



# UMEÅ UNIVERSITY

## **Course survey for Biokemi - Proteiners struktur och funktion - statistics only**

Questionnaire: UPL LEQ4

Respondents: 18

Answer Count: 7

Answer Frequency: 38.89%

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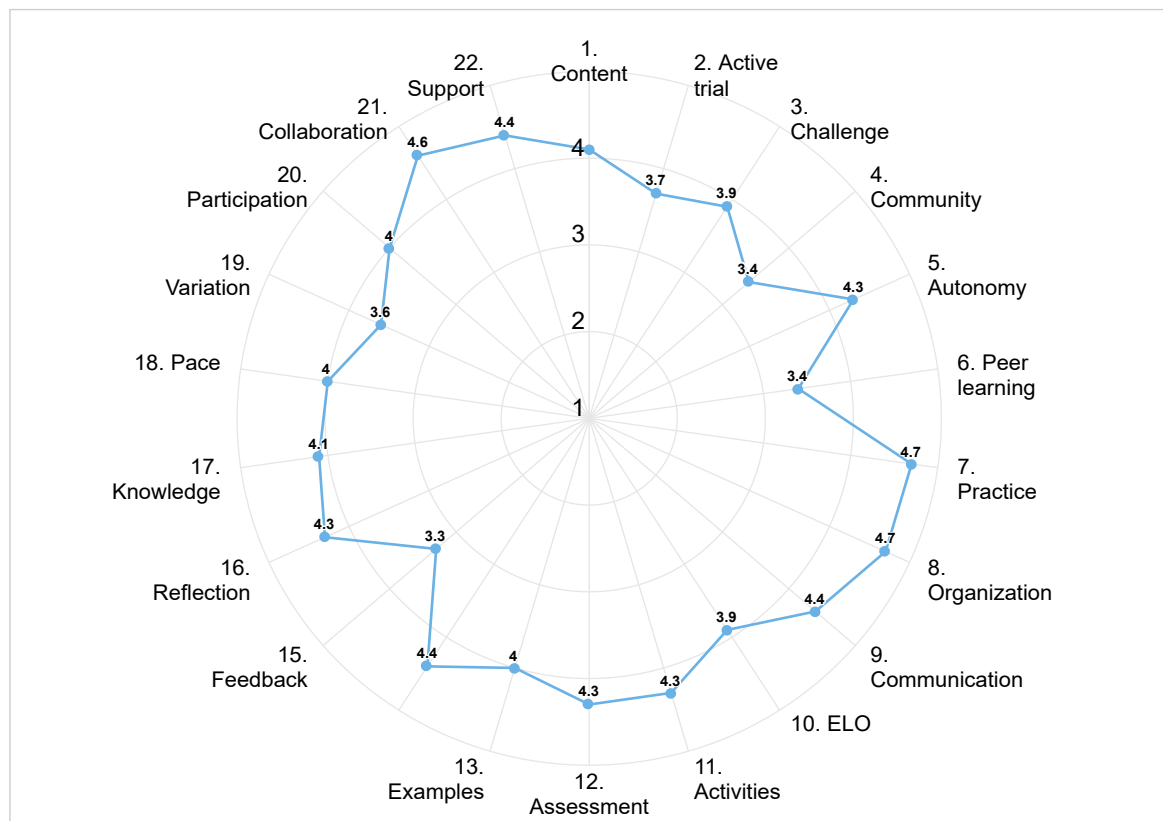
# Average response to statements about the learning environment

The first 22 statements examine the student's experience of the learning environment based on a number of factors that in empirical research have been found to promote learning in higher education.

At a more general level, the student's experience of meaningfulness (statements 1-7), comprehensibility (8-16) and manageability (17-22) in the learning environment are also examined.

The polar diagram below shows the mean value of the response to each statement using a numeric scale from 1 to 5 where 1 = "Strongly disagree" and 5 = "Strongly agree".

More detailed information about these statements – and the response to them – are found below.



# Assessment of own effort

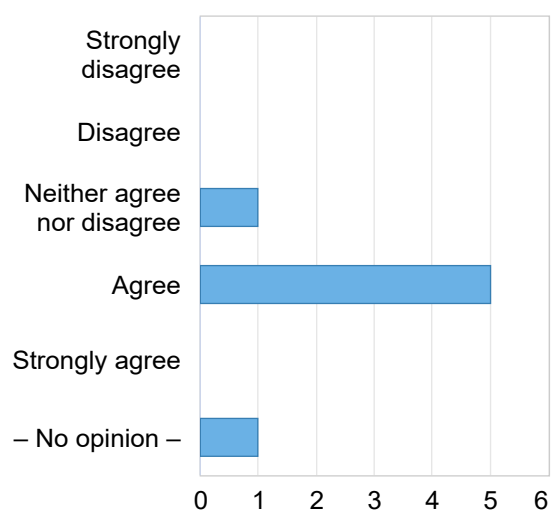
## 23. I studied to the extent I needed to comprehend the content of the course

General category: Own effort

Aspect of learning environment: Own effort

Learning factor: We have enough time to learn and devote the time needed to do so

