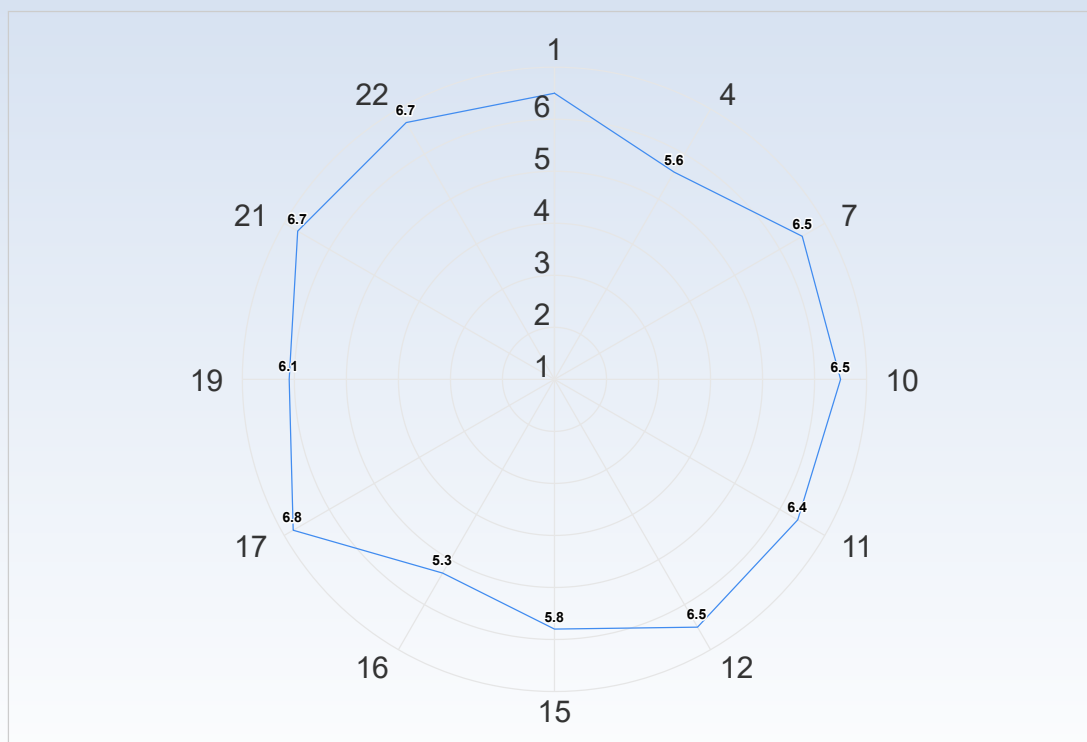
Biggs J. & Tang, C. (2011). *Teaching for Quality Learning at University*, Chapter 6, pp. 95-110. Maidenhead: McGraw Hill.

Elmgren, M. & Henriksson, A-S. (2014). *Academic Teaching*, Chapter 3, pp. 57-72. Lund: Studentlitteratur.

Kember, K. & McNaught, C. (2007). *Enhancing University Teaching: Lessons from Research into Award-Winning Teachers*, Chapter 5, pp. 31-40. Abingdon: Routledge.

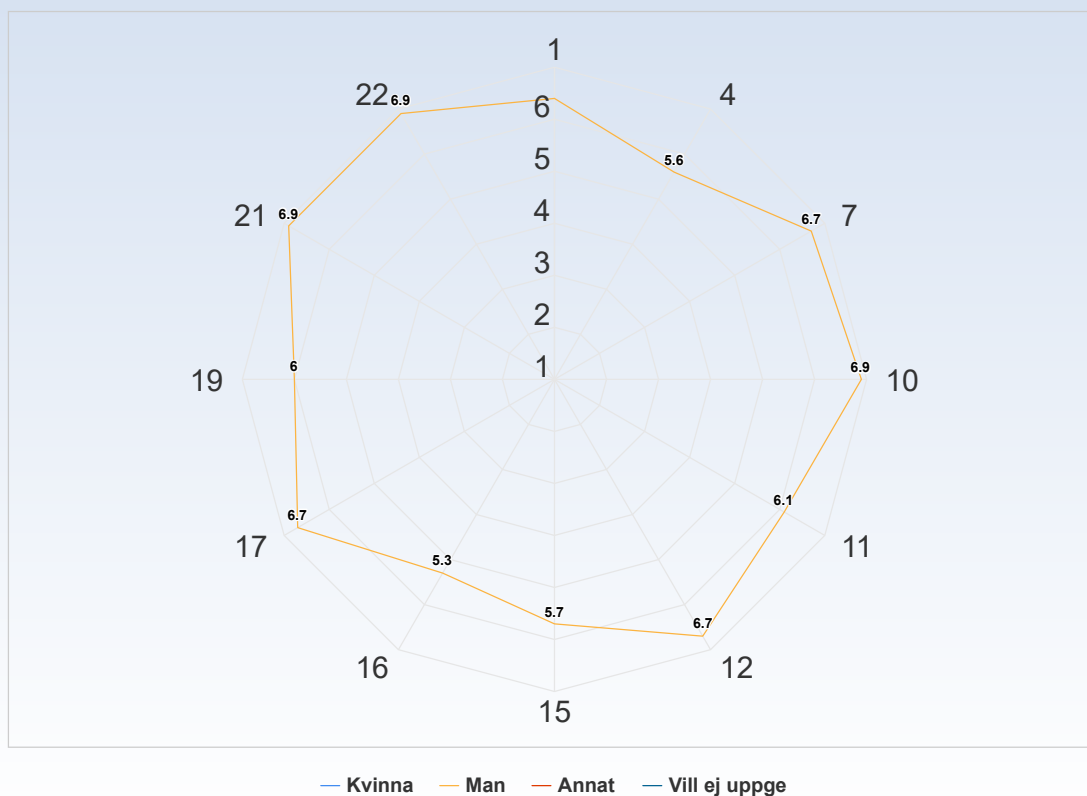
Ramsden, P. (2003). *Learning to Teach in Higher Education*, Chapter 6, pp. 84-105. New York: RoutledgeFalmer.

