# Attachment 1: Primary data

**Table 1:** Study progress of the participating medical students at the time of the survey. The modules denote the respective clinical semesters at LMU.

| Feature | Frequency | Percentage |
|---|---|---|
| **Study progress** | | |
| Preclinical | 63 | 26,7 |
| Module 1 | 28 | 11,9 |
| Moduel 2 | 16 | 6,8 |
| Module 3 | 31 | 13,1 |
| Module 4 | 36 | 15,3 |
| Module 5 | 46 | 19,5 |
| Module 6 | 4 | 1,7 |
| Practical year | 1 | 0,4 |
| Semester off | 2 | 0,8 |
| NS | 9 | 3,8 |
| | | |
| **Sex** | | |
| Male | 76 | 32,2 |
| Female | 158 | 66,9 |
| NS | 2 | 0,8 |

(NS = not stated, *N* = 236)

Attachment 1 to: Rohr SO, Gerhard A, Schmidt F, Eder J, Salvermoser L, Dimitriadis K, Fischer MR. *Thinking outside the box: students positive about visionary elective curricula in medical school.* GMS J Med Educ. 2021;38(7):Doc119. DOI: 10.3205/zma001515

**Table 2:** Further subject reference of medical students at LMU at the time of the survey with regard to a previous or second degree or previous professional training.

| Feature | Frequency | Percentage |
|---|---|---|
| **Previous studies** | | |
| Yes | 41 | 17,4 |
| No<br>NS | 183<br>12 | 77,5<br>5,1 |
| | | |
| **Secondary studies (current)** | | |
| Yes | 6 | 2,5 |
| No<br>NS | 207<br>23 | 87,7<br>9,7 |
| | | |
| **Subjects**<br>Biochemistry | <br>1 | <br>0,4 |
| Bioinformatics | 1 | 0,4 |
| Economy | 1 | 0,4 |
| Physics | 1 | 0,4 |
| Art History | 1 | 0,4 |
| Dentistry | 1 | 0,4 |
| | | |
| **Secondary studies (Interest)** | | |
| Yes | 23 | 9,7 |
| No<br>NS | 195<br>18 | 82,6<br>7,6 |
| | | |
| **Professional training** | | |
| Yes | 50 | 21,2 |
| No<br>NS | 168<br>18 | 71,2<br>7,6 |
| | | |
| **Subjects** | | |
| Nurse | 8 | 3,4 |
| paramedic | 28 | 11,9 |
| Medical-technical assistance | 1 | 0,4 |
| Medical-pharmaceutical assistance | 1 | 0,4 |
| Other | 12 | 5,1 |
| | | |

(NS = not stated)

**Table 3:** Responses of participating medical students at LMU to the question "In your opinion, to what extent is creative/interdisciplinary/critical thinking currently promoted by the study of human medicine?"

| Likert | Creative Thinking | Interdisciplinary Thinking | Critical Thinking |
|---|---|---|---|
| 1 | 64 (27%) | 11 (5%) | 34 (14%) |
| 2 | 81 (34%) | 32 (14%) | 43 (18%) |
| 3 | 34 (14%) | 54 (23%) | 41 (17%) |
| 4 | 32 (14%) | 62 (26%) | 56 (24%) |
| 5 | 16 (7%) | 60 (25%) | 45 (19%) |
| 6 | 4 (2%) | 13 (6%) | 11 (5%) |
| NS | 5 (2%) | 4 (2%) | 6 (3%) |
| Total | 236 | 236 | 236 |

(Question type: 6-point Likert scale, 1 = not encouraged, 6 = very encouraged, NS = not stated, *N* = 236)

**Table 4:** Responses from participating medical students at LMU to the question "To what extent do you think creative/interdisciplinary/critical thinking would currently be enhanced by a visionary elective curriculum?"

| Likert | Creative Thinking | Interdisciplinary Thinking | Critical Thinking |
|---|---|---|---|
| 1 | 5 (2%) | 4 (2%) | 5 (2%) |
| 2 | 18 (8%) | 9 (4%) | 9 (4%) |
| 3 | 17 (%) | 14 (6%) | 11 (5%) |
| 4 | 62 (7%) | 40 (17%) | 56 (24%) |
| 5 | 76 (26%) | 81 (34%) | 88 (37%) |
| 6 | 42 (18%) | 68 (29%) | 54 (23%) |
| NA | 16 (7%) | 20 (8%) | 13 (6%) |
| Total | 236 | 236 | 236 |

(Question type: 6-point Likert scale, 1 = not encouraged, 6 = very encouraged, NS = not stated, *N* = 236)

**Table 5:** Responses from participating medical students at LMU to the question "Please indicate the extent to which the following topics are currently covered by the human medicine curriculum."

| Likert | Philo | CS | GH | Lit | Eco | Poli | Stat | Bio |
|---|---|---|---|---|---|---|---|---|
| 1 | 81 | 63 | 36 | 173 | 101 | 127 | 18 | 6 |
| 2 | 74 | 86 | 67 | 42 | 87 | 58 | 29 | 8 |
| 3 | 30 | 39 | 52 | 7 | 18 | 21 | 53 | 20 |
| 4 | 31 | 21 | 45 | 3 | 10 | 15 | 59 | 41 |
| 5 | 7 | 10 | 19 | 1 | 4 | 2 | 49 | 87 |
| 6 | 1 | 2 | 4 | 0 | 1 | 0 | 15 | 57 |
| NS | 12 | 15 | 13 | 10 | 15 | 13 | 13 | 17 |
| Total | 236 | 236 | 236 | 236 | 236 | 236 | 236 | 236 |

(Question type: 6-point Likert scale, 1 = weakly covered, 6 = strongly covered, NS = not specified, N = 236; Philo = philosophy, CS = computer science, GH = global health, Lit = literary studies, Eco = economics, Poli = political science, Stat = statistics, Bio = biology).

