

Course Analysis for IV1351, Data Storage Paradigms, Period 2 2024

May 24, 2024

1 Notes from course evaluation board

Unfortunately no one volunteered for the course evaluation board.

2 Course evaluation

The LEQ questionnaire unfortunately only got 16 answers, which corresponds to about 9% of the participants. It's therefore perhaps not meaningful to draw conclusions based on the evaluation. Below is anyway a summary of the answers, the complete results of the evaluation can be found in appendix 1.

2.1 Analysis of learning experience

2.2 Analysis of workload

The workload is reasonable according to the course evaluation. The majority worked 24-26 hours per week or slightly less.

3 Changes since previous course round

The main change was to replace the online exam with written exam.

4 Pass Rate

- 146 participants were registered for the first time and 22 participants were re-registered, which makes a total of 168 participants.
- 110 participants (65% of the 168 participants) passed the TEN1 sub-course.

- 129 participants (76% of the 168 participants) passed the LAB1 sub-course.
- 98 participants (58% of the 168 participants) completed the course.
- The final grades were distributed as follows.

Betyg	Antal	Percentage of the 168 participants
A	18	11%
B	18	11%
C	28	16%
D	34	20%
E	0	0%
F/not done	70	42%

The pass rate is lower than previous year. This is probably due to the fact that there was written exam.

5 Improvements for next course round

This was the fourth time the course was given, and the most important problems have now been corrected. There are still many suggestions for smaller improvements, both from students and teachers, but no major change is planned for next year.

Appendix 1, Result of LEQ questionnaire

IV1351 - 2024-01-30

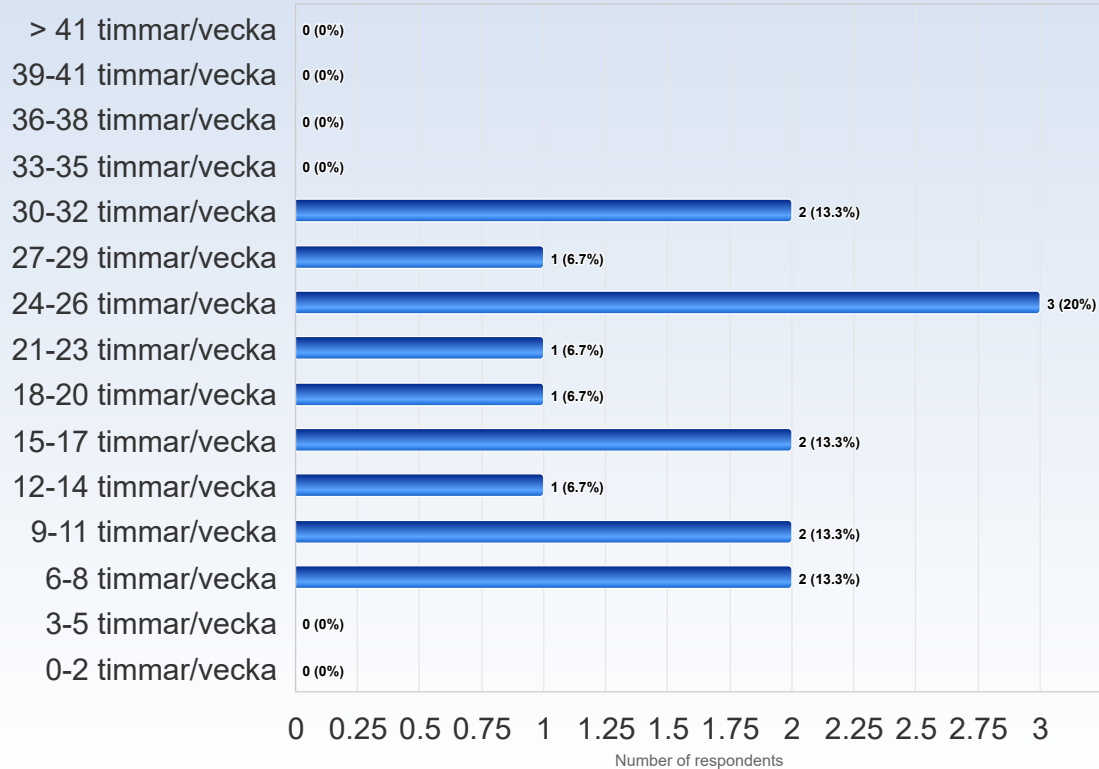
Antal respondenter: 183

Antal svar: 16

Svarsfrekvens: 8,74 %

ESTIMATED WORKLOAD

On average, how many hours/week did you work with the course (including scheduled hours)?



Comments

Comments (I worked: 6-8 timmar/vecka)

Enkelt 2x mer en andra liknande kurser

Comments (I worked: 9-11 timmar/vecka)

Kursen och dess innehåll samt ämnesområdet var ganska nytt för mig, vilket var något jag insåg ganska sent in i kursen. I början tyckte jag att jag ändå kunde relatera mig efter att ha associerat arbetsuppgifterna från vår tidigare kurs som jag tyckte påminde ganska bra om detta; objektorienterad design. Eftersom att det gick ganska bra från den kursen tänkte jag att det skulle gå på samma sätt för den här kursen också, varför jag snittade ganska lite i studietid för denna kurs.

Comments (I worked: 21-23 timmar/vecka)

Around 30 hours the first weeks but then much less.

Comments (I worked: 30-32 timmar/vecka)

Most of it spent with the seminars/assignment, they took so much time.

It differed alot, but during the project weeks i think i worked over 40 hours per week on the course. After that it was reduced a bit.

LEARNING EXPERIENCE

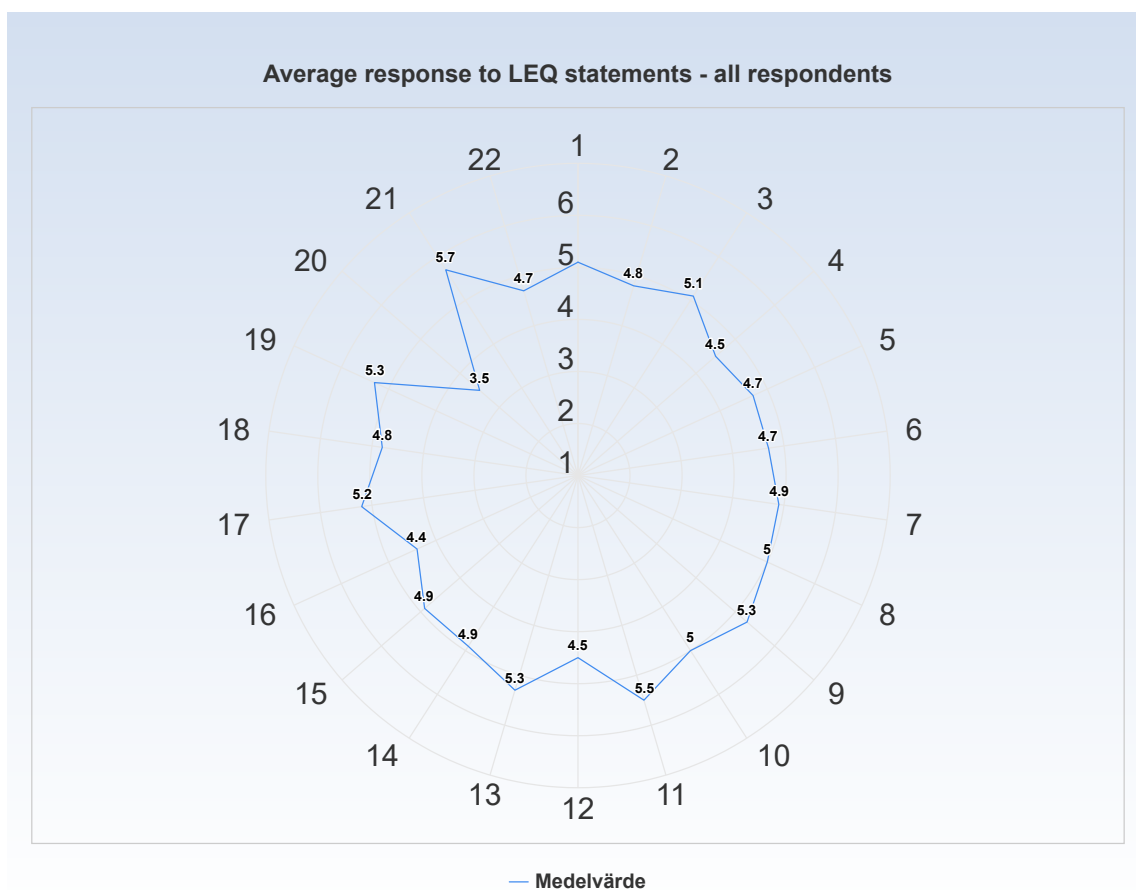
The polar diagrams below show the average response to the LEQ statements for different groups of respondents (only valid responses are included). The scale that is used in the diagrams is defined by:

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.

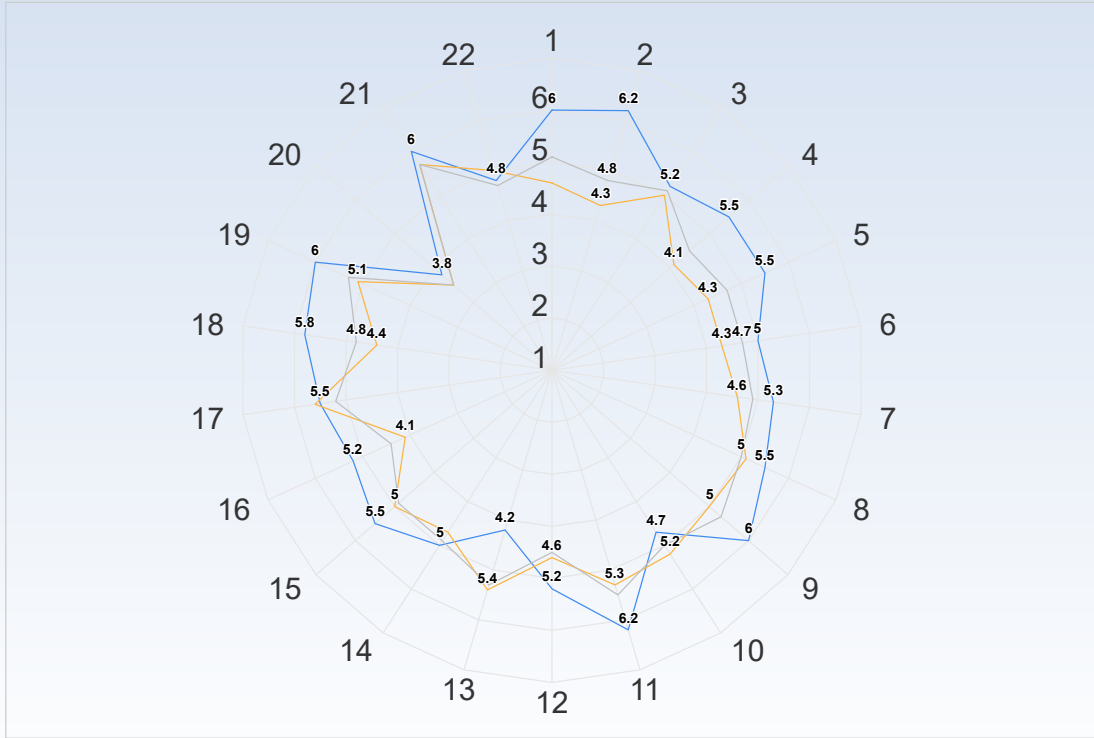
Biggs J. & Tang, C. (2011). *Teaching for Quality Learning at University*, Chapter 6, pp. 95-110. Maidenhead: McGraw Hill.

