Do the medical humanities enrich learning during an undergraduate anaesthetic placement?

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**Abstract**

The value of humanities may not be immediately apparent to those focused on the medical sciences. Medical humanities offer a range of learning opportunities, complementing the sciences to enhance medical education (Lake, Jackson and Hardman, 2015). This study examines whether the humanities enrich learning during an undergraduate anaesthetic placement.

**Method**

26 third-year medical students completed a questionnaire following a two-week placement in anesthetics. Students had previously completed a compulsory humanities project. Inductive thematic analysis was carried-out on qualitative data by two independent assessors, before combining results to find common themes.

**Summary of Results**

69% reported no previous experience of studying the humanities.  
80% considered studying humanities beneficial.  
34% responded that humanities were significant to anaesthesia.  
85% used the humanities project to further explore and reflect on previous anaesthetic learning.

**Conclusions**

Despite minimal exposure, students agree with medical educationalists that the humanities can complement the sciences to create and change in ideas and behaviours, and therefore improve patient care (Oyebode, 2010). The majority of students regarded the medical humanities project a useful learning exercise; students valued the opportunity to choose a personally pertinent topic before using creative techniques to explore and reflect on it further. Students’ responses frequently demonstrated a deepening of knowledge leading to a favourable change in their attitudes and behaviour across topics difficult to explore using solely the sciences. Not all students responded enthusiastically to this style of learning with some preferring a more traditional approach.

**Take home messages**
The medical humanities are an important facet of the undergraduate curriculum. The humanities project offered students a structure with which to further explore, analyse and reflect on a topic of personal interest within anaesthesia creating a deeper, holistic learning experience. The medical humanities may be particularly beneficial in developing non-technical skills in medical students extending beyond the anaesthetics placement.

**Keywords:** Medical humanities; anaesthesia; anaesthetics; anaesthetists; medical student; undergraduate; philosophy; spirituality; history; human factors; reflective; learning; holistic; personal and professional maturation

**Introduction**

The value of the medical humanities may not be immediately apparent to those focused solely on the sciences. Indeed, the formal learning objectives for our third-year undergraduate anaesthetic placement are confined to the clinical application of physics, pharmacology and physiology. The basic and applied sciences are clearly important in anaesthesia, but it is the medical humanities that provide a different cognitive and affective experience (Spicer, Harrison and Winning, 2013). Learning through the medical humanities develops and enhances critical thinking and enables students to holistically challenge and analyse evidence (Naughton, 2000); skills essential to personal development and life-long learning.

Arguably, the medical humanities can elevate a competent doctor to an excellent one through complementing biomedical models of illness with deeper sensitivity and insight into the complex and varied human experience of health and disease (Gordon and Evans, 2007). Our project seeks to establish whether the introduction of a humanities project would serve to enrich the learning of third-year medical students during a two-week anaesthetic attachment.

**Methods**

26 third-year medical students were asked to complete a reflective assignment at the end of a two-week placement in anaesthesia. The assignment could be applied to any aspect of the placement and students were encouraged to choose an area which had the most personal impact; it did not have to align with the formal learning objectives of the placement. The project could be presented in any format, including, but not limited to, video, prose, picture or song. After submitting the assignment, students were invited to complete an anonymous questionnaire consisting of nine questions and free-text responses. Free text answers were chosen to not bias or limit the student response.

Inductive thematic analysis was carried out on the qualitative data by two independent assessors, before results were combined and common themes established to determine the outcome for each question.

**Results/Analysis**

The student responses to each question will be reported in the order that it appears within the questionnaire.

Firstly, students were asked "Do you have previous experience of the medical humanities". 14 students reported ‘no’, 4 were doubtful, 6 said ‘yes’, and 2 students gave no response. Of the students that answered ‘yes’, 5 had past experience in an applied format, while 1 student had past experience of pure medical humanities. Answers are summarised in table one.

