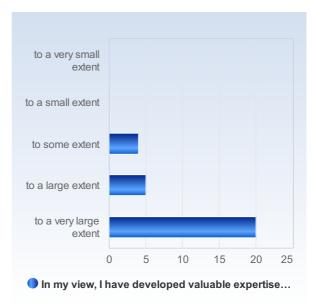


Cell-, Stem Cell and Developmental Biology 1BI037, 2021

Respondents: 50 Answer Count: 29 Answer Frequency: 58.00%

In my view, I have developed valuable expertise /skills during the course.

| In my view, I have developed valuable expertise | Number of |
|---|-------------|
| /skills during the course. | responses |
| to a very small extent | 0 (0.0%) |
| to a small extent | 0 (0.0%) |
| to some extent | 4 (13.8%) |
| to a large extent | 5 (17.2%) |
| to a very large extent | 20 (69.0%) |
| Total | 29 (100.0%) |

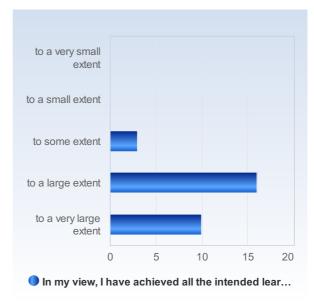


| | Mean | Standard Deviation | Coefficient of Variation | Min | Lower Quartile | Median | Upper Quartile | Max |
|---|------|-----------------------|-----------------------------|--------|-------------------|--------|-------------------|-----|
| In my view, I have developed valuable expertise/skills during | | | | \Box | | | | |
| the course | 4.6 | 0.7 | 16.2 % | 3.0 | 4.0 | 5.0 | 5.0 | 5.0 |



In my view, I have achieved all the intended learning outcomes of the course.

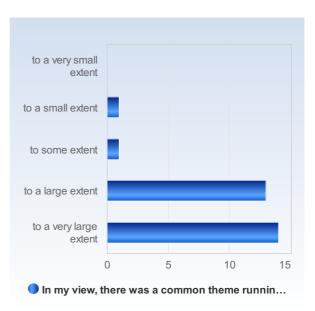
| In my view, I have achieved all the intended | Number of |
|--|-------------|
| learning outcomes of the course. | responses |
| to a very small extent | 0 (0.0%) |
| to a small extent | 0 (0.0%) |
| to some extent | 3 (10.3%) |
| to a large extent | 16 (55.2%) |
| to a very large extent | 10 (34.5%) |
| Total | 29 (100.0%) |



| | Mean | Standard Deviation | Coefficient of Variation | Min | Lower Quartile | Median | Upper Quartile | Max |
|---|------|-----------------------|-----------------------------|-----|-------------------|--------|-------------------|-----|
| In my view, I have achieved all the intended learning outcomes of the course. | 4.2 | 0.6 | 15.0 % | 3.0 | 4.0 | 4.0 | 5.0 | 5.0 |

In my view, there was a common theme running throughout the course – from learning outcomes to examinations.

| In my view, there was a common theme running throughout the course – from learning outcomes to examinations. | Number of responses |
|--|---------------------|
| to a very small extent | 0 (0.0%) |
| to a small extent | 1 (3.4%) |
| to some extent | 1 (3.4%) |
| to a large extent | 13 (44.8%) |
| to a very large extent | 14 (48.3%) |
| Total | 29 (100.0%) |

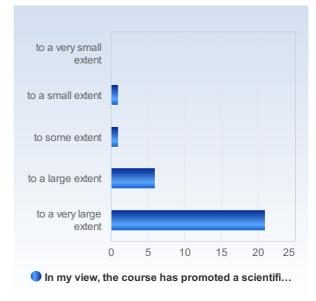


| | Mean | Standard Deviation | Coefficient of Variation | Min | Lower Quartile | Median | Upper Quartile | Max |
|--|------|-----------------------|-----------------------------|-----|-------------------|--------|-------------------|-----|
| In my view, there was a common theme running throughout the course – | | | | | | | | |
| from learning outcomes to examinations. | 4.4 | 0.7 | 16.6 % | 2.0 | 4.0 | 4.0 | 5.0 | 5.0 |



