COURSE ANALYSIS, postgraduate course

Third cycle courses, EECS School, KTH , from 2018

An asterix (*) denotes non-compulsory data.

Course data

Course name: Music informatics

Course ID: DT2470
Credits: 7.5
Credits per module: 7.5
Time period for course: HT2022
Teachers: Bob L. T. Sturm and André Holzapfel
Examiner: Sten Ternström
Classroom hours: Almost twice a week for 2 hours
Nr of registered students: 39
Examination rate, in %: 100

Goals

After passing the course, the student shall be able to

- **account for how feature extraction works and explain why it is needed**
- **recommend methods for comparing and modelling of music data**
- **design, implement and evaluate own methods for modelling of music data**

in order to

- **be able to describe how information at different levels of abstraction can be extracted from music data (acoustic as well as symbolic) and be used in many applications (e.g., search, retrieval, synthesis)**
- **be able to design algorithms for handling and modelling of music data as well as evaluate their performance.**

How the course design helps to fulfill these goals: Lectures, weekly quizzes, labs, project and written report

Pedagogical development - I

***Changes made* since previous time course was given:**

1. **Schedule revised such that four labs are completed before project work begins.**
2. **Separate assignment for project proposal**
3. **Added weekly quizzes**
4. **Revised the intended learning outcomes and assessment criteria:**

LAB1, Laborationer/Laboratory work, 3.0 hp A-F
PRO1, Projekt/Project, 3.0 hp A-F
UPP1, Uppsats/Written report, 1.0 hp A-F
ÖVN2, Exercises, 0.5 hp A-F

Course evaluation; comments from students

Based on the anonymous questionnaire.

Evaluation response rate: 18% (7 of 39)

Overall student view*

“I think it was well structured and there were passionated teachers”
”I thought the lectures, llave and project we’re really interesting and I feel I learned a lot of new subjects that I had a prior interest of.”
“I’ve really enjoyed the course and feel like I’ve learned a lot.”

Negative comments:
“Some labs were difficult to get started because we don't get examples of codes.“
“The grading felt arbitrary”

Pre-knowledge, comments*
”like the course. I get how hard it is to adapt a course to people without a background in DSP, but you did well.”

Course design, comments*
“Labs and project in groups of 3.”
“I would love to be handed a project instead of choosing one myself. Perhaps have some good projects for MIR noobs? It is hard to estimate difficulty from papers and RW.”
“why are the deadlines for the final lab and project after the course is over?? I am starting new courses why am I still doing this instead of my new courses”

Literature, comments: None

Examination, comments: None

Course teacher’s impressions from the evaluation

Comments: The student observations align with my own as to what changes should be made i the next edition.

Course teacher’s summary

Overall view: The course ran smoothly, and pretty much followed the course book.

Positive comments: Attendence was ok throughout the course, taught in a hybrid way.

Negative comments: The lab schedule was ok until the last lab. Move them forward a bit.

View on pre-knowledge*: Fine

View on course design* It was difficult to get some students to work in groups. And the lab schedule is too tight. Perhaps break up the labs to be weekly exercises?

View on course material: The material is timely and appropriate for the learning objectives. Th labs provided hands-on experience.

View on examination: Projects

Pedagogical development - II

***Outcome of course changes made* since last time course was given:**

- ***Changes made* since previous time course was given:**
    1. **Separate assignment for project proposal – worked well**
    2. **Added weekly quizzes – worked well**
    3. **Revised the intended learning outcomes and assessment criteria:**

LAB1, Laborationer/Laboratory work, 3.0 hp A-F
PRO1, Projekt/Project, 3.0 hp A-F
UPP1, Uppsats/Written report, 1.0 hp A-F
ÖVN2, Exercises, 0.5 hp A-F

These changes to evaluation make it easier to assign final individual grades.