**Table 1. Q1: Do you have previous experience of the medical humanities?**
In question two, students were asked "what do you think the medical humanities can offer?". Following inductive thematic analysis, three clear areas emerged which were classified as 'personal gains', 'educational gains' and 'care and compassion. Answers are summarised in table two.

Table 2. Q2: What do you think the medical humanities can offer?

| Main theme                  | No. Students | Sub-theme                                      | No. students |
|-----------------------------|--------------|-----------------------------------------------|--------------|
| Personal gains              | 9            | Deeper thought                                | 6            |
|                             |              | What will it be like to be a doctor           | 3            |
| Educational gains           | 7            | New skills / new ways of learning             | 3            |
|                             |              | Increased understanding                       | 1            |
| Care and compassion         | 10           | 'Rounded' education                          | 3            |
|                             |              | Understanding patient’s perspective           | 2            |
| Uncertain                   | 1            |                                               |              |
| No response                 | 4            |                                               |              |

Next, students were asked "do you consider any specific humanity disciplines significant to anaesthesia?". 12 students gave no response, 1 said 'no', 4 were uncertain and 9 students reported 'yes'. Included within the positive responses, 5 students considered philosophy, 3 considered spirituality and 2 history. Answers are summarised in table three.

Table 3. Q3: Do you consider any specific humanity disciplines significant to anaesthesia?

| Main theme  | Number of Students | Sub-theme A       | Number of Students | Sub-theme B                          | Number of Students |
|-------------|--------------------|-------------------|--------------------|--------------------------------------|--------------------|
| No response | 12                 |                   |                    |                                      |                    |
| No          | 1                  |                   |                    |                                      |                    |
| Uncertain   | 4                  |                   |                    |                                      |                    |
| Yes         | 9                  | Philosophy        | 5                  | Unconsciousness                      | 2                  |
|             |                     |                   |                    | Communication                        | 1                  |
|             |                     |                   |                    | Ethics                               | 1                  |
|             |                     | Spirituality      | 3                  | Control                              | 2                  |
|             |                     |                   |                    | What unconsciousness means to different people | 1                  |
|             |                     | History           | 2                  |                                      |                    |

Question four asked students "which aspect of anaesthesia did you choose to do your project on?". 12 students
focused on the role of the anaesthetist, with 9 highlighting non-technical skills and 3 elaborating on anaesthetic technical skills. 8 students looked at sub-specialities relevant to anaesthesia, 3 focused on the patient's perspective, 2 students documented a personal experience during the placement and 1 student did not answer the question. The responses from students are summarised in table four.

Table 4. Q4: Which aspects of anaesthesia did you choose to do your project on?

| Main theme                      | No. Students | Sub-theme               | No. Students |
|---------------------------------|--------------|-------------------------|--------------|
| Role of anaesthetist            | 12           | Non-technical skills    | 9            |
|                                 |              | Technical skills        | 3            |
| Sub-specialities                | 8            | Labour ward             | 2            |
|                                 |              | Paediatrics             | 1            |
|                                 |              | General theatres        | 5            |
| Patient perspective             | 3            |                         |              |
| Personal experience             | 2            | Clinical skills         | 2            |
| No response                     | 1            |                         |              |

Question five asked students "why did you choose this aspect of anaesthesia?". 11 students felt their project was representative of their anaesthetic placement, 3 students exploited an area of clinical interest, 4 students did not answer the question and a further 11 students based their project on a new area of thinking or ideas. Included within the theme of 'new thinking', 6 students focused on human factors, 2 looked at an emotional impact and 3 students explored the patient's perspective. The results are summarised in table 5.

Table 5. Q5: Why did you choose this aspect of anaesthesia?

| Main theme                     | No. Students | Sub-theme               | No. Students |
|--------------------------------|--------------|-------------------------|--------------|
| New thinking                   | 11           | Human factors           | 6            |
|                                |              | Emotional impact        | 2            |
|                                |              | Patient's perspective   | 3            |
| Representative of placement    | 11           |                         |              |
| Clinical interest              | 3            |                         |              |
| No response                    | 4            |                         |              |

Students were next asked "what was the format of your project?". 16 students chose a text format, 9 projects were art based and 1 was presented via data. Of the text-based projects, 7 were poems, 3 were blogs and 6 were prose. The results are summarised in table 6.