In my view, the course has promoted a scientific way of thinking and reasoning (e.g. analytical and critical thinking, independent search for and evaluation of information).

| In my view, the course has promoted a scientific way of thinking and reasoning (e.g. analytical and | |
|---|-------------|
| critical thinking, independent search for and | Number of |
| evaluation of information). | responses |
| to a very small extent | 0 (0.0%) |
| to a small extent | 1 (3.4%) |
| to some extent | 1 (3.4%) |
| to a large extent | 6 (20.7%) |
| to a very large extent | 21 (72.4%) |
| Total | 29 (100.0%) |

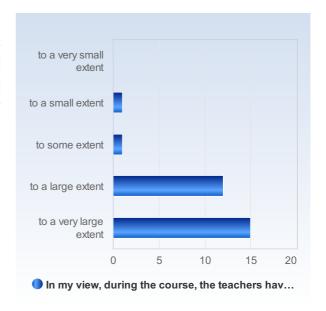


| | | Standard | Coefficient | | Lower | | Upper | |
|--|------|-----------|--------------|-----|----------|--------|----------|-----|
| | Mean | Deviation | of Variation | Min | Quartile | Median | Quartile | Max |
| In my view, the course has promoted a scientific way of thinking and reasoning | | | | | | | | |
| (e.g. analytical and critical thinking, independent search for and evaluation of | | | | | | | | |
| information). | 4.6 | 0.7 | 15.7 % | 2.0 | 4.0 | 5.0 | 5.0 | 5.0 |



In my view, during the course, the teachers have been open to ideas and opinions about the course's structure and content.

| In my view, during the course, the teachers have been open to ideas and opinions about the | Number of |
|--|-------------|
| course's structure and content. | responses |
| to a very small extent | 0 (0.0%) |
| to a small extent | 1 (3.4%) |
| to some extent | 1 (3.4%) |
| to a large extent | 12 (41.4%) |
| to a very large extent | 15 (51.7%) |
| Total | 29 (100 0%) |



| | | Standard | Coefficient of | | Lower | | Upper | |
|---|------|-----------|----------------|--------|----------|--------|----------|-----|
| | Mean | Deviation | Variation | Min | Quartile | Median | Quartile | Max |
| In my view, during the course, the teachers have been open to ideas and | | | | \Box | | | | |
| opinions about the course's structure and content. | 4.4 | 0.7 | 16.6 % | 2.0 | 4.0 | 5.0 | 5.0 | 5.0 |



Have you during the course been subjected to negative discrimination or insults because of your gender, ethnic origin, religion, disability or sexual orientation? If the answer is yes, the programme advises you to contact the study advisor or the student ombudsman; see KI webpage for Contact information.

Have you during the course been subjected to negative discrimination or insults because of your gender, ethnic origin, religion, disability or sexual orientation? If the answer is yes, the programme advises you to contact the study advisor or the student ombudsman; see KI webpage for Contact information.

Yes

No

Total

| t | Number of | |
|---|-------------|--|
| | responses | |
| | 0 (0.0%) | |
| | 29 (100.0%) | |
| | 29 (100.0%) | |

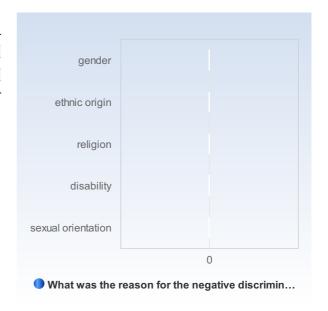


| | | | Coefficient of Variation | | Lower Quartile | Median | Upper Quartile | Max |
|---|-----|-----|--------------------------|-----|-------------------|--------|-------------------|-----|
| Have you during the course been subjected to negative discrimination or insults | | | | | | | | |
| because of your gender, ethnic origin, religion, disability or sexual orientation? If | | | | | | | | |
| the answer is yes, the programme advises you to contact the study advisor or | | | | | | | | |
| the student ombudsman; see KI webpage for Contact information. | 2.0 | 0.0 | 0.0 % | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |