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.

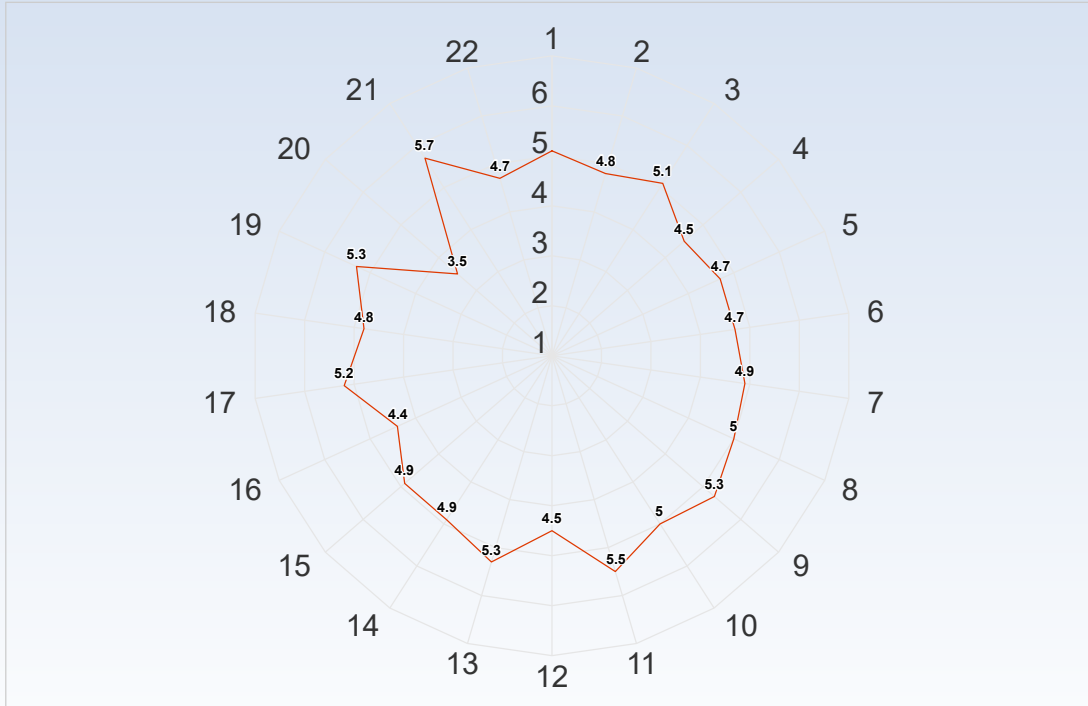
Ramsden, P. (2003). *Learning to Teach in Higher Education*, Chapter 6, pp. 84-105. New York: RoutledgeFalmer.

Average response to LEQ statements - per gender



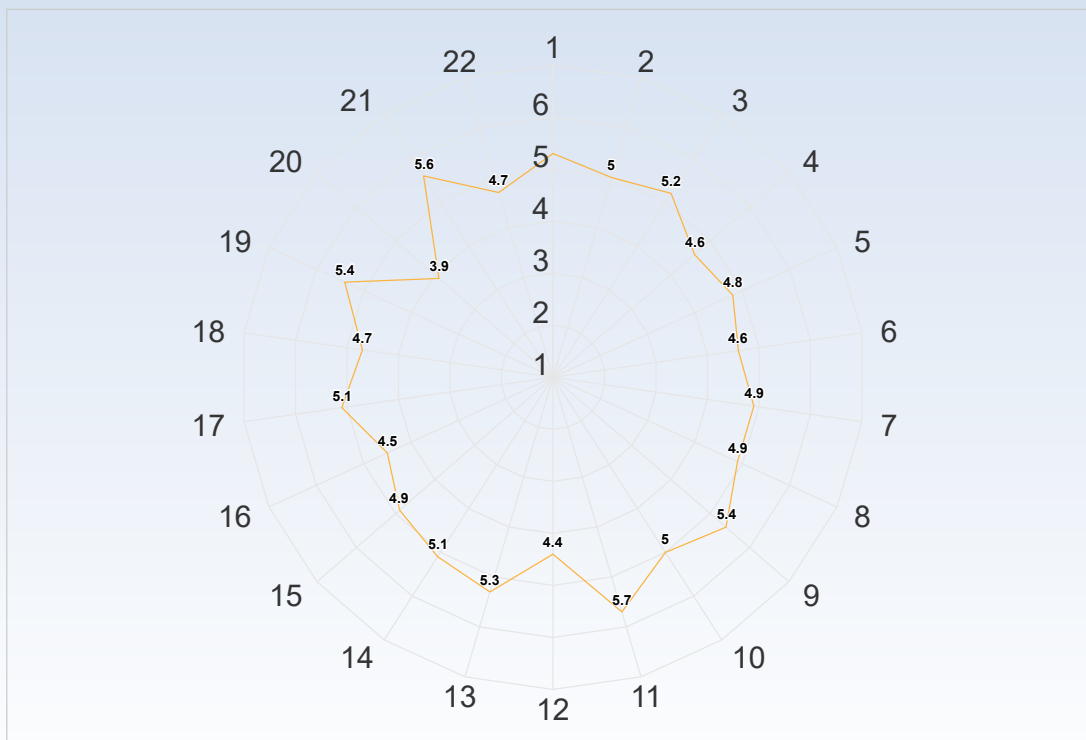
— Kvinna — Man — Annat — Vill ej uppge — (Answered)

Average response to LEQ statements - per type of student



- Internationell masterstudent
- Internationell utbytesstudent
- Svensk student i årskurs 1-3
- Svensk student i årskurs 4-5
- Annan typ av student
- Vill ej uppge

Average response to LEQ statements - per disability



— Ja — Nej — Vill ej uppge

GENERAL QUESTIONS

What was the best aspect of the course?

What was the best aspect of the course? (I worked: 6-8 timmar/vecka)

Att lära sig hur man hanterar databaser då det är viktigt i framtida yrken.

Online föreläsningar

What was the best aspect of the course? (I worked: 9-11 timmar/vecka)

Det bästa med kursen var tillämpningen av ämnesområdet i form av seminarieuppgifter och quizzarna som erbjöds i kursen.

What was the best aspect of the course? (I worked: 12-14 timmar/vecka)

Bra med grupparbete.

What was the best aspect of the course? (I worked: 15-17 timmar/vecka)

Strukturen, piazza (man kunde få hjälp och diskutera med andra på ett effektivt sätt!), projektet i grupp.

What was the best aspect of the course? (I worked: 24-26 timmar/vecka)

Inlämningsuppgifterna. Perfekt sätt att få praktisk kunskap och kunna applicera teorin

Troligtvis projektet där vi designade vår egen databas; SQL delen var inte bra alls dock. Det var den gången vi kunde lära oss något och ha frihet; fullständigt den bästa delen utav kursen.

Projektet

What was the best aspect of the course? (I worked: 27-29 timmar/vecka)

Being able to work on my own project using my own definitions and finally implementing it in my programming language of choice is great. I find that choosing these things myself lead to much more intrinsic motivation and thus a better learning outcome.

What was the best aspect of the course? (I worked: 30-32 timmar/vecka)

Clear layout of the course with good administrative information. Really fun take on the exam with multiple choice questions that can give negative points, making it difficult but really fair. Fun topics.

The course allowed me to gain a good understanding of how data is stored. What possible factors and obstacles that come into storing data. How to create a database. How to write queries. I have never gotten so much practical use out of one course really.

What would you suggest to improve?

What would you suggest to improve? (I worked: 6-8 timmar/vecka)

Om man har problem med att installera en viss programvara i kursen är det önskvärt att få hjälp. Lärarassistenten visste inte hur man kunde lösa problem som uppstod vid installationen.

Att utforma en tenta som inte ger minuspoäng.

Att ge fler övningsexempel på pdf med lösningar inför tentan.

Om möjligt, korta ner föreläsningarna som är uppladdade på canvas.

Online seminarium

What would you suggest to improve? (I worked: 9-11 timmar/vecka)

Finns inget särskilt som jag tycker behöver upplysas.

Högre rigorositet och principiell noggrannhet. Många av koncepten som förklaras i kursen är i sig väldigt entydiga, men förklaras på ett talspråkligt sätt. Det blir en rejäl krock när ingenjörer lär ut matematik. Det blir sällan bra tyvärr.

What would you suggest to improve? (I worked: 15-17 timmar/vecka)

Allt var bra.

What would you suggest to improve? (I worked: 21-23 timmar/vecka)

The first part of this course was the most demotivating experience I've ever had during university. The examples given of how to create a conceptual model is too simple to relate to the model we were expected to create. Combining this with the TA being condescending and unwilling to provide constructive feedback during the tutorial, in favour of "letting us figure it out ourselves" after already having spent 20 hours on your own, gave me a bad taste for this course and subject for the rest of the course. I ended up getting an A in the course and it is not like I tried to get through by just doing the minimal effort. I feel like I was made to feel like a complete idiot for the first task of the project for no good reason at all.

What would you suggest to improve? (I worked: 24-26 timmar/vecka)

Tentan måste ändras. Det kändes som man blev lurad när föreläsaren har sagt att det är urenkelt att få E, och att få A är verkligen inte heller särskilt tufft.

För E räcker det att öva på quizzarna så har man det.

Helt klart verkar inte så vara fallet eftersom alla fick 5 bonuspoäng på måfå på grund av tuffa kuggfrågor... Aldrig varit med om att man får extra poäng sådär, men det låter som att det kanske inte var så många som klarade tentan utan dem.

Ha en vanlig tenta, eller en vars upplägg som liknar quizen utan massa minus på varje modul.

Kursen kan faktiskt ha en lista av saker som man faktiskt ska kunna. Det var alltid så himla otydligt vad som man behövde lära sig under kursen, för att klara tentan. Det borde vara en lista med alla sakerna och uppgifter som exact tar med allt man behöver kunna. För jag kunde inte förstå typ något om vad som man behövde lära sig.

Det var idiotiskt att försöka lära ut relationsalgebran, då den inte har någon implementering, eller ens relevans i ämnet; man klarar sig fullständigt utan den om man ser allting bara som tabeller; så det finns ingen anledning att ha med den.

SQL delen var också väldigt dåligt förklarad; vi gick igenom under presentationerna det mest grundläggande SQL, som egentligen är busenkelt att lära sig själv; sedan så kommer projectuppgiften där det är den mest komplicerade texten som man någonsin har funnit. SQL delen behöver mycket bättre gås igenom.

Ta bort powerpointen fullständigt från kursen, för att läraren bara pratar runt hela ämnet och bilderna, istället för att faktiskt förklara något. Det går typ såhär: "Här är en bild som beskriver allt detta", och sedan så går han bara till nästa sak och pratar mer nonsense. Ingen förstår vad du säger. Ha en plan. Gör en restriktion sådan att du måste faktiskt förstå vad du pratar om, genom att behöva faktiskt etablera saker själv genom att rita dom, istället för att bara prata runt andras arbete utan att förstå något utav det själv.

Poängsystemet på tentan. Om ni vill ha samma format sätt ett jag vet inte alternativ på alla alternativ så om man vet ett av alternativen så kan man svara det..

What would you suggest to improve? (I worked: 27-29 timmar/vecka)

The difficulty difference between the practice quizzes and the real quizzes felt somewhat large. I found that it was hard to practice for the actual level of question that appeared in the quizzes with the course supplied content.