Table 6. Q6: What was the format of your project?

| Main theme | No. Students | Sub-theme A | No. Students | Sub-theme B | No. Students |
|------------|--------------|-------------|--------------|-------------|--------------|
| Text       | 16           | Creative    | 7            | Poem        | 7            |
|            |              | Traditional | 9            | Blog        | 3            |
| Art        | 9            | Drawing     | 5            | Prose       | 6            |
| Data       | 1            | Other       | 4            |             |              |
Question seven asked students "why did you choose this format?". 15 students chose a format to allow freedom of expression, 7 students considered their format to facilitate further reflection, 2 wanted to use a new medium, 3 chose an enjoyable style, 2 students chose a format which they considered to be easy and 2 students did not answer the question.

Table 7. Q7: Why did you choose this format?

| Student rationale     | Number of students |
|-----------------------|--------------------|
| Freedom of expression | 15                 |
| Further reflection    | 7                  |
| Enjoyable             | 3                  |
| Easy                  | 2                  |
| New medium            | 2                  |
| No response           | 2                  |

Next, students were asked "did the humanities project enhance your learning?". 17 students gave a positive response, of which 14 said a definite 'yes' and 3 were fairly sure. 9 students gave a negative response, of which 4 were a definite 'no' and 5 were doubtful of any learning benefits.

The final question asked students: "how did the humanities project enhance your learning?" 12 students gave no response, 3 stated that the project had not been helpful and 11 students reported benefit though personal reflection. The results are summarised in table eight.

Table 8. Q9: How did the humanities project enhance your learning?

| Main theme     | No. Students | Sub-theme              | No. Students |
|----------------|--------------|------------------------|--------------|
| Personal reflection | 11           | Organisation of thoughts | 9            |
|                 |              | Behaviour change       | 2            |
| Not helpful     | 3            |                        |              |
| No response     | 12           |                        |              |

Discussion

Only 6 students (23%) felt they had previous experience of the medical humanities, while a further 4 (15%) were not certain that they definitely had not encountered it. Medical ethics, writing diary entries and reflective tasks were common areas that students felt they had engaged with the humanities.

Despite minimal exposure, students were readily able to describe potential benefits of learning through the medical humanities; only 4 students (15%) provided no response and 1 student (4%) was uncertain. The remaining students grouped their responses into three main areas: 'personal', 'educational' and 'care and compassion'. Typical responses included:

"Provides an opportunity to step away from the technicalities and intricacies of science for a moment and think about our roles as future doctors in a more rounded way! Science isn’t always the answer."

"Develop other skills including writing for a non-medical audience, opportunity to reflect"
“It makes you remember the personal side to medicine as well as the science”

“Especially with anaesthetics- you are balancing an art and medicine. Familiarising ourselves with the humanities would benefit the patient.”

Students seem to agree with medical educationalists that the humanities can complement the sciences to create and change in ideas and behaviours, and therefore improve patient care (Oyebode, 2010).

When asked which disciplines of the medical humanities are relevant to anaesthesia, 12 students (46%) gave no response, 1 (4%) felt there were no relevant disciplines and 4 (15%) were unsure. Only 9 students (35%) were able to engage with the question and considered philosophy, spirituality and history to be relevant.

“Spirituality, since patients are made unconscious and each patient had a different view/understanding of what this means”

“Definitely philosophy as it goes hand in hand with themes such as unconsciousness”

“Spirituality and philosophy: the unconscious state. History: when GA [General anaesthesia] came around etc.”