Answer option	Number of responses
Strongly disagree	0 (0.0%)
Disagree	0 (0.0%)
Neither agree nor disagree	1 (14.3%)
Agree	5 (71.4%)
Strongly agree	0 (0.0%)
– No opinion –	1 (14.3%)
<b>Total</b>	<b>7 (100.0%)</b>



Statistics	Mean	Standard Deviation
	3.8	0.4

# Detailed response to statements about the learning environment

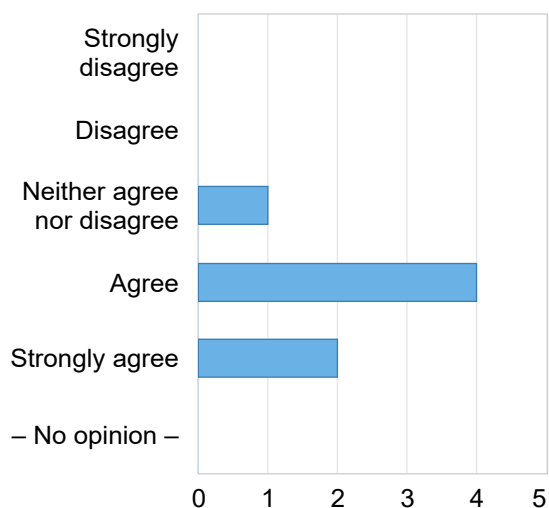
## 1. The course content felt meaningful to me as a person

**General category:** Meaningfulness

**Aspect of learning environment:** Meaningful content

**Learning factor:** We try to answer questions, solve problems or develop skills that we find interesting, exciting or important

Answer option	Number of responses
Strongly disagree	0 (0.0%)
Disagree	0 (0.0%)
Neither agree nor disagree	1 (14.3%)
Agree	4 (57.1%)
Strongly agree	2 (28.6%)
– No opinion –	0 (0.0%)
<b>Total</b>	<b>7 (100.0%)</b>



Statistics	Mean	Standard Deviation
	4.1	0.7

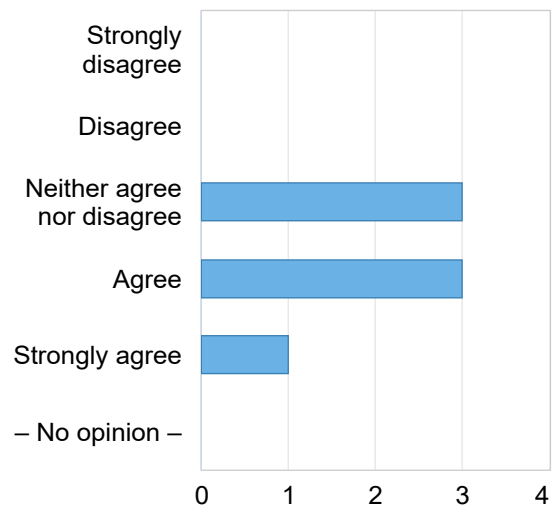
## 2. I was able to try out my own ideas about the subject – theoretically or practically – and learn from experience

**General category:** Meaningfulness

**Aspect of learning environment:** Active trial

**Learning factor:** We are able to speculate, test ideas (intellectually or practically) and learn from experience, even before we know much about the subject

Answer option	Number of responses
Strongly disagree	0 (0.0%)
Disagree	0 (0.0%)
Neither agree nor disagree	3 (42.9%)
Agree	3 (42.9%)
Strongly agree	1 (14.3%)
– No opinion –	0 (0.0%)
<b>Total</b>	<b>7 (100.0%)</b>



Statistics	Mean	Standard Deviation
	3.7	0.8

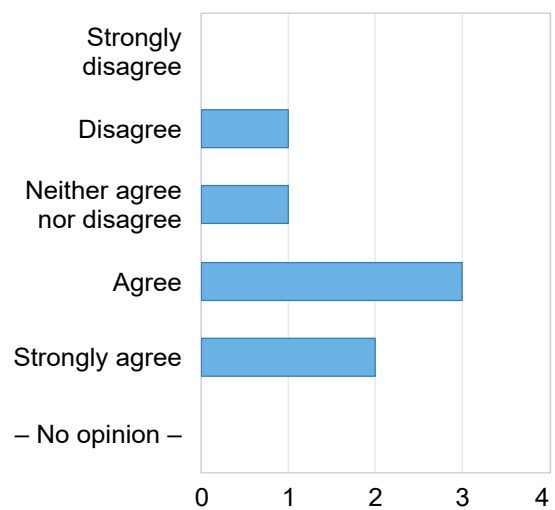
### 3. The course was challenging in a stimulating way

**General category:** Meaningfulness

**Aspect of learning environment:** Challenge

**Learning factor:** We are able speculate, test ideas... in a challenging and at the same time supportive environment

Answer option	Number of responses
Strongly disagree	0 (0.0%)
Disagree	1 (14.3%)
Neither agree nor disagree	1 (14.3%)
Agree	3 (42.9%)
Strongly agree	2 (28.6%)
– No opinion –	0 (0.0%)
<b>Total</b>	<b>7 (100.0%)</b>