What would you suggest to improve? (I worked: 30-32 timmar/vecka)

The workload was just too much with the seminars/assignments. Perhaps the number of tasks could be reduced? Or the seminars skipped with only the assignments being hand-ins?

The exam format was a bit hard to understand. I got many minus points and that was a bit frustrating. Perhaps using one correct answer questions could be an improvement?

What advice would you like to give to future participants?

What advice would you like to give to future participants? (I worked: 6-8 timmar/vecka)

Kursen handlar inte bara om att kunna skriva queries i SQL, utan allt från modellering till själva hårdvaran i databaser och processer vid användning av databaser.

Var i fas

What advice would you like to give to future participants? (I worked: 9-11 timmar/vecka)

Några av de värdefulla råd som jag kan tänka mig att ge, är att se till att hänga med kursen redan i början av kursens gång, det gäller särskilt kursens samtliga quizzar. Man blev inte särskild informerad av hur kursen var upplagd och hur centrala quizzarna egentligen var, då även kursens tenta avslutades med en quiz-utformad tenta (vilket jag tyckte var en genialisk metod att bli slutexaminerad på eftersom att det skulle påvisa hur mycket man faktiskt förstod sig på ämnesområdet ifråga och om eleven uppnådde de övergripande målen).

Kom till föreläsningarna även om du inte har lyckats tangera dig i ämnena / kapitlarna som kommer att tas upp. Föreläsningarna som erbjuds i kursen är otroligt innehållsrika enligt min erfarenhet. Försök även att lyssna uppmärksammat med syfte att försöka bilda en helhet av ämnet ifråga, då tentan och quizzarna kommer mäta ditt förståelse kring delmomenten.

Våga ställa frågor när du är osäker, även under föreläsningarna till undervisningsläraren då handledningstillfällerna kommer handla mest om att få hjälp kring sitt projektarbete / seminarieuppgifter för kursen.

Detta är numera en kurs där fokus ligger på att klara tentan. Plugga mycket på gamla tentor. (Även om Paris säger att det inte är så)

What advice would you like to give to future participants? (I worked: 15-17 timmar/vecka)

Samarbeta och fråga om hjälp när det behövs. Läs boken (den är bra).

What advice would you like to give to future participants? (I worked: 24-26 timmar/vecka)

Läs boken och försök göra tidigare tentor. Detta är en kurs där man inte förstår något, så få det att fungera på något sätt genom att testa allt. Känns svårt i början men bitarna faller på plats mot slutet

What advice would you like to give to future participants? (I worked: 30-32 timmar/vecka)

Perhaps read it over two years instead, one for the seminars/assignments and one for the exam.

You can not slack on the project. You will not make it if you do. Start early and work a bit every day. Some weeks take a long time to get correct. Use the help sessions, not so many people did this year. Specially the early ones. When studying for the exam focus on learning the concepts introduced on the lectures. The lectures provide all information you need. If something is hard to understand the book is good for context and clarification.

Is there anything else you would like to add?

Is there anything else you would like to add? (I worked: 6-8 timmar/vecka)

Att inte säga av läraren att man behöver anstränga sig i kursen och att vi annars kommer misslyckas i början av kursen. Studenterna vet om att kurserna kräver tid och energi, och att säga sådär av läraren kan verka omotiverande.

Is there anything else you would like to add? (I worked: 15-17 timmar/vecka)

Nope

Is there anything else you would like to add? (I worked: 24-26 timmar/vecka)

Nej

Is there anything else you would like to add? (I worked: 30-32 timmar/vecka)

If you have any questions on what i thought my name is Julius Larsson

SPECIFIC QUESTIONS

RESPONSE DATA

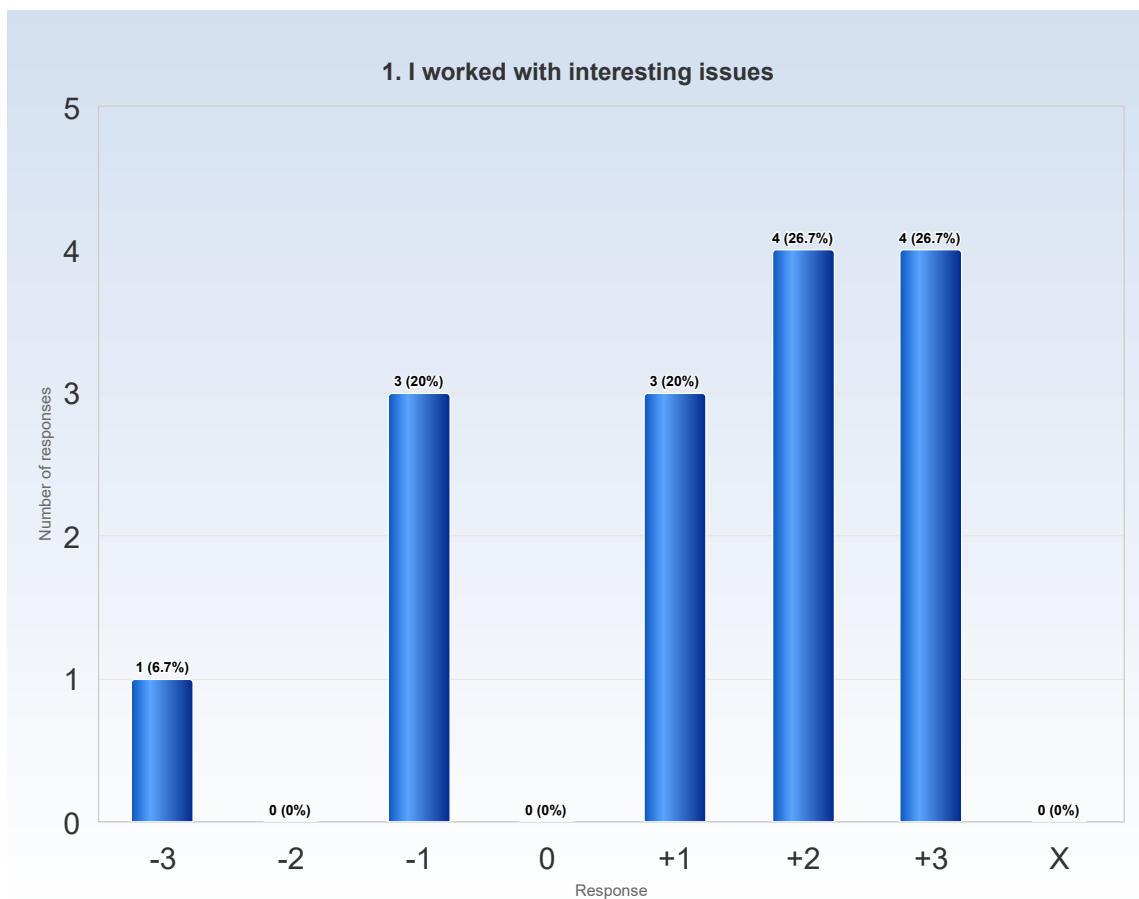
The diagrams below show the detailed response to the LEQ statements. The response scale is defined by:

-3 = No, I strongly disagree with the statement

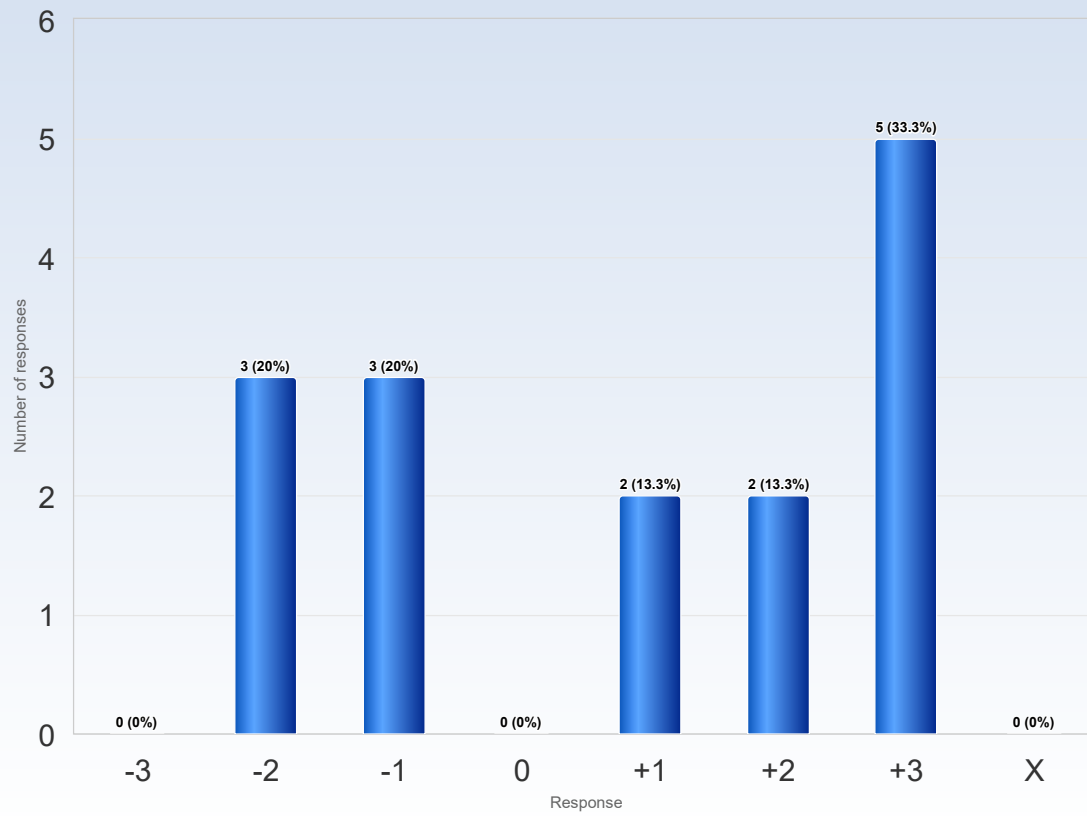
0 = I am neutral to the statement

+3 = Yes, I strongly agree with the statement

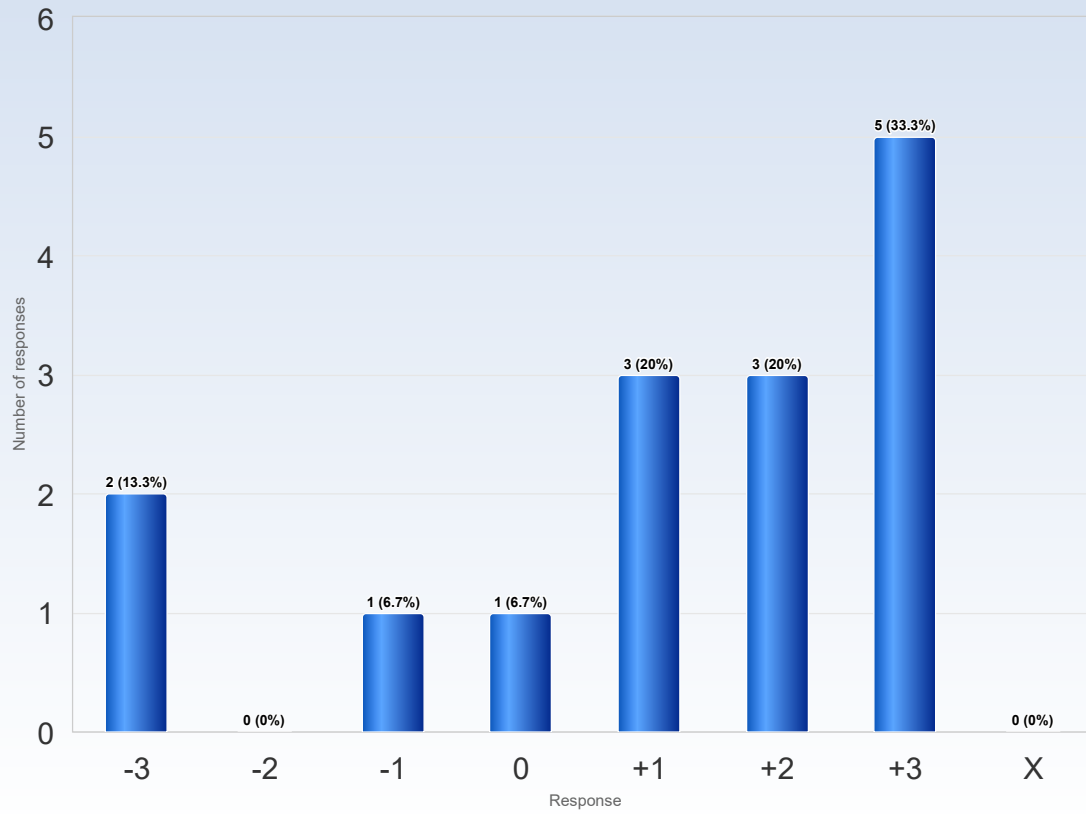
X = I decline to take a position on the statement



