

Report - AF2610 - 2025-02-05

Respondents: 1
Answer Count: 1
Answer Frequency: 100.00%

Please note that there is only one respondent to this form: the person that performs the course analysis.

Course analysis carried out by (name, e-mail):

Johan Spross, spross@kth.se

DESCRIPTION OF THE COURSE EVALUATION PROCESS

Describe the course evaluation process. Describe how all students have been given the possibility to give their opinions on the course. Describe how aspects regarding gender, and disabled students are investigated.

Two student representatives, 2M, were elected by the students at the first lecture. Students comments were collected through a questionnaire at the end of the course (3 out of 29 responded). The result was discussed with the student representatives at a course evaluation meeting. Due to the limited number of respondents, the evaluation was mostly qualitative. Too little data to see differences in gender and disability.

DESCRIPTION OF MEETINGS WITH STUDENTS

Describe which meetings that has been arranged with students during the course and after its completion. (The outcomes of these meetings should be reported under 7, below.)

A meeting with the two student representatives was arranged after the questionnaire results were available. Examiner and course responsible represented the teachers. The outcome of the questionnaire was discussed and a list of action points for upcoming years was prepared.

COURSE DESIGN

Briefly describe the course design (learning activities, examinations) and any changes that have been implemented since the last course offering.

The course consists of on-campus lectures (+one online) and workshops, in which the students solve typical rock engineering tasks that one would do in a tunnel project. The outcome is reported in 4 assignment reports, which are graded. There is a final exam in a classroom focusing on theoretical concepts. The final grade is weighed between the assignments and the final exam. This year, we adjusted the schedule to give more report writing time at the end of the course, and switched places between Assignment 3 and 4. These modifications were well received by the students.

THE STUDENTS' WORKLOAD

Does the students' workload correspond to the expected level (40 hours/1.5 credits)? If there is a significant deviation from the expected, what can be the reason?

The students report an expected workload for a 50% study activity, though hard to draw conclusions from only 3 respondents. The content and work load was slightly less than last year, maybe due to the rearrangement of the course disposition, which evened out the work load better.

THE STUDENTS' RESULTS

How well have the students succeeded on the course? If there are significant differences compared to previous course offerings, what can be the reason?

The students results were as expected.

STUDENTS' ANSWERS TO OPEN QUESTIONS

What does students say in response to the open questions?

See details in appended survey.

SUMMARY OF STUDENTS' OPINIONS

Summarize the outcome of the questionnaire, as well as opinions emerging at meetings with students.

Students think the course is very good, but that there are some opportunities for improvement to make it even better, listed below.

OVERALL IMPRESSION

Summarize the teachers' overall impressions of the course offering in relation to students' results and their evaluation of the course, as well as in relation to the changes implemented since last course offering.

The teachers are happy with the present course and the students' results.

ANALYSIS

Is it possible to identify stronger and weaker areas in the learning environment based on the information you have gathered during the evaluation and analysis process? What can the reason for these be? Are there significant difference in experience between:

- students identifying as female and male?
- international and national students?
- students with or without disabilities?

The learning environment seems very good, based on the very positive feedback in the LEQ. (Too few respondents to draw detailed conclusions.)

PRIORITIZED COURSE DEVELOPMENT

What aspects of the course should be developed primarily? How can these aspects be developed in short and long term?

- For upcoming years we will consider:
- Provide more detailed guideline at the first lecture about what is expected from reports in terms of possibility to review. Maybe have a slide on report writing when introducing Assignment 1, including grading criteria for report writing.
- Rework the blasting module.
- The sustainability module may need an update. We can consider inviting Prof Anna Björklund to co-arrange an interactive workshop together with Fredrik, instead of just having a lecture. We could also incorporate sustainability issues into assignments, e.g. choice of material.

