

# Kursanalys för Arkitektur och design av globala applikationer, IV1201, VT 24

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## 1 Minnesanteckningar från kursnämnd

Deltagarna är nöjda med kursens utformning, speciellt bra är förtroendet att själv få styra sitt arbete och kunna påverka vad som studeras. Det är också uppskattat att allting implementeras i kod. Dessa synpunkter stämmer med vad deltagarna skrivit i skriftliga rapporter som lämnats in under kursens gång. Nedan följer några bra förslag på förbättringar.

- Ge tydligare direktiv om hur omfattande slutrapporten ska vara, kanske tex hur många sidor rapporter på olika nivåer i genomsnitt brukar ha.
- Ge tydligare direktiv om hur presentationerna ska gå till, att de ska vara genomtänkta men inte överarbetade. Det är helt OK att ställa krav som innebär en viss förberedelsestid.
- Kanske något mer om microservices, tex en föreläsning till. Ställ dock inte krav på att det ska användas i arbetet. Många som läser kursen har aldrig tidigare byggt en fullstack-applikation med bra arkitektur, och att göra det med en monolit är viktig kunskap. Det kan dock vara en idé att utöka undervisningen om microservices något, för att göra det till ett tydligare alternativ till monolitisk arkitektur, som kan tillämpas av de intresserade.

## 2 Enkät

LEQ-enkäten fick tyvärr endast sex svar, mindre än 10% av kursdeltagarna, vilket gör det tveksamt att dra några slutsatser av den. De omdömen som gavs var dock mycket positiva, och tidsåtgången var rimlig. Det fullständiga enkätresultatet finns i bilaga ett.

### 3 Examinationsgrad

- 62 studenter kursregistrerades. 61 av dessa deltog aktivt i kursen, den sista utförde inget arbete någon gång under kursen.
- 60 deltagare (98% av de aktiva deltagarna) klarade den enda delkursen INL1, och därmed hela kursen.
- Slutbetygen föredelade sig som följer.

Betyg	Antal	Procentandel av deltagare
A	17	28%
B	18	29%
C	21	34%
D	4	7%
E	0	0%
F/ej klar	1	2%

### 4 Förändringar från föregående kursomgång

Inga större förändringar gjordes till denna kursomgång.

### 5 Åtgärder till nästa kursomgång

Nedanstående åtgärder bör vidtas till nästa kursomgång.

- Ge tydligare direktiv om hur omfattande slutrapporten ska vara, kanske tex hur många sidor rapporter på olika nivåer i genomsnitt brukar ha.
- Ge tydligare direktiv om hur presentationerna ska gå till, att de ska vara genomtänkta men inte överarbetade. Det är helt OK att ställa krav som innebär en viss förberedelse tid.

### Bilaga 1, Resultat av LEQ-enkät

Här presenteras det fullständiga resultatet av kursenkäten.

## IV1201 - 2024-03-26

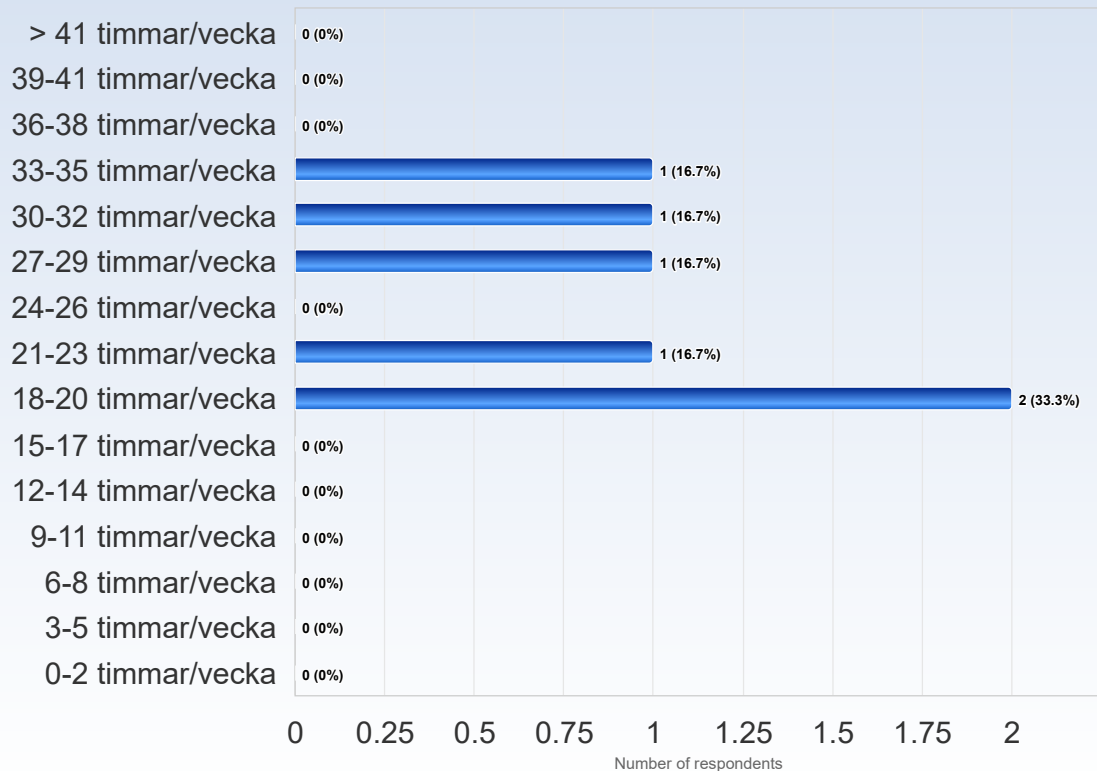
Antal respondenter: 62

Antal svar: 6

Svarsfrekvens: 9,68 %

### ESTIMATED WORKLOAD

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



# LEARNING EXPERIENCE

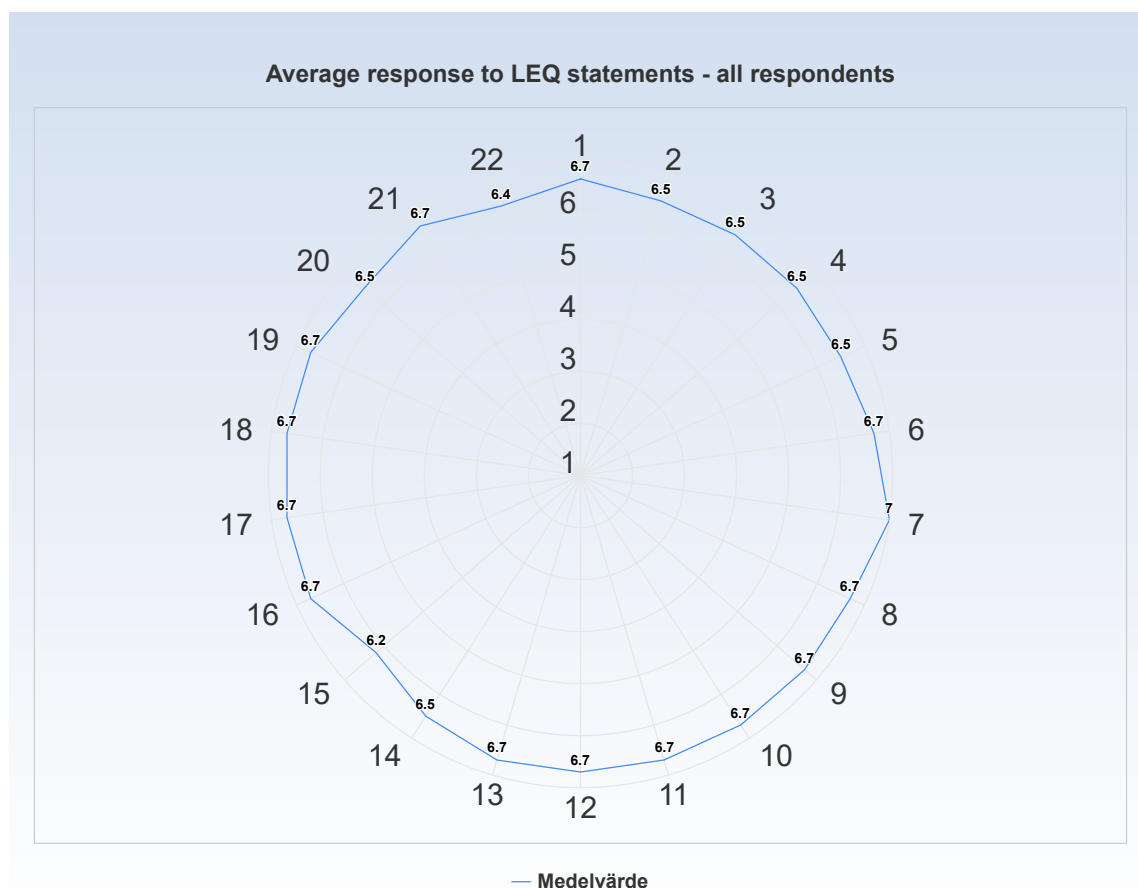
The polar diagrams below show the average response to the LEQ statements for different groups of respondents (only valid responses are included). The scale that is used in the diagrams is defined by:

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.

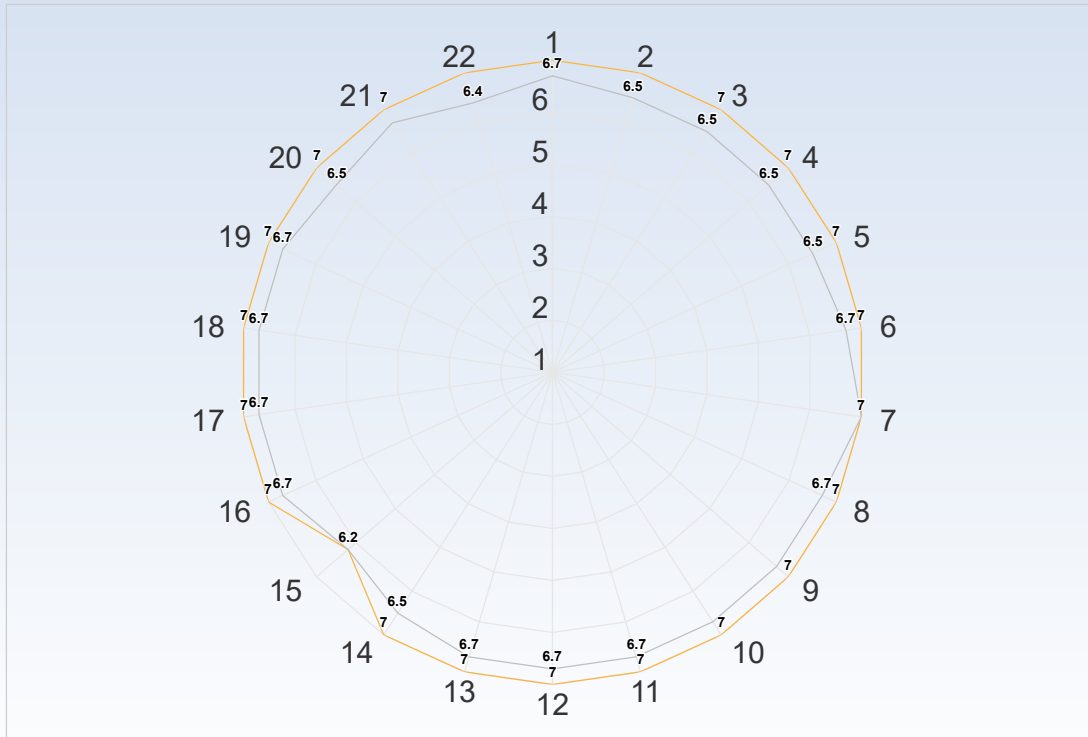
Biggs J. & Tang, C. (2011). *Teaching for Quality Learning at University*, Chapter 6, pp. 95-110. Maidenhead: McGraw Hill.