Average response to LEQ statements - all respondents



— Medelvärde

Average response to LEQ statements - all respondents per gender

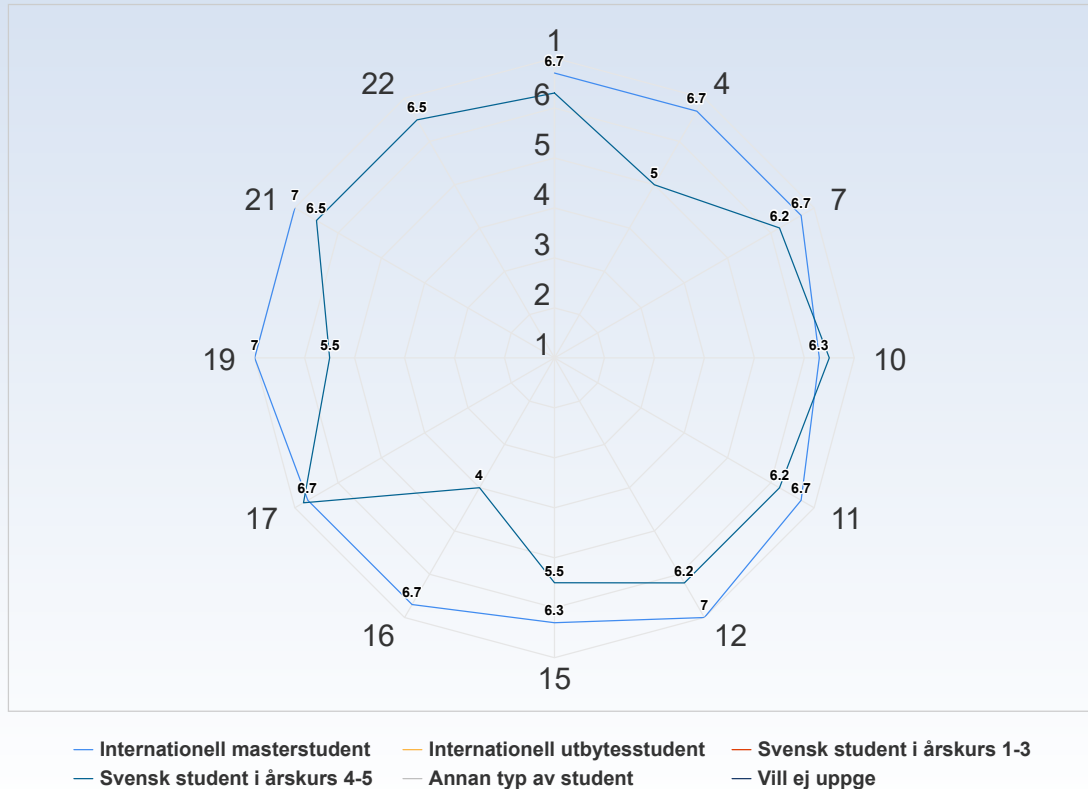


Comments

Comments (I belonged to: Grupp 5)