***Changes to be made* before next time course is given:**

Revise schedule such that four labs are completed before project work begins

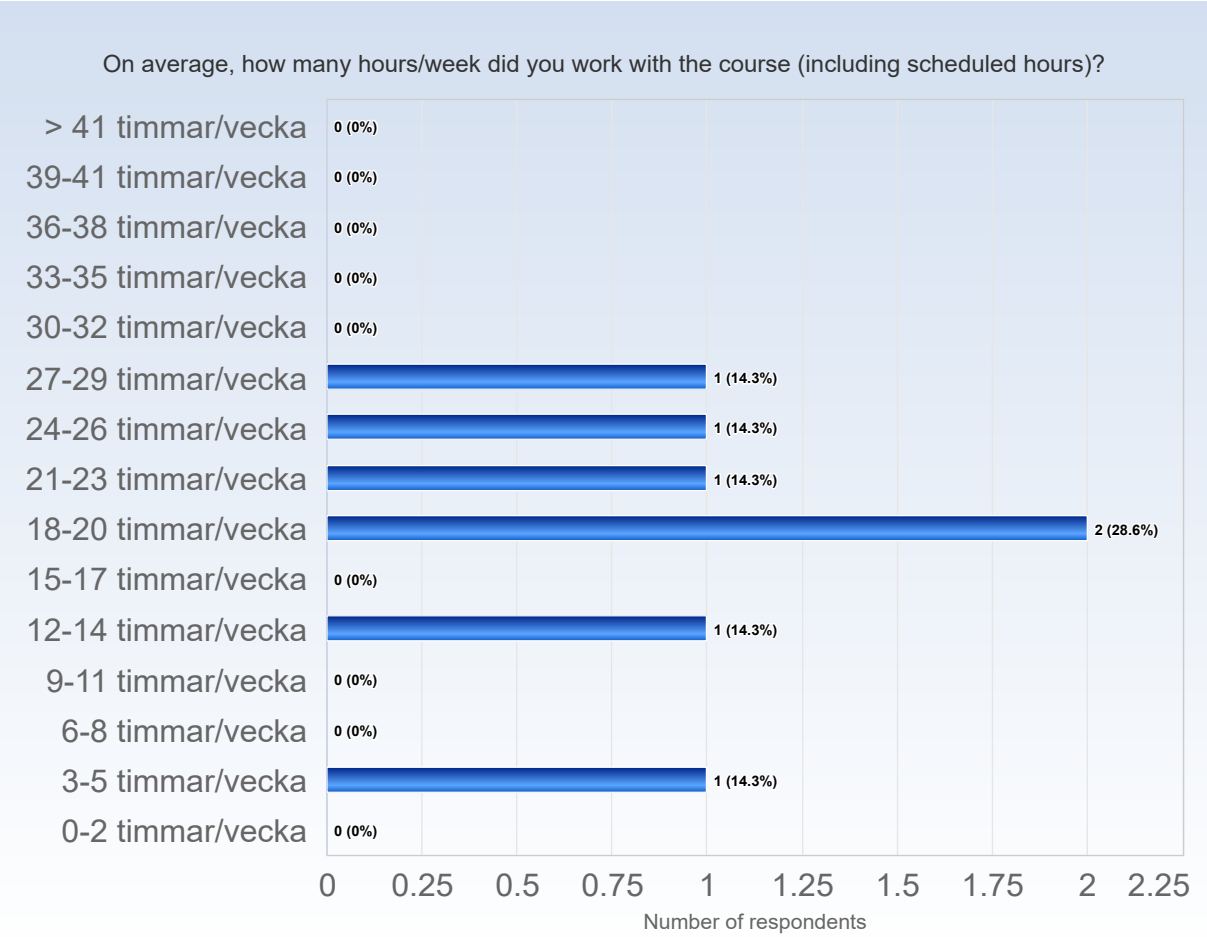
Other

Comments*

DT2470 - 2022-10-18

Antal respondenter: 39
Antal svar: 7
Svarsfrekvens: 17,95 %

ESTIMATED WORKLOAD



Comments

Comments (I worked: 12-14 timmar/vecka)
I put a lot of work in with the labs and project.

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

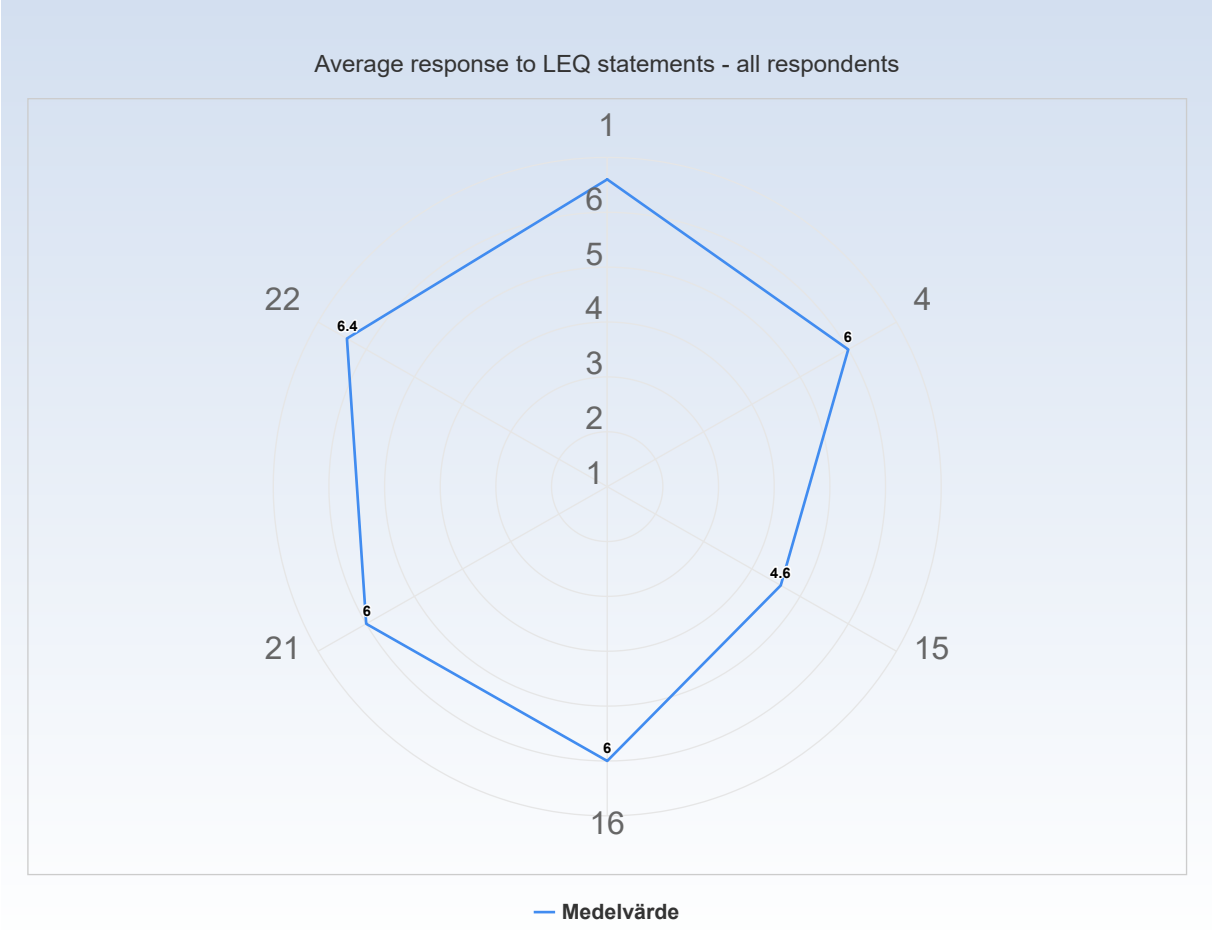
Comments (I worked: 27-29 timmar/vecka)
It was a lot of work, not very clear on what levels the labs should be on, since it was not communicated in any clear way.