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.

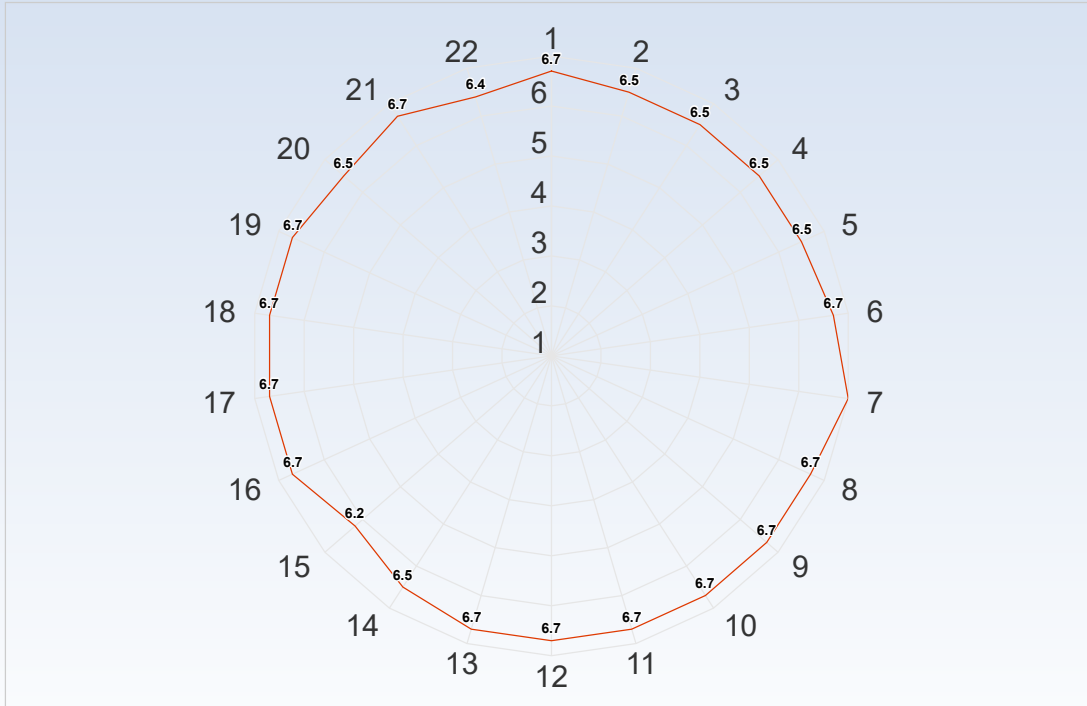
Ramsden, P. (2003). *Learning to Teach in Higher Education*, Chapter 6, pp. 84-105. New York: RoutledgeFalmer.

### Average response to LEQ statements - per gender



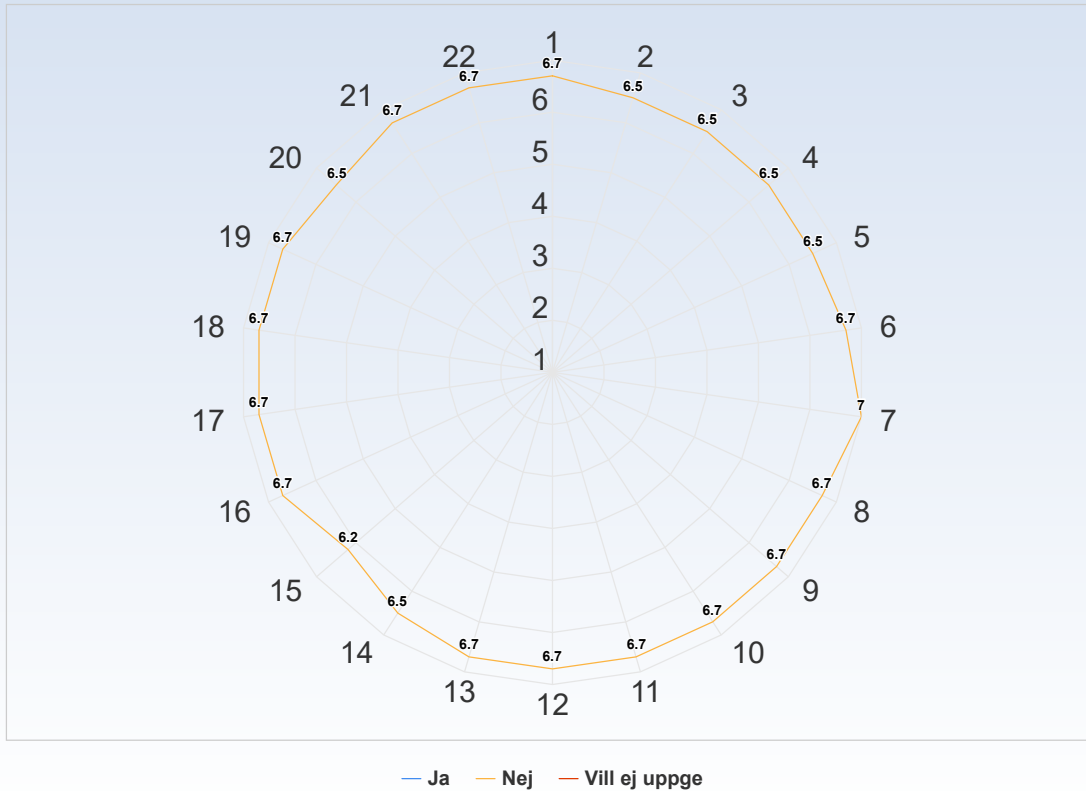
— Kvinna — Man — Annat — Vill ej uppge — (Answered)

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



## GENERAL QUESTIONS

What was the best aspect of the course?

What was the best aspect of the course? (I worked: 18-20 timmar/vecka)

Kul att göra ett projekt på en lite högre nivå än de flesta andra programmeringsuppgifter vi gör. Roligt och nyttigt att få fokusera på kvaliteten i koden och inte bara få det att fungera.

What was the best aspect of the course? (I worked: 21-23 timmar/vecka)

Hela upplägget var briljant. Bästa kursupplägget av alla TIDAB kurser.

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

Kursen var bra.

What was the best aspect of the course? (I worked: 33-35 timmar/vecka)

Den bästa delen av kursen IV1201 är att man kan följa videohandledningar som lär ut på ett mycket pedagogiskt sätt och visar hur man blir en effektiv programmerare.

What would you suggest to improve?

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

Inget.

What would you suggest to improve? (I worked: 33-35 timmar/vecka)

Dne skulle kunna förbättra lite mer instruktion som man ska göra för projektet typ vart man börjar

What advice would you like to give to future participants?

What advice would you like to give to future participants? (I worked: 18-20 timmar/vecka)

Fokusera på godkänt-kraven innan man börjar med några högre betygs-krav.

What advice would you like to give to future participants? (I worked: 21-23 timmar/vecka)

Gå igenom kursmaterialet ordentligt.

What advice would you like to give to future participants? (I worked: 27-29 timmar/vecka)

Följe kursen instruktioner och studera bra.

What advice would you like to give to future participants? (I worked: 33-35 timmar/vecka)

Förbättringen skulle kunna vara mer detaljerade instruktioner om vad som ska göras i projektets början.

Is there anything else you would like to add?

Is there anything else you would like to add? (I worked: 18-20 timmar/vecka)

Vad jag har förstått kommer inte Nätverksprogrammering vara obligatorisk i programmet längre, tror det kommer bli en svårare/mer krävande kurs om man inte kan nånting om att bygga en webbserver sen tidigare. Kanske borde bli ännu tydligare vilka inspelade föreläsningar om nätverksprogrammering man behöver se för den här kursen.

Is there anything else you would like to add? (I worked: 27-29 timmar/vecka)

Nej.