"Potentially in a theoretical sense but less so in terms of day-to-day work"

Lack of engagement in the question could be secondary to reduced understanding of the subspecialties which contribute to the medical humanities or represent a limited understanding of anaesthetic practice. Responsive students frequently made two or three different suggestions demonstrating a significant disparity of awareness within the cohort of students.

The student projects covered a wide range of subjects. Most (46%) focused on the role of the anaesthetist, with three-quarters of these interested in human factors or non-technical skills. 31% of projects were related to an anaesthetic subspecialty, e.g. obstetrics or paediatrics. Student comments included:

"The responsibility an anaesthetist has on patients"

"Emotional aspects of anaesthetics"

"The patient experience of anaesthesia"

"Putting in cannula"

Reasons influencing student topic choice were similarly varied. 38% of students felt their topic was representative of the placement, while a further 38% chose something which represented a new idea, knowledge area or novel way of thinking. Only 3 students (10%) completed a project closely related to the basic sciences, and 4 (14%) did not answer the question. Student rationale included:

"Because [patient responsibility] was the quality I saw in all doctors in this specialty… and took very seriously. On a personal level I think I learnt what it truly means during this placement."
"It was an experience that really stuck with me. It was an emotional experience seeing the baby being born, then seeing the anaesthetist respond in an emergency."

"Watched numerous inductions of children and parents were often nervous about the complications of anaesthesia"

"Because it was something I hadn’t done before and something I really enjoyed [inserting intravenous cannula]"

"Because I wanted to reflect on my entire experience"

It is encouraging that 22 students (85%) utilised the project to reflect on ideas and experiences gained from the two-week placement anaesthetic placement. The rationale for topic choice was similarly interesting as it often represented very personal responses across themes that are frequently difficult to access using solely the sciences.

16 students (62%) presented their work in a text format, of which 7 (27%) were poems, 6 (23%) prose and 3 (12%) blogs. 5 students (19%) presented their work as a drawing or sketch, 3 (12%) chose collage and 1 (4%) used a poster format. 1 student (4%) used a spider diagram.

The rationale for choosing the format was similarly varied with many students having multiple reasons for their choice in presentation style. Most students, 15, chose their medium to engender freedom of expression while 7 students chose a style to facilitate further reflection. 3 students chose a medium which they found enjoyable while 2 wanted to try something new. 2 students chose a presentation style for its ease of production and 2 students did not provide a response.

"I have never written a poem before, so why not?"

"I imagined it as a river with many tributaries and, whilst definitely not an artist (sorry!), it was easiest to try and depict this via a drawing. The patient just thinks they are going off to sleep, but there is so much going on, risks being avoided, the anaesthetist is literally keeping them alive whilst putting the patient under as little stress as possible."

"It helped me express my thoughts about the experience"

"Quick and easy"

While it is encouraging that the majority of students chose a medium to assist their learning, the choice of an ‘easy’ presentation style may reflect reduced student value of the project. Perceived lower value may be attributed to a lack of respect for the medical humanities, or external time pressures.

The majority of students (65%) found the project to be a useful learning experience while 35% did not find the task valuable. Comments included:

"It was interesting and different to have to think about what we were doing"

"…I would rather spend this time learning ECG…sorry!"
"Fairly, but not hugely"

"It helped me collect my thoughts during my experience"

Despite the positivity associated with the task, students demonstrated difficulty in explaining how the project was helpful. 12 students (46%) did not answer the question and 3 students (12%) reiterated that they did not find educational value in the task. 11 students (42%) considered personal reflection the most instrumental part of the learning process, by allowing organisation of thought processes and ideas relating to behaviour change.

"I had to think about why it made such an impact on me"

"It made me think about how I would cope if things went wrong"

"It got me to think about the experience and how it could make me a better doctor"

"Was already reflecting throughout, not really a very creative person and would have preferred to instead have a group reflective session where we discussed a topic each or something….would be interesting to see if others felt the same way and had similar experiences"

A high level of insight is required into a student’s own learning techniques in order to accurately describe ‘how’ they learned. This may be particularly difficult for students dealing with a new learning strategy and limited expertise in analysis, evaluation and personal reflection. Perhaps there is a role for enhanced reflection through facilitation from seniors to maximise student benefit from the process (Henderson et al, 2002). Indeed, students may become better equipped with analytical and reflective skills following increased exposure to the medical humanities.

