

PEB Qualifying Examinations: Review of three years of Candidate Feedback

1. Introduction

This review considers trends of candidate satisfaction from three years of feedback from the PEB Qualifying Examinations between 2014 and 2016. The PEB has published a response to candidate feedback given in 2016, and made adaptations to the examinations. Changes include standardising the length of time available for the Foundation Certificate examinations from 2017, and also an in-depth review of FD4 (P6) with Middlesex University in response to consistently low pass rates and candidate concerns about the examination.

Key findings:

- Candidate profiles have remained broadly constant over the three years, with women and ethnic minorities consistently under-represented.
- The PEB has taken candidate feedback seriously, and where possible made changes to examination arrangements and requirements. Candidate feedback acknowledges the improvements made by the PEB to clarify the guidance and address candidate concerns. Overall satisfaction that the examinations gave candidates the opportunity to demonstrate their knowledge and skills has increased for four papers, and dropped slightly for two. Most papers are working well, and candidates feel they are fairly testing learning outcomes. However there is still room for continuing improvement, as recurring issues over the three years include mistakes in the papers, concern about the volume of material to learn, clarity of expectations, course consistency and problems with venues.
- Feedback for the 2016 examinations was the most extensive, and while there were concerns raised about the difficulty and consistency of the examinations, the overall assessment was that most examinations are fine, with the exception of FC2 (Law) and FD4 (P6). These papers have consistently stood out for lower candidate satisfaction, and the PEB is taking steps to address this. These papers have been criticised for too much reliance on memorising obscure content, lack of relevance to professional work and inconsistent marking schemes.
- The review of three years of survey data also highlights dropping satisfaction with the FC3 paper, though the paper has not been particularly singled out in candidate feedback. This might indicate an area for review, but given that candidates have not raised specific concerns about this paper, the PEB may wish to see how the trend continues in 2017.

2. Candidates Profile

This review draws on three years of feedback from PEB examination candidates, as detailed below:

| | 2014 | 2015 | 2016 |
|--------------------------------------|------|------|------|
| Number of candidate survey responses | 104 | 161 | 227 |

The profile of candidates has remained broadly the same across the three years. Candidates continued to be predominantly white, male, 24 – 35 year olds, with only slight variations between years.

The majority of candidates come from a Physics, Engineering or Chemistry / Biochemistry background:

| Predominant disciplinary background | 2014 | 2015 | 2016 |
|--|-------------|-------------|-------------|
| Physics | 24% | 35% | 35% |
| Engineering | 31% | 24% | 24% |
| Chemistry / Biology / Biomedical Engineering | 30% | 30% | 29% |

Candidate ethnicity:

| | 2014 | 2015 | 2016 |
|------------------------|-------------|-------------|-------------|
| White | 73.4% | 76.9% | 81.1% |
| Asian or Asian British | 4.3% | 2.1% | 3.5% |
| Chinese | 2.1% | 2.1% | 3.1% |
| Prefer not to say | 12.8% | 7.0% | 5.3% |

Gender of candidates:

| | 2014 | 2015 | 2016 |
|-------------------|-------------|-------------|-------------|
| Male | 60% | 56% | 63% |
| Female | 32% | 37% | 35% |
| Prefer not to say | 8% | 7% | 2% |

Women and ethnic minorities continue to be under-represented. Around a third of candidates were women and it is notable that there have been no Black (African or Caribbean) or Black British candidates for the three years (one mixed race Black / White candidate).

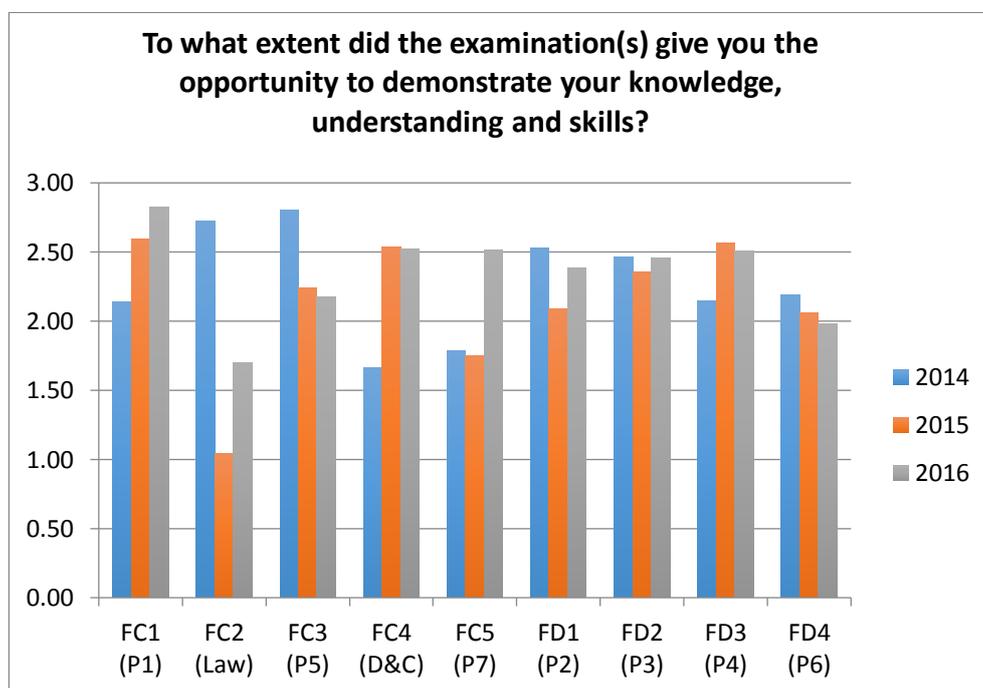
Between 92% and 94% of candidates speak English as their first language.