What was the reason for the negative discrimination or insult?

| What was the reason for the negative discrimination or insult? | Number of responses |
|--|---------------------|
| gender | 0 (0.0%) |
| ethnic origin | 0 (0.0%) |
| religion | 0 (0.0%) |
| disability | 0 (0.0%) |
| sexual orientation | 0 (0.0%) |
| Total | 0 (0.0%) |



| | Mean | Standard Deviation | Coefficient of Variation | Min | Lower Quartile | Median | Upper Quartile | Max |
|--|------|-----------------------|-----------------------------|-----|-------------------|--------|-------------------|-----|
| What was the reason for the negative discrimination or insult? | 0.0 | 0.0 | NaN % | ∞ | 0.0 | 0.0 | 0.0 | -∞ |

To what extent do you feel that the workload during the course was reasonable in relation to the extent of the course/number of credits awarded?

| To what extent do you feel that the workload | |
|---|-------------|
| during the course was reasonable in relation to the | Number of |
| extent of the course/number of credits awarded? | responses |
| To a very small extent | 0 (0.0%) |
| To a small extent | 0 (0.0%) |
| To some extent | 2 (6.9%) |
| To a large extent | 14 (48.3%) |
| To a very large extent | 13 (44.8%) |
| Total | 29 (100.0%) |



| | | Standard | Coefficient of | | Lower | | Upper | |
|---|------|-----------|----------------|-----|----------|--------|----------|-----|
| | Mean | Deviation | Variation | Min | Quartile | Median | Quartile | Max |
| To what extent do you feel that the workload during the course was | | | | | | | | |
| reasonable in relation to the extent of the course/number of credits awarded? | 4.4 | 0.6 | 14.2 % | 3.0 | 4.0 | 4.0 | 5.0 | 5.0 |



The course structure and methods used (e.g. lectures, exercises, seminars, assignments etc.) were relevant in relation to the learning outcomes.

| The course structure and methods used (e.g. lectures, exercises, seminars, assignments etc.) were relevant in relation to the learning outcomes. | Number of responses |
|--|---------------------|
| to a very small extent | 0 (0.0%) |
| to a small extent | 2 (6.9%) |
| to some extent | 1 (3.4%) |
| to a large extent | 15 (51.7%) |
| to a very large extent | 11 (37.9%) |
| Total | 29 (100.0%) |

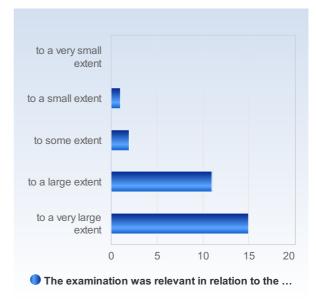


| | | Standard Coefficient of Lower | | Coefficient of | | | Upper | |
|--|------|-------------------------------|-----------|----------------|----------|--------|----------|-----|
| | Mean | Deviation | Variation | Min | Quartile | Median | Quartile | Max |
| The course structure and methods used (e.g. lectures, exercises, seminars, | | | | | | | | |
| assignments etc.) were relevant in relation to the learning outcomes. | 4.2 | 0.8 | 19.5 % | 2.0 | 4.0 | 4.0 | 5.0 | 5.0 |



The examination was relevant in relation to the learning outcomes.