Nothing particular

Average response to LEQ statements - all respondents per type of student

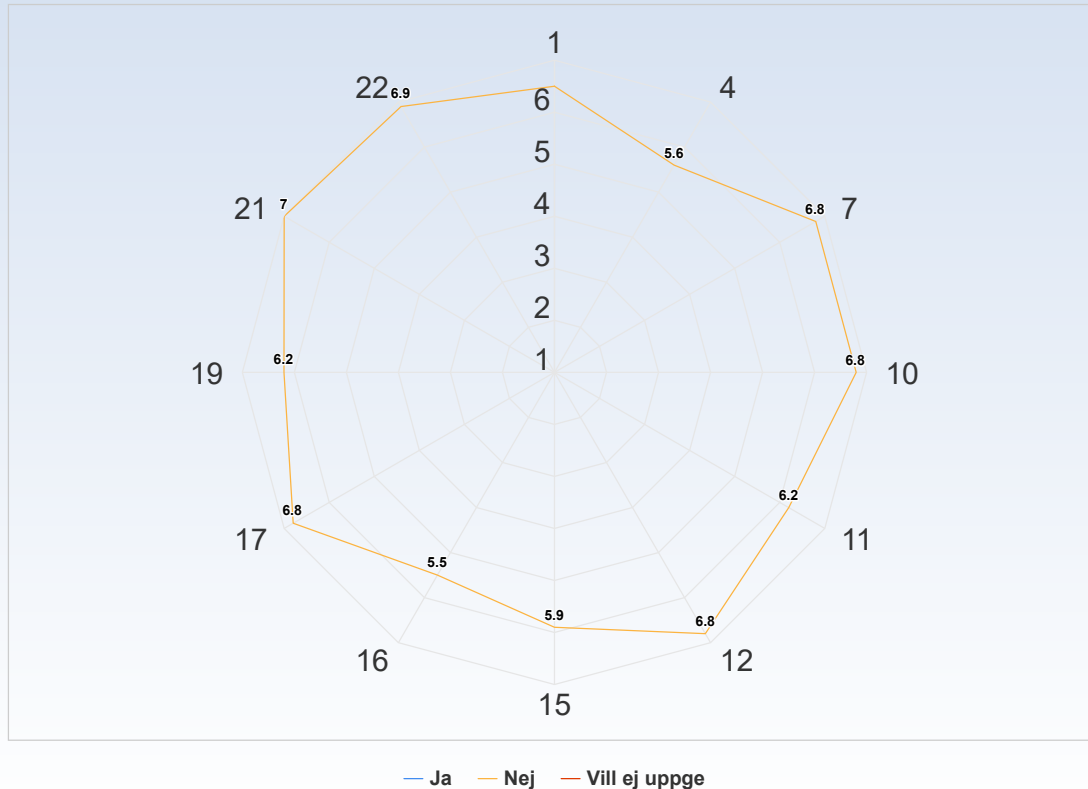


Comments

Comments (I belonged to: Grupp 6)

If the purpose of this course is to level the base knowledge in preparation for the rest of the master, I don't see any reason for why those of us who already did our bachelor at KTH should take this course. Most of the course is repetition of things we've already done and the mass and heat balance could easily have been included in the sustainable processing course that we took this spring that was a prerequisite for the master. In this way we might instead take another course that will contribute more to furthering our knowledge then repitition.

Average response to LEQ statements - all respondents per disability



Comments

Comments (I belonged to: Grupp 5)

I think yes (ADD) but I can't assure that because a diagnosis must be done

GENERAL QUESTIONS

What was the best aspect of the course?

What was the best aspect of the course? (I belonged to: Grupp 1)

smoothly examination parts

What was the best aspect of the course? (I belonged to: Grupp 3)

I liked the fact we had to focus on one metal and research about that

Having a project and a home exam made it easy to split the workload and do it when it suited, it was very good.

What was the best aspect of the course? (I belonged to: Grupp 4)

The way the professor had taught the course and the course has been taken.

The learn mass/heat balance

What was the best aspect of the course? (I belonged to: Grupp 5)

Chris was a brilliant lecturer, he made subjects interesting, engaged with the students and was a bit quirky!

The group project

What was the best aspect of the course? (I belonged to: Grupp 6)

I think that the mass and heat balance parts as well as the lectures were the best part because we learned some new things. The lectures were clearly structured and easy to follow which was great.

What would you suggest to improve?

What would you suggest to improve? (I belonged to: Grupp 1)

I dont know

What would you suggest to improve? (I belonged to: Grupp 3)

Inlcuding more process engineering since most of the conent was taught in previous courses. Adding quizzes (with several tries) would be something I would recommend. This type of learning are is most cases a favourable way to examin. If it is too much workload to make these quizzes then you can ask a 5th grader to help you or a PHD student.

What would you suggest to improve? (I belonged to: Grupp 4)

NA

Take away the project and reduce the hp.

What would you suggest to improve? (I belonged to: Grupp 5)

Perhaps give a feedback session for the written report, say half way through the course. I think this would help students start the project on time and also benefit their writing.