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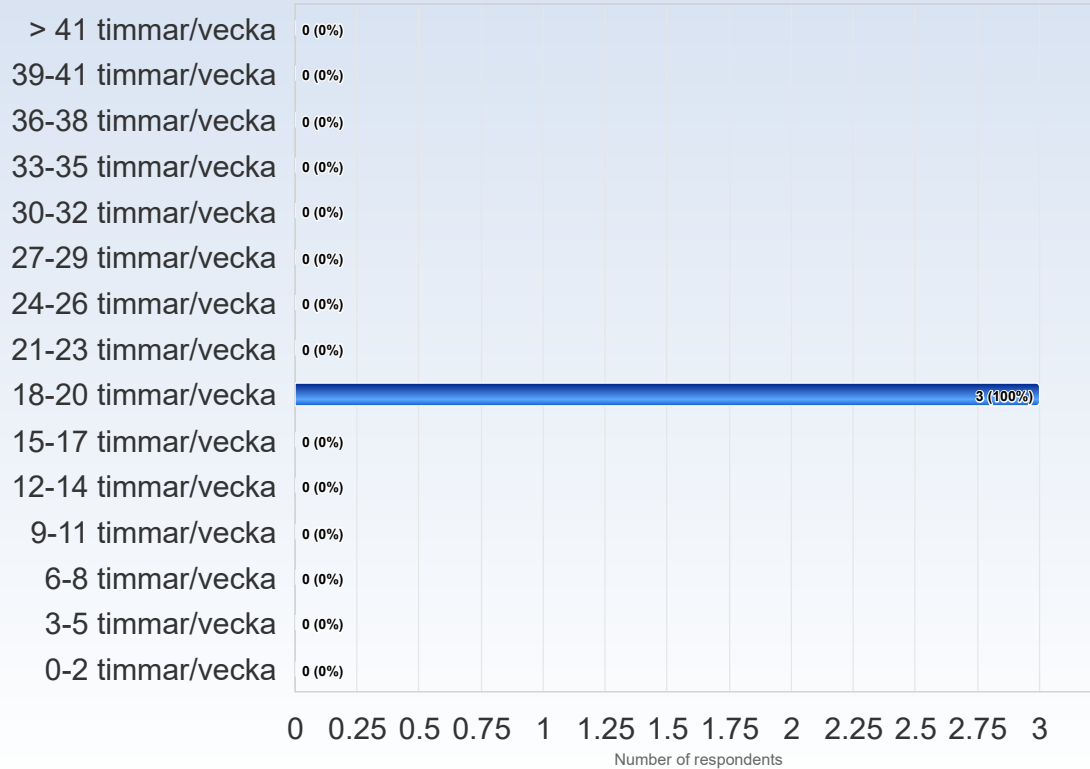
Antal respondenter: 29

Antal svar: 3

Svarsfrekvens: 10,34 %

ESTIMATED WORKLOAD

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



Comments

Comments (I worked: 18-20 timmar/vecka)

It was a lot of time of work but was still interesting to learn on it.

LEARNING EXPERIENCE

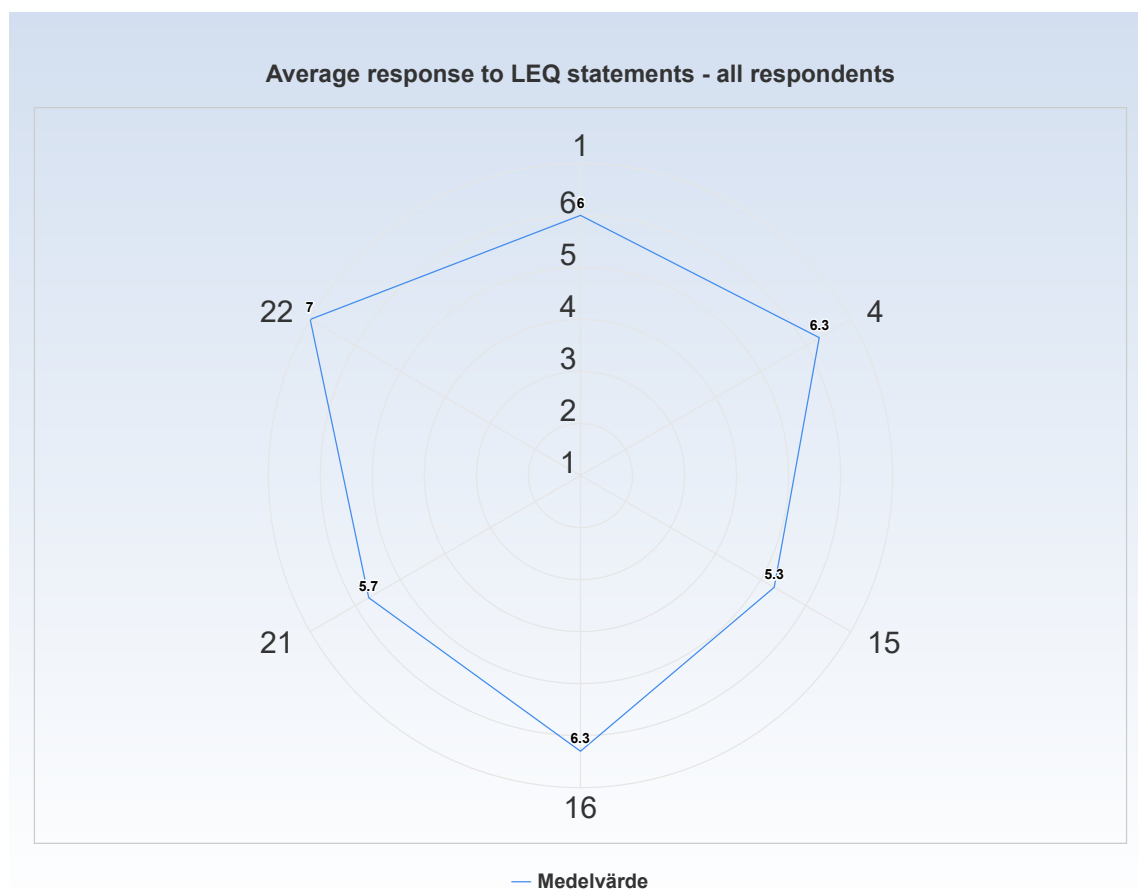
The polar diagrams below show the average response to the LEQ statements for different groups of respondents (only valid responses are included). The scale that is used in the diagrams is defined by:

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.

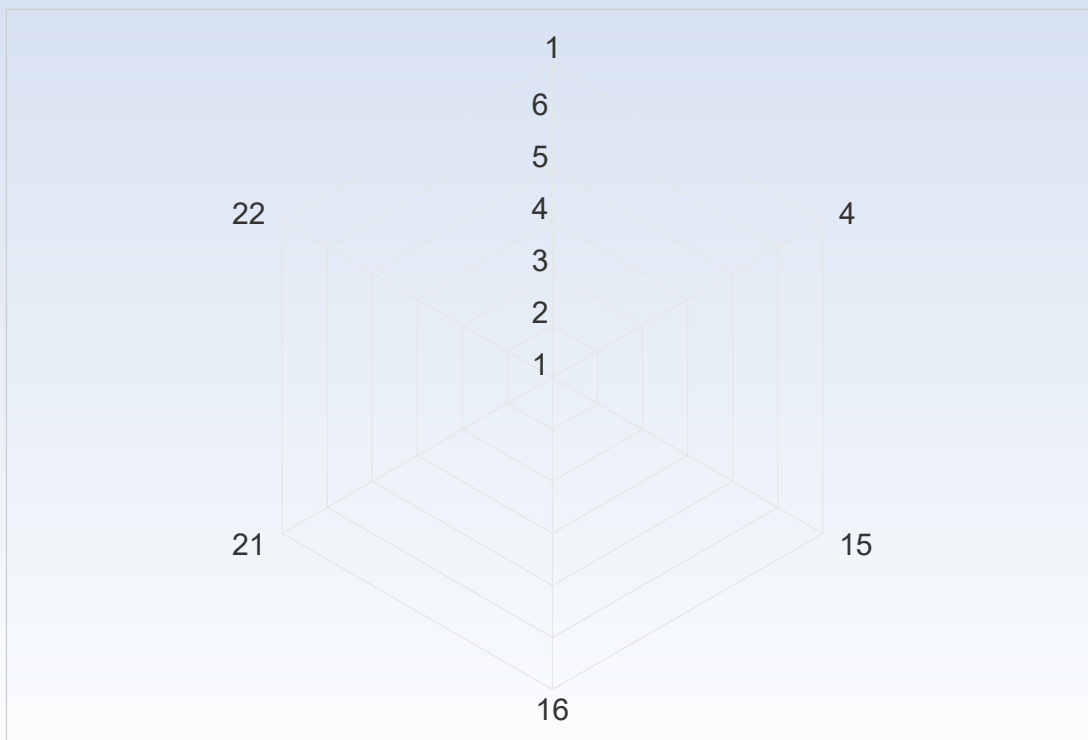
Biggs J. & Tang, C. (2011). *Teaching for Quality Learning at University*, Chapter 6, pp. 95-110. Maidenhead: McGraw Hill.

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.