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

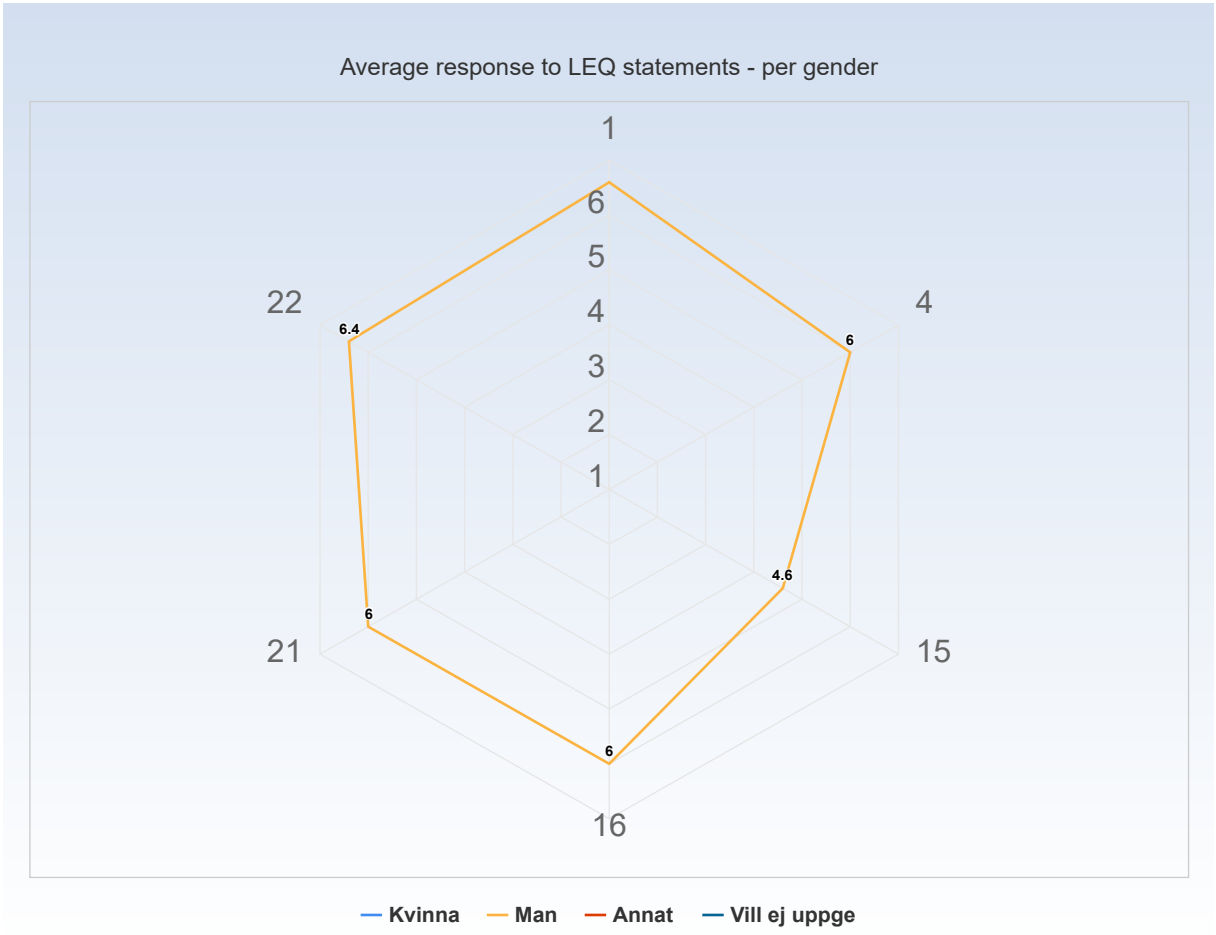
Bain, K. (2004). *What the Best College Teachers Do*, Chapter 5, pp. 98-134. Cambridge: Harvard University Press.