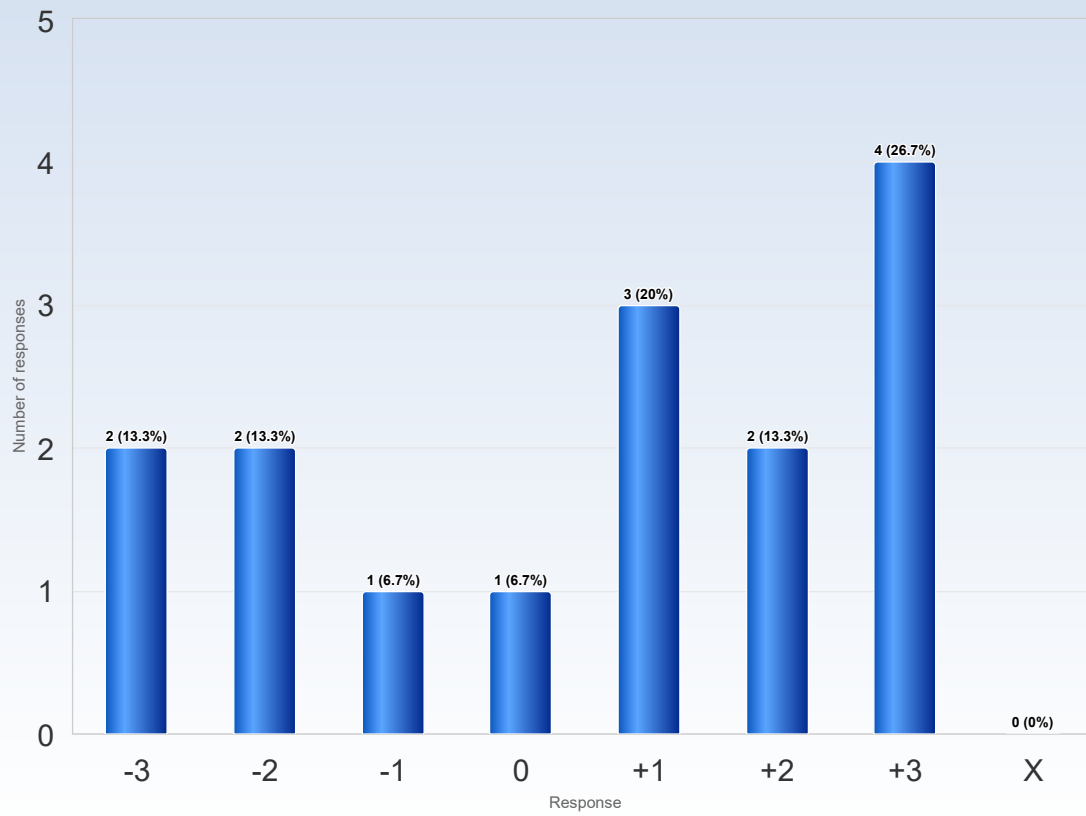
2. I explored parts of the subject on my own



3. I was able to learn by trying out my own ideas



4. The course was challenging in a stimulating way

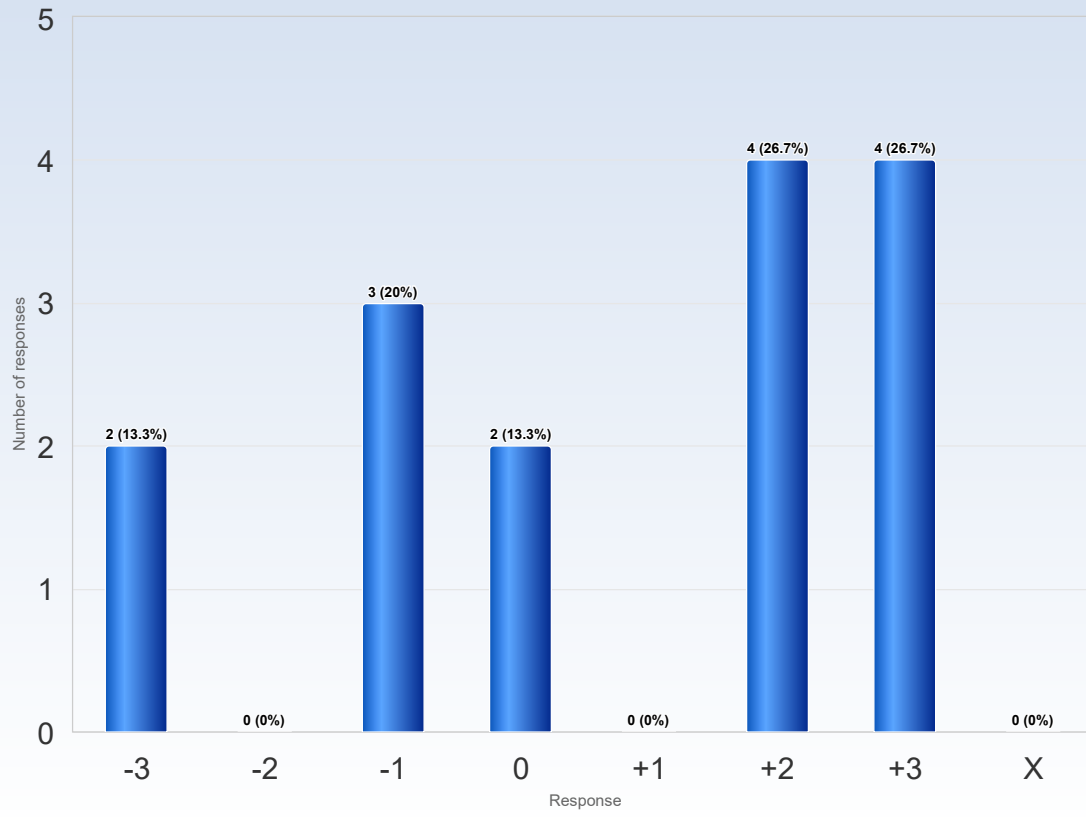


Comments

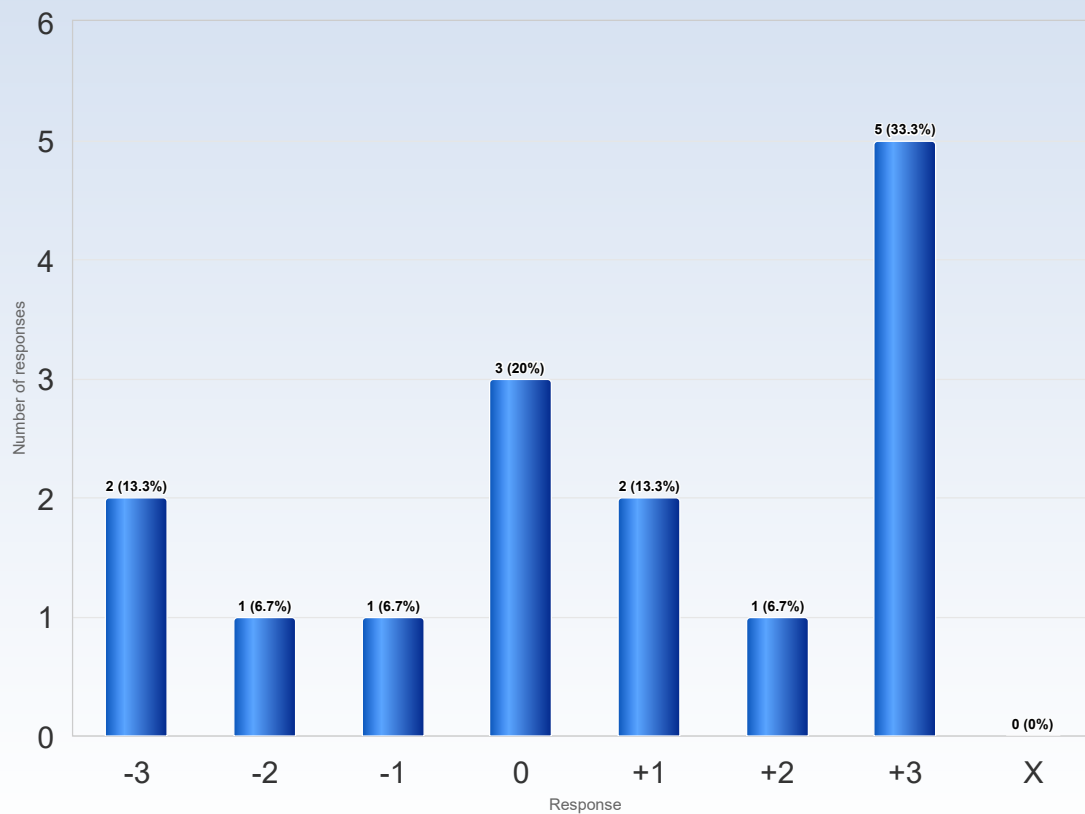
Comments (My response was: -3)

First task with conceptual model felt hopelessly difficult

5. I felt togetherness with others on the course



6. The atmosphere on the course was open and inclusive



Comments

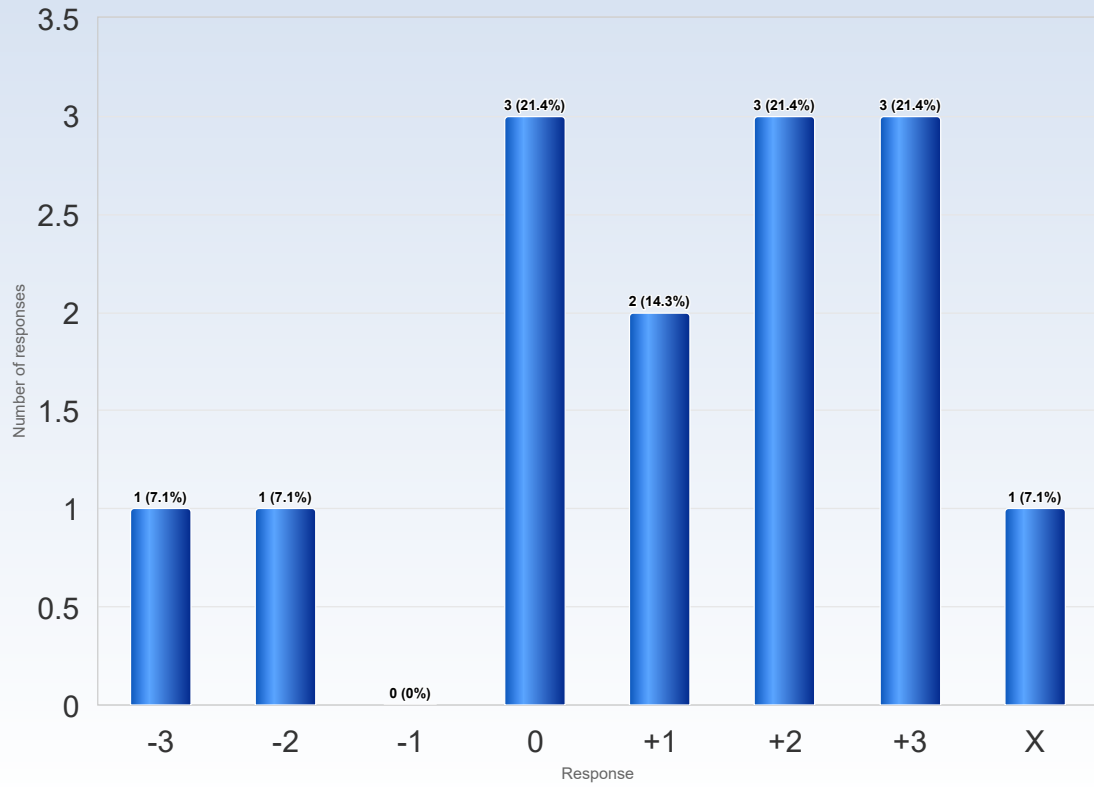
Comments (My response was: -3)

Kändes inte som att man som student blev lyssnad på när man gav feedback till läraren.