## SPECIFIC QUESTIONS

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## RESPONSE DATA

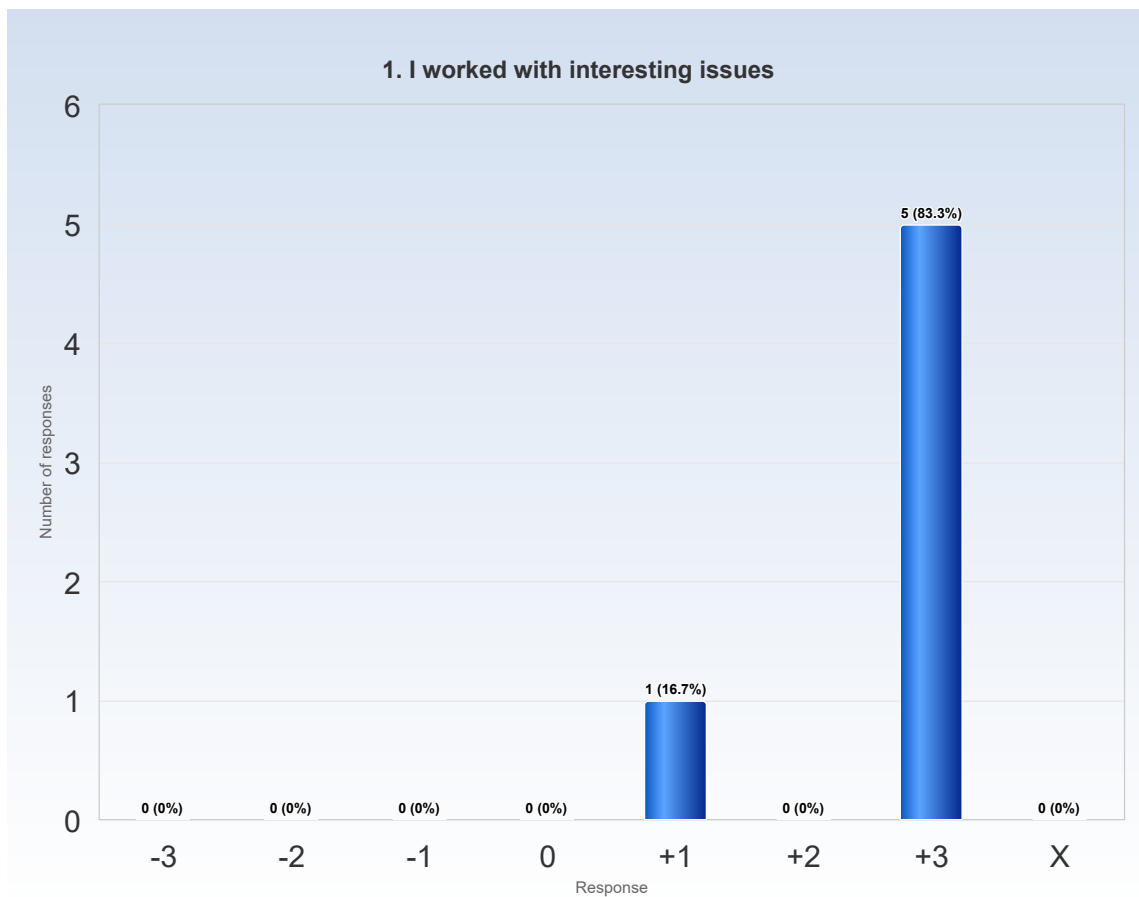
The diagrams below show the detailed response to the LEQ statements. The response scale is defined by:

-3 = No, I strongly disagree with the statement

0 = I am neutral to the statement

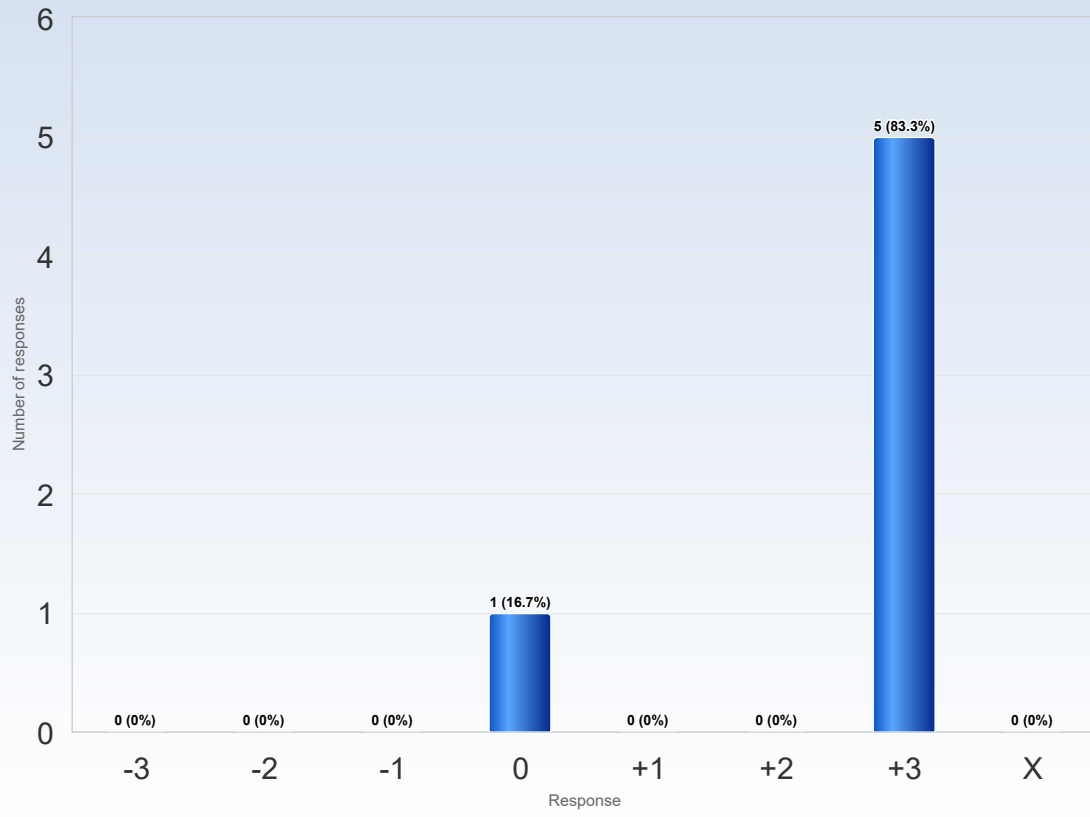
+3 = Yes, I strongly agree with the statement

X = I decline to take a position on the statement

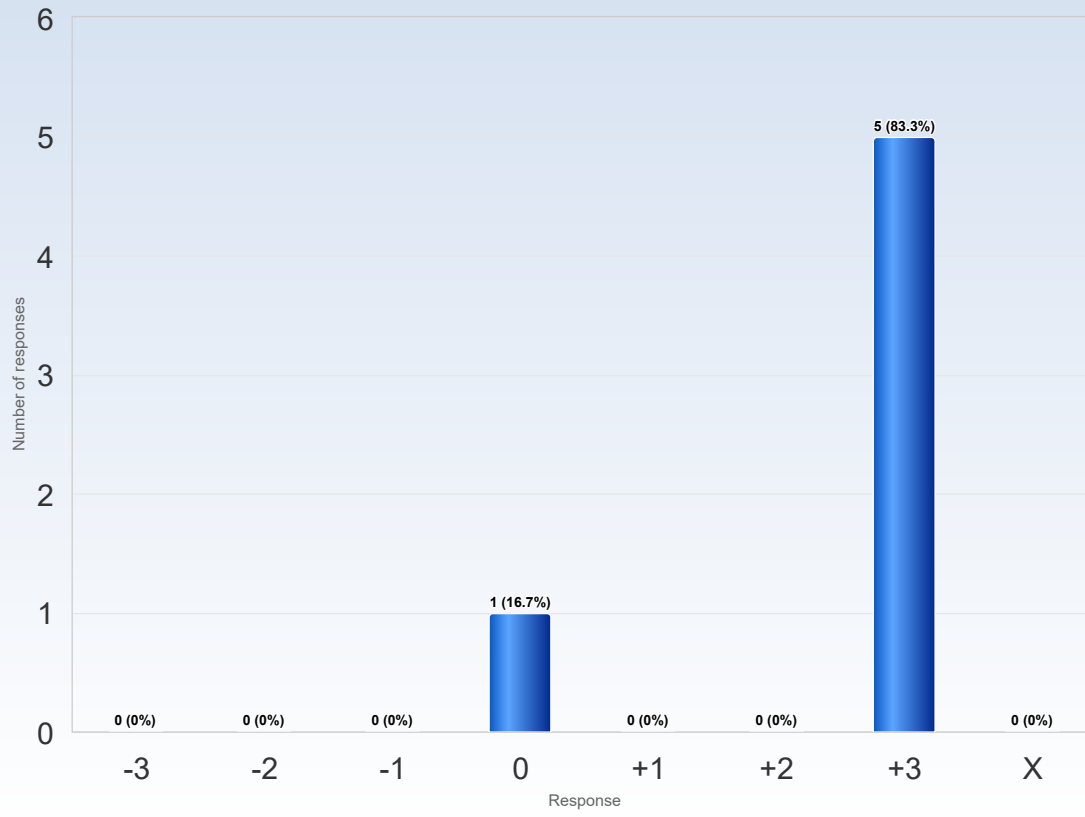




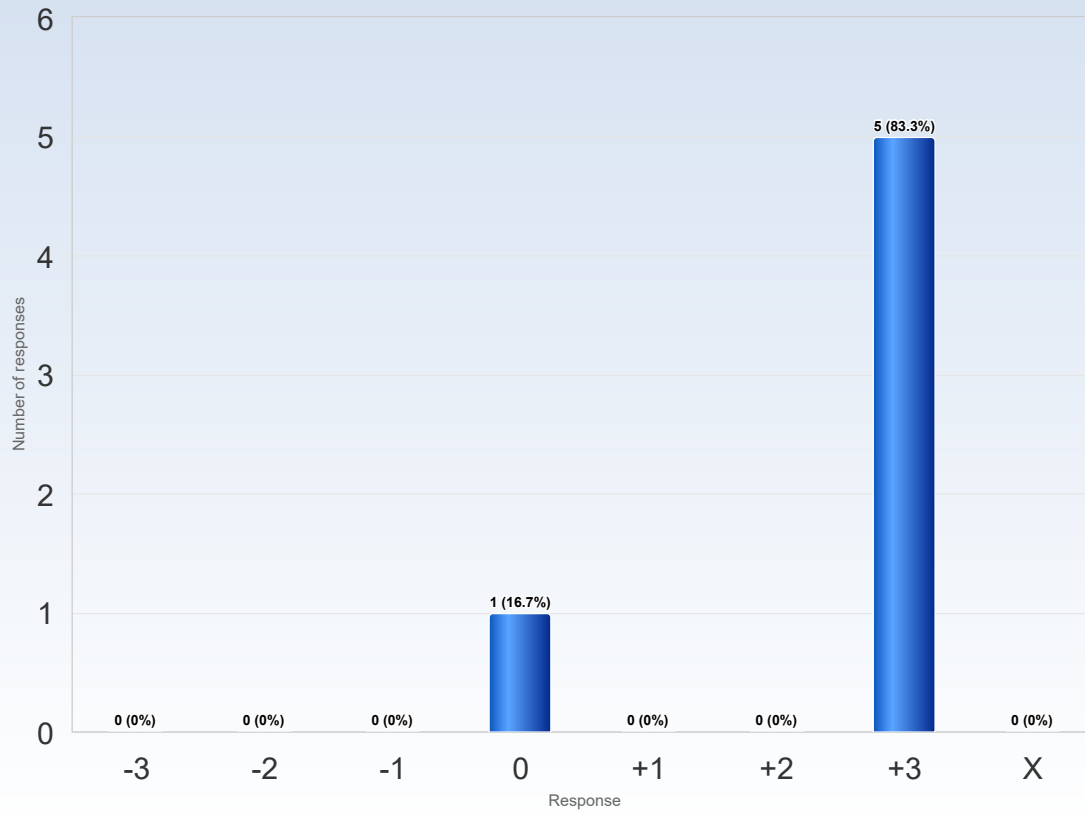
## 2. I explored parts of the subject on my own