**Conclusion**

Students reported limited exposure to the medical humanities prior to undertaking this project. However, they attributed an holistic approach to medicine and a greater understanding of the patients’ perspective to the study of the medical humanities. Students reported that spirituality and philosophy were relevant to anaesthesia, in particular the unconscious mind. This is a complex topic that is difficult to explore using solely the sciences.

The majority of third-year medical students regarded the medical humanities project as a useful learning exercise; students valued the opportunity to choose a personally pertinent topic before using creative techniques to explore and reflect on it further. A wide range of themes was evident and students' responses frequently demonstrated a deepening of knowledge leading to a favourable change in their attitudes and behaviour. Not all students responded enthusiastically to this style of learning; some prefer a more traditional approach to teaching or learning that focuses on the medical sciences. A greater understanding and respect of the medical humanities throughout the undergraduate curriculum may help to improve students’ engagement with similar projects in the future.

**Take Home Messages**

- Despite minimal exposure, students agree with medical educationalists that the humanities can complement the sciences to create and change in ideas and behaviours, and therefore improve patient care (Oyebode, 2010).
- The medical humanities have much to offer undergraduates in anaesthesia, though not all students respond enthusiastically to this style of learning.
The humanities project offered students a structure with which to further explore, analyse and reflect on a topic of personal interest within anaesthesia creating a deeper, holistic learning experience. The medical humanities may be particularly beneficial in developing non-technical skills in medical students with learning extending beyond the anaesthetics placement.

Notes On Contributors

Dr Helen Westall is a ST7 anaesthetic trainee within the Imperial School of anaesthesia, London. Educational interests include the medical humanities, assessment and the clinical application of simulation training; a deeper understanding of which has been gained through completion of a teaching fellowship and postgraduate certificate in medical education.

Dr Amardeep Riyat is an anaesthetic consultant and college tutor at London North West University Healthcare NHS Trust, London. A keen educationalist, he oversees a local teaching fellowship, regularly supervising and facilitating local research and quality improvement projects. Educational interests include simulation training, the medical humanities and professionalism in undergraduates.

Acknowledgements

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Appendices

Below is the raw data collected from the student questionnaires. Each student has been assigned a number between 1 and 26.

Table 1. Question 1 raw data: do you have previous experience of the medical humanities?

| Question 1: Do you have previous experience of the medical humanities? |
|---------------------------------------------------------------|
| 1 No                                                          |
| 2 No- which is why I particularly enjoyed this assignment!    |
| 3 Nope                                                        |
| 4 Yes; studying medico-ethics                                 |
| 5 No                                                          |
| 6 No                                                          |
| 7 No                                                          |
| 8 No                                                          |
| 9 No                                                          |
| 10 No                                                         |
| 11 Yes, communication skills, sociology, epidemiology         |
| 12 No, it's been very scientific                              |
| 13 Mainly science based                                       |
| 14 No, not really                                             |
| 15 Yes - reflective task                                      |
| 16 Not really                                                 |
| 17                                                            |
| 18 once in ethics - write a diary entry                       |
| 19 ethics - diary entry                                       |
| 20 No                                                         |
| 21 no                                                         |
| 22 Not really                                                 |
| 23 history, literature, philosophy                            |
| 24 no                                                         |
| 25                                                            |
| 26 No                                                         |

Table 2. Question 2 raw data: what do you think the medical humanities can offer?