Instead of leaving Fridays for the project group do the lectures. We usually have time for meeting during all the week.

What would you suggest to improve? (I belonged to: Grupp 6)

Overall, I think that the course would be better if it didn't include the project and instead went more into depth on other parts as we've already done similar projects in other process courses and it felt very repetative. For example, it would have been nice if phase stability diagrams were introduced as the 3:rd years get to learn about that now that the courses have been changed, but we haven't heard of it at all. It feels like our year are missing out on content due to the restructuring of the program and, taking that into consideration, it felt quite frustrating to have a course that was mainly repetition when we could have spent that time on learning something new.

I also think that the project should be pass/fail if the groups aren't assigned based on level of ambition or freely chosen by the students. The reason for this is that it is important to get working groups for group assignments that directly impact the course grade so that the goals of the students who actually work are not impacted by the potential lack of effort of their group members. Otherwise it might be nice to consider what it is that you want to get out of the group project in this course.

What advice would you like to give to future participants?

What advice would you like to give to future participants? (I belonged to: Grupp 1)

go for it all and do it all

What advice would you like to give to future participants? (I belonged to: Grupp 3)

Try to learn how to do a mass and heat balance before the home exam and start the home exam early, it takes a day to do.

What advice would you like to give to future participants? (I belonged to: Grupp 4)

It is a very interesting course and do actively participate.

Start early with the project

What advice would you like to give to future participants? (I belonged to: Grupp 5)

Have good communication within your project group

If you have doubts don't hesitate to ask.

What advice would you like to give to future participants? (I belonged to: Grupp 6)

Make sure to discuss your expectations on the group project and how you want to work with it. There may be several culture shocks and it is better to face them as soon as possible rather than being surprised by them half way through.

Is there anything else you would like to add?

Is there anything else you would like to add? (I belonged to: Grupp 1)

I noticed that the foreign students would need more respect, they checked the phone a lot during all the different lessons. and especially at the presentation... the person behind me, as I said, slept during the presentation. and on the right side where people were sitting, there was a lot of typing on both phones and computers...

It's also a little annoying that a lot of foreign students puff smoke very often, it disturbs concentration and often leads to headaches.

Is there anything else you would like to add? (I belonged to: Grupp 3)

Improving the grading system so that it reflects more on the workload put into the project.

Is there anything else you would like to add? (I belonged to: Grupp 4)

NA

Is there anything else you would like to add? (I belonged to: Grupp 5)

Huge props to Chris for being a great lecturer and teacher! His ability to explain topics on a large variety of educational levels was great and with this ability he truly made lectures fun!

Sometimes the professor goes extremely fast, maybe due to the lack of time as a result of not doing the lectures on Friday, but at least he does record them.

SPECIFIC QUESTIONS

RESPONSE DATA

The diagrams below show the detailed response to the LEQ statements.
The response scale is defined by:

-3 = No, I strongly disagree with the statement

0 = I am neutral to the statement

+3 = Yes, I strongly agree with the statement

X = I decline to take a position on the statement

Note! If you want to compare the results between different groups on equal terms, you must normalize the number of responses with the size of the corresponding group. The size of each group is found in the first diagram in this report.

[illegible]



Comments

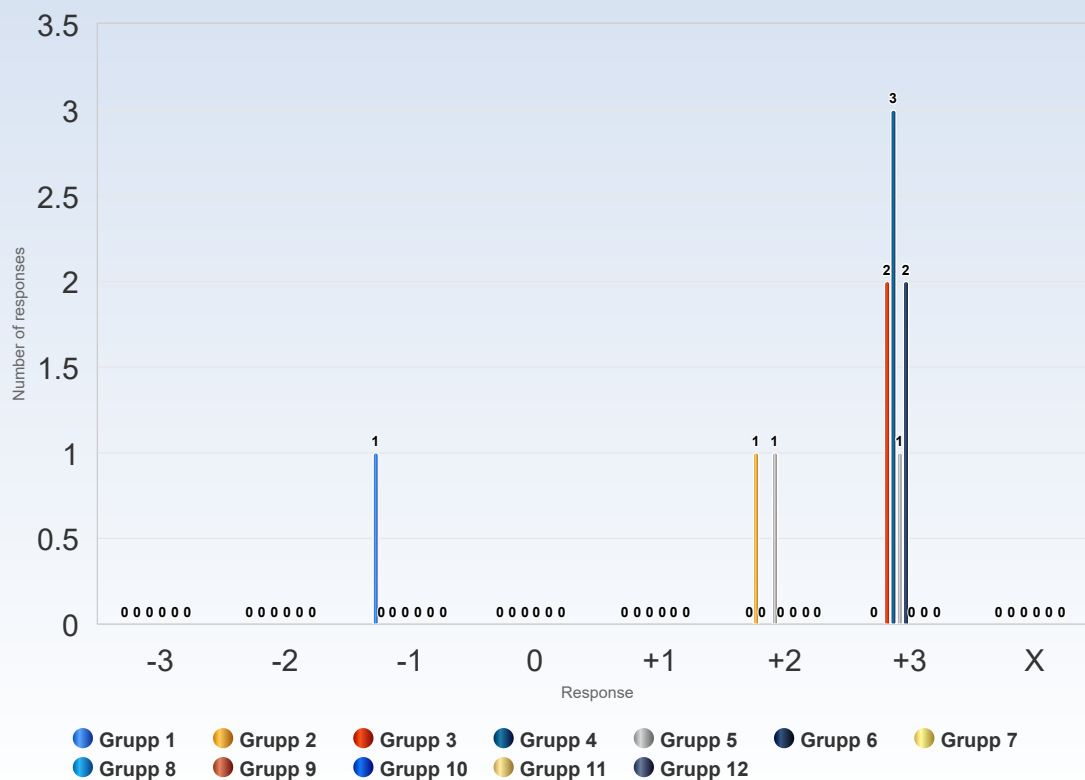
Comments (: Grupp 4)