Statistics	Mean	Standard Deviation
	3.9	1.1

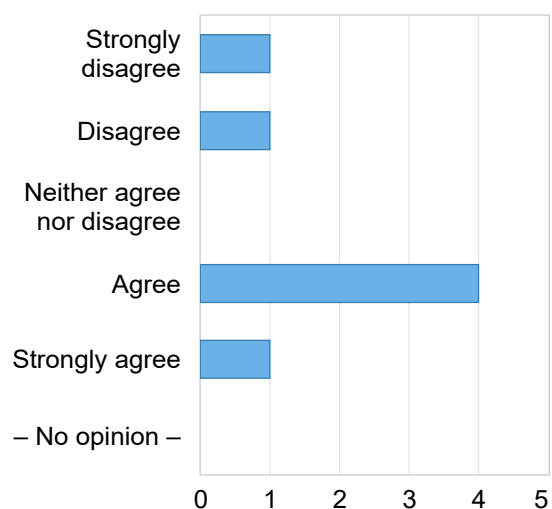
## 4. I felt a sense of community with others on the course

**General category:** Meaningfulness

**Aspect of learning environment:** Belonging

**Learning factor:** We feel that we are part of a community and believe that other people have confidence in our ability to learn

Answer option	Number of responses
Strongly disagree	1 (14.3%)
Disagree	1 (14.3%)
Neither agree nor disagree	0 (0.0%)
Agree	4 (57.1%)
Strongly agree	1 (14.3%)
– No opinion –	0 (0.0%)
<b>Total</b>	<b>7 (100.0%)</b>



Statistics	Mean	Standard Deviation
	3.4	1.4

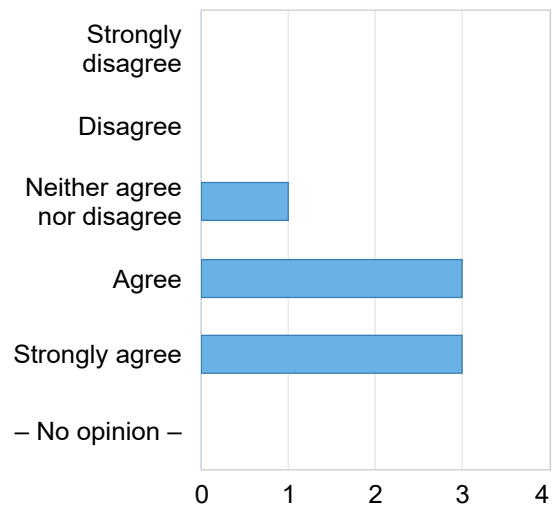
## 5. I felt that the teachers in the course had confidence in my ability to learn

**General category:** Meaningfulness

**Aspect of learning environment:** Autonomy

**Learning factor:** We feel that we are part of a community and believe that other people have confidence in our ability to learn

Answer option	Number of responses
Strongly disagree	0 (0.0%)
Disagree	0 (0.0%)
Neither agree nor disagree	1 (14.3%)
Agree	3 (42.9%)
Strongly agree	3 (42.9%)
– No opinion –	0 (0.0%)
<b>Total</b>	<b>7 (100.0%)</b>



Statistics	Mean	Standard Deviation
	4.3	0.8



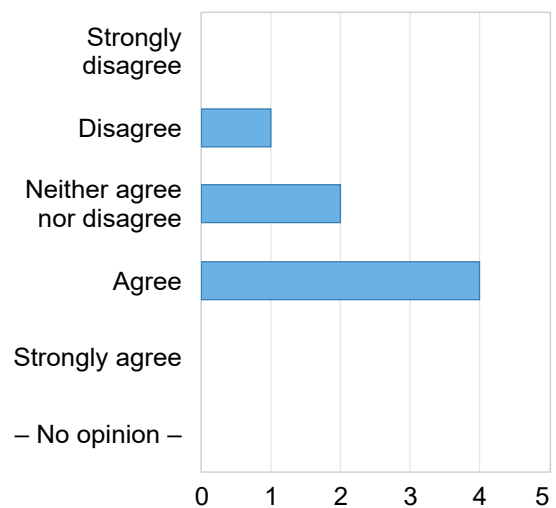
## 6. Collaborating with others on the course helped me to learn

**General category:** Meaningfulness

**Aspect of learning environment:** Peer learning

**Learning factor:** We are able to collaborate with and learn from other learners struggling with the same problems

Answer option	Number of responses
Strongly disagree	0 (0.0%)
Disagree	1 (14.3%)
Neither agree nor disagree	2 (28.6%)
Agree	4 (57.1%)
Strongly agree	0 (0.0%)
– No opinion –	0 (0.0%)
<b>Total</b>	<b>7 (100.0%)</b>