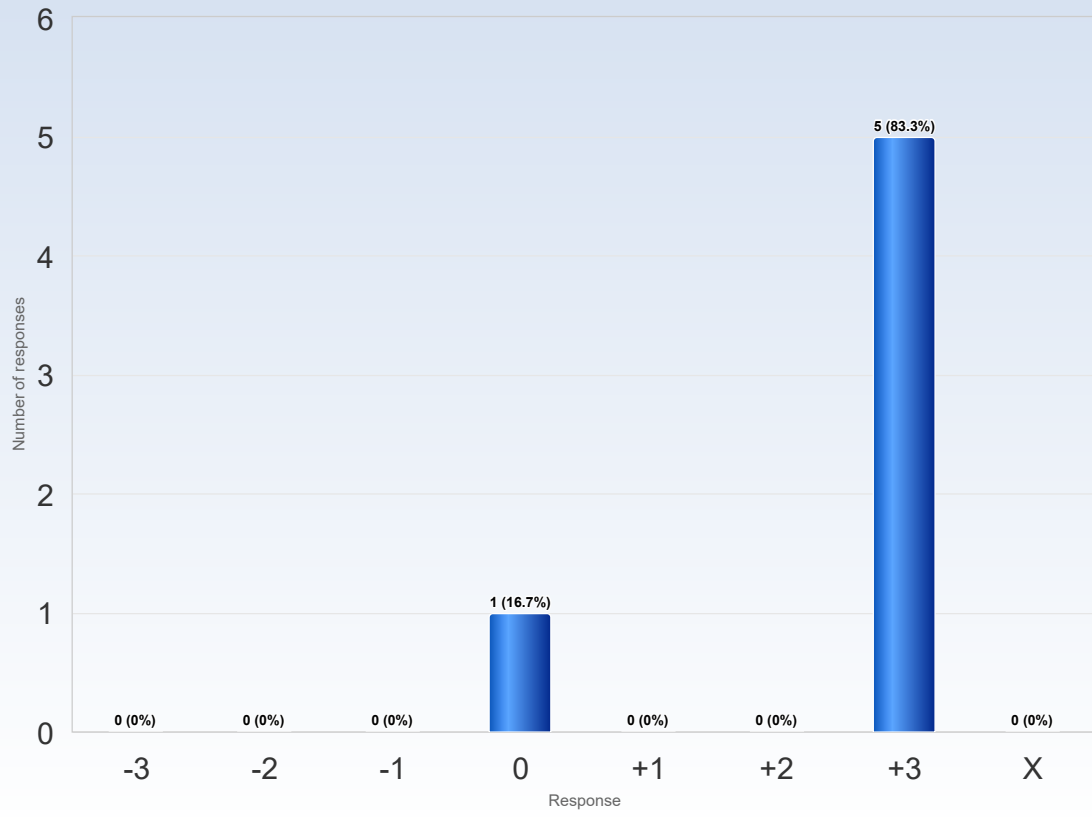
### 3. I was able to learn by trying out my own ideas



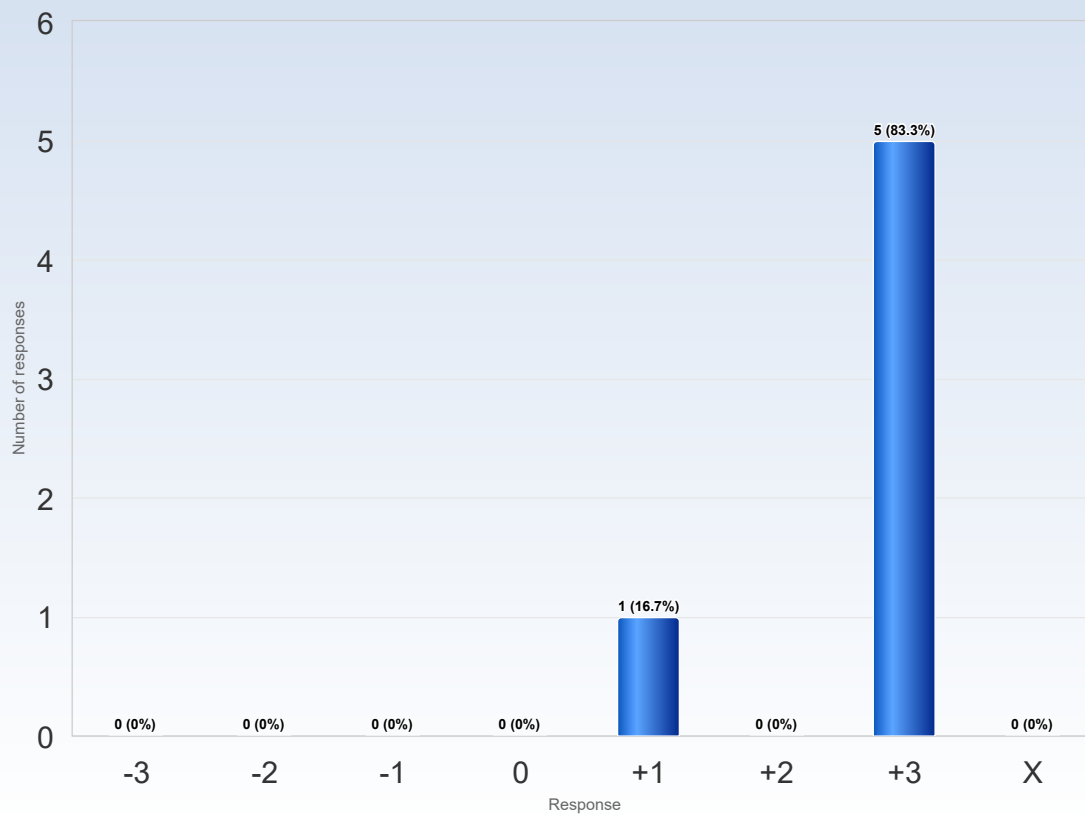
#### 4. The course was challenging in a stimulating way



### 5. I felt togetherness with others on the course



### 6. The atmosphere on the course was open and inclusive



#### Comments

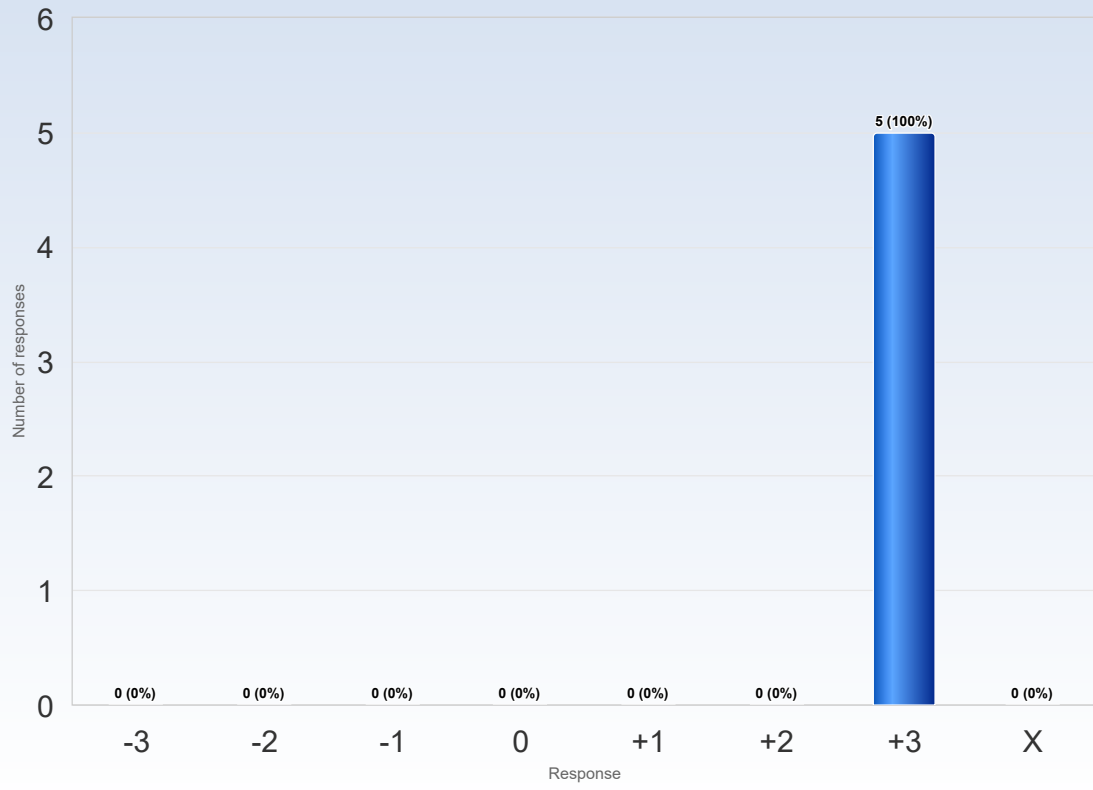
Comments (My response was: +3)

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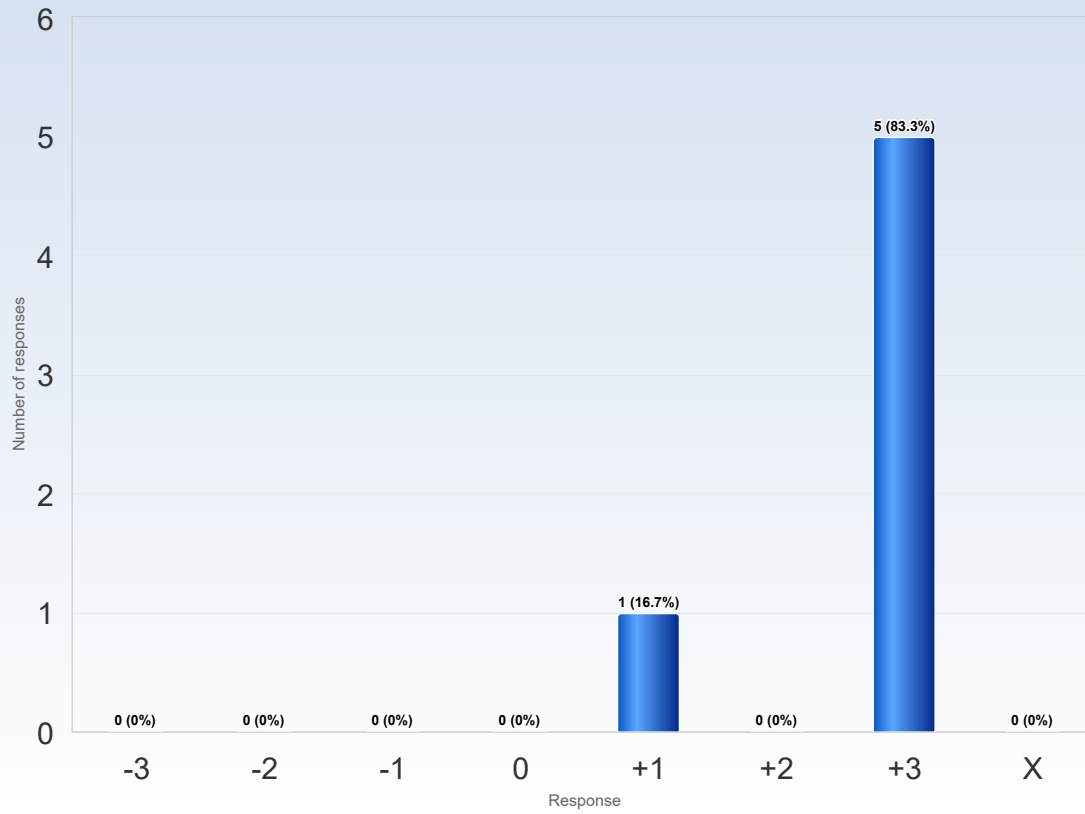
Man behövde inte vara rädd för att ställa dumma frågor på seminarierna.