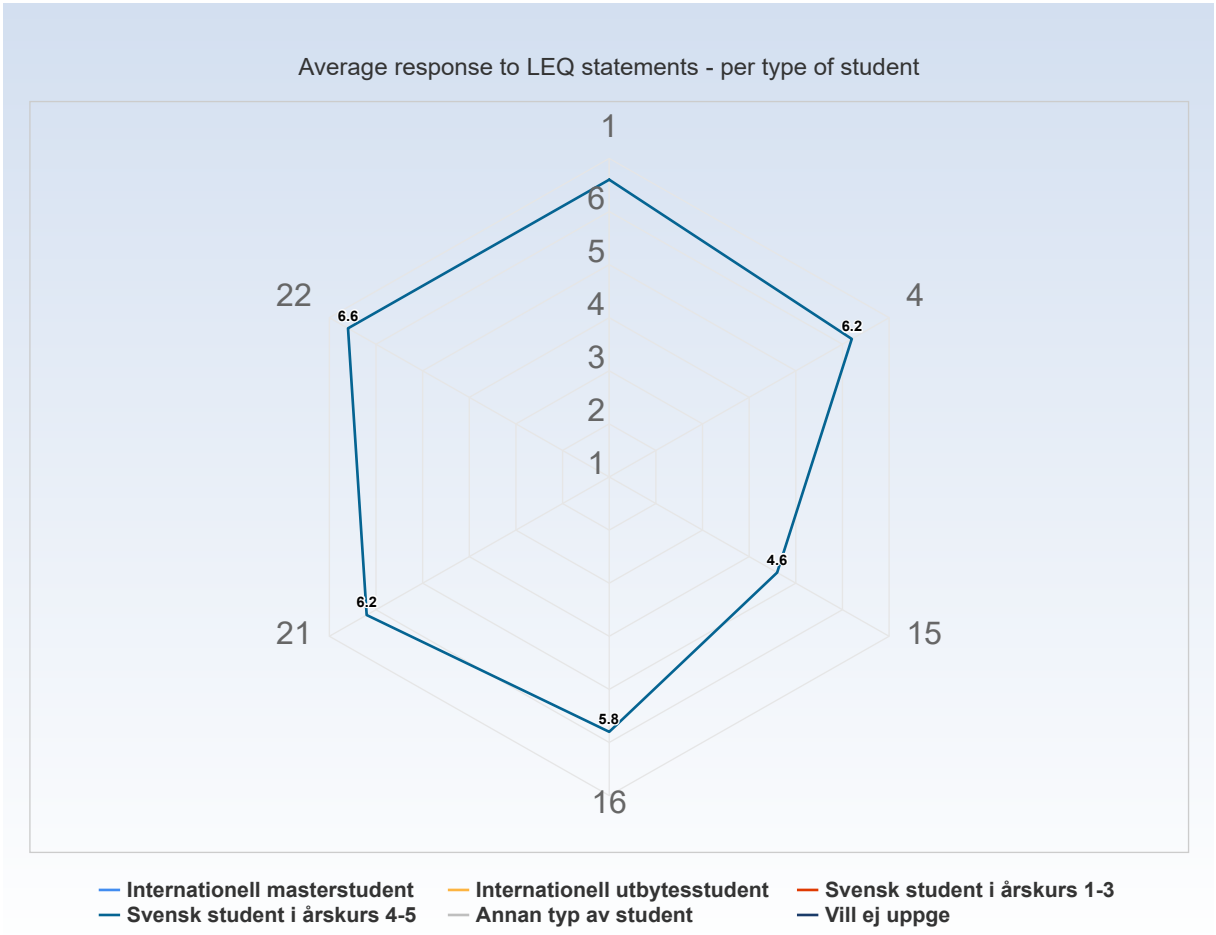
Biggs J. & Tang, C. (2011). *Teaching for Quality Learning at University*, Chapter 6, pp. 95-110. Maidenhead: McGraw Hill.

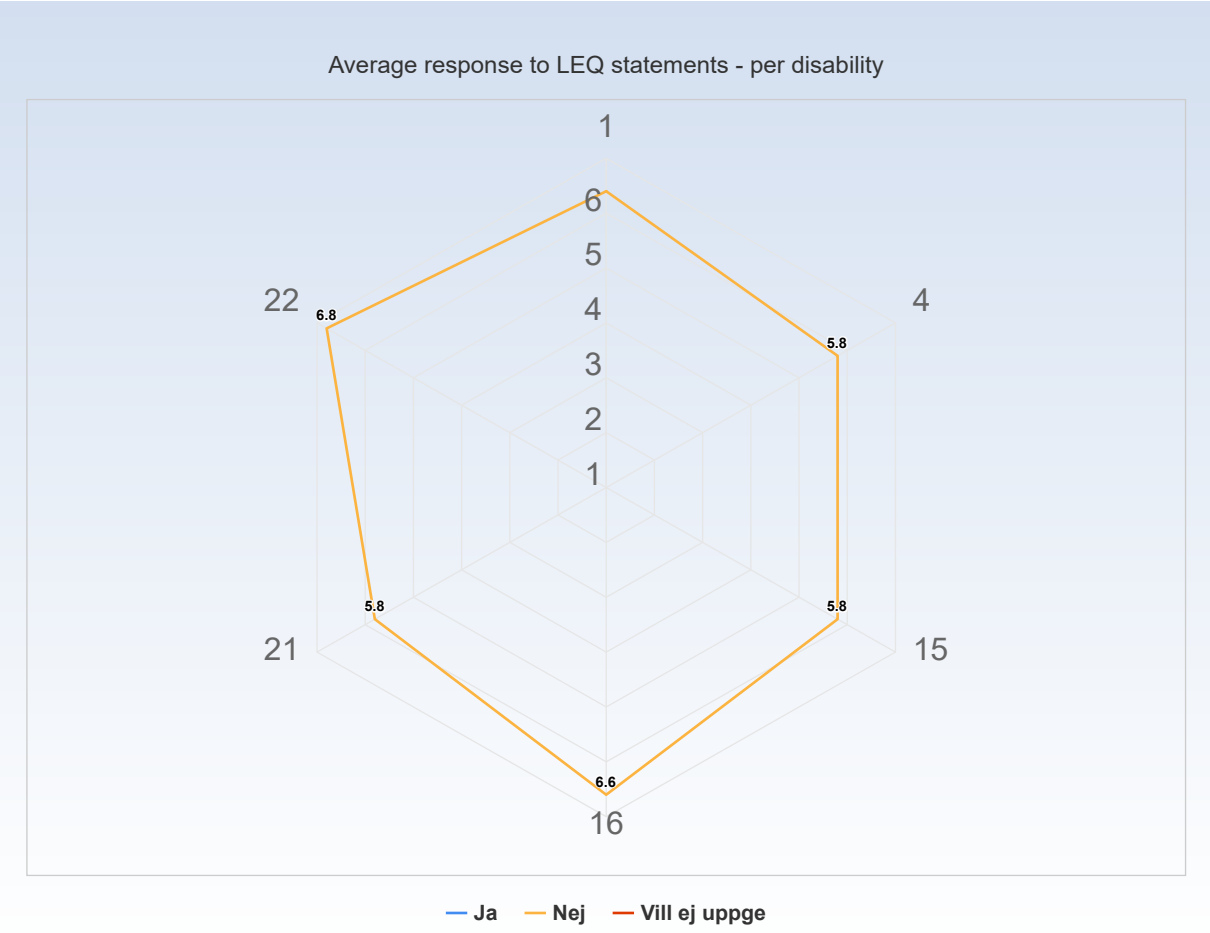
Elmgren, M. & Henriksson, A-S. (2014). *Academic Teaching*, Chapter 3, pp. 57-72. Lund: Studentlitteratur.