Statistics	Mean	Standard Deviation
	3.4	0.8

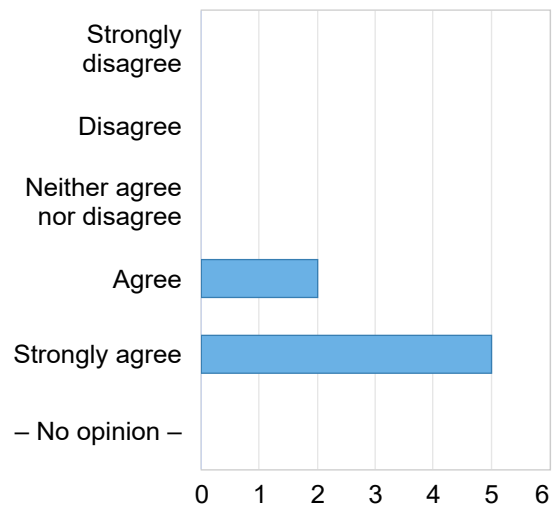
## 7. During the course I was given opportunities to practice what I was expected to learn

**General category:** Meaningfulness

**Aspect of learning environment:** Practice

**Learning factor:** We are able to try, fail, and receive feedback before, and separate from, each summative assessment of our efforts

Answer option	Number of responses
Strongly disagree	0 (0.0%)
Disagree	0 (0.0%)
Neither agree nor disagree	0 (0.0%)
Agree	2 (28.6%)
Strongly agree	5 (71.4%)
– No opinion –	0 (0.0%)
<b>Total</b>	<b>7 (100.0%)</b>



Statistics	Mean	Standard Deviation
	4.7	0.5

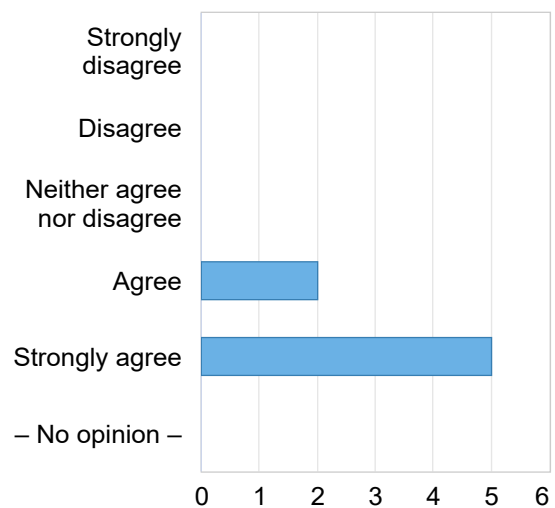
## 8. The course was organized in a way that helped me understand what I should do

**General category:** Comprehensibility

**Aspect of learning environment:** Clear organization

**Learning factor:** We understand how the environment is organized and what is expected of us

Answer option	Number of responses
Strongly disagree	0 (0.0%)
Disagree	0 (0.0%)
Neither agree nor disagree	0 (0.0%)
Agree	2 (28.6%)
Strongly agree	5 (71.4%)
– No opinion –	0 (0.0%)
<b>Total</b>	<b>7 (100.0%)</b>



Statistics	Mean	Standard Deviation
	4.7	0.5

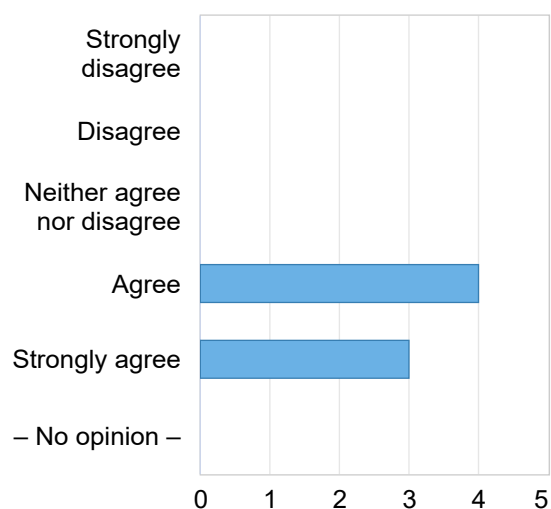
## 9. The course content was communicated in ways I could understand

**General category:** Comprehensibility

**Aspect of learning environment:** Clear communication

**Learning factor:** We have sufficient prior knowledge to handle our learning situation, which is at the same time well adapted to the intended level

Answer option	Number of responses
Strongly disagree	0 (0.0%)
Disagree	0 (0.0%)
Neither agree nor disagree	0 (0.0%)
Agree	4 (57.1%)
Strongly agree	3 (42.9%)
– No opinion –	0 (0.0%)
<b>Total</b>	<b>7 (100.0%)</b>