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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



#### Comments

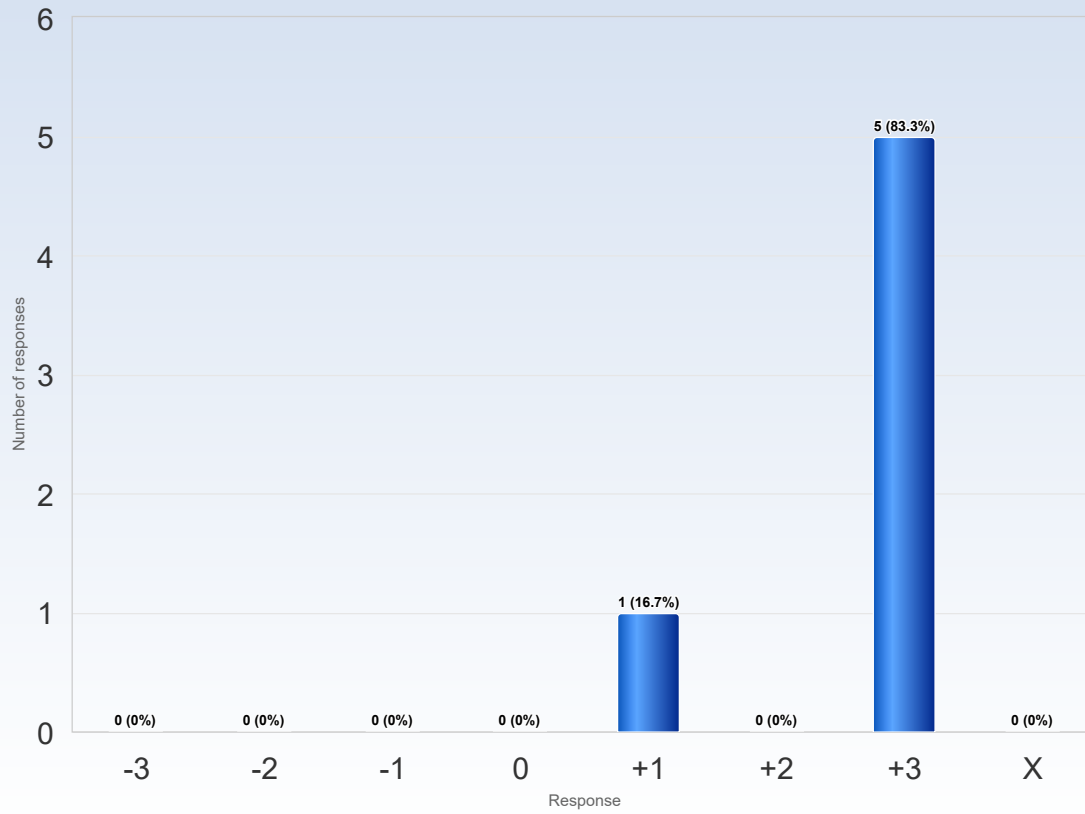
Comments (My response was: +3)

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Bra upplägg med inspelade föreläsningar och seminarier i grupp.

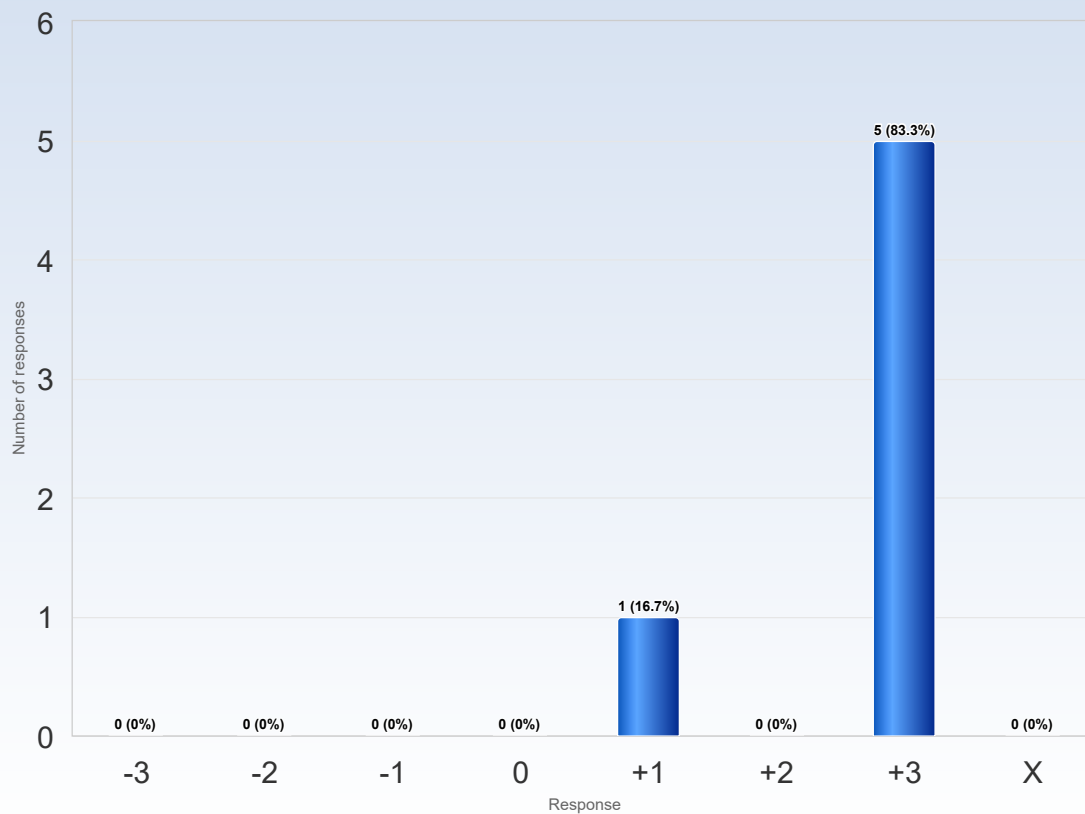
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### 9. I understood what the teachers were talking about