94% of candidates said they did not have a disability, with the remaining candidates saying they preferred not to say in 2014 and 2015. In 2016, 3 candidates (1.3%) said they had some form of disability.

3. Overall satisfaction by course

In all years, candidates were asked: ***“To what extent did the examination(s) give you the opportunity to demonstrate your knowledge, understanding and skills?”*** Response options were ranked to give an overall weighted average score, though the wording was slightly different for 2016:

| Year | Answer options / Ranking | | | | |
|-------------|--------------------------|----------|-------------------|-------|--------------|
| 2014 & 2015 | Very poorly | Poorly | Satisfactory | Well | Very well |
| 2016 | Not at all | A little | A moderate amount | A lot | A great deal |
| Ranking | 0 | 1 | 2 | 3 | 4 |



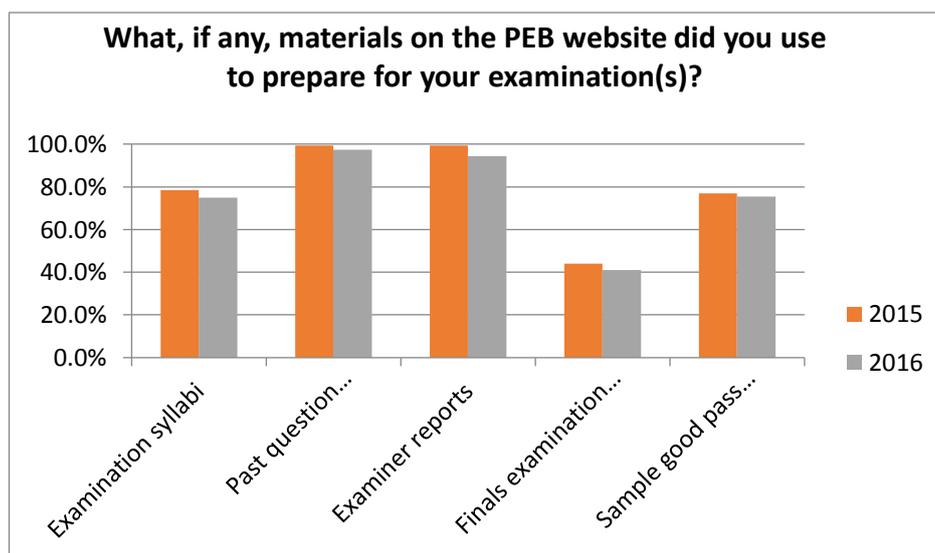
- Overall satisfaction increased between 2014 and 2016 for four of the nine papers: FC1, FC4, FC5, and FD3. This is reflected in the written feedback from candidates, as very few criticisms were made about these papers.
- Satisfaction remained broadly constant across the years for FD2, and dropped very slightly for FD1 and FD4 (P6). Despite the many concerns raised about FD4 and the lower pass rates, the three-year survey data does not highlight any major shifts in candidate satisfaction.
- FC2 was the subject of much candidate comment in the surveys, and stands out in the survey data for the biggest shift in candidate satisfaction. Satisfaction dropped significantly in 2015, probably reflecting the substantial changes to the examination format. Some

candidates commented in 2015 that they felt uninformed about the changes. By 2016, complaints about this paper were still common: adding to the complaints about the paper content, there was then the additional problem that changes to the examination format had rendered past papers and examiner reports less relevant and helpful. The average rating rose in 2016, but still to a lower level than the 2014 score. Only a quarter of candidates from 2016 thought there was enough time for the examination, and this may be the major reason why a similar proportion felt that the examination did not fairly test learning outcomes. The proposed increase in time for the examination from 2017 may address the candidates' main concerns from the 2016 survey. However concerns about usefulness of preparation materials as well as the level of detail expected were also prominent in 2017 and may need to be addressed.

- Satisfaction dropped for FC3 over the three years. In 2016, almost all candidates felt there was sufficient time for the paper but less than a third felt that it fairly represented learning outcomes. However, the reasons for this did not emerge strongly in candidate feedback in either year. Comments included syllabus too vague, too much to do P5 and P1 on the same day, and the syllabus being unreasonably broad in terms of the number of countries.

4. Use of PEB course materials

Comparable questions were asked in 2015 and 2016 about the use of PEB materials to support examination preparation. Broadly similar results were seen in both surveys, with past papers and examiner reports used by nearly all candidates, and finals examination guidance used much less, by just 40% of candidates.



In 2015, 59% of candidates found the materials very useful, and 39% somewhat useful. Similar results were seen in 2016: 54% found the materials very useful and 41% somewhat useful.

This was explored in a less detailed question in the 2014 survey. Candidates were asked whether they were aware of the examination guidance available on the PEB website (99% were aware), and 56% had found it very useful, and a further 19% somewhat useful.

5. Conclusion

Review of three years of survey data indicates a trend of overall improvement in candidate satisfaction, confirms known concerns about the FC2 paper, and indicates a potential issue with FC3, though the shift is small and may not reflect a genuine problem.