Statistics	Mean	Standard Deviation
	4.4	0.5

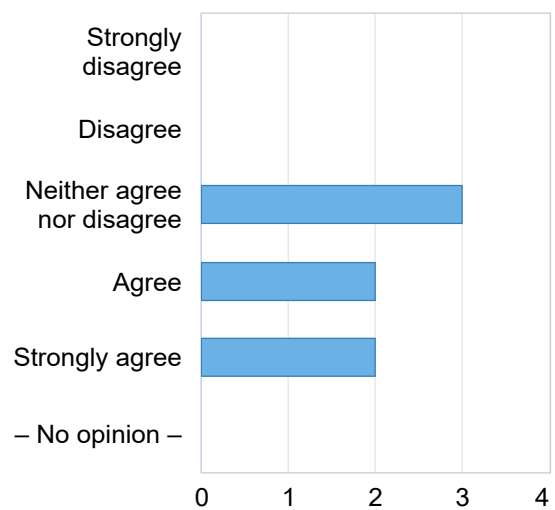
## 10. The expected learning outcomes of the course helped me understand what I was going to learn

**General category:** Comprehensibility

**Aspect of learning environment:** Constructive alignment

**Learning factor:** We understand the meaning of the expected learning outcomes and believe that the work we are expected to do will help us achieve these

Answer option	Number of responses
Strongly disagree	0 (0.0%)
Disagree	0 (0.0%)
Neither agree nor disagree	3 (42.9%)
Agree	2 (28.6%)
Strongly agree	2 (28.6%)
– No opinion –	0 (0.0%)
<b>Total</b>	<b>7 (100.0%)</b>



Statistics	Mean	Standard Deviation
	3.9	0.9

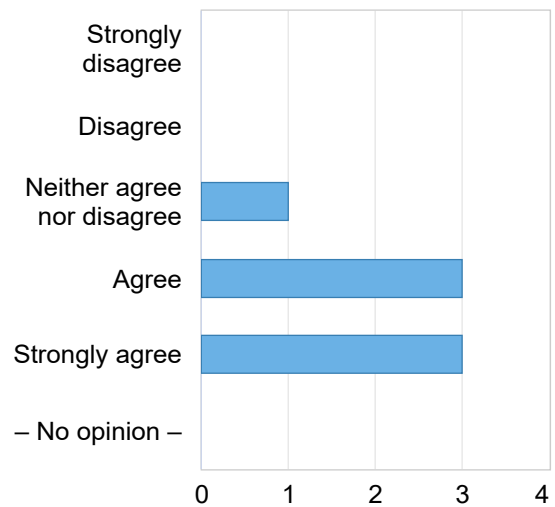
# 11. The course activities helped me reach the expected learning outcomes

**General category:** Comprehensibility

**Aspect of learning environment:** Constructive alignment

**Learning factor:** We understand the meaning of the expected learning outcomes and believe that the work we are expected to do will help us achieve these

Answer option	Number of responses
Strongly disagree	0 (0.0%)
Disagree	0 (0.0%)
Neither agree nor disagree	1 (14.3%)
Agree	3 (42.9%)
Strongly agree	3 (42.9%)
– No opinion –	0 (0.0%)
<b>Total</b>	<b>7 (100.0%)</b>



Statistics	Mean	Standard Deviation
	4.3	0.8

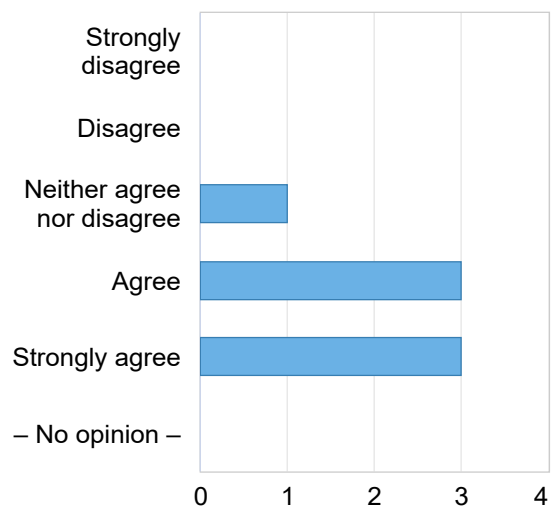
## 12. My knowledge and abilities were assessed in a clear and equitable way

**General category:** Comprehensibility

**Aspect of learning environment:** Constructive alignment

**Learning factor:** We believe that our work will be considered in a fair and honest way

Answer option	Number of responses
Strongly disagree	0 (0.0%)
Disagree	0 (0.0%)
Neither agree nor disagree	1 (14.3%)
Agree	3 (42.9%)
Strongly agree	3 (42.9%)
– No opinion –	0 (0.0%)
<b>Total</b>	<b>7 (100.0%)</b>



Statistics	Mean	Standard Deviation
	4.3	0.8

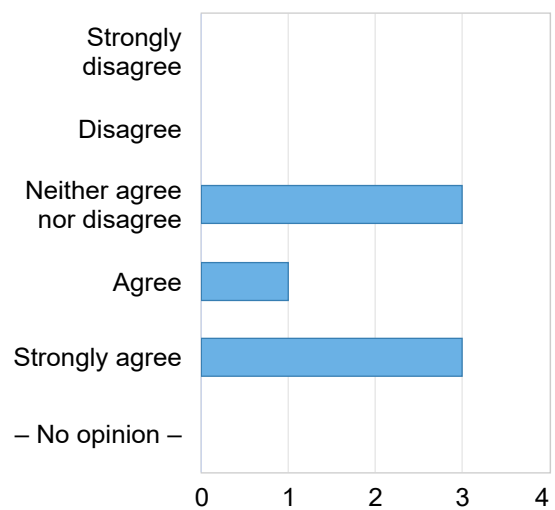
## 13. I was able to learn from concrete examples that I could relate to