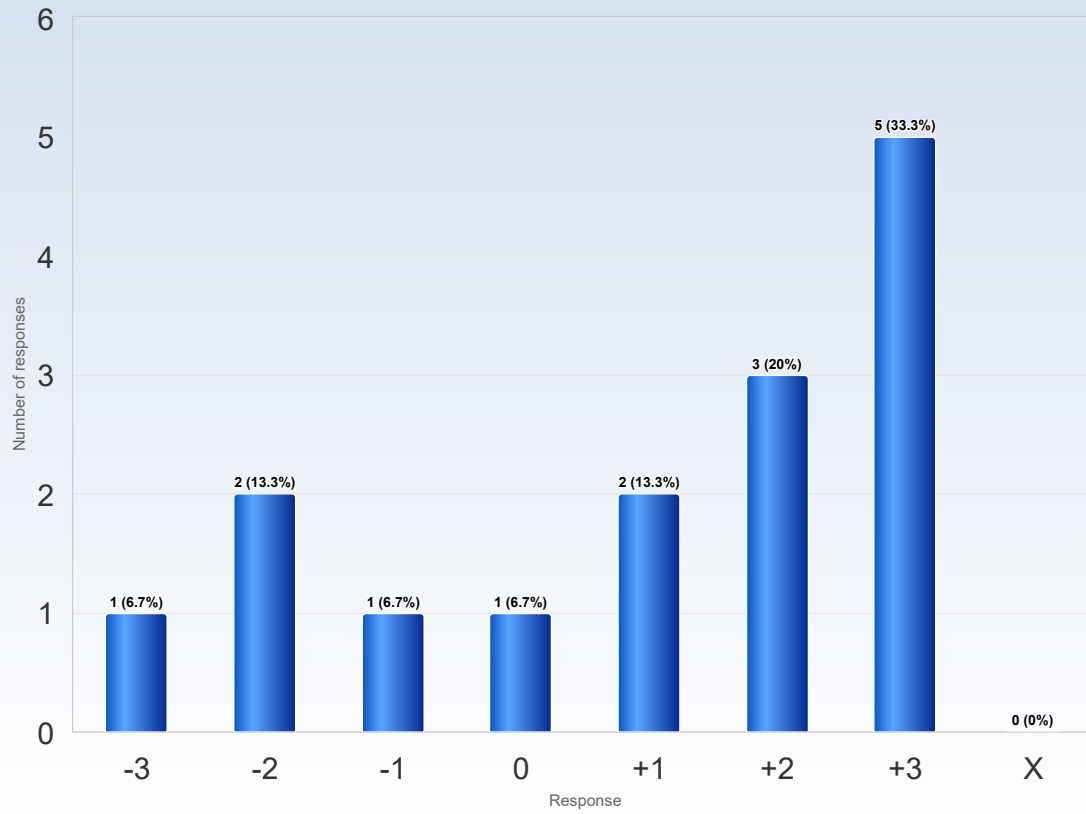
Comments (My response was: -1)

Some TAs had a very condescending attitude during tutorials and seminars

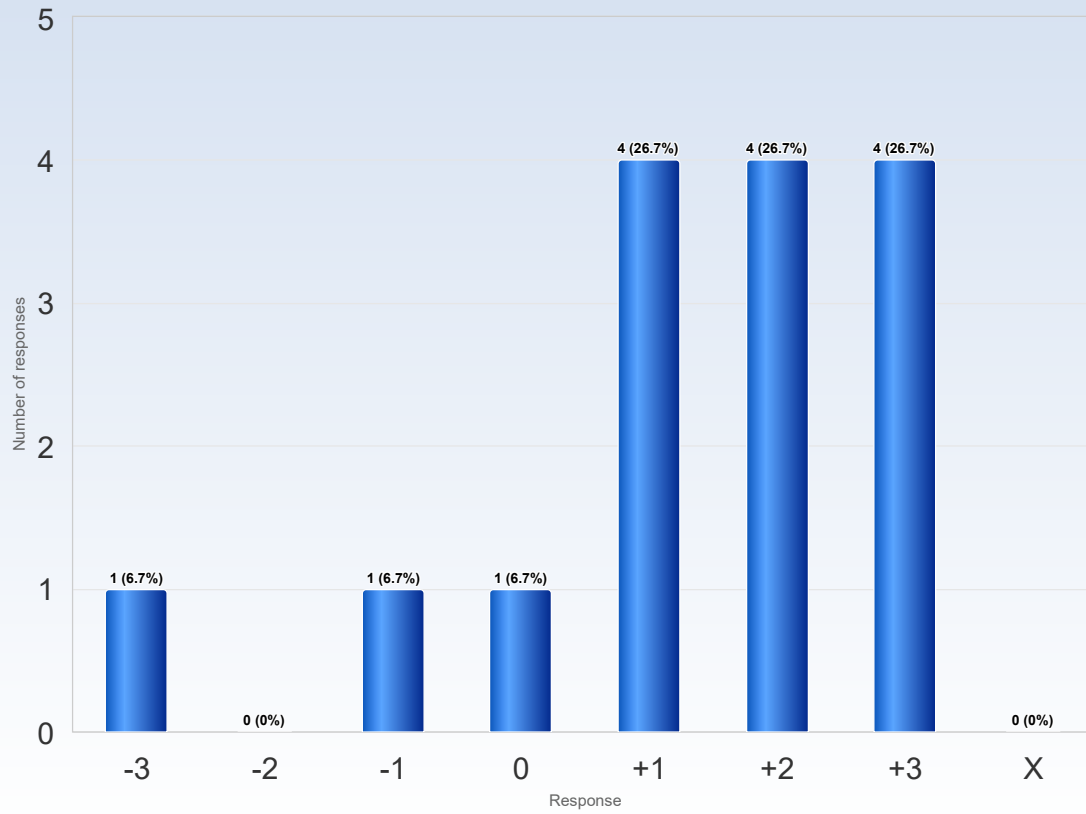
7. The intended learning outcomes helped me to understand what I was expected to achieve



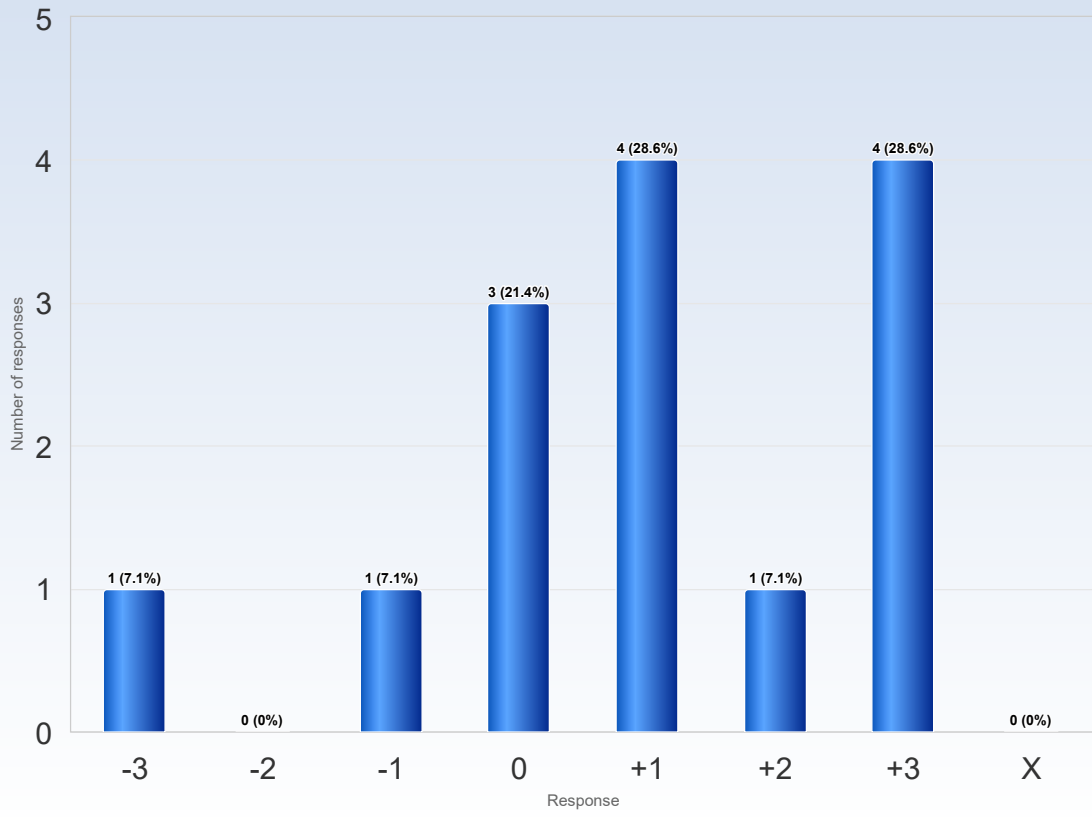
8. The course was organized in a way that supported my learning