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

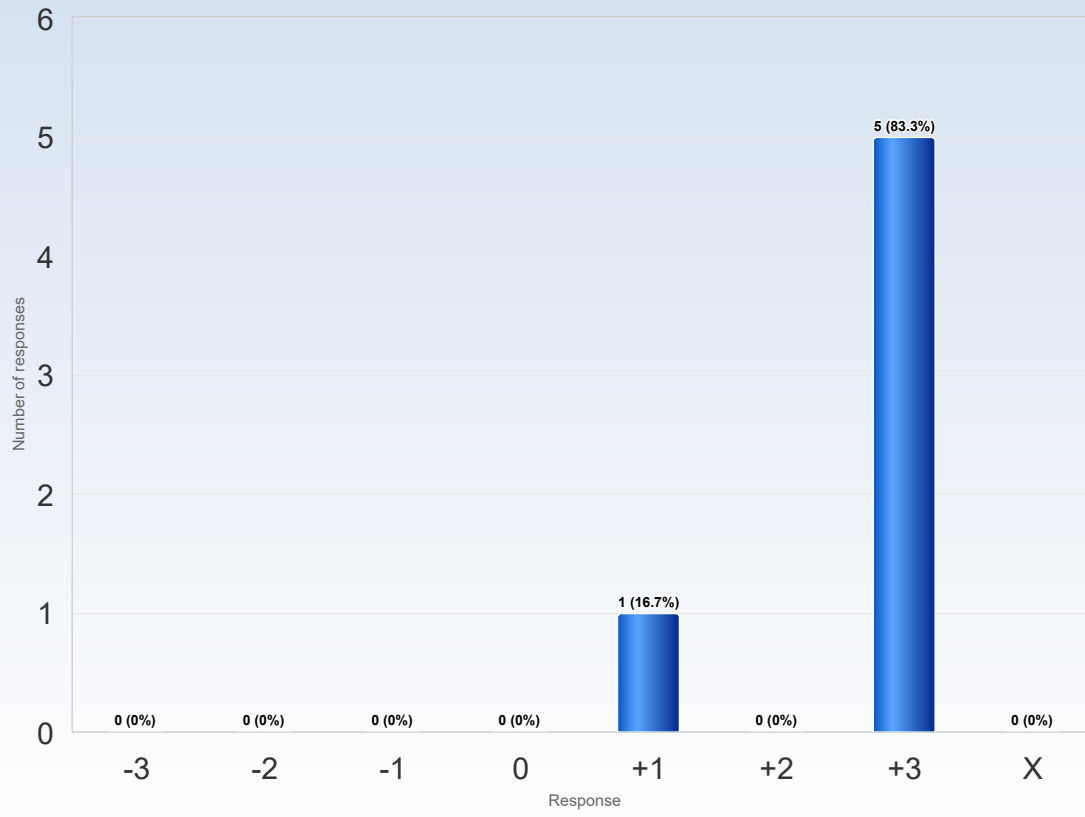


Comments

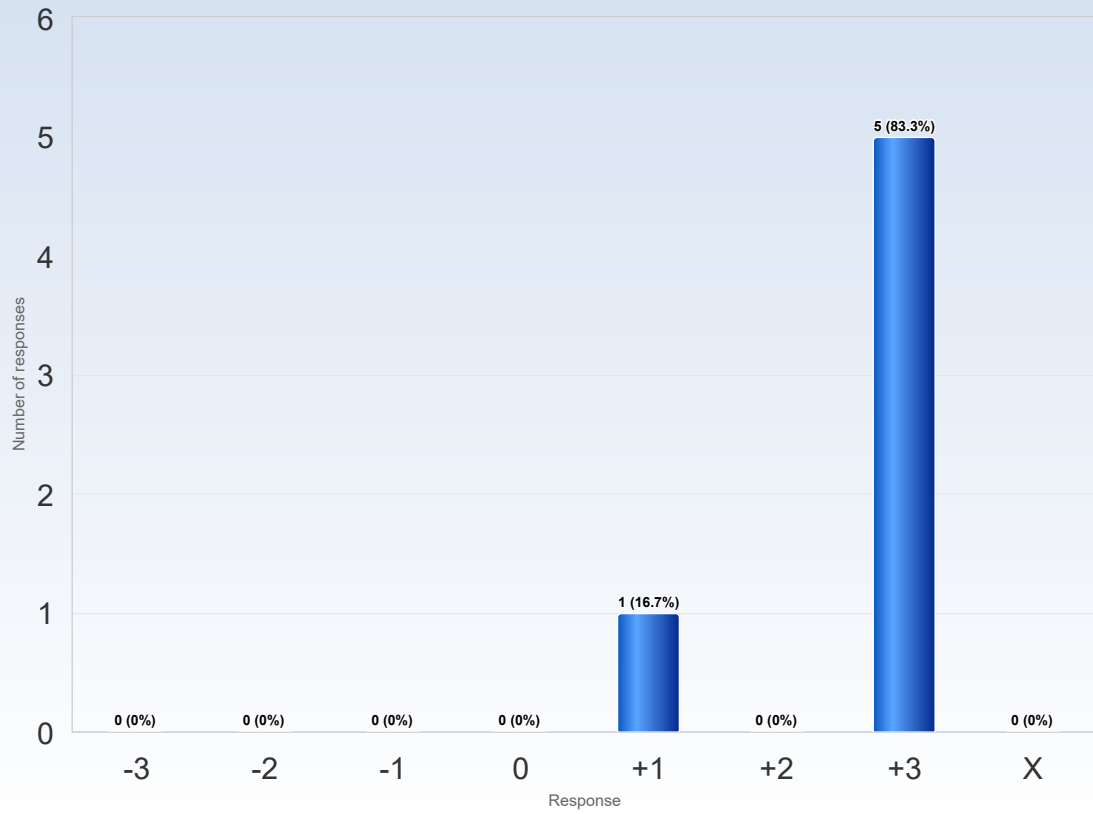
Comments (My response was: +3)

Bra med kodexemplen på github.

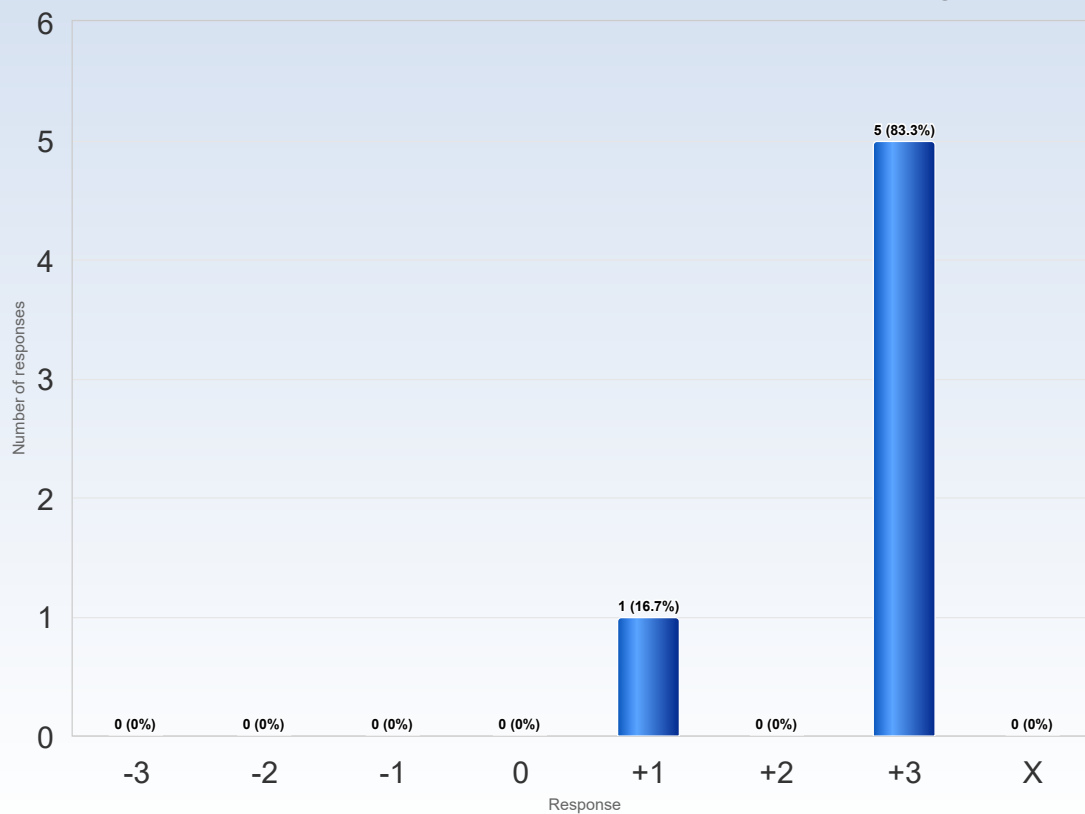
### 11. Understanding of key concepts had high priority



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

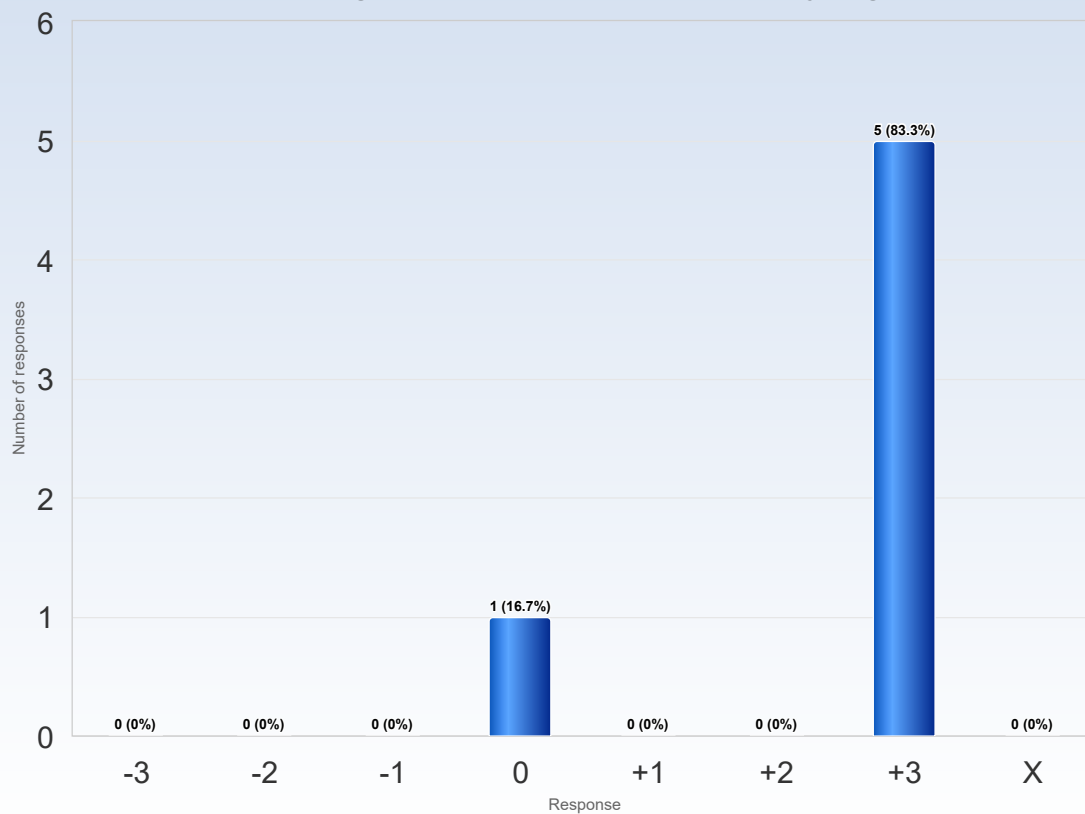


Comments

Comments (My response was: +3)

Mycket tydliga betygskrav.

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



#### Comments

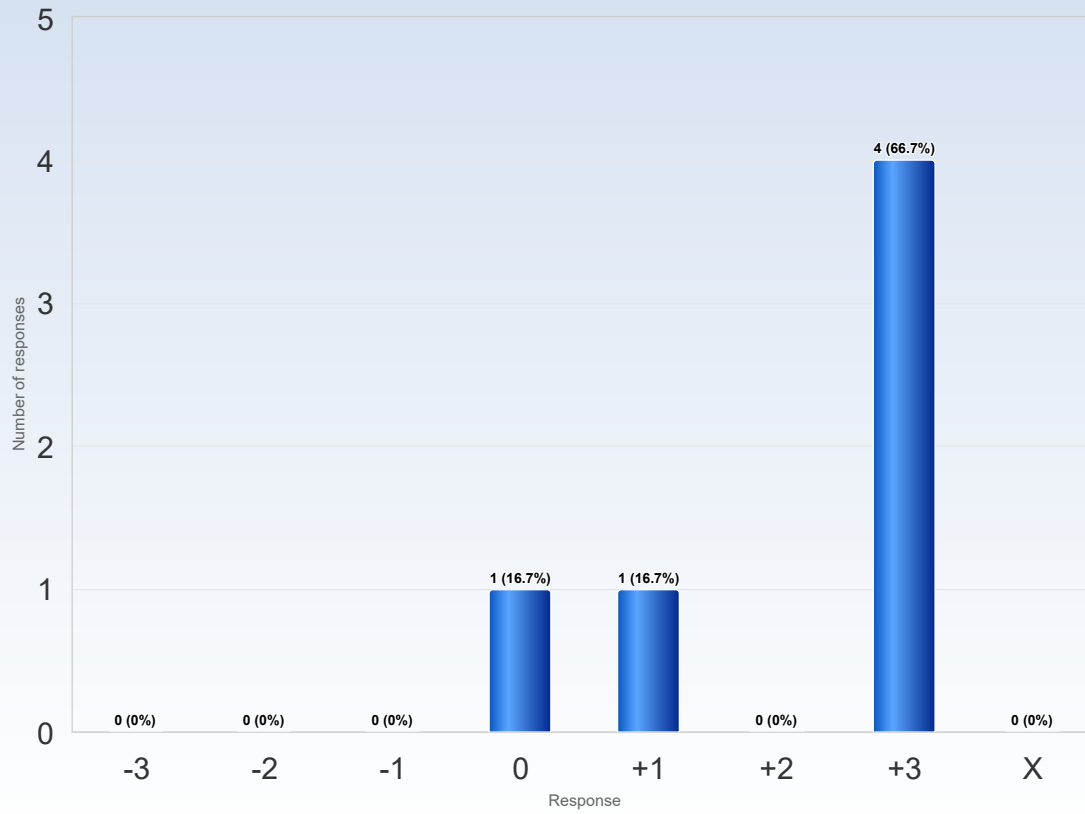
Comments (My response was: +3)