The project was unnecessary, it had almost nothing to do with the rest of the coarse and was just busy work

Comments (: Grupp 6)

The thermodynamics part was good but the project was not.

7. The intended learning outcomes helped me to understand what I was expected to achieve



Comments

Comments (I belonged to: Grupp 5)

Extremely clear!!!

Response	Grupp 1	Grupp 2	Grupp 3	Grupp 4	Grupp 5	Grupp 6	Grupp 7	Grupp 8	Grupp 9	Grupp 10	Grupp 11	Grupp 12
-3	0	0	0	0	0	0	0	0	0	0	0	0
-2	0	0	0	0	0	0	0	0	0	0	0	0
-1	0	0	0	0	0	0	0	0	0	0	0	0
0	1	0	0	0	0	0	0	0	0	0	0	0
+1	0	0	0	0	0	0	0	0	0	0	0	0
+2	0	0	1	0	1	0	0	0	0	0	0	0
+3	0	1	0	3	0	2	1	0	0	0	1	0

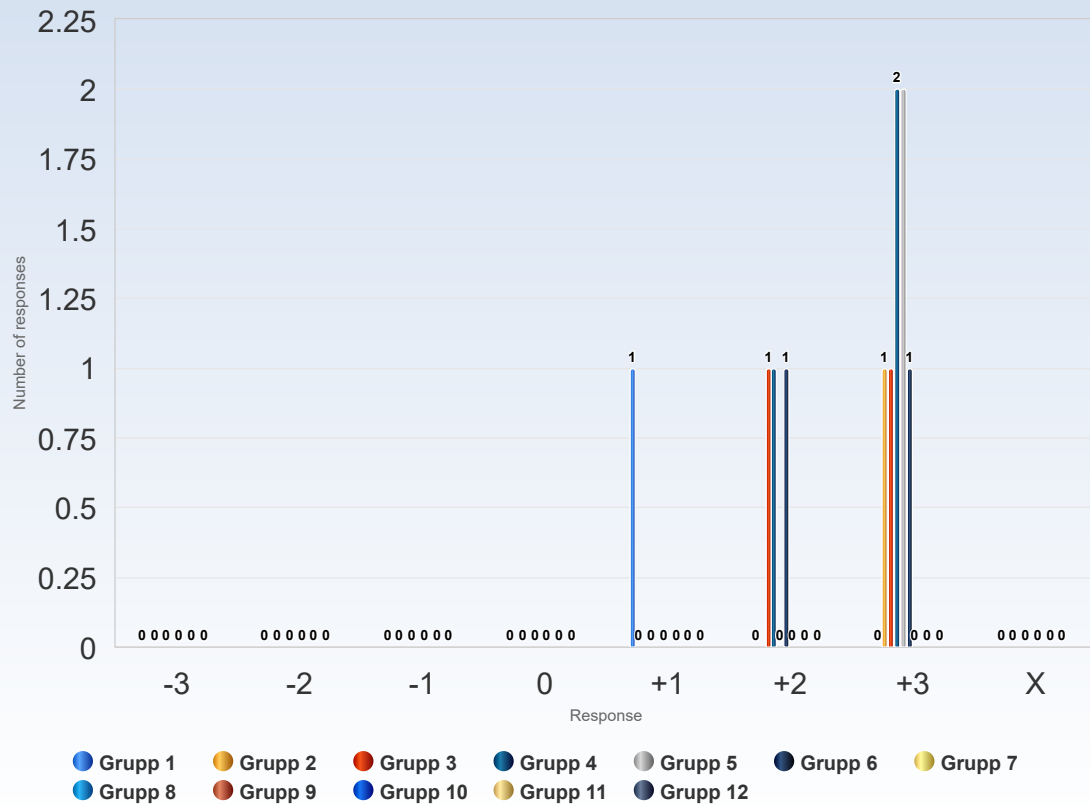
Number of responses

Response

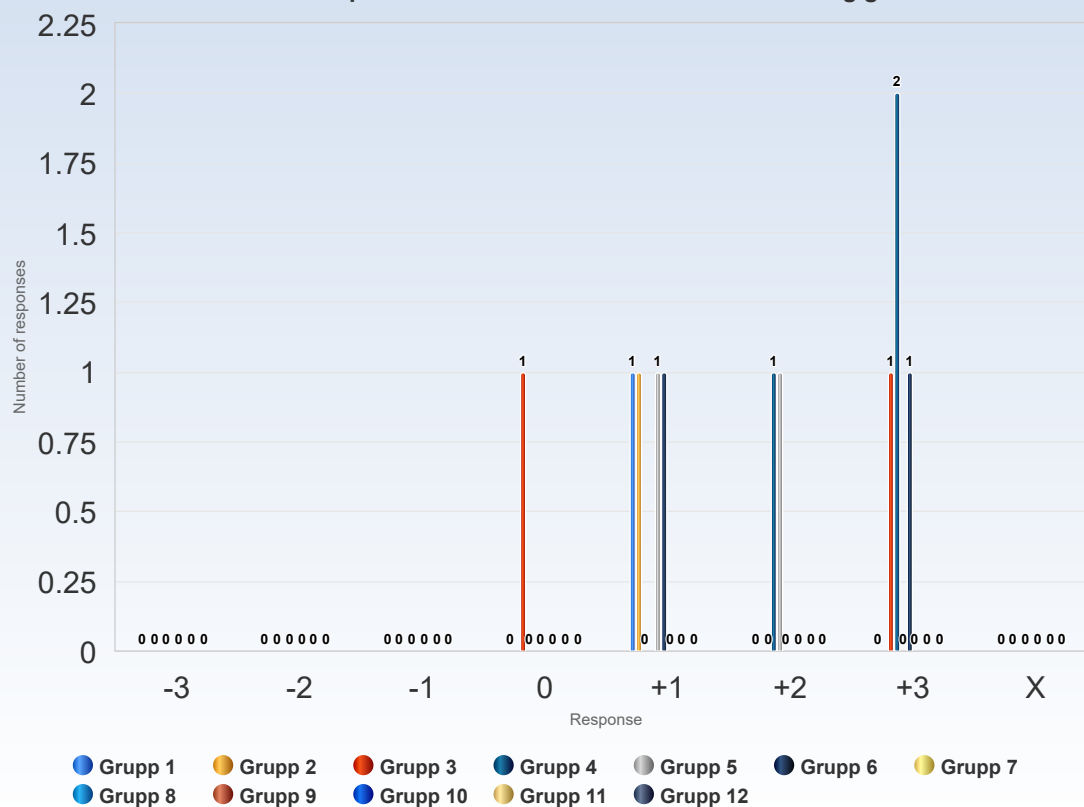
Grupp 1 Grupp 2 Grupp 3 Grupp 4 Grupp 5 Grupp 6 Grupp 7
Grupp 8 Grupp 9 Grupp 10 Grupp 11 Grupp 12