| Question 2: What do you think the medical humanities can offer? |
|---------------------------------------------------------------|
| 1 Provides an opportunity to step away from the technicalities |
| and intricacies of science for a moment and think about our |
| roles as future doctors in a more rounded way! Science isn't |
| always the answer.                                           |
| 2 Especially with anaesthetics- you are balancing an art and |
| medicine. Familiarising ourselves with the humanities would |
| benefit the patient                                           |
| 3 Integrating their clinical skills and practical knowledge |
| into the wider context of the human experience               |
| 4 A chance to unleash their creative minds                    |
| 5 Puts everything into context                                |
| 6 It makes you remember the personal side to medicine as    |
| well as the science                                           |
| 7 Nice change to the normal very scientific nature of the    |
| course. Different approaches to thinking providing us with  |
| a more open-minded approach to what we have heard             |
Not too sure, I think it depends on the individual

Could be much more extensive

An opportunity to perceive medicine from a non-scientific standpoint; helping to put into perspective how medicine fits into the greater picture

Give a worldly view of medicine in society

The chance to give the holistic view of the patient

Other, more useful ways of learning

Develop other skills including writing for a non-medical audience; opportunity to reflect

approaches to thinking

More rounded education. Better development of writing style.

understanding ethical issues, helps in writing essays, more rounded education

well, it could make you a more rounded person

a more rounded education

a better understanding of human behaviour and interactions

good for reflection and be able to evaluate what we have done in our practice

The opportunity to consider looking at different things from different perspectives. This is useful when considering layman's options and perspectives

Table 3. Question 3 raw data: do you consider any specific humanity disciplines significant to anaesthesia?

| Question 3: Do you consider any specific humanity disciplines significant to anaesthesia? |
|---|
| 1 | Definitely philosophy as it goes hand in hand with themes such as unconsciousness |
| 2 | Not really |
| 3 | |
| 4 | Spirituality |
| 5 | Spirituality and philosophy the unconscious state. History: when GA came around etc. |
| 6 | |
| 7 | |
| 8 | Philosophy: anaesthetists may have philosophical and legal views to weigh up. |
| 9 | History would have a large impact, as anaesthesia has developed so much over time. The knowledge would be documented in literature and passed on over time, as it still is in 2015 |
| 10 | |
| 11 | |
| 12 | Spirituality, because sending people to sleep is a very deep powerful control, it's a strange and thought provoking experience. |
| 13 | Spirituality, since patients are made unconscious and each patient has a different view/understanding of what this means |
| 14 | |
| 15 | |
| 16 | potentially in a theoretical sense but less so in terms of day-to-day work |
| 17 | |
| 18 | |
| 19 | Philosophy and communication |
| 20 | Not really |
| 21 | |
| 22 | |
| 23 | philosophy |
| 24 | not sure |
Table 4. Question 4 raw data: which aspect of anaesthesia did you choose to do your project on?

| Question 4: Which aspect of anaesthesia did you choose to do your project on? |
|---------------------------------------------------------------|
| 1. The responsibility an anaesthetist has on patients         |
| 2. The patients perspective of anaesthesia is a mysterious thing |
| 3. The patient experience of anaesthesia                      |
| 4. Pharmacology                                               |
| 5. Labour ward                                                |
| 6. Paediatric anaesthesia                                     |
| 7. Ventilation with reference to a specific case I had observed |
| 8. Teamwork and the humour I saw                              |
| 9. Pharmacology                                               |
| 10. The art of anaesthesia                                    |
| 11. Emotional aspects of anaesthetics, importance of people in medicine and anaesthetics, responsibilities of anaesthetics. |
| 12. Panic i.e. when things go wrong                           |
| 13. Intra-operative care                                      |
| 14. experience in the labour ward                             |
| 15. Complications of anaesthesia and incidence                |
| 16. The role of anaesthetists in surgery and asking if their role is subordinate to that of the surgeon |
| 17. Theatres                                                  |
| 18. the experience as a whole                                 |
| 19. All - general overview of each subspeciality               |
| 20. Overall aspect                                             |
| 21. an overview of my two weeks of anaesthesia                 |
| 22. Putting in cannula                                        |
| 23. experience of patient                                     |
| 24. team work and anaesthesia                                 |
| 25.                                                        |
| 26. Role of anaesthetist                                      |