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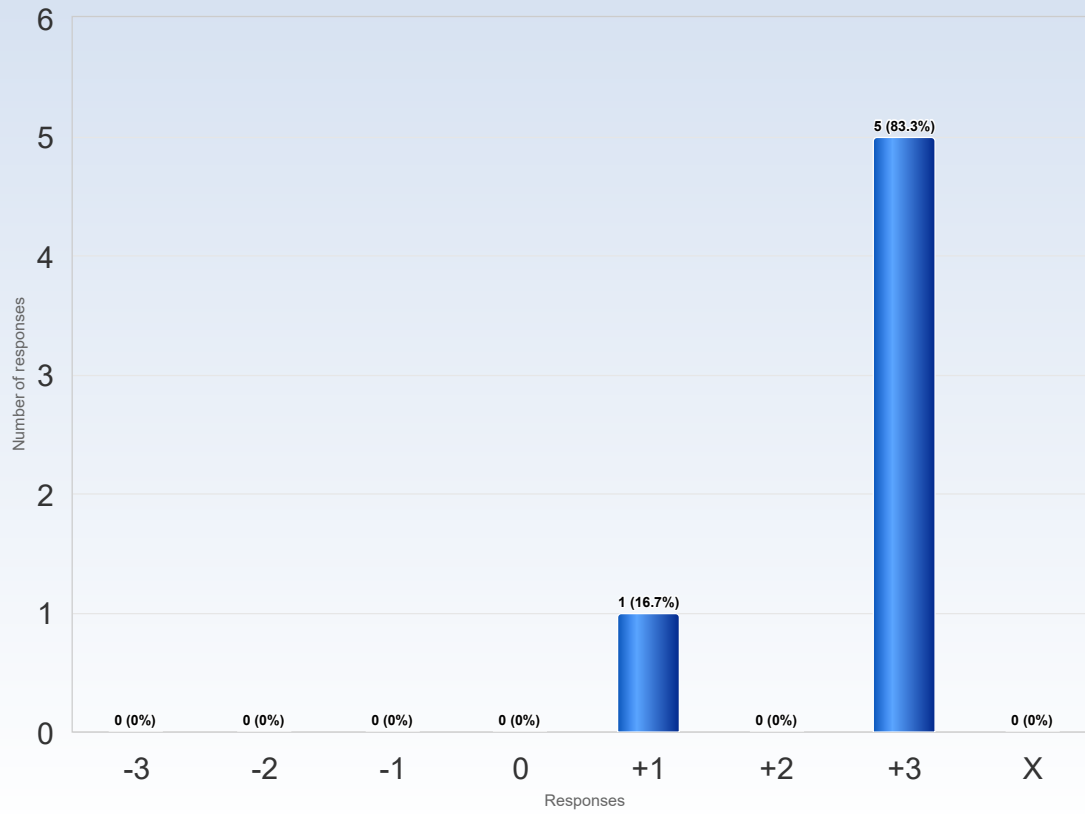
Redovisningarna/seminarierna var väldigt bra, de gjorde att vi hade bra koll på hur vi låg till och vad som saknades.

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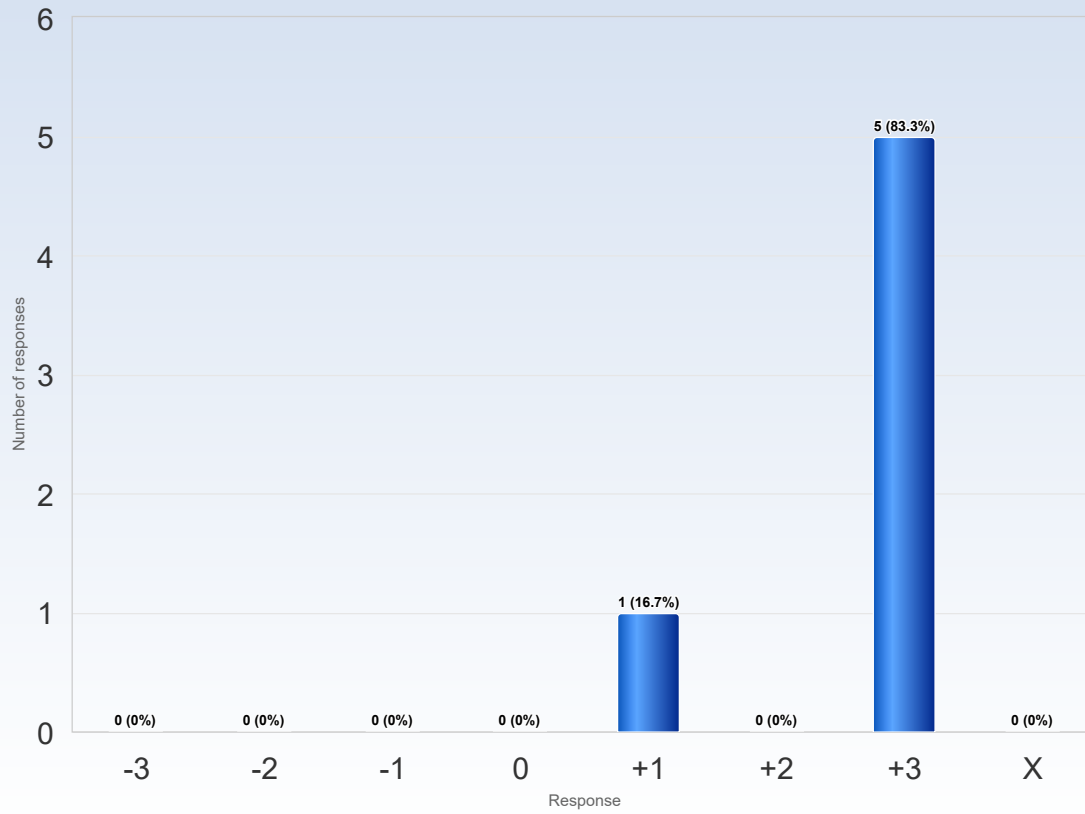
15. I could practice and receive feedback without being graded



### 16. The assessment on the course was fair and honest



### 17. My background knowledge was sufficient to follow the course



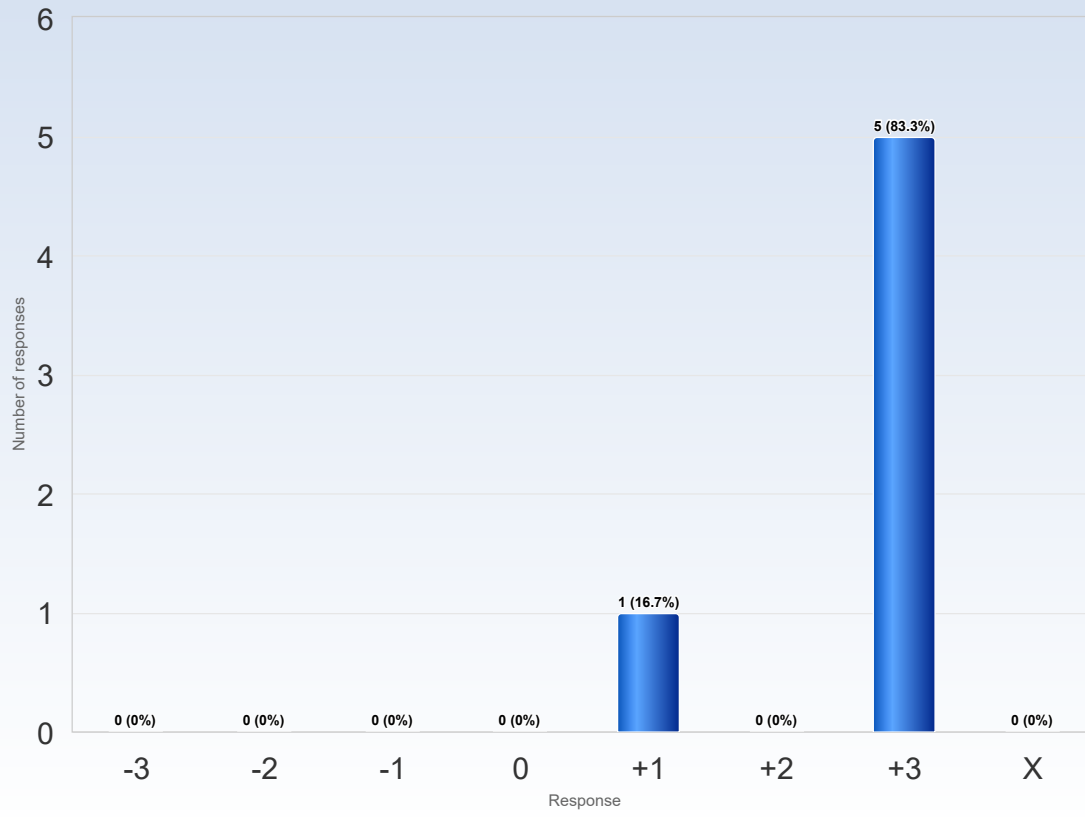
#### Comments

Comments (My response was: +3)