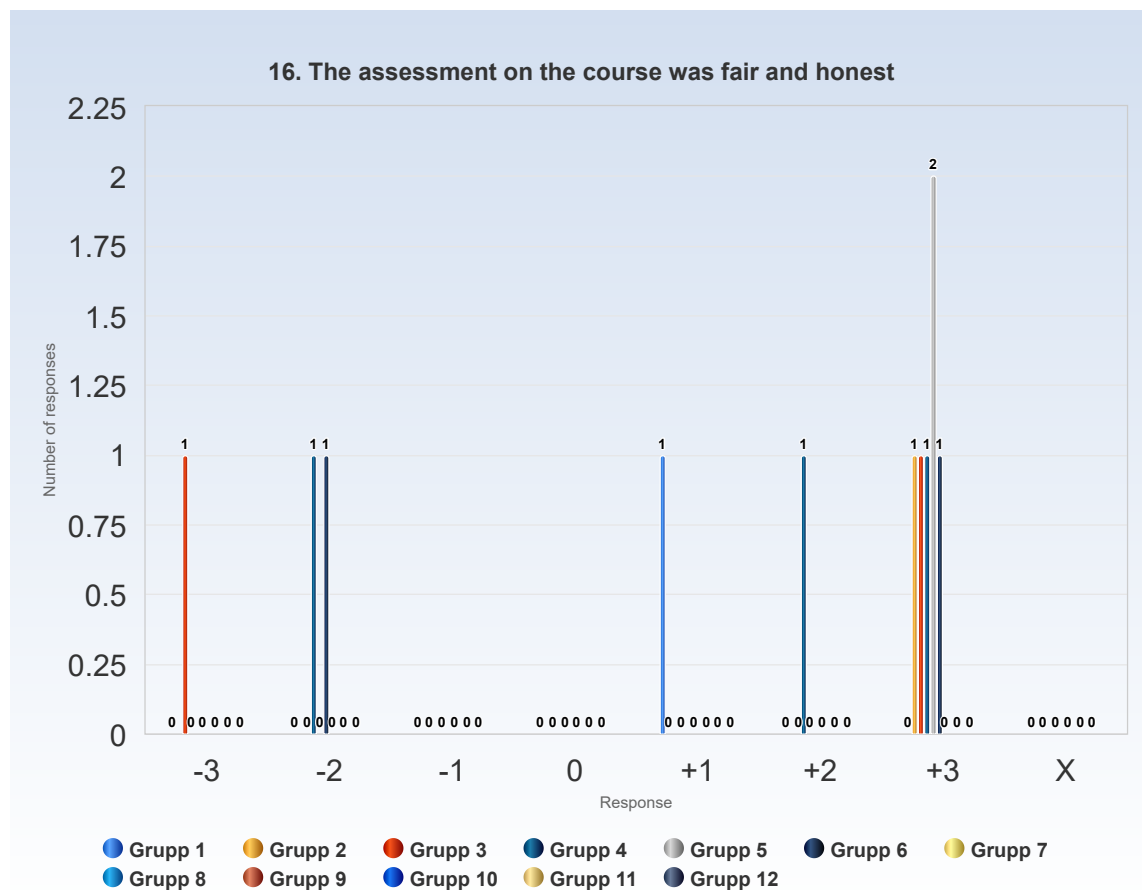
Response (X)	Grupp 1	Grupp 2	Grupp 3	Grupp 4	Grupp 5	Grupp 6	Grupp 7	Grupp 8	Grupp 9	Grupp 10	Grupp 11	Grupp 12
-3	0	0	0	0	0	0	0	0	0	0	0	0
-2	0	0	0	0	0	0	0	0	0	0	0	0
-1	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	0	0	0	0	0	0
+1	0	0	0	0	0	0	0	0	0	0	0	0
+2	1	1	0	1	0	0	0	0	0	0	0	0
+3	1	0	1	2	1	2	0	0	0	0	0	0

2.25