**General category:** Comprehensibility

**Aspect of learning environment:** Concrete examples

**Learning factor:** We are able to learn inductively by moving from concrete examples and experiences to general principles, rather than the reverse

Answer option	Number of responses
Strongly disagree	0 (0.0%)
Disagree	0 (0.0%)
Neither agree nor disagree	3 (42.9%)
Agree	1 (14.3%)
Strongly agree	3 (42.9%)
– No opinion –	0 (0.0%)
<b>Total</b>	<b>7 (100.0%)</b>



Statistics	Mean	Standard Deviation
	4.0	1.0



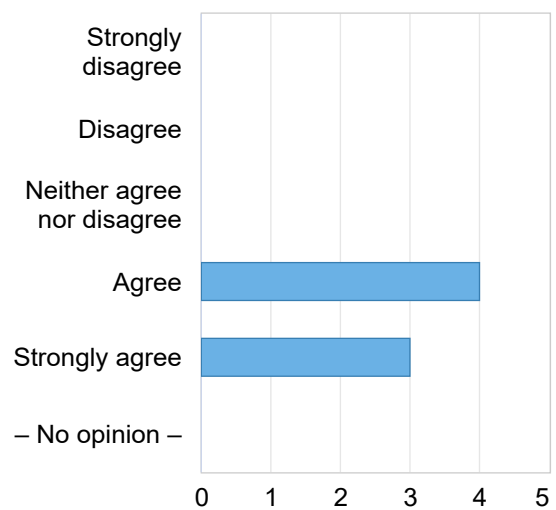
## 14. The course activities helped me develop a thorough understanding of key concepts

**General category:** Comprehensibility

**Aspect of learning environment:** Key concepts

**Learning factor:** We are challenged to develop a thorough understanding of key concepts and gradually create a coherent whole from the content

Answer option	Number of responses
Strongly disagree	0 (0.0%)
Disagree	0 (0.0%)
Neither agree nor disagree	0 (0.0%)
Agree	4 (57.1%)
Strongly agree	3 (42.9%)
– No opinion –	0 (0.0%)
<b>Total</b>	<b>7 (100.0%)</b>



Statistics	Mean	Standard Deviation
	4.4	0.5

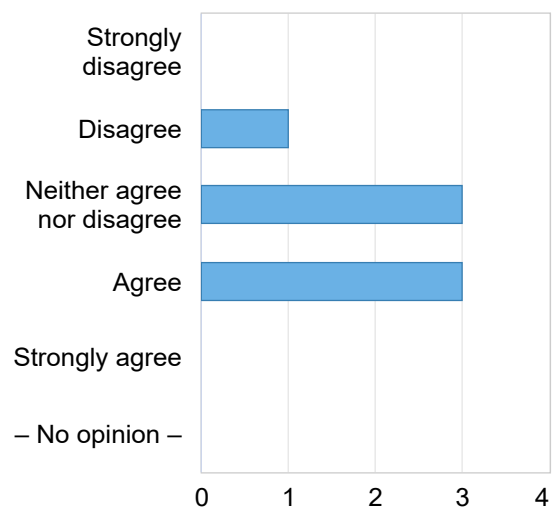
## 15. I received regular feedback from teachers or peers that helped me see my progress

**General category:** Comprehensibility

**Aspect of learning environment:** Feedback

**Learning factor:** We are able to try, fail, and receive feedback before, and separate from, each summative assessment of our efforts

Answer option	Number of responses
Strongly disagree	0 (0.0%)
Disagree	1 (14.3%)
Neither agree nor disagree	3 (42.9%)
Agree	3 (42.9%)
Strongly agree	0 (0.0%)
– No opinion –	0 (0.0%)
<b>Total</b>	<b>7 (100.0%)</b>



Statistics	Mean	Standard Deviation
	3.3	0.8

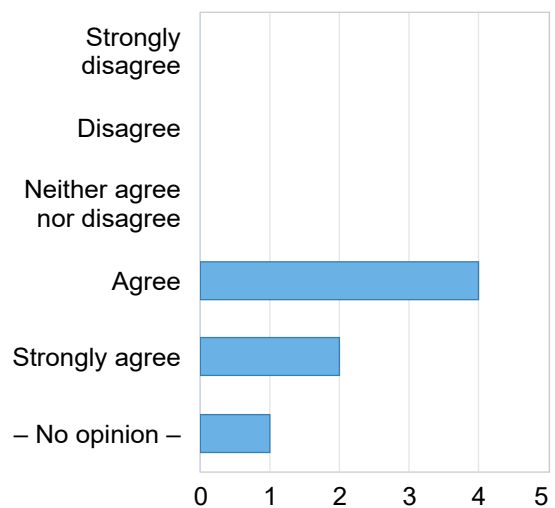
## 16. The course activities provided opportunities to reflect on what I learned