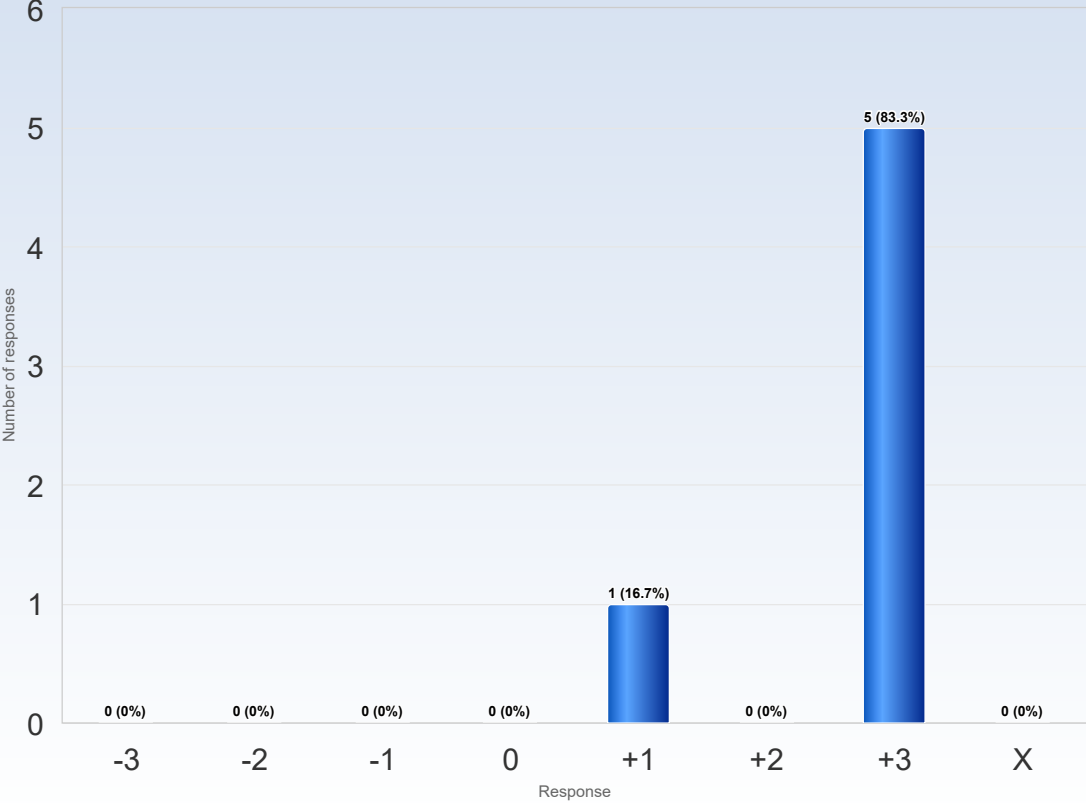
Kursen nätverksprogrammering kändes nödvändig för att förstå hur man skriver en webbserver, men är inte ett formellt behörighetskrav vilket den egentligen kunde ha varit tycker jag.



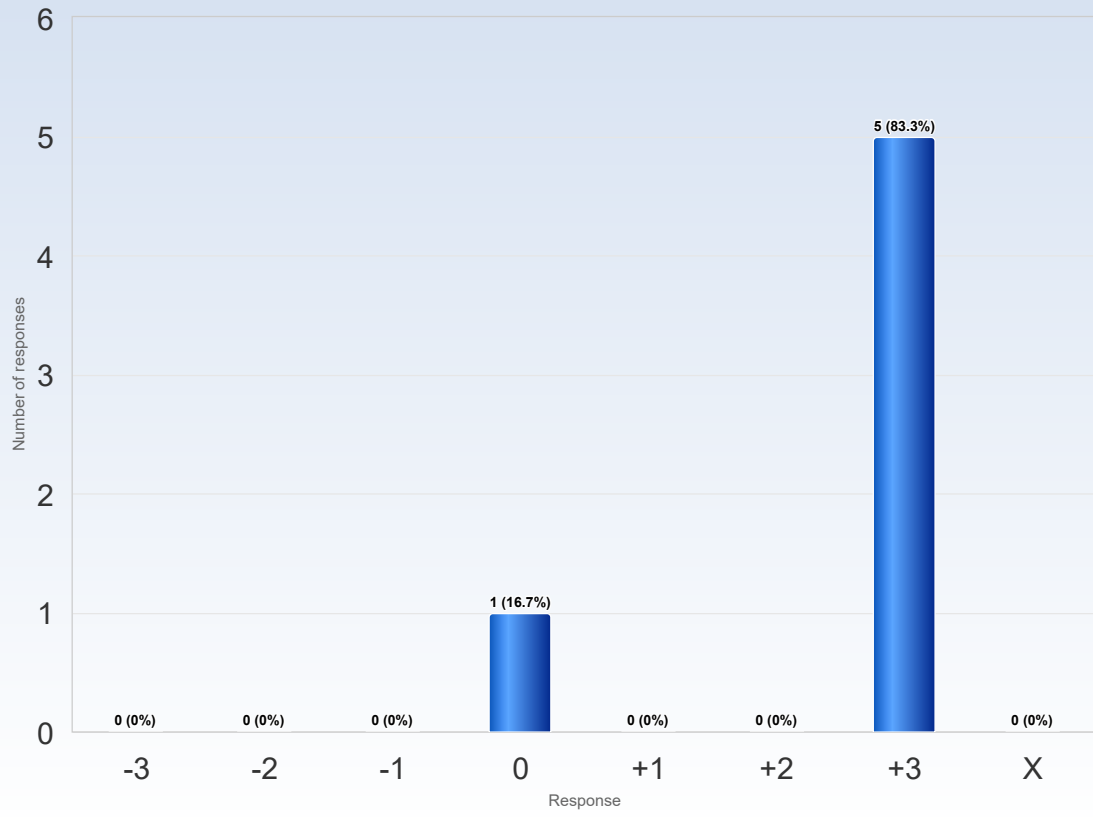
### 18. I regularly spent time to reflect on what I learned



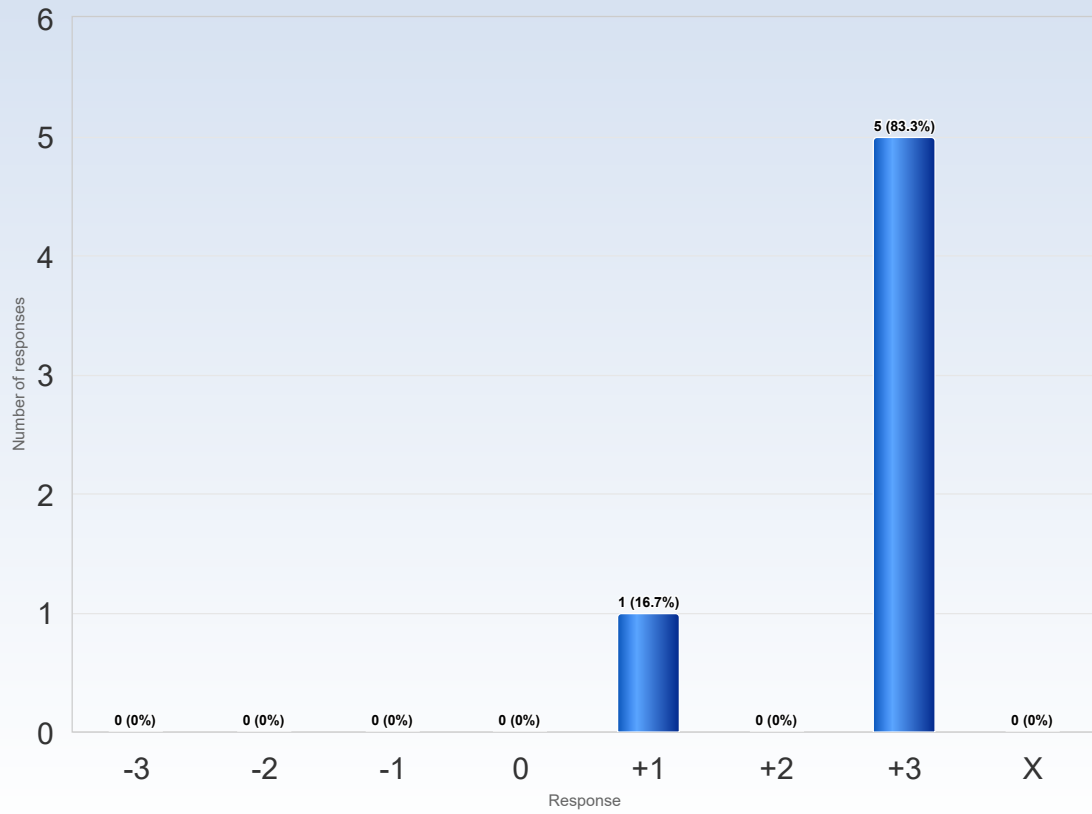
19. The course activities enabled me to learn in different ways



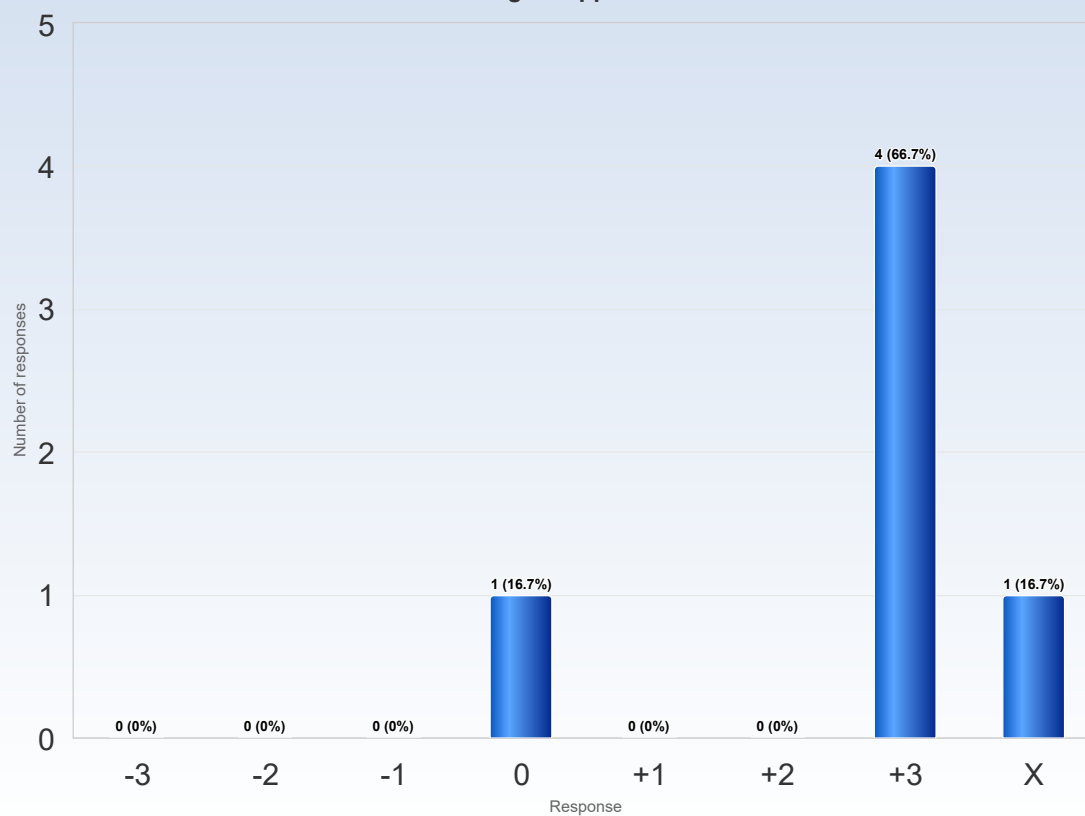
20. I had opportunities to influence the course activities



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: +3)

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Tydligt och bra med tider när vi kunde prata med läraren och få hjälp.