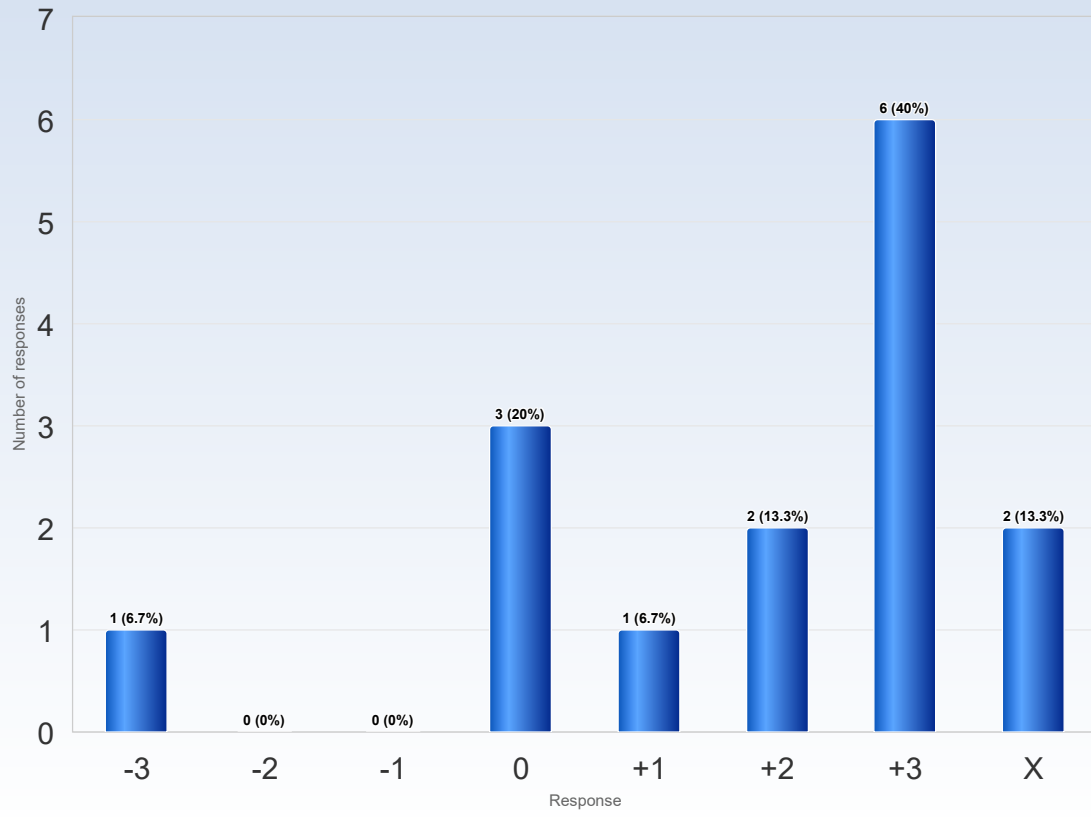
9. I understood what the teachers were talking about



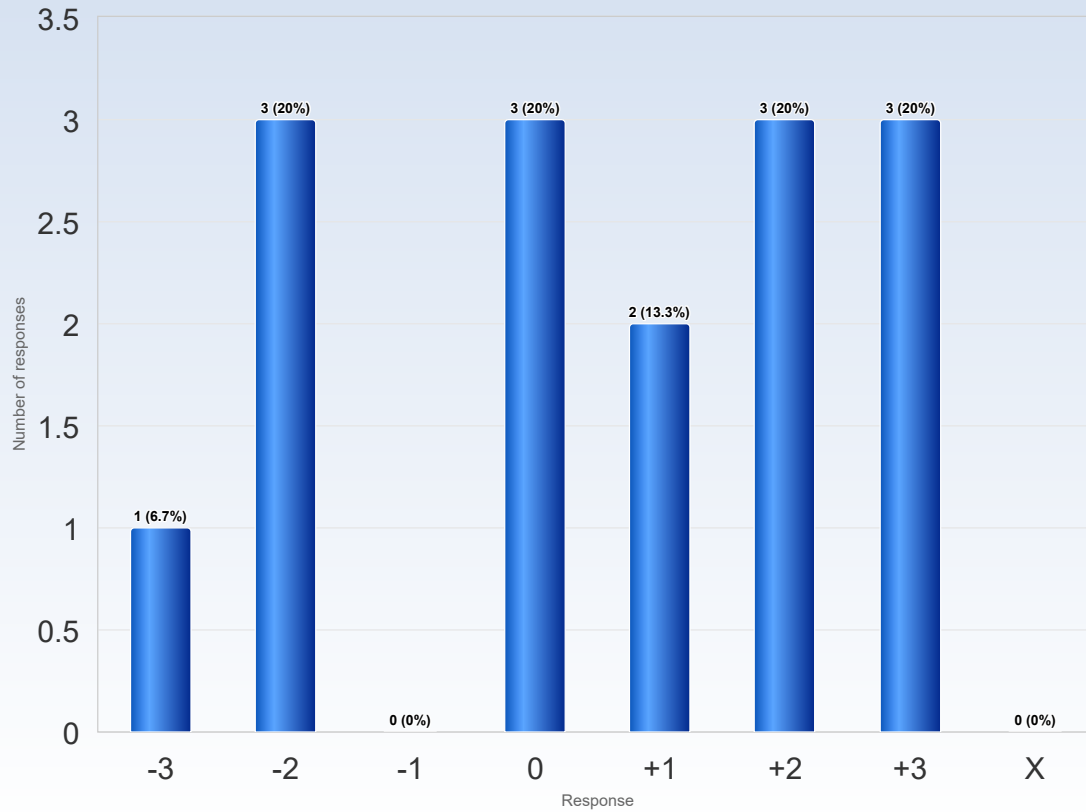
10. I was able to learn from concrete examples that I could relate to



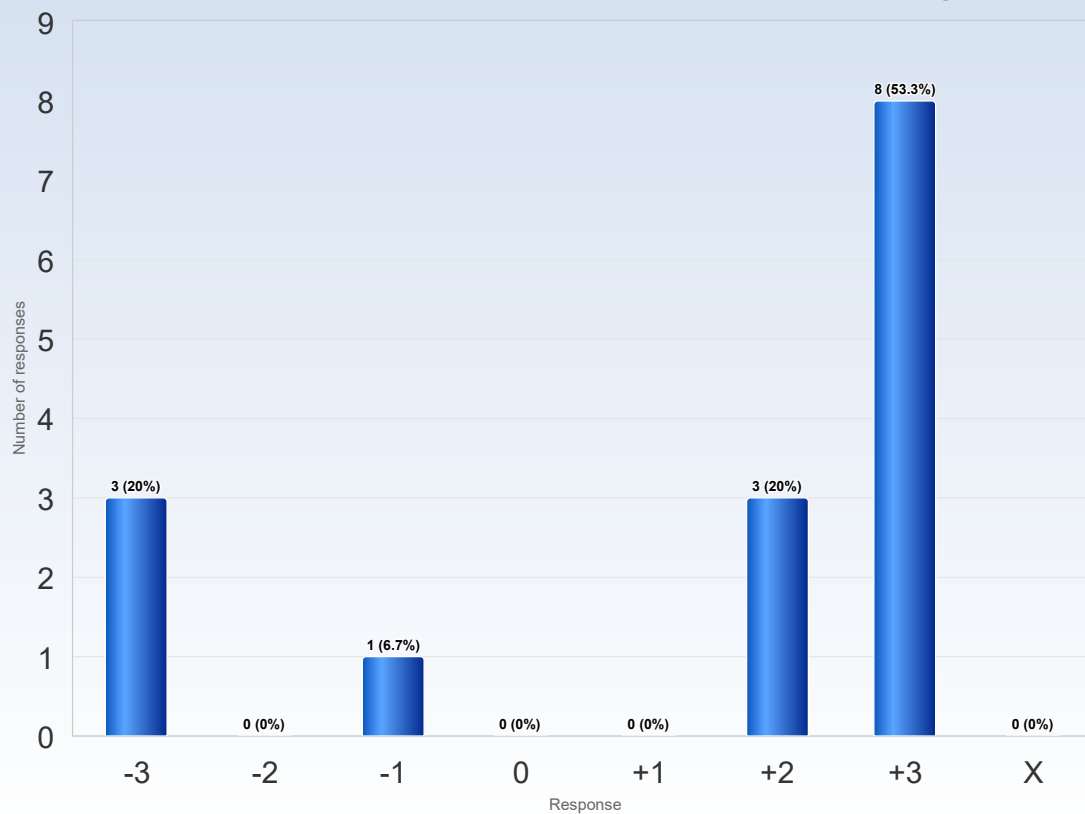
11. Understanding of key concepts had high priority



12. The course activities helped me to achieve the intended learning outcomes efficiently



13. I understood what I was expected to learn in order to obtain a certain grade

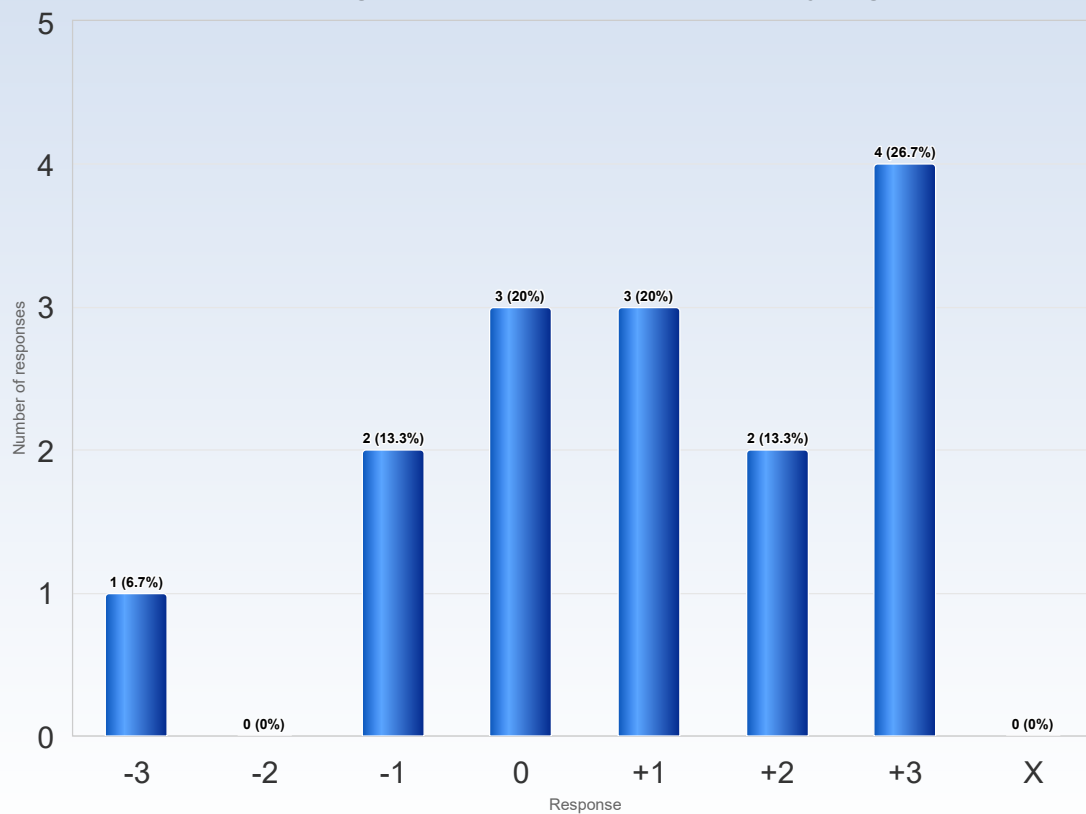


Comments

Comments (My response was: -3)

Lite svårt att förstå nya systemet men det blev bra tillslut.