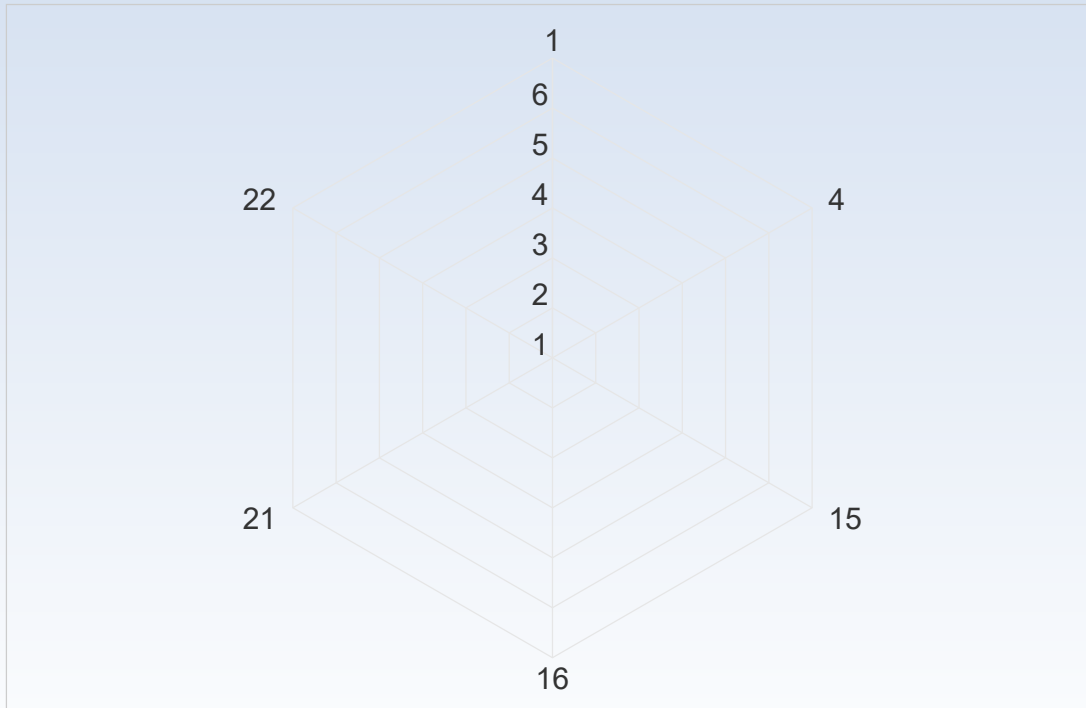
Ramsden, P. (2003). *Learning to Teach in Higher Education*, Chapter 6, pp. 84-105. New York: RoutledgeFalmer.