**General category:** Comprehensibility

**Aspect of learning environment:** Reflective observation

**Learning factor:** We can reflect on new experiences in the light of previous knowledge and experience

Answer option	Number of responses
Strongly disagree	0 (0.0%)
Disagree	0 (0.0%)
Neither agree nor disagree	0 (0.0%)
Agree	4 (57.1%)
Strongly agree	2 (28.6%)
– No opinion –	1 (14.3%)
<b>Total</b>	<b>7 (100.0%)</b>



Statistics	Mean	Standard Deviation
	4.3	0.5

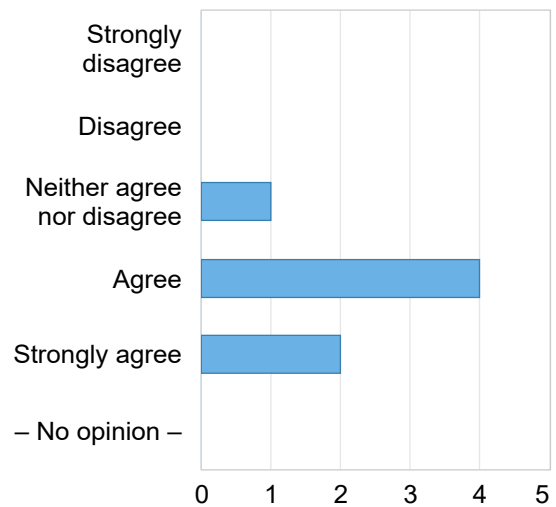
## 17. My background knowledge and abilities were sufficient to follow the course

**General category:** Manageability

**Aspect of learning environment:** Sufficient prior knowledge

**Learning factor:** We have sufficient prior knowledge to handle our learning situation, which is at the same time well adapted to the intended level

Answer option	Number of responses
Strongly disagree	0 (0.0%)
Disagree	0 (0.0%)
Neither agree nor disagree	1 (14.3%)
Agree	4 (57.1%)
Strongly agree	2 (28.6%)
– No opinion –	0 (0.0%)
<b>Total</b>	<b>7 (100.0%)</b>



Statistics	Mean	Standard Deviation
	4.1	0.7

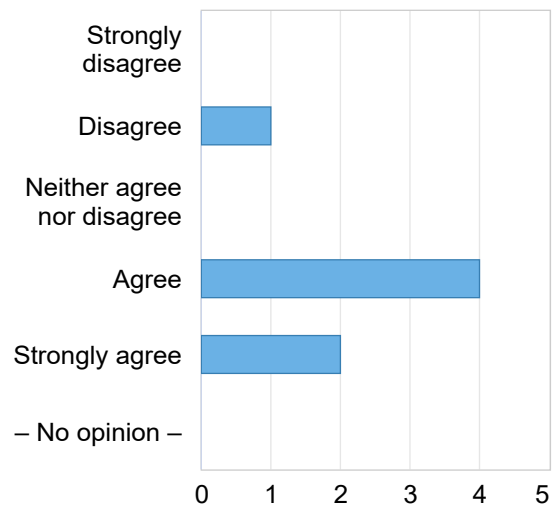
## 18. The pace of the course was reasonable in relation to what I was expected to do

**General category:** Manageability

**Aspect of learning environment:** Enough time

**Learning factor:** We have enough time to learn and devote the time needed to do so

Answer option	Number of responses
Strongly disagree	0 (0.0%)
Disagree	1 (14.3%)
Neither agree nor disagree	0 (0.0%)
Agree	4 (57.1%)
Strongly agree	2 (28.6%)
– No opinion –	0 (0.0%)
<b>Total</b>	<b>7 (100.0%)</b>



Statistics	Mean	Standard Deviation
	4.0	1.0

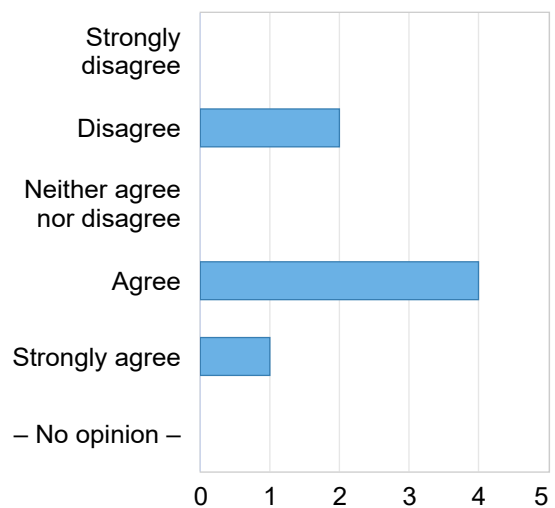
## 19. The course activities enabled me to learn in different ways