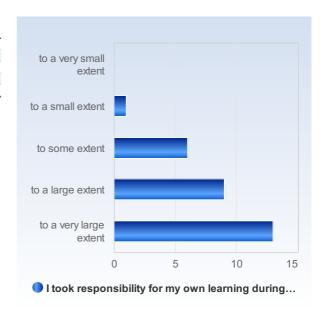
| The examination was relevant in relation to the learning outcomes. | Number of |
|--|-------------|
| | responses |
| to a very small extent | 0 (0.0%) |
| to a small extent | 1 (3.4%) |
| to some extent | 2 (6.9%) |
| to a large extent | 11 (37.9%) |
| to a very large extent | 15 (51.7%) |
| Total | 29 (100 0%) |



| | | Standard | Coefficient of | | Lower | | Upper | |
|--|------|-----------|----------------|-----|----------|--------|----------|-----|
| | Mean | Deviation | Variation | Min | Quartile | Median | Quartile | Max |
| The examination was relevant in relation to the learning | | | | | | | | |
| outcomes. | 4.4 | 0.8 | 17.7 % | 2.0 | 4.0 | 5.0 | 5.0 | 5.0 |

I took responsibility for my own learning during this course.

| I took responsibility for my own learning during this course. | Number of responses |
|---|---------------------|
| to a very small extent | 0 (0.0%) |
| to a small extent | 1 (3.4%) |
| to some extent | 6 (20.7%) |
| to a large extent | 9 (31.0%) |
| to a very large extent | 13 (44.8%) |
| Total | 29 (100.0%) |

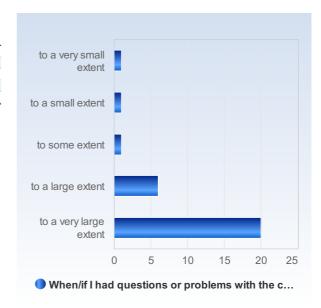


| | Mean | Standard Deviation | Coefficient of Variation | Min | Lower Quartile | Median | Upper Quartile | Max |
|---|------|-----------------------|-----------------------------|-----|-------------------|--------|-------------------|-----|
| I took responsibility for my own learning during this | | | | | | | | |
| course. | 4.2 | 0.9 | 21.3 % | 2.0 | 4.0 | 4.0 | 5.0 | 5.0 |



When/if I had questions or problems with the course content, I felt that I could turn to my teacher/supervisor for guidance.

| When/if I had questions or problems with the course content, I felt that I could turn to my teacher/supervisor for guidance. | Number of responses |
|--|---------------------|
| to a very small extent | 1 (3.4%) |
| to a small extent | 1 (3.4%) |
| to some extent | 1 (3.4%) |
| to a large extent | 6 (20.7%) |
| to a very large extent | 20 (69.0%) |
| Total | 29 (100.0%) |



| | | Standard | Coefficient of | | Lower | | Upper | |
|--|------|-----------|----------------|-----|----------|--------|----------|--------|
| | Mean | Deviation | Variation | Min | Quartile | Median | Quartile | Max |
| When/if I had questions or problems with the course content, I felt that I | | | | | | | | \Box |
| could turn to my teacher/supervisor for guidance. | 4.5 | 1.0 | 22.0 % | 1.0 | 4.0 | 5.0 | 5.0 | 5.0 |



The feedback that I have received has been important for my development and learning.

| The feedback that I have received has been important for my development and learning. | Number of responses |
|---|---------------------|
| to a very small extent | 1 (3.4%) |
| to a small extent | 1 (3.4%) |
| to some extent | 11 (37.9%) |
| to a large extent | 9 (31.0%) |
| to a very large extent | 7 (24.1%) |
| Total | 29 (100.0%) |



| | Mean | Standard Deviation | Coefficient of Variation | Min | Lower Quartile | Median | Upper Quartile | Max |
|---|------|-----------------------|-----------------------------|-----|-------------------|--------|-------------------|-----|
| The feedback that I have received has been important for my | | | | | | | | |
| development and learning. | 3.7 | 1.0 | 27.2 % | 1.0 | 3.0 | 4.0 | 4.0 | 5.0 |



What is your overall opinion of the course?

| What is your overall opinion of the course? | Number of responses |
|---|---------------------|
| very poor | 0 (0.0%) |
| poor | 0 (0.0%) |
| OK | 1 (3.4%) |
| good | 9 (31.0%) |
| very good | 19 (65.5%) |
| Total | 29 (100 0%) |