14. I received regular feedback that helped me to see my progress



Comments

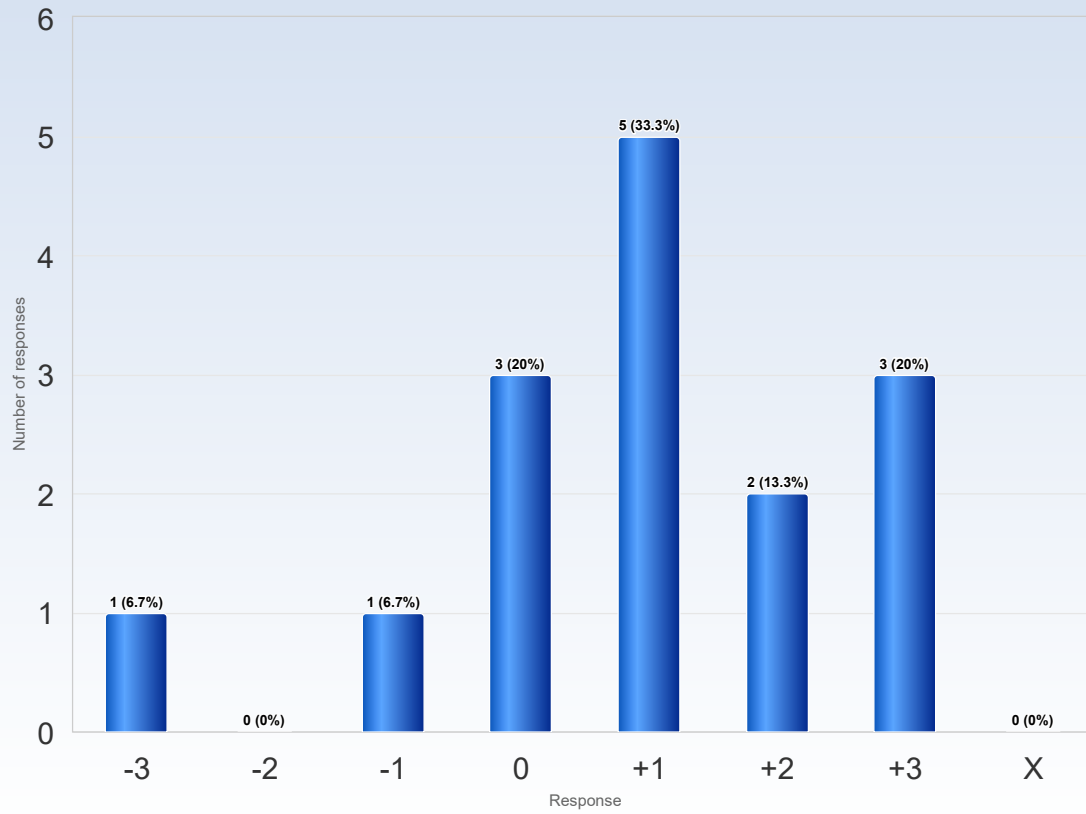
Comments (My response was: +1)

Viss feedback var bristfällig.

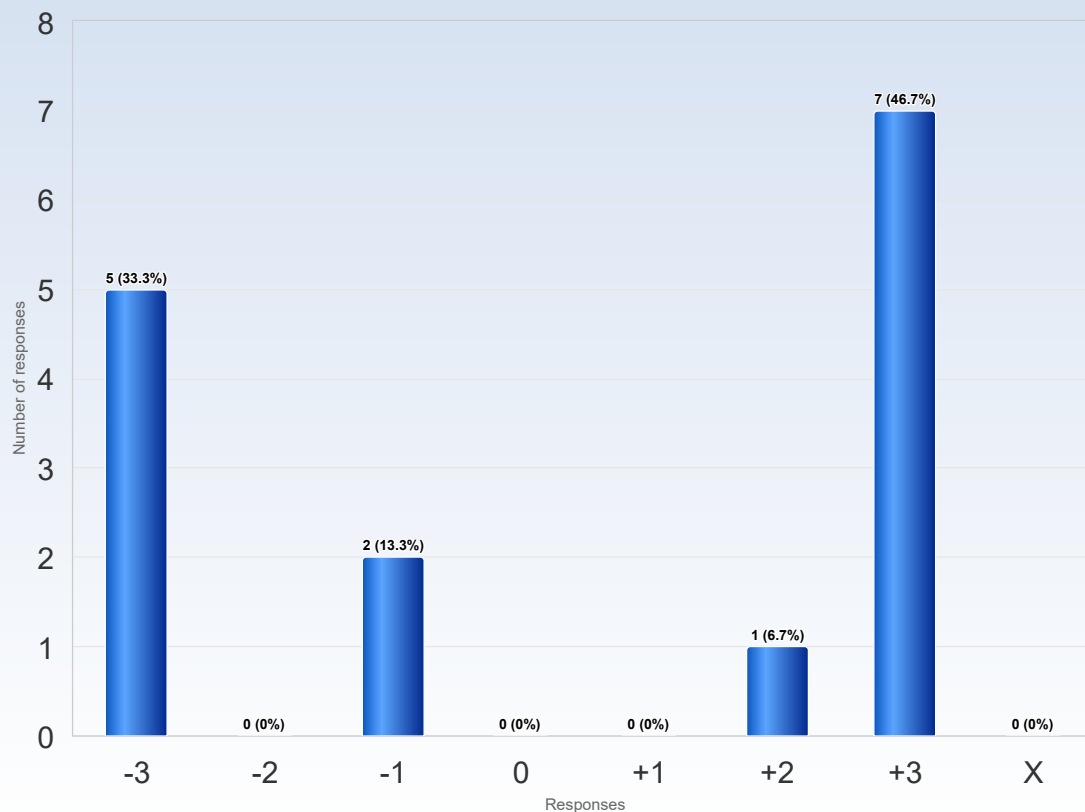
Comments (My response was: +2)

Good teacher feedback on the reports

15. I could practice and receive feedback without being graded



16. The assessment on the course was fair and honest



Comments

Comments (My response was: -3)

Tentan kändes som man hade blivit lurad

Nya tenta formatet var väldigt orättvist. Tentan hade fokus på vad man inte kunde istället för vad man kunde.

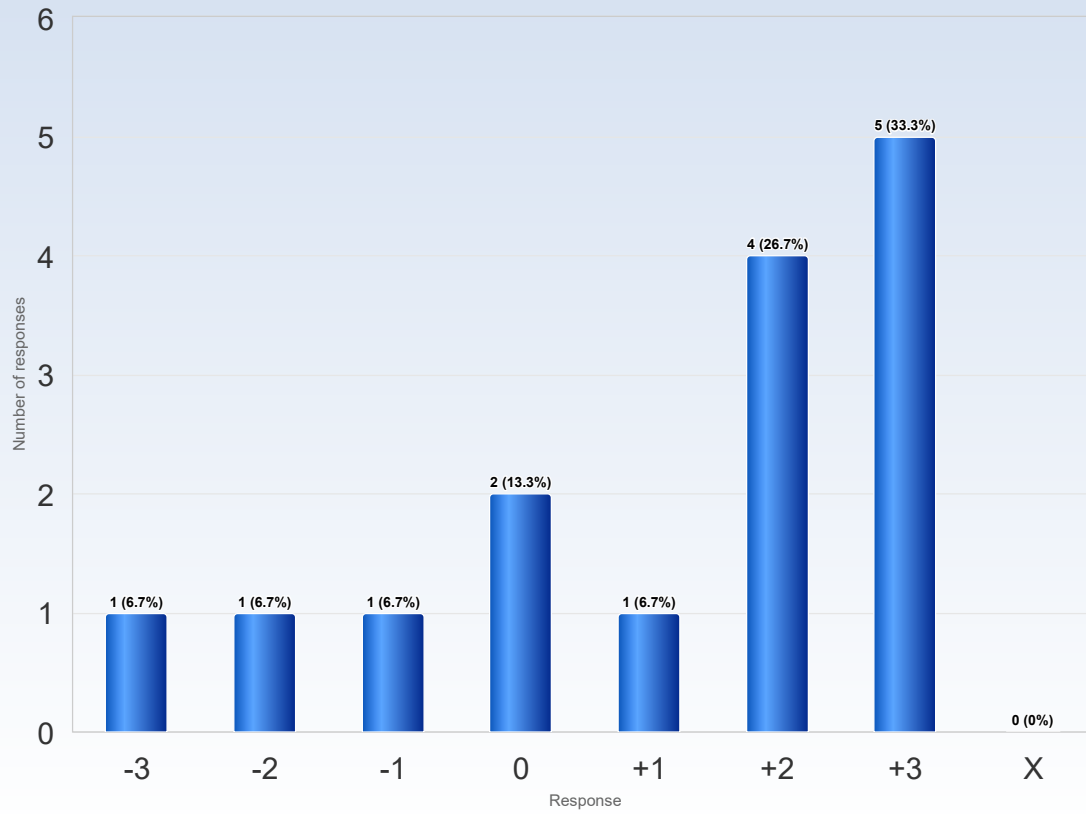
Comments (My response was: -1)

Vrf minus poäng?!

Comments (My response was: +3)

Despite many complaints from others, I think the exam grading was totally fair.