Average response to LEQ statements - per gender



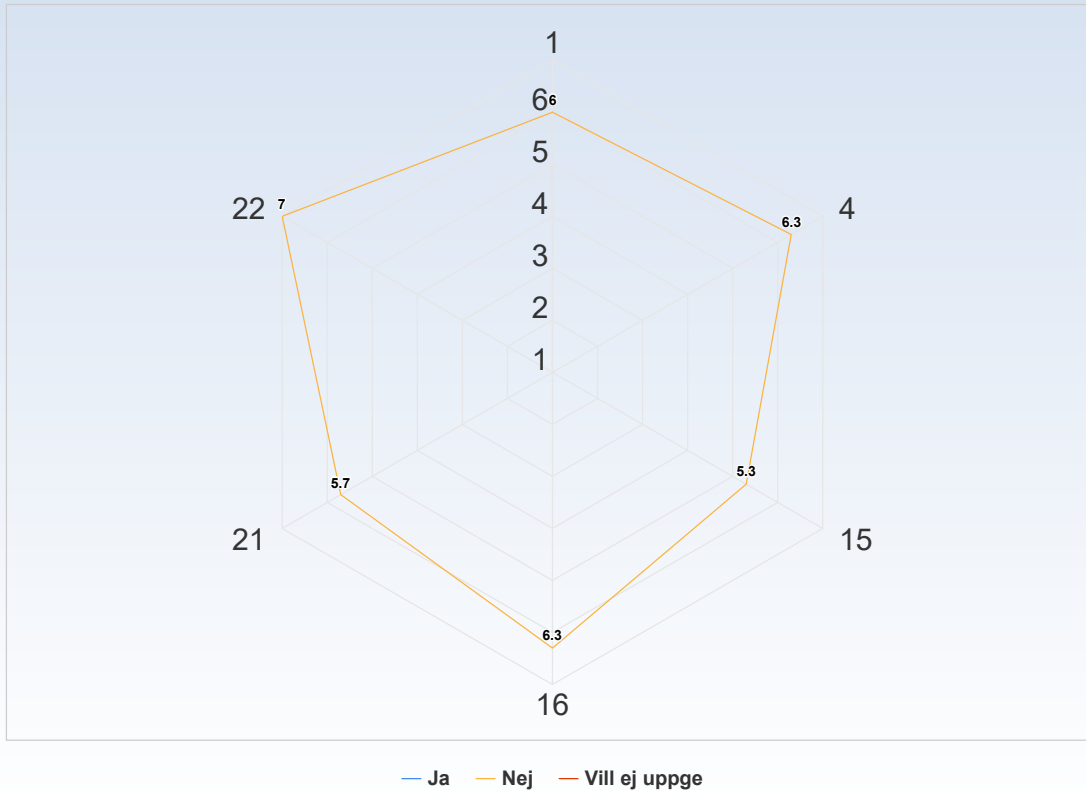
— Kvinna — Man — Annat — Vill ej uppge

Average response to LEQ statements - per type of student



- Internationell masterstudent
- Svensk student i årskurs 4-5
- Internationell utbytesstudent
- Annan typ av student
- Svensk student i årskurs 1-3
- 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)

Learning about the design process and dealing with uncertainty in projects. The content of this course is in general very interesting.
The best aspect was assignments linked to specific courses. It was easier to understand the knowledge and apply it in a good way.

What would you suggest to improve?

What would you suggest to improve? (I worked: 18-20 timmar/vecka)

I don't know
Maybe improve informations that are present on slides.

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)

Read the papers by Stille and Palmström given on the first lecture day.
Go to all classes because if you miss it you'll miss important advice/knowledge that aren't showed in PowerPoints
Take rock mechanics first

Is there anything else you would like to add?

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

No

One of the best courses.

SPECIFIC QUESTIONS

RESPONSE DATA

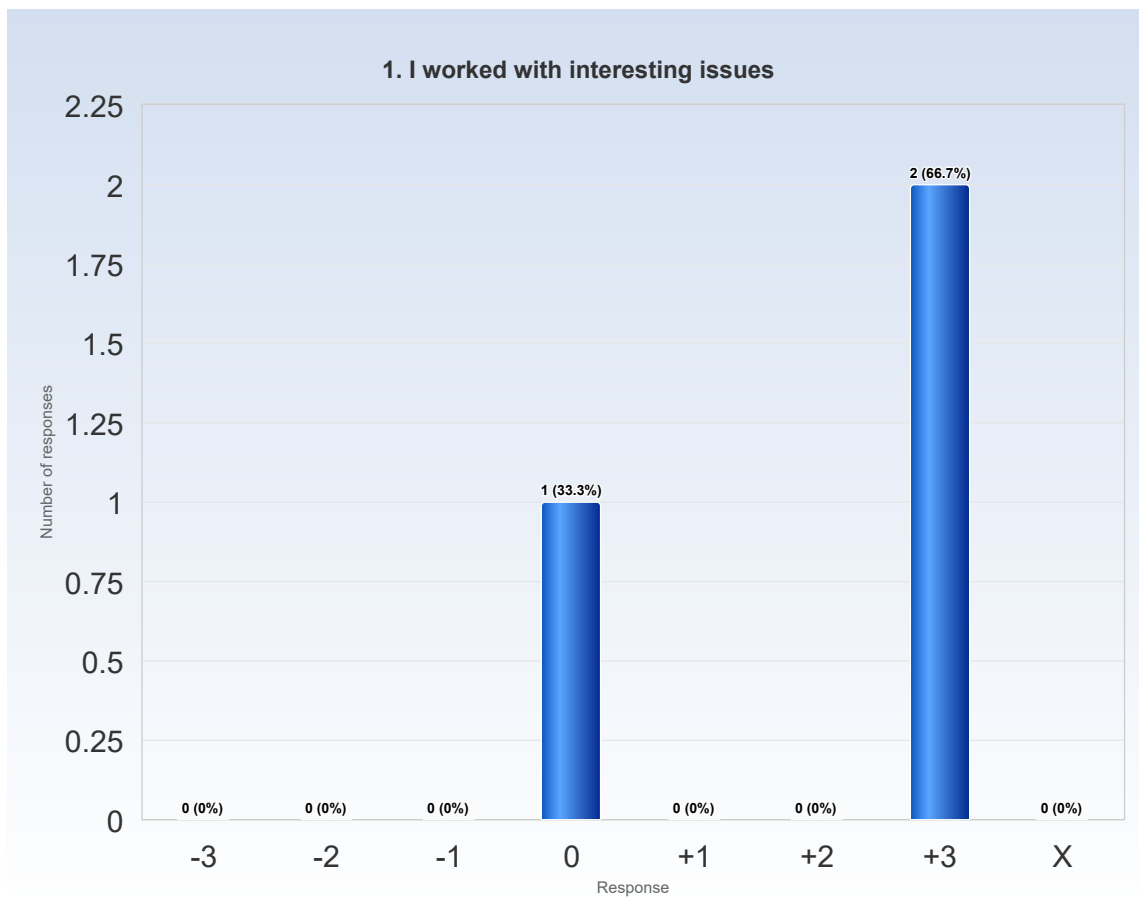
The diagrams below show the detailed response to the LEQ statements. The response scale is defined by:

-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

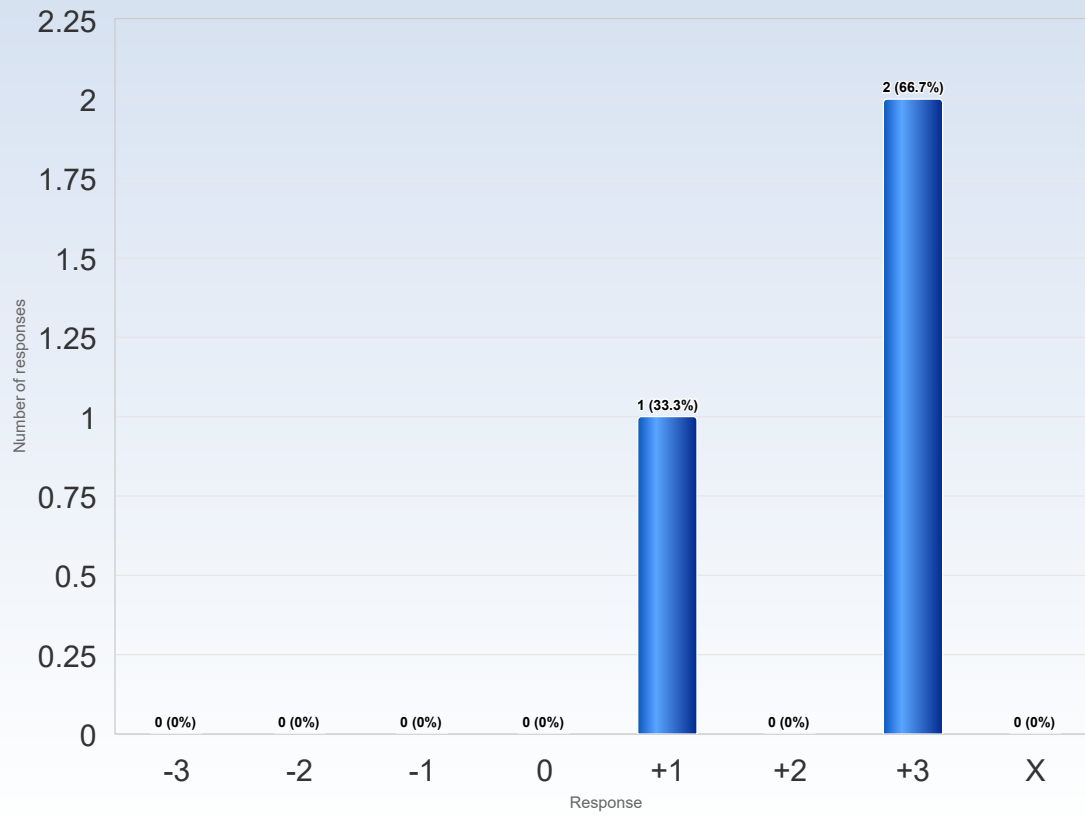


Comments

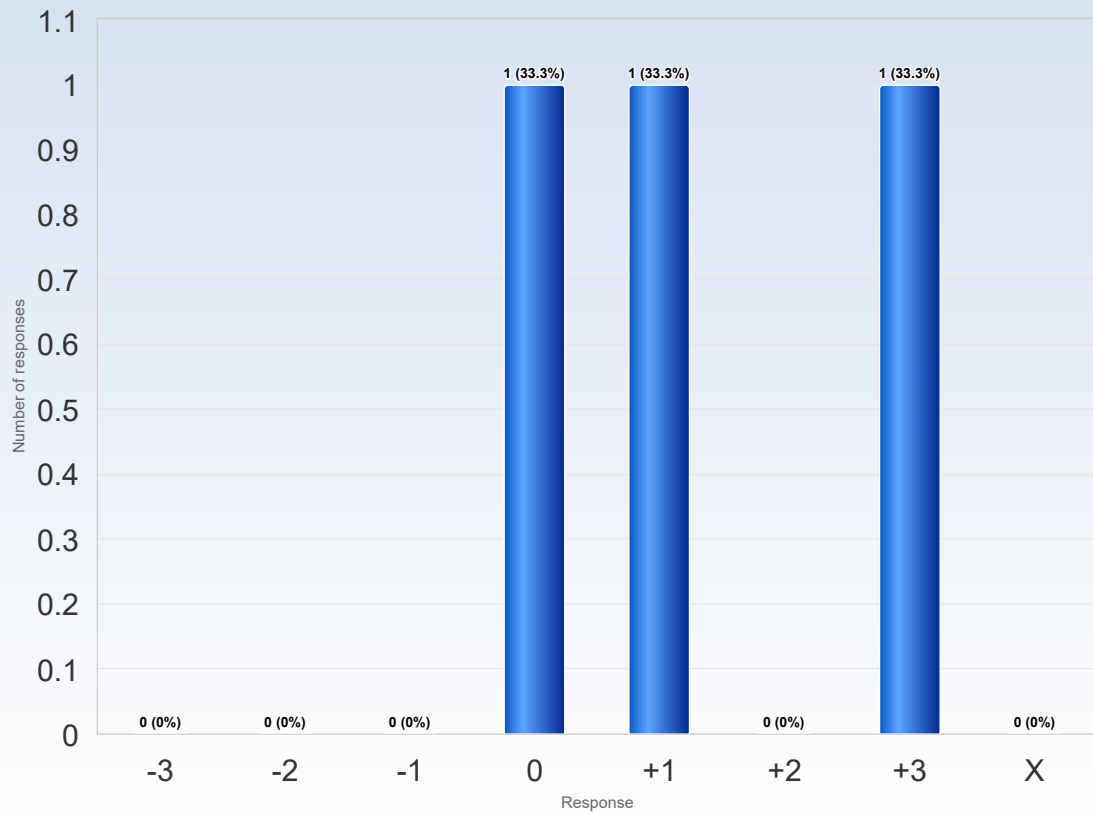
Comments (My response was: 0)