Table 5. Question 5 raw data: Why did you choose this aspect of anaesthesia?

| Question 5: Why did you choose this aspect of anaesthesia? |
|---------------------------------------------------------------|
| 1. Because that was the quality I saw all doctors in this specialty had and took very seriously. On a personal level I think I learnt what it truly meant during this placement |
| 2. - going to 'sleep' compared to the medical reality of actually GA meaning putting patients into an induced coma- actually really technical and quite scary for people which is perhaps why we don't really tell them! |
| 3. In theatre on placement we see a lot from the medical perspective so I thought it would be interesting to think from the other side |
| 4. I have a degree in pharmacology                             |
| 5. It was great to see a baby being born and the fact that the mother was awake for the procedure |
| 6. Because it made me think                                    |
| 7. I found this to be very interesting                         |
| 8. The anaesthetists were really welcoming and that really improved my time in theatre |
| 9. Because it is a major part of the process of anaesthetics and I found the details of each drug interesting. |
10  every session with a different consultant, it struck me how they all have their own techniques and preferences, and there are no right or wrong answers like in medicine. There is no one correct pathway and they are constantly making decisions and adapting and experience.

11  My experiences during 2 weeks here showed me, above all else, those aspects of anaesthetics.

12  It's an inevitability of practicing medicine

13  It's interesting/daunting to see how carefully a patient has to be monitored during an operation, how many factors come into play.

14  It was an experience that really stuck with me. It was a very emotional experience seeing a baby being born, then seeing the anaesthetist respond in an emergency.

15  Watched numerous inductions of children and parents were often nervous about the complications of anaesthesia

16  a consultant anaesthetist said to me that they are often thought of as 'handmaids to the surgeon'

17  this is where I spent most of my time observing anaesthetics

18  to reflect on what I've learned over the past two weeks

19  Because I wanted to reflect on my entire experience

20

21

22  Because it was something I hadn't done before and something I really enjoyed

23

24  I was really struck by how supportive the teams were of each other and how able they felt able to ask others for help

25

26  It's not always appreciated as being 'vital'

Table 6. Question 6 raw data: what was the format of your project?

| Question 6: What was the format of your project? |
|-----------------------------------------------|
| 1 Blog                                         |
| 2 Art- painting!                               |
| 3 Poetry                                      |
| 4 Poetry                                      |
| 5 Poetry                                      |
| 6 Prose                                       |
| 7 Prose                                       |
| 8 limericks                                   |
| 9 Sketching                                   |
| 10 Drawing                                    |
| 11 Prose                                      |
| 12 Poem                                       |
| 13 Sketch                                     |
| 14 Prose                                      |
| 15 Drawing + text                             |
| 16 poster                                     |
| 17 photograph collage                         |
| 18 Blog post                                  |
| 19 Spider diagram                             |
| 20 poem                                       |
| 21 Word doc                                   |
| 22 Poem                                       |
| 23 1st person                                 |
Table 7. Question 7 raw data: Why did you choose this format?