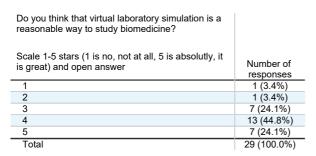
| | Mean | Standard Deviation | Coefficient of Variation | Min | Lower Quartile | Median | Upper Quartile | Max |
|---|------|--------------------|--------------------------|-----|----------------|--------|----------------|-----|
| What is your overall opinion of the course? | 4.6 | 0.6 | 12.2 % | 3.0 | 4.0 | 5.0 | 5.0 | 5.0 |

Labster pilot, Questionnaire.



Do you think that virtual laboratory simulation is a reasonable way to study biomedicine?

Scale 1-5 stars (1 is no, not at all, 5 is absolutly, it is great) and open answer





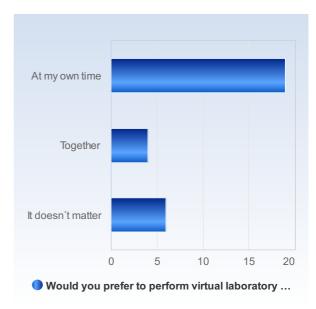
irtual laboratory simulation i... Scale 1-5 stars (1 is no, not a

| | Mean | Standard Deviation | Coefficient of Variation | Min | Lower Quartile | Median | Upper Quartile | Max |
|---|------|-----------------------|-----------------------------|-----|-------------------|--------|-------------------|-----|
| Do you think that virtual laboratory simulation is a reasonable way to study biomedicine? | | | | | | | | |
| Scale 1-5 stars (1 is no, not at all, 5 is absolutly, it is great) and open answer | 3.8 | 1.0 | 25.2 % | 1.0 | 3.0 | 4.0 | 4.0 | 5.0 |



Would you prefer to perform virtual laboratory simulations at your own time alone or at classroom with other students and teacher?

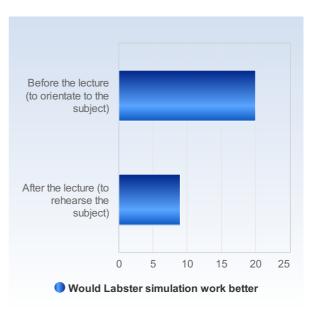
| Would you prefer to perform virtual laboratory | |
|--|-------------|
| simulations at your own time alone or at | Number of |
| classroom with other students and teacher? | responses |
| At my own time | 19 (65.5%) |
| Together | 4 (13.8%) |
| It doesn't matter | 6 (20.7%) |
| Total | 29 (100 0%) |



| | | Standard | Coefficient of | | Lower | | Upper | |
|---|------|-----------|----------------|-----|----------|--------|----------|-----|
| | Mean | Deviation | Variation | Min | Quartile | Median | Quartile | Max |
| Would you prefer to perform virtual laboratory simulations at your own time | | | | | | | | |
| alone or at classroom with other students and teacher? | 1.6 | 0.8 | 53.3 % | 1.0 | 1.0 | 1.0 | 2.0 | 3.0 |

Would Labster simulation work better

| Would Labster simulation work better | Number of responses |
|--|---------------------|
| Before the lecture (to orientate to the subject) | 20 (69.0%) |
| After the lecture (to rehearse the subject) | 9 (31.0%) |
| Total | 29 (100.0%) |



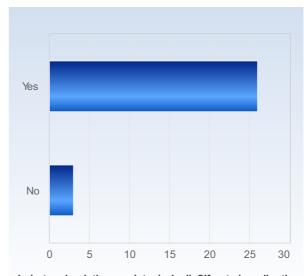
| | Mean | Standard Deviation | Coefficient of Variation | Min | Lower Quartile | Median | Upper Quartile | Max |
|--------------------------------------|------|--------------------|--------------------------|-----|----------------|--------|----------------|-----|
| Would Labster simulation work better | 1.3 | 0.5 | 35.9 % | 1.0 | 1.0 | 1.0 | 2.0 | 20 |



Did the Labster simulation work technically?