17. My background knowledge was sufficient to follow the course

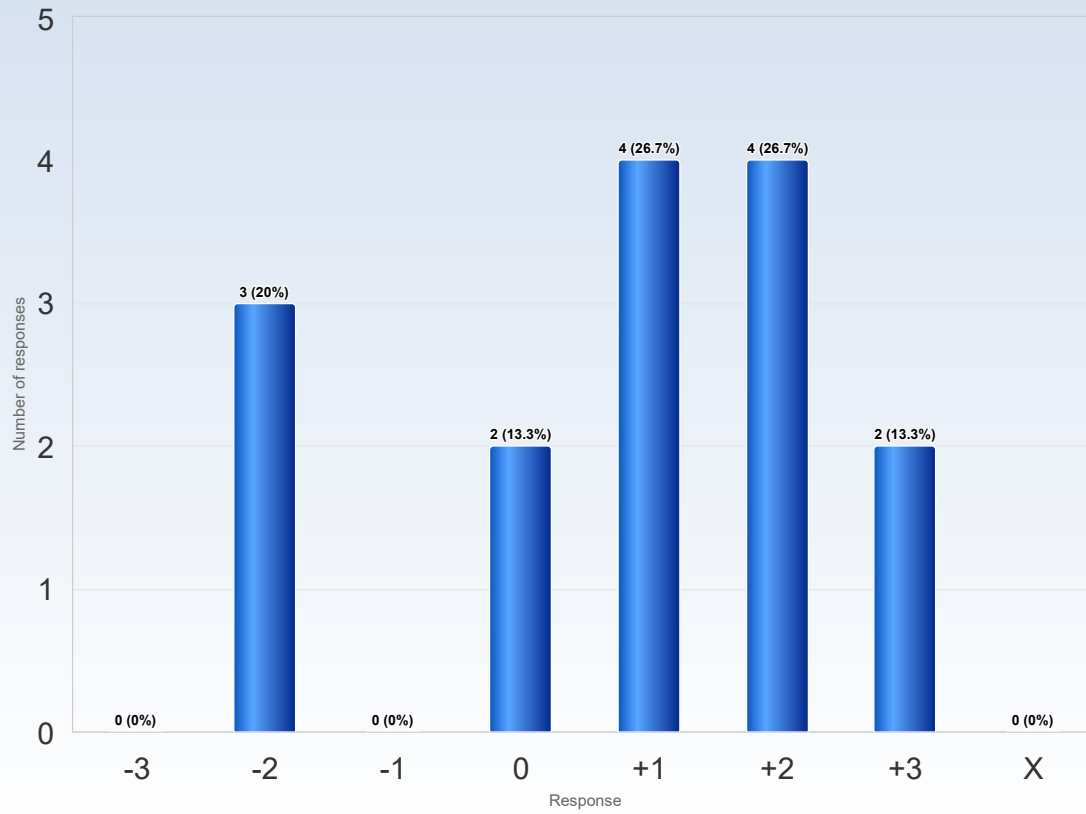


Comments

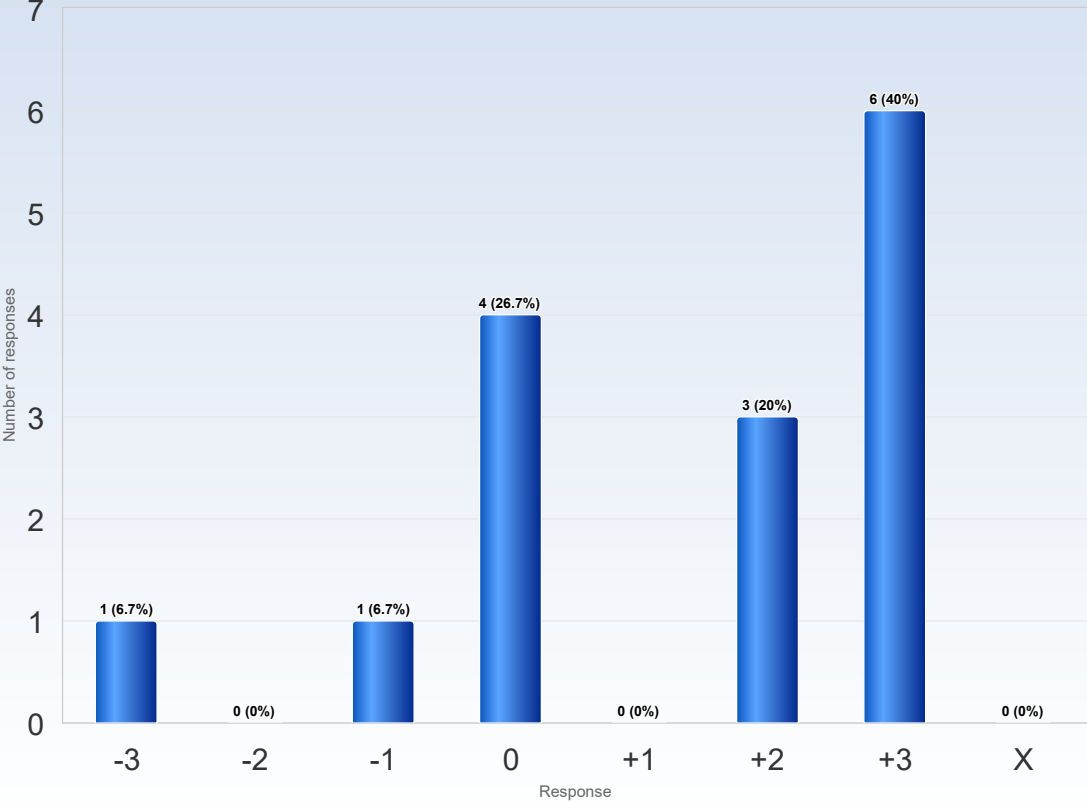
Comments (My response was: -2)

I would actually say yes, but since the seminars part of the course was so tough perhaps no?

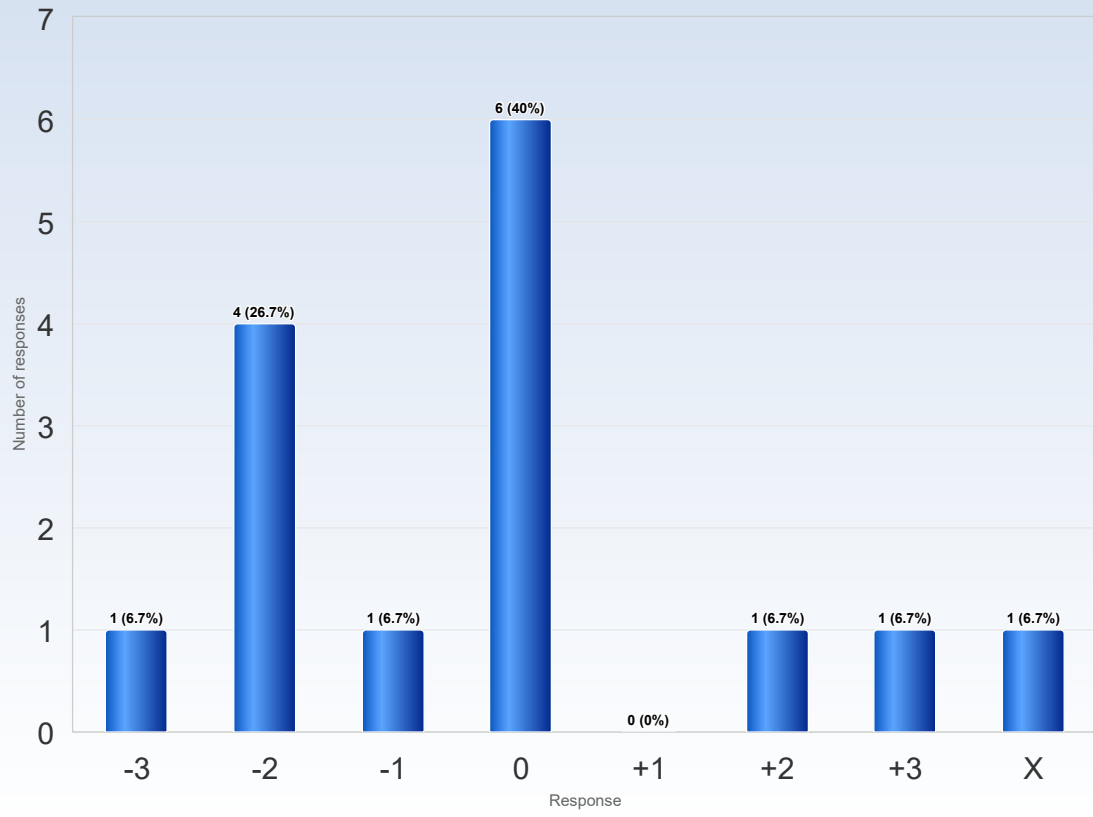
18. I regularly spent time to reflect on what I learned



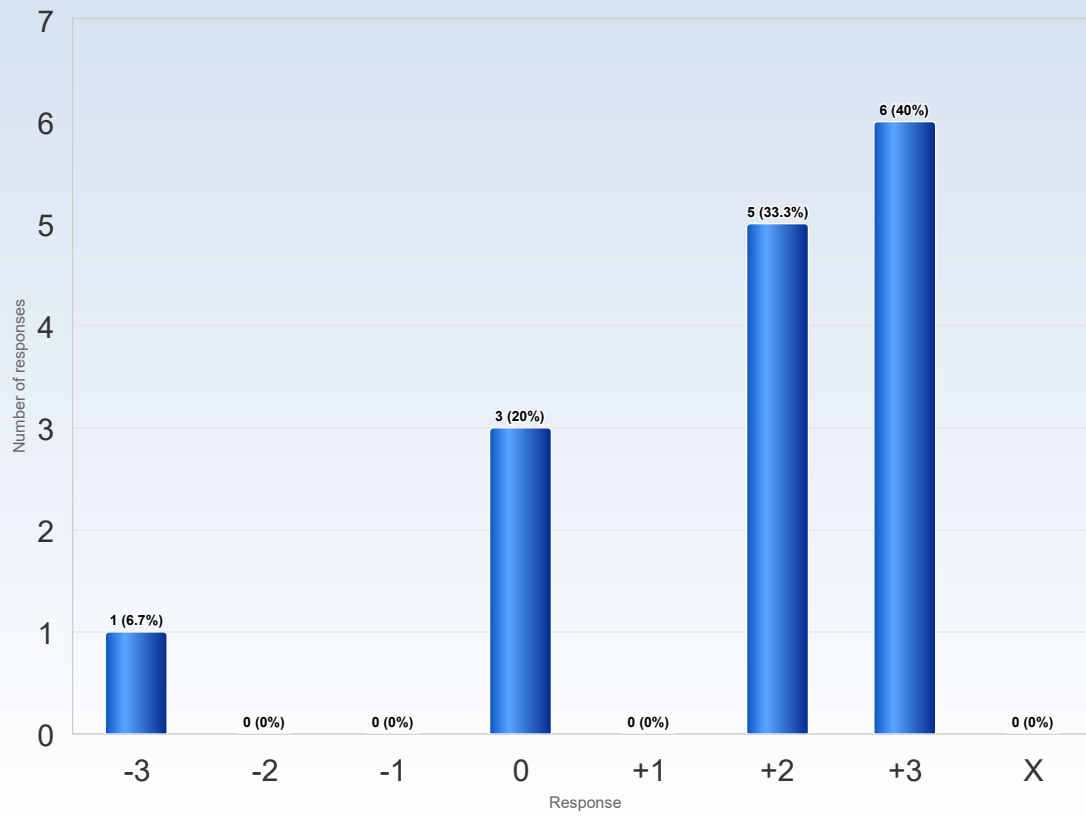
19. The course activities enabled me to learn in different ways



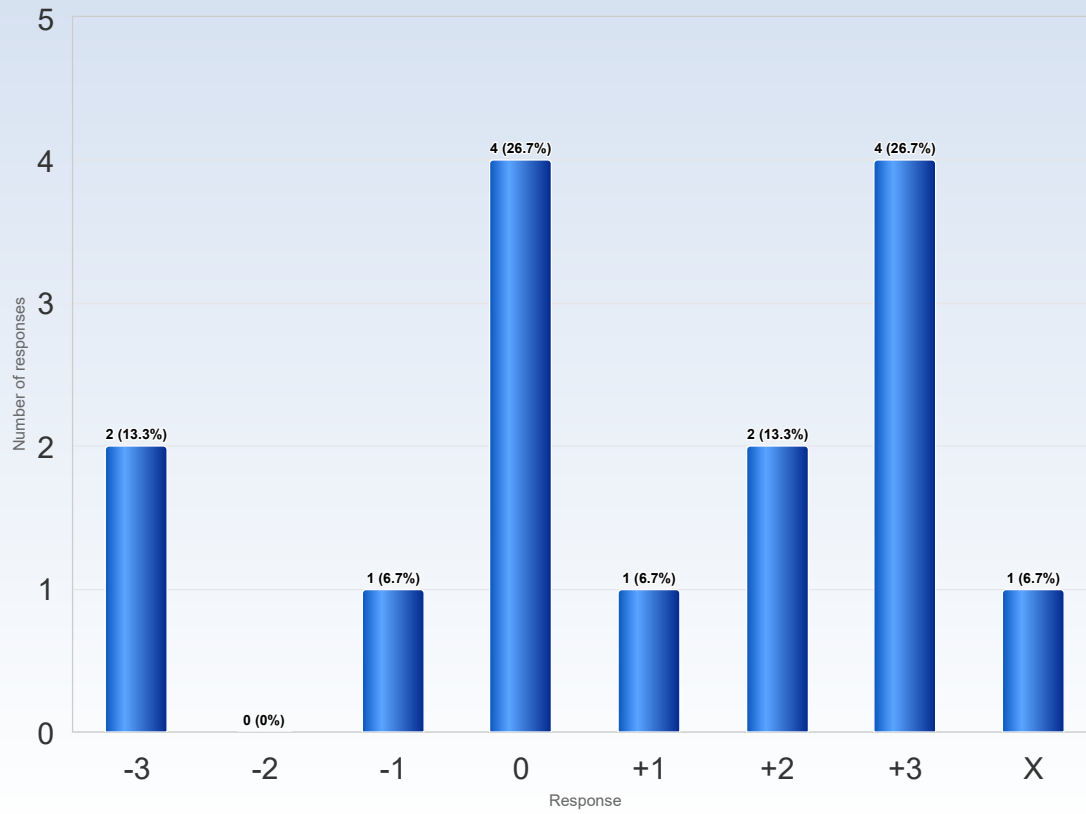
20. I had opportunities to influence the course activities



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



22. I was able to get support if I needed it



Comments

Comments (My response was: 0)

Many opportunities to ask question both online and during tutorial sessions but very varied responses depending on the person asked.