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
1
6
5
4
3
2
1
4
15
16
21
22
6
4.6
6
6.4
Kvinna
Man
Annat
Vill ej uppge


Average response to LEQ statements - per type of student
1
6
5
4
3
2
1
22
4
21
15
16
6.6
6.2
6.2
4.6
5.8
Internationell masterstudent
Internationell utbytesstudent
Svensk student i årskurs 1-3
Svensk student i årskurs 4-5
Annan typ av student
Vill ej uppge



GENERAL QUESTIONS

What was the best aspect of the course?

What was the best aspect of the course? (I worked: 3-5 timmar/vecka)

I think it was well structured and there were passionated teachers

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

I thought the lectures, llave and project we're really interesting and I feel I learned a lot of new subjects that I had a prior interest of.

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

Bobs passion to the subject. It shines through.

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

The teachers insight into his own contribution and understanding of music.

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

Interesting subject, good lectures,

What would you suggest to improve?

What would you suggest to improve? (I worked: 3-5 timmar/vecka)

Some labs were difficult to get started because we don't get examples of codes.

What would you suggest to improve? (I worked: 12-14 timmar/vecka)

Can’t think of anything patticular.

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

End project, have suggestions for beginners.

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

Labs and project in groups of 3.

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

why are the deadlines for the final lab and project after the course is over?? I am starting new courses why am I still doing this instead of my new courses

What advice would you like to give to future participants?

What advice would you like to give to future participants? (I worked: 12-14 timmar/vecka)

Put a lot of time in for the labs, and check the book when in doubt.

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

Dance and love

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

Attemp this course with a fundamental knowledge in Signal Processing and Machine Learning.

Is there anything else you would like to add?

Is there anything else you would like to add? (I worked: 12-14 timmar/vecka)

I’ve really enjoyed the course and feel like I’ve learned a lot.