If not, describe the problems

| Did the Labster simulation work technically? | |
|--|---------------------|
| If not, describe the problems | Number of responses |
| Yes | 26 (89.7%) |
| No | 3 (10.3%) |
| Total | 29 (100.0%) |



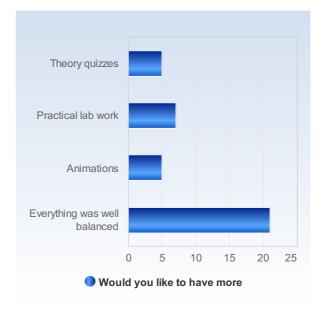
e Labster simulation work technically? If not, describe the $\ensuremath{\epsilon}$

| | Mean | Standard Deviation | Coefficient of Variation | Min | Lower Quartile | Median | Upper Quartile | Max |
|--|------|--------------------|--------------------------|-----|----------------|--------|----------------|-----|
| Did the Labster simulation work technically? | | | | | | | | |
| If not, describe the problems | 1.1 | 0.3 | 28.1 % | 1.0 | 1.0 | 1.0 | 1.0 | 2.0 |



Would you like to have more

| Would you like to have more | Number of responses |
|------------------------------|---------------------|
| Theory quizzes | 5 (17.2%) |
| Practical lab work | 7 (24.1%) |
| Animations | 5 (17.2%) |
| Everything was well balanced | 21 (72.4%) |
| Total | 38 (131.0%) |

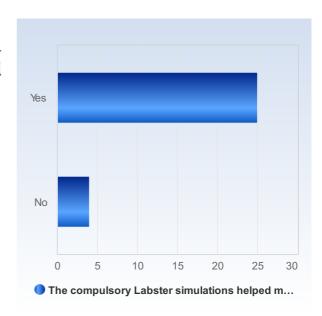


| | Mean | Standard Deviation | Coefficient of Variation | Min | Lower Quartile | Median | Upper Quartile | Max |
|-----------------------------|------|--------------------|--------------------------|-----|----------------|--------|----------------|-----|
| Would you like to have more | 3.1 | 1.1 | 36.5 % | 1.0 | 2.0 | 4.0 | 4.0 | 4.0 |

Mandatory labster simulations:

The compulsory Labster simulations helped me to attain the intended learning outcomes of this course.

| The compulsory Labster simula to attain the intended learning of | |
|--|-------------|
| course. | responses |
| Yes | 25 (86.2%) |
| No | 4 (13.8%) |
| Total | 29 (100.0%) |

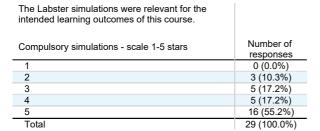


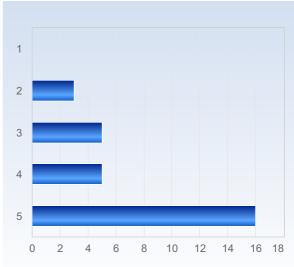
| | L. | Standard | Coefficient of | L | Lower | L I | Upper | |
|---|------|-----------|----------------|-----|----------|--------|----------|-----|
| | Mean | Deviation | Variation | Min | Quartile | Median | Quartile | Max |
| The compulsory Labster simulations helped me to attain the intended | | | | | | | | |
| learning outcomes of this course. | 1.1 | 0.4 | 30.8 % | 1.0 | 1.0 | 1.0 | 1.0 | 2.0 |



The Labster simulations were relevant for the intended learning outcomes of this course.