**General category:** Manageability

**Aspect of learning environment:** Variation

**Learning factor:** We are able to learn in different ways and have opportunities to influence our learning situation

Answer option	Number of responses
Strongly disagree	0 (0.0%)
Disagree	2 (28.6%)
Neither agree nor disagree	0 (0.0%)
Agree	4 (57.1%)
Strongly agree	1 (14.3%)
– No opinion –	0 (0.0%)
<b>Total</b>	<b>7 (100.0%)</b>



Statistics	Mean	Standard Deviation
	3.6	1.1

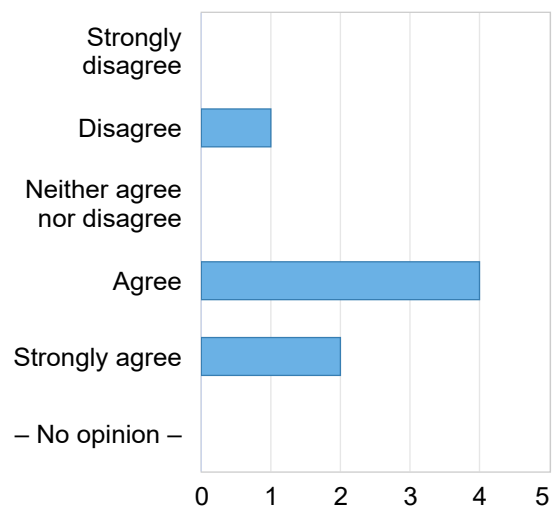
## 20. I felt that the teachers were interested in and took into account my experiences of the course

**General category:** Manageability

**Aspect of learning environment:** Participation

**Learning factor:** We are able to learn in different ways and have opportunities to influence our learning situation

Answer option	Number of responses
Strongly disagree	0 (0.0%)
Disagree	1 (14.3%)
Neither agree nor disagree	0 (0.0%)
Agree	4 (57.1%)
Strongly agree	2 (28.6%)
– No opinion –	0 (0.0%)
<b>Total</b>	<b>7 (100.0%)</b>



Statistics	Mean	Standard Deviation
	4.0	1.0

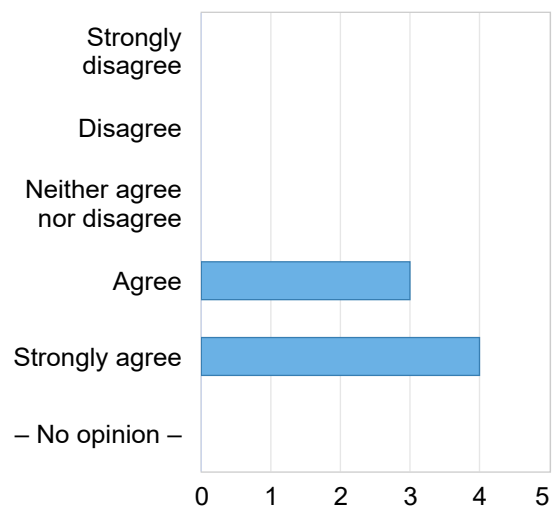
## 21. The course activities provided opportunities to collaborate with others and discuss the subject

**General category:** Manageability

**Aspect of learning environment:** Collaboration

**Learning factor:** We are able to collaborate with and learn from other learners struggling with the same problems

Answer option	Number of responses
Strongly disagree	0 (0.0%)
Disagree	0 (0.0%)
Neither agree nor disagree	0 (0.0%)
Agree	3 (42.9%)
Strongly agree	4 (57.1%)
– No opinion –	0 (0.0%)
<b>Total</b>	<b>7 (100.0%)</b>



Statistics	Mean	Standard Deviation
	4.6	0.5



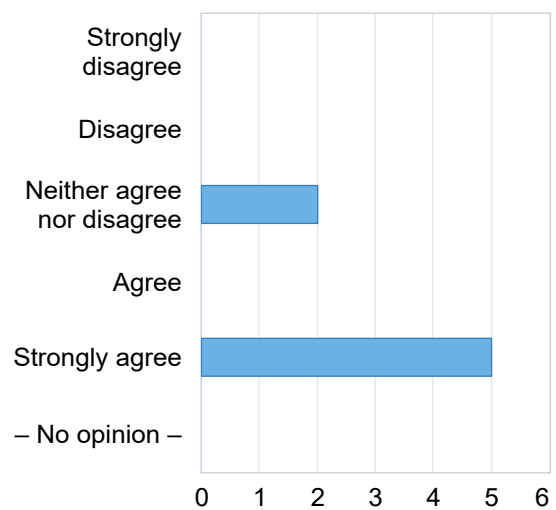
## 22. I was able to get support from teachers or peers if I needed it

**General category:** Manageability

**Aspect of learning environment:** Support

**Learning factor:** We are able to speculate, test ideas... in a challenging and at the same time supportive environment

Answer option	Number of responses
Strongly disagree	0 (0.0%)
Disagree	0 (0.0%)
Neither agree nor disagree	2 (28.6%)
Agree	0 (0.0%)
Strongly agree	5 (71.4%)
– No opinion –	0 (0.0%)
<b>Total</b>	<b>7 (100.0%)</b>



Statistics	Mean	Standard Deviation
	4.4	1.0