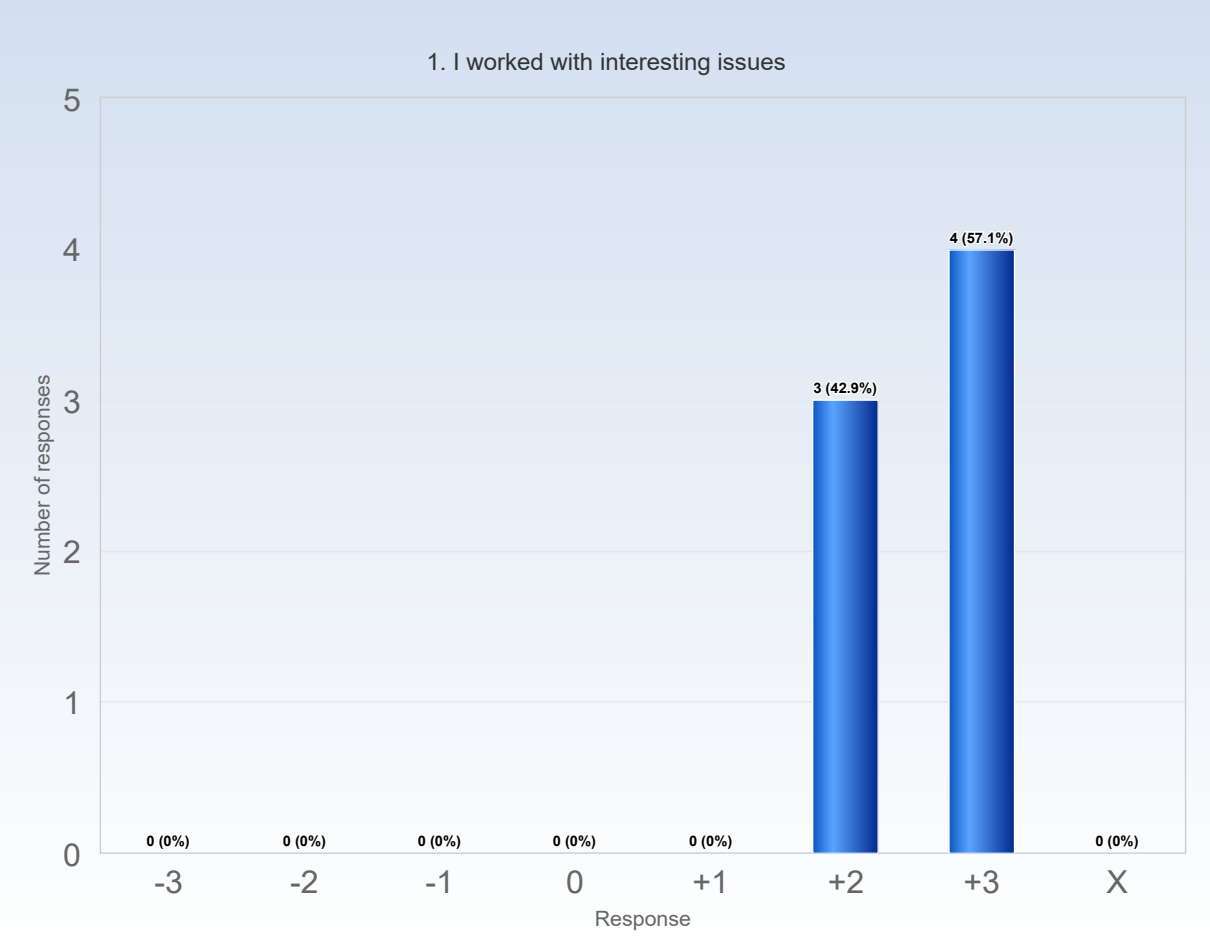
SPECIFIC QUESTIONS

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

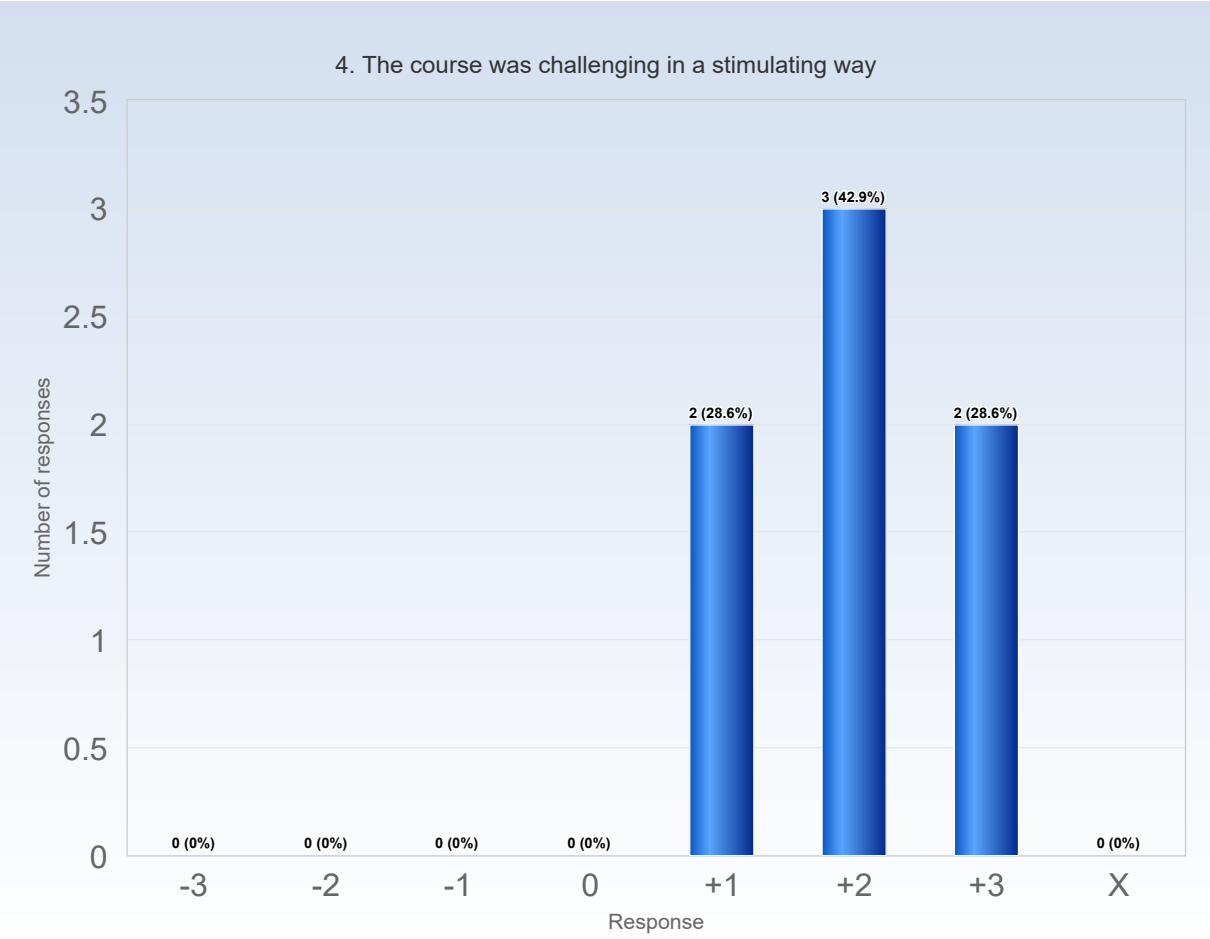
X = I decline to take a position on the statement



Comments

Comments (My response was: +2)