**Table 6:** Responses from participating medical students at LMU to the question "What topics would you want to address in a visionary elective curriculum?"

| Likert | Philo | CS | GH | Lit | Eco | Poli | Stat | Bio |
|---|---|---|---|---|---|---|---|---|
| 1 | 58 | 38 | 13 | 76 | 24 | 25 | 48 | 36 |
| 2 | 26 | 27 | 15 | 41 | 30 | 25 | 40 | 35 |
| 3 | 22 | 29 | 22 | 20 | 32 | 20 | 47 | 38 |
| 4 | 39 | 41 | 42 | 33 | 35 | 47 | 46 | 55 |
| 5 | 31 | 50 | 60 | 25 | 61 | 53 | 19 | 31 |
| 6 | 37 | 33 | 64 | 22 | 40 | 50 | 16 | 22 |
| NS | 23 | 18 | 20 | 19 | 14 | 16 | 20 | 19 |
| Total | 236 | 236 | 236 | 236 | 236 | 236 | 236 | 236 |

(Question type: 6-point Likert scale, 1 = weakly covered, 6 = strongly covered, NS = not specified, N = 236; Philo = philosophy, CS = computer science, GH = global health, Lit = literary studies, Eco = economics, Poli = political science, Stat = statistics, Bio = biology).

**Table 5:** Responses from participating medical students at LMU to the question "Do you think a project like the visionary elective curriculum makes medical students better doctors?"

| Likert | Frequency | Percentage |
|---|---|---|
| 1 | 51 | 22,6 |
| 2 | 75 | 33,3 |
| 3 | 58 | 25,8 |
| 4 | 15 | 6,7 |
| 5 | 17 | 7,6 |
| 6 | 9 | 4,0 |
| NS | 11 | 4,7 |
| Total | 236 | 100 |

(Question type: 6-point Likert scale, 1 = not encouraged, 6 = very encouraged, NS = not stated, *N* = 236)

**Table 6:** Responses from participating medical students at LMU to the optional question "Do you think a project like the visionary elective curriculum makes medical students better doctors?"

| | Wording | Frequency |
|---|---|---|
| Yes | Expands non-medical general knowledge/horizon | 37 |
| | Expands non-medical specific knowledge | 2 |
| | Promotes critical/creative thinking | 17 |
| | Matures personality | 1 |
| | Not assignable to exact performance | 3 |
| No | Only personal initiative allows students to become better physicians | 1 |
| Undecided | Only dedicated students benefit from an elective curriculum | 2 |
| NS | / | 4 |
| Total | / | 67 |

(Question type: free text response, *N* = 67)

**Table 7:** Parametric comparison between preclinical and clinical students on the question "Would you want to participate in a visionary elective curriculum?"

| | | N | Mean | Std. deviation | Std. error | 95% confidence interval for the mean value | | Mini-mum | Maxi-mum | Variance between components |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Upper limit | Lower limit | | | |
| Preclinical | | 56 | 4,86 | 1,052 | ,141 | 4,58 | 5,14 | 2 | 6 | |
| Clinical | | 154 | 4,35 | 1,532 | ,123 | 4,11 | 4,59 | 1 | 6 | |
| Total | | 210 | 4,49 | 1,435 | ,099 | 4,29 | 4,68 | 1 | 6 | |
| Mo-del | Fixed effects | | | 1,421 | ,098 | 4,29 | 4,68 | | | |
| | Random effects | | | | ,270 | 1,06 | 7,91 | | | ,104 |

(A) Descriptive statistics, question type: 6-point Likert scale, 1 = strongly disagree, 6 = strongly agree, N = 210

| | Sum of squares | df | Mean of squares | F | Significance |
|---|---|---|---|---|---|
| Between the groups | 10,535 | 1 | 10,535 | 5,218 | ,023 |
| Within groups | 419,922 | 208 | 2,019 | | |
| Total | 430,457 | 209 | | | |

(B) Single factorial ANOVA

**Table 8:** Parametric comparison between students in the preclinical and clinical study sections. 'Should interfaces of medicine with other non-medical specialties be addressed in human medical studies?'

| | | N | Mean | Std. deviation | Std. error | 95% confidence interval for the mean value | | Mini-mum | Maxi-mum | Variance between components |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Upper limit | Lower limit | | | |
| Preclinical | | 59 | 1,10 | ,305 | ,040 | 1,02 | 1,18 | 1 | 2 | |
| Clinical | | 156 | 1,22 | ,414 | ,033 | 1,15 | 1,28 | 1 | 2 | |
| Total | | 215 | 1,19 | ,390 | ,027 | 1,13 | 1,24 | 1 | 2 | |
| Mo-del | Fixed effects | | | ,387 | ,026 | 1,13 | 1,24 | | | |
| | Random effects | | | | ,061 | ,41 | 1,96 | | | ,005 |

(A) Descriptive statistics, question type: 6-point Likert scale, 1 = strongly disagree, 6 = strongly agree, N = 215

| | Sum of squares | df | Mean of squares | F | Significance |
|---|---|---|---|---|---|
| Between the groups | ,579 | 1 | ,579 | 3,854 | ,051 |
| Within groups | 31,980 | 213 | ,150 | | |
| Total | 32,558 | 214 | | | |

(B) Single factorial ANOVA