I was not that interesten in the content covered in assignment 4.

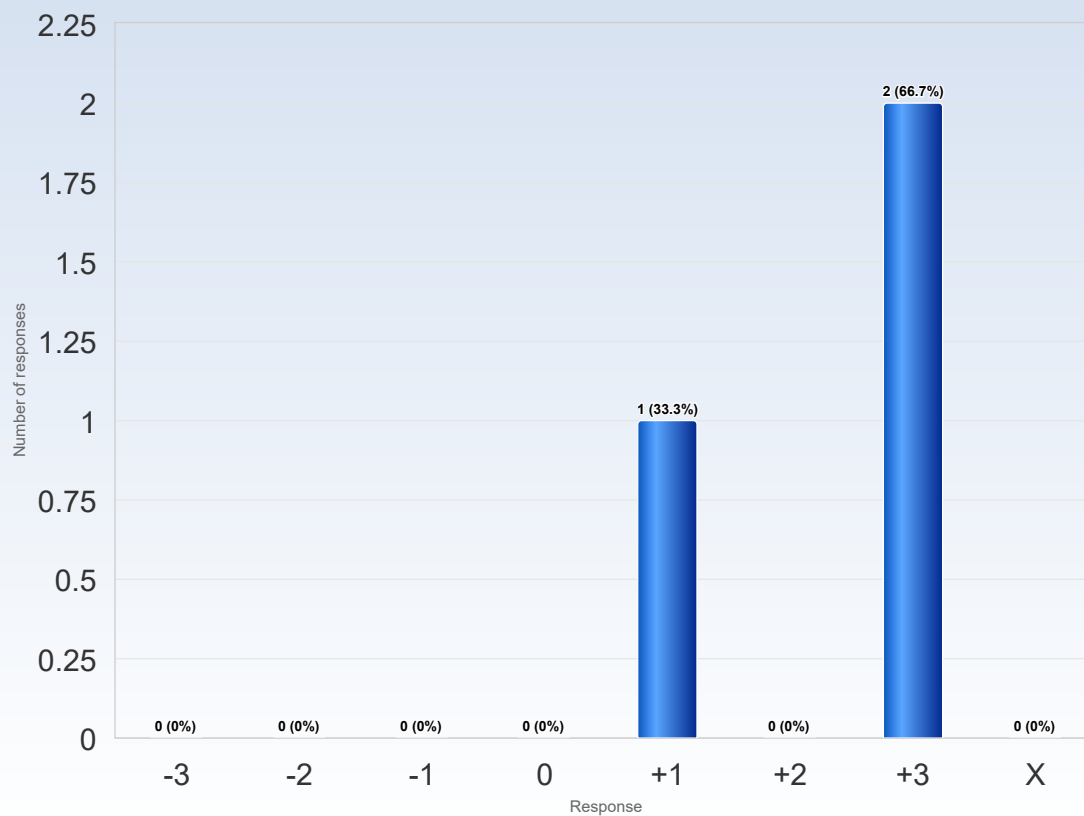
4. The course was challenging in a stimulating way