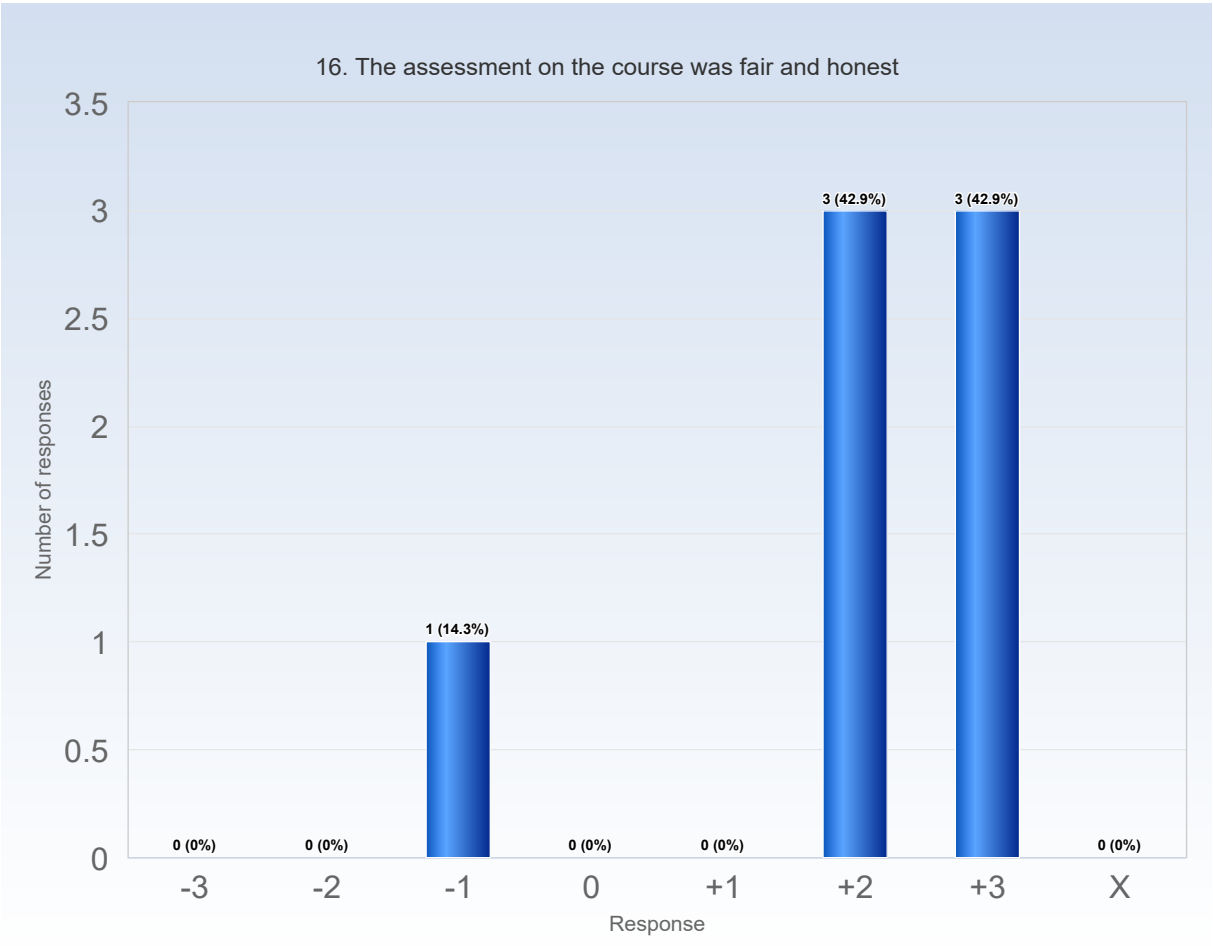
I like the course. I get how hard it is to adapt a course to people without a background in DSP, but you did well.



Comments

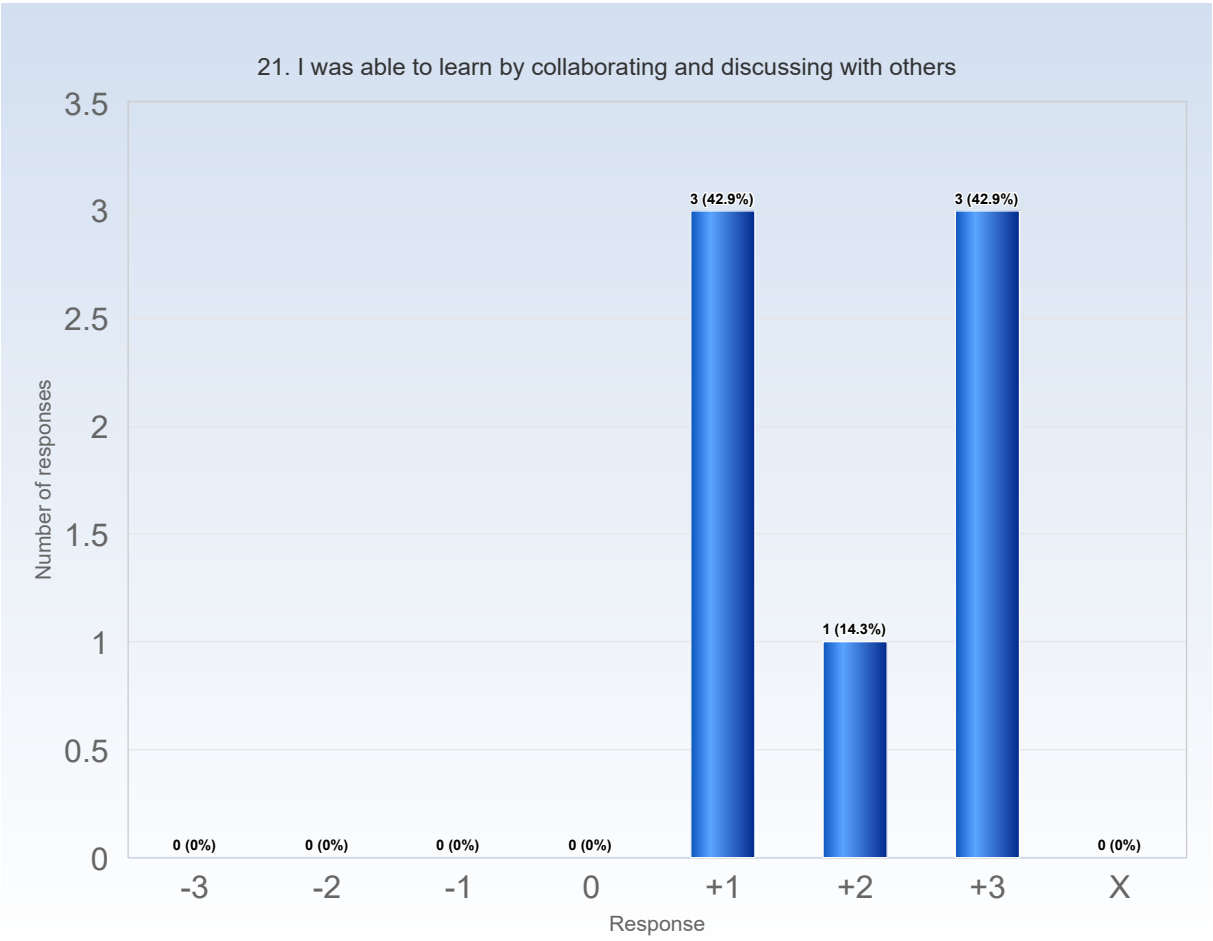
Comments (My response was: +2)
I would love to be handed a project instead of choosing one myself. Perhaps have some good projects for MIR noobs? It is hard to estimate difficulty from papers and RW.