15. I was able to practice and receive feedback without being graded





Comments

Comments (I belonged to: Grupp 3)

Not everyone that got a high grade worked for it, rather the work came from their group members.

Comments (I belonged to: Grupp 4)

Group project are not fair way to get a grade for a course but the exam was fair

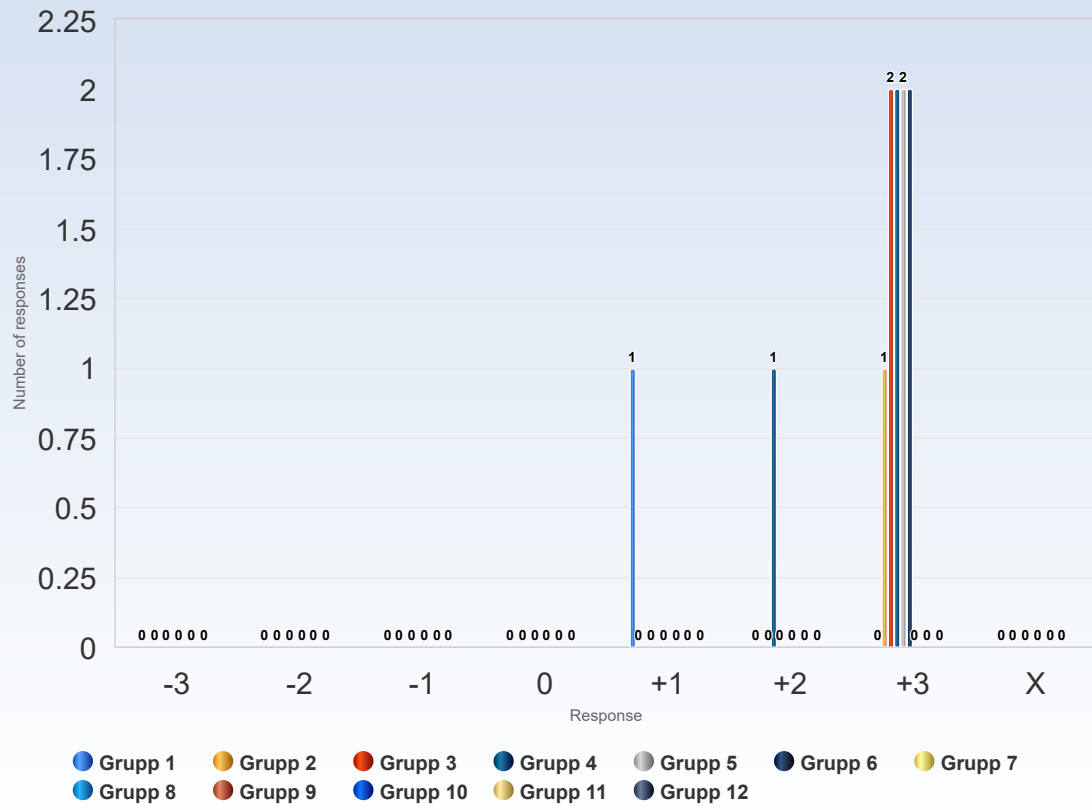
Comments (I belonged to: Grupp 6)