| Question 7: Why did you choose this format? |
|-------------------------------------------|
| 1. A little less formal and more personal than prose |
| 2. Thought it would be a slightly different way of expressing what I have experienced over the last couple of weeks |
| 3. |
| 4. I have never written a poem before, so why not? |
| 5. Enjoyable to write and more creative/less scientific than we are usually asked to do |
| 6. As I was watching the procedure I had many thoughts, I wanted to piece to show my trail of thoughts |
| 7. I felt this was the best way to effect what I had seen/observed |
| 8. They aptly gave me an opportunity to write in a format usually reserved for humour about anaesthetics |
| 9. I've always enjoyed art and it was a lovely having a chance to reflect in a creative way |
| 10. I imagined it as a river with many tributaries and, whilst definitely not an artist, (sorry!), it was easiest to try and depict this via a drawing. The patient just thinks they are going off to sleep, but there is so much going on, risks being avoided, the anaesthetist is literally keeping them alive whilst putting the patient under as little stress as possible. |
| 11. Best way personally for me to reflect |
| 12. I think it reflects the emotional side of dealing with when things go wrong very well |
| 13. I thought a picture would be more striking than writing. |
| 14. It helped me express my thoughts about the experience |
| 15. To show relative incidences |
| 16. less writing, visually easy to take in the message |
| 17. this summed up the main areas of the hospital where anaesthetics has the most influence |
| 18. A way to summarise and reflect on the whole two weeks |
| 19. Felt it was the best way to represent my reflection |
| 20. quick and easy |
| 21. easy |
| 22. Because it's a fun way to write about something I enjoyed |
| 23. |
| 24. I felt I wanted to write out my ideas freely |
| 25. Express the different views of the specialty |
| 26. More impactful |

Table 8. Question 8 raw data: Did the humanities project enhance your learning?

| Question 8: Did the humanities project enhance your learning? |
|--------------------------------------------------------------|
| 1. It helped me collect my thoughts during my experience |
| 2. Was a good way to think about what I had really found striking over the fortnight |
| 3. It was helpful to spend some time thinking about things from a patients perspective and I have found that reflecting on that has helped me to empathise with the patient |
| 4. Well… I would rather spend this time learning ECG- sorry! |
| 5. Yes |
| 6. It was interesting and different to have to think about what we were doing |
| 7. Yes |
| 8. Not really |
| No. | Response |
|-----|----------|
| 9   | Yes      |
| 10  | Not hugely |
| 11  | Yes      |
| 12  | Yes      |
| 13  | Slightly, not exactly. |
| 14  | Yes      |
| 15  | Yes      |
| 16  | I think so, we discuss/reflect on things quite a lot anyway but it’s a good opportunity to go into more depth. |
| 17  | Yes, but a specific format should have been requested which would have aided learning - e.g. a piece of writing or essay on an interesting patient / difficult to anaesthetise |
| 18  | No       |
| 19  | Not especially |
| 20  | Not really |
| 21  | Not really |
| 22  | Fairly, not hugely |
| 23  | No       |
| 24  | Yes      |
| 25  | It was good to think about the past two weeks and everything we have seen |
| 26  | No       |

Table 9: Question 9 raw data: How did the humanities project enhance your learning?

| Question 9: How did the humanities project enhance your learning? |
|---------------------------------------------------------------|
| 1                                                                 |
| 2                                                                 |
| 3                                                                 |
| 4                                                                 | It was fun though |
| 5                                                                 | I had to think about why it made such an impact on me |
| 6                                                                 | It allowed me to process what I had observed and had seen |
| 8                                                                 | Made me think about my experience from a non-scientific angle. Made me consider pharmacology as a BSc more. |
| 10                                                                | Was already reflecting throughout, not really a very creative person and would have maybe preferred to instead have a group reflective session where we discussed a topic each or something more interactive. Would be interesting to see if others felt the same way and had similar experiences. |
| 11                                                                 | Helped me summarise what I have gained and learned from my time in anaesthetics |
| 12                                                                 | it made me think about how I’d cope if things went wrong. |
| 13                                                                 | It did help me consider what I’d learnt during the attachment. |
| 14                                                                 | It got me to think about the experience and how it could make me a better doctor |
| 15                                                                 | Allowed us to make a more interactive piece of work which tends to stick better for learning |
| 16                                                                 | See above |
| 17                                                                 |
| 18                                                                 | Reflection is much more effective with others / seniors as a consultant |
| 19                                                                 |
| 20                                                                 | I didn’t really see the point |
| 21                                                                 |
| 22                                                                 | It was nice to think about what I enjoyed doing |
| 23                                                                 |
it was good for organising my thoughts and looking back on the placement

Declarations

The author has declared that there are no conflicts of interest.

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Ethics Statement

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