Compulsory simulations - scale 1-5 stars





mulations were relevant for the i... Compulsory simulations

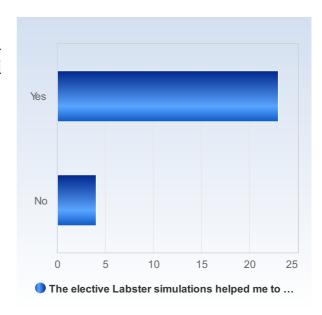
| | Mean | Standard Deviation | Coefficient of Variation | Min | Lower Quartile | Median | Upper Quartile | Max |
|--|------|-----------------------|-----------------------------|-----|-------------------|--------|-------------------|-----|
| The Labster simulations were relevant for the intended learning outcomes of this course. | | | | | | | | |
| Compulsory simulations - scale 1-5 stars | 4.2 | 1.1 | 25.7 % | 2.0 | 3.0 | 5.0 | 5.0 | 5.0 |

Elective labster simulations



The elective Labster simulations helped me to attain the intended learning outcomes of this course.

| The elective Labster simulations helped me to attain the intended learning outcomes of this | Number of |
|---|-------------|
| course. | responses |
| Yes | 23 (85.2%) |
| No | 4 (14.8%) |
| Total | 27 (100.0%) |



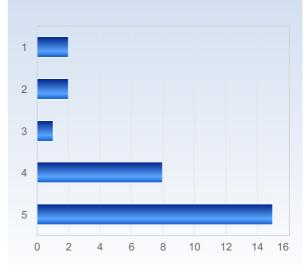
| | Mean | Standard Deviation | Coefficient of Variation | Min | Lower Quartile | Median | Upper Quartile | Max |
|---|------|-----------------------|-----------------------------|--------|-------------------|--------|-------------------|-----|
| The elective Labster simulations helped me to attain the intended | | | | \Box | | | | |
| learning outcomes of this course. | 1.1 | 0.4 | 31.5 % | 1.0 | 1.0 | 1.0 | 1.0 | 2.0 |



The Labster simulations were relevant for the intended learning outcomes of this course.

Electives simulations - scale 1-5 stars

| The Labster simulations were relevant for the intended learning outcomes of this course. | |
|--|-------------|
| Electives simulations - scale 1-5 stars | Number of |
| | responses |
| 1 | 2 (7.1%) |
| 2 | 2 (7.1%) |
| 3 | 1 (3.6%) |
| 4 | 8 (28.6%) |
| 5 | 15 (53.6%) |
| Total | 28 (100 0%) |



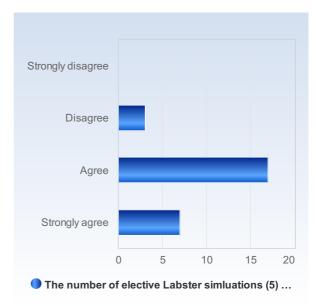
simulations were relevant for the i... Electives simulations

| | Mean | Standard Deviation | Coefficient of Variation | Min | Lower Quartile | Median | Upper Quartile | Max |
|--|------|-----------------------|-----------------------------|-----|-------------------|--------|-------------------|-----|
| The Labster simulations were relevant for the intended learning outcomes of this course. | | | | | | | | |
| Electives simulations - scale 1-5 stars | 4.1 | 1.2 | 29.9 % | 1.0 | 4.0 | 5.0 | 5.0 | 5.0 |



The number of elective Labster simluations (5) was optimal.

| The number of elective Labster simluations (5) | Number of |
|--|-------------|
| was optimal. | responses |
| Strongly disagree | 0 (0.0%) |
| Disagree | 3 (11.1%) |
| Agree | 17 (63.0%) |
| Strongly agree | 7 (25.9%) |
| Total | 27 (100.0%) |



| | Mean | Standard Deviation | Coefficient of Variation | Min | Lower Quartile | Median | Upper Quartile | Max |
|--|------|-----------------------|-----------------------------|-----|-------------------|--------|-------------------|-----|
| The number of elective Labster simluations (5) was | | | | | | | | |
| optimal. | 3.1 | 0.6 | 19.1 % | 2.0 | 3.0 | 3.0 | 3.5 | 4.0 |