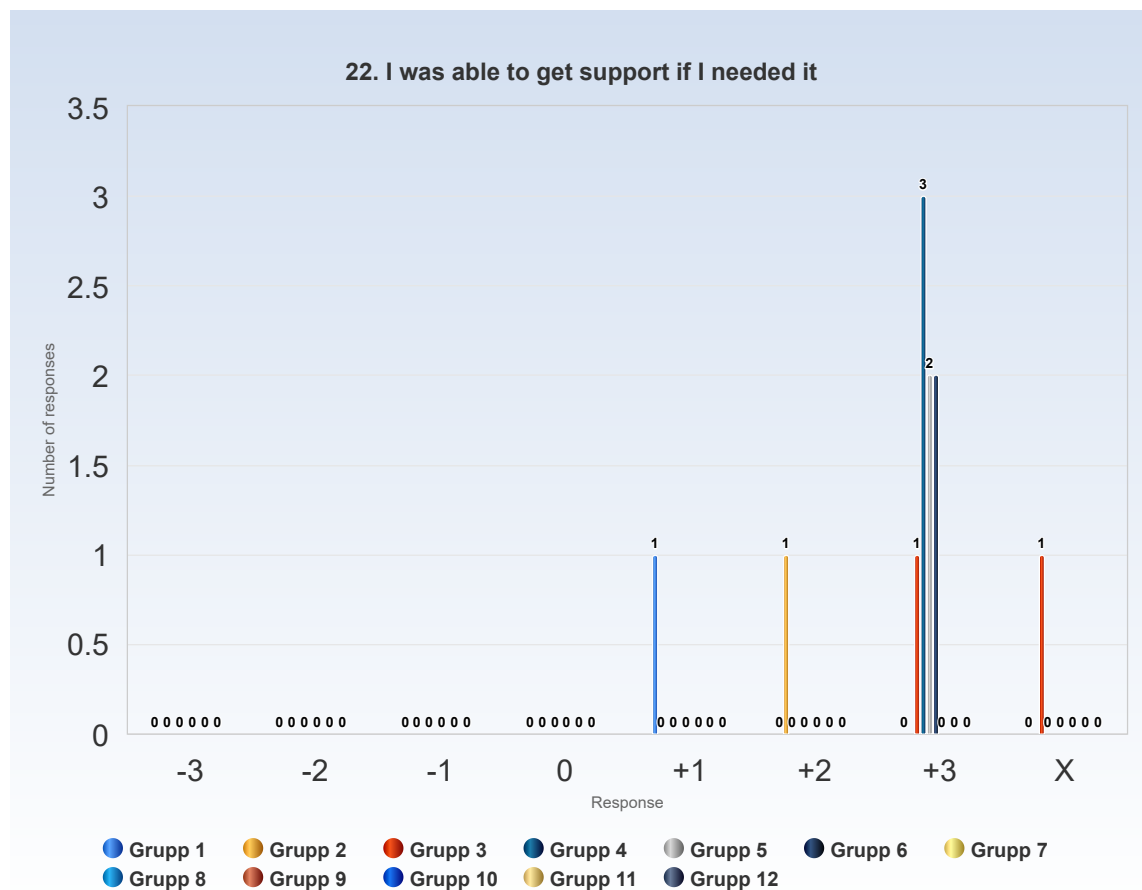
I don't think that giving a group grade is representative of the group members work. The individual assessment should have a greater impact on the final course grade.

[illegible]

[illegible]

21. I was able to learn by collaborating and discussing with others





Comments

Comments (I belonged to: Grupp 5)

Great teacher, was also available when needed and answered emails quickly!