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



16. The assessment on the course was fair and honest

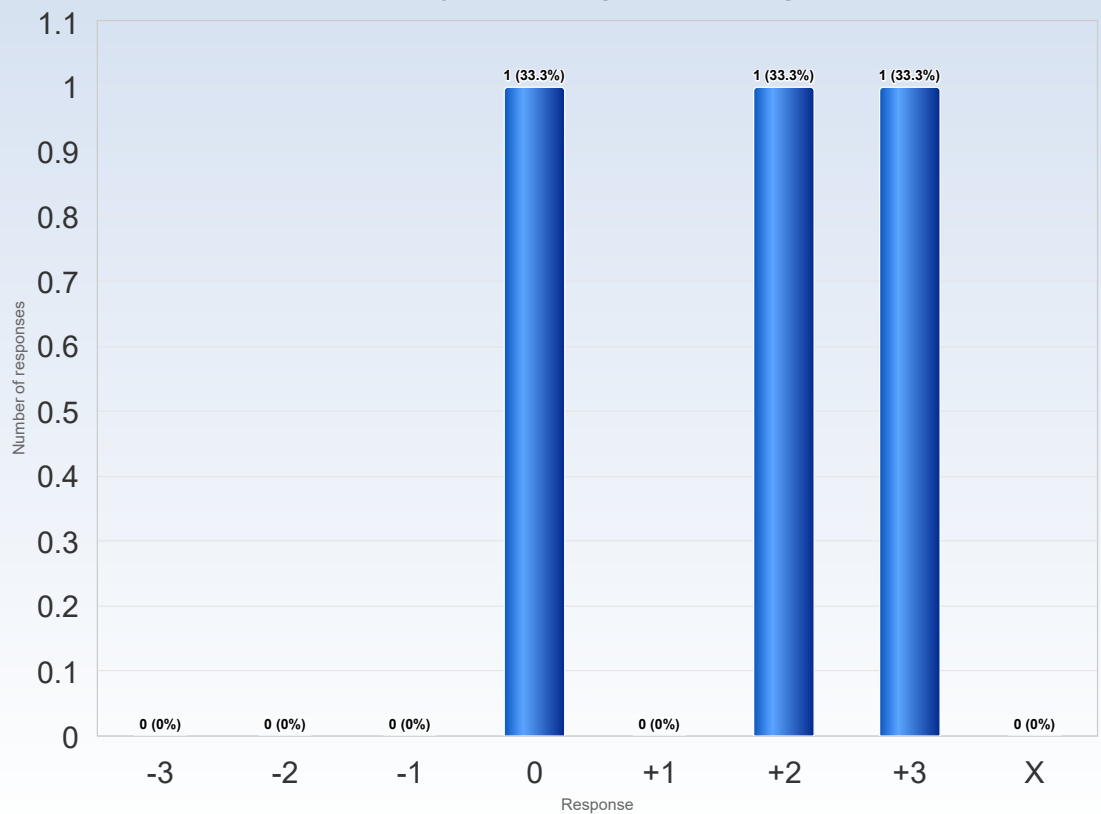


Comments

Comments (My response was: +1)

Sometimes better explication on the correction were needed.

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



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