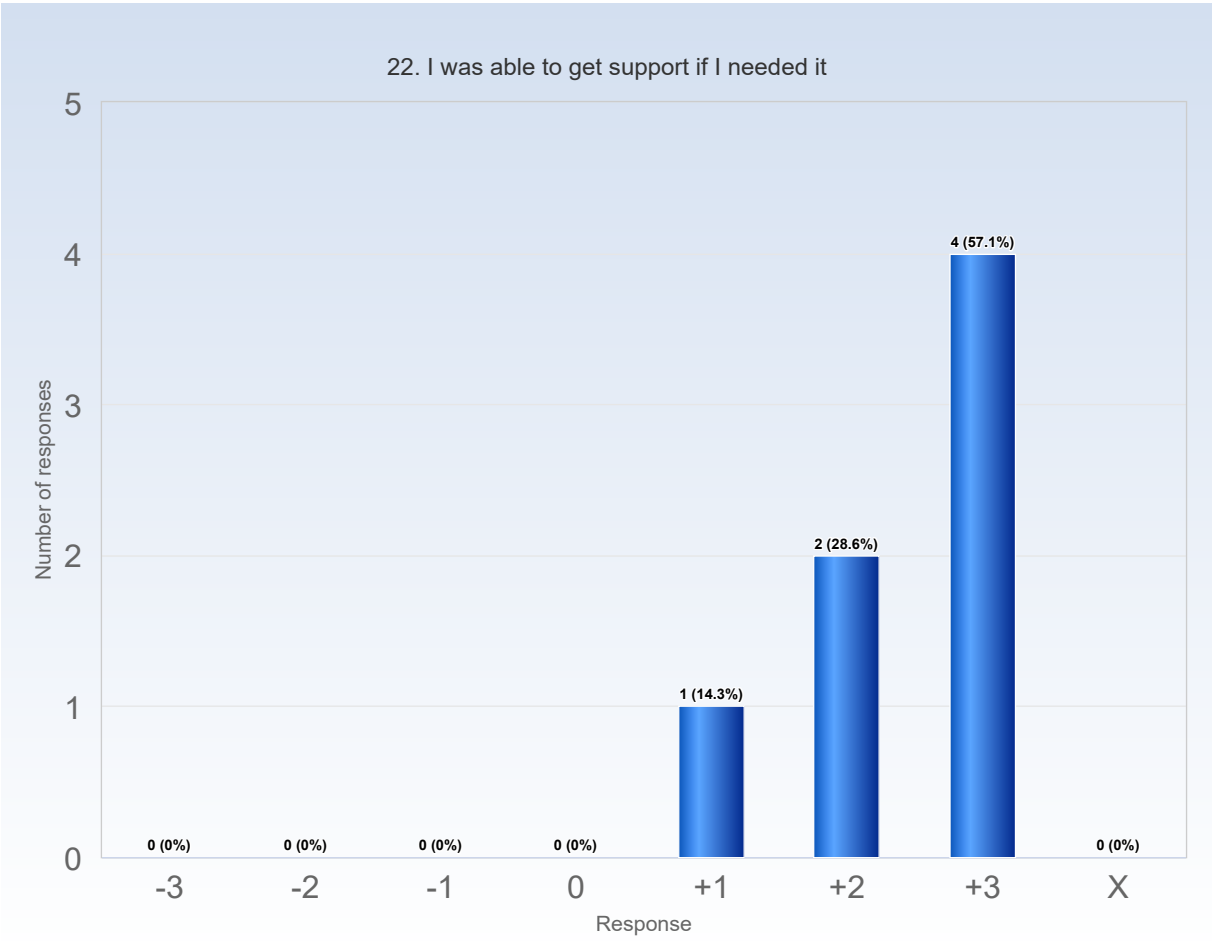

15. I was able to practice and receive feedback without being graded
Number of responses
3.5
3
2.5
2
1.5
1
0.5
0
1 (14.3%)
1 (14.3%)
0 (0%)
2 (28.6%)
0 (0%)
0 (0%)
3 (42.9%)
0 (0%)
-3
-2
-1
0
+1
+2
+3
X
Response



Comments

Comments (My response was: -1)
The grading felt arbitrary


21. I was able to learn by collaborating and discussing with others
Number of responses
3.5
3
2.5
2
1.5
1
0.5
0
0 (0%)
0 (0%)
0 (0%)
0 (0%)
3 (42.9%)
1 (14.3%)
3 (42.9%)
0 (0%)
-3
-2
-1
0
+1
+2
+3
X
Response


22. I was able to get support if I needed it
Number of responses
5
4
3
2
1
0
0 (0%)
0 (0%)
0 (0%)
0 (0%)
1 (14.3%)
2 (28.6%)
4 (57.1%)
0 (0%)
-3
-2
-1
0
+1
+2
+3
X
Response