

EXHIBIT 3

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HIGHLY CONFIDENTIAL-ATTORNEYS EYES ONLY
IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS
Civil Action No: 1:14-cv-14176-ADB

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STUDENTS FOR FAIR ADMISSIONS,
INC.,

Plaintiff,

v.

PRESIDENT AND FELLOWS OF
HARVARD COLLEGE
(HARVARD CORPORATION),

Defendant.

-----X

VIDEOTAPED DEPOSITION OF
DAVID CARD, Ph.D.
Washington, DC
April 27, 2018
9:07 AM

Reported by:
Karen Brynteson, RMR, CRR, FAPR
Job No. 139809

1 D. Card

2 MS. ELLSWORTH: Object to the
3 form.

4 THE WITNESS: I have read the
5 phrase, and I have some
6 understanding of it.

7 BY MR. STRAWBRIDGE:

8 Q. You're aware that that's --
9 that's -- that's the phrase that Harvard
10 applied to its own admissions process, I
11 assume?

12 A. I am, yes.

13 Q. Okay. Have you written any
14 papers that actually analyze the -- the
15 extent to which various factors play a
16 role in admission under a holistic
17 admissions process?

18 A. Well, if one interprets
19 holistic to mean evaluating different
20 characteristics of students, potentially,
21 I studied that indirectly, but I have not
22 written any papers, I believe, that would
23 use the word holistic admissions in them.

24 Q. Have you looked at -- have you
25 written any papers that are specific to

1 D. Card

2 the question of how race affects college
3 admissions decisions by universities?

4 MS. ELLSWORTH: Object to the
5 form.

6 THE WITNESS: I have written a
7 paper on the effect of ending
8 affirmative action policies in
9 Texas and California on the
10 probabilities that students send
11 their SATs to different colleges,
12 which would indirectly affect that,
13 what colleges can do, I guess.

14 BY MR. STRAWBRIDGE:

15 Q. Am I right that that paper was
16 about basically analyzing applicant
17 behavior?

18 A. Yes.

19 Q. It wasn't -- it wasn't about
20 analyzing what colleges did with those
21 applications once they were received, was
22 it?

23 A. Well, indirectly. There are
24 -- there are figures and tables in that
25 paper which show the changes in admission

1 D. Card

2 rates of different groups. So it has
3 evidence on that.

4 Q. Did you -- did you purport in
5 that paper to analyze the strength of
6 various factors that were actually used
7 by the Admissions Department in deciding
8 who to admit and who to reject?

9 A. Well, indirectly I -- I guess
10 it does show that because it has changes
11 in admission rates of different racial
12 groups as a result of the end of
13 affirmative action policies.

14 Q. Did you build a multivariate
15 logit model to analyze the admissions
16 processes for the universities that were
17 the subject of that study?

18 A. No.

19 Q. You just basically reported
20 how the -- how the rates of -- the
21 admission rates of various groups changed
22 in two different periods of time?

23 A. Among other things, yeah.

24 Q. What else?

25 A. Well, there was many

1 D. Card

2 institutions involved and there was
3 multiple periods before and after.

4 Q. But until this case, I guess
5 what I'm getting at, is have you ever
6 been involved in the creation of a -- of
7 a -- of a multivariate logit model to
8 estimate the effects of factors on
9 college admissions decisions?

10 A. I don't believe so, no.

11 Q. On -- have -- and I guess
12 because my earlier questions were about
13 papers you have written, I assume that
14 your answer that you haven't built that
15 kind of a model to measure the effect on
16 college admissions of various factors
17 necessarily means you haven't published
18 any papers on that question either?

19 MS. ELLSWORTH: Object to the
20 form.

21 THE WITNESS: Well, if I
22 haven't written them, they haven't
23 published them, yes, that's
24 correct.

25 BY MR. STRAWBRIDGE:

1 D. Card

2 should exclude any other variables based
3 on the potential that race was affecting
4 them?

5 A. I -- when I was finishing my
6 -- in the process of trying to finish my
7 rebuttal report, it was very clear that
8 there were a number of disagreements
9 between Professor Arcidiacono and me on a
10 couple of issues.

11 And so I -- I was able to ask
12 Dean Fitzsimmons directly in a telephone
13 conversation if race was involved in the
14 personal rating, for example, and he said
15 no.

16 Q. Did you do anything to verify
17 his testimony?

18 MS. ELLSWORTH: Object to the
19 form.

20 THE WITNESS: No.

21 BY MR. STRAWBRIDGE:

22 Q. You're familiar with what it
23 means to interact a variable in the
24 multivariate logit model?

25 A. In general terms, yes.

1 D. Card

2 a difference in a model?

3 MS. ELLSWORTH: Sorry. Object
4 to the form.

5 THE WITNESS: Well, I think I
6 just showed that it does make a
7 small difference. So I think
8 that's self-evident from what I
9 just said.

10 BY MR. STRAWBRIDGE:

11 Q. You and Professor Arcidiacono,
12 I think you just acknowledged, you made
13 some adjustments to your models after
14 reviewing each others' reports in this
15 case?

16 A. Yes.

17 Q. Okay. For example, in your
18 rebuttal report you adopted Professor
19 Arcidiacono's ratings methodology?

20 A. Yes.

21 Q. That had the effect of
22 dropping many, but not all, of the
23 perfect predictions from your model?

24 A. Yes.

25 Q. Do you know about how many

1 D. Card

2 perfect predictions are still in your
3 model, even after making that change?

4 A. No, not precisely. There is
5 some perfect predictions that are perfect
6 predict admits, so some people who would
7 be predicted to get in with 100 percent
8 probability, and there is some who would
9 be predicted to not get in with
10 100 percent probability.

11 Q. Do you know what the relative
12 breakdown is between the perfect predicts
13 of admission and the perfect predicts of
14 rejection?

15 MS. ELLSWORTH: Object to the
16 form.

17 THE WITNESS: Not precisely,
18 no.

19 (Card Deposition Exhibit 7,
20 New Hard Models printout, was marked
21 for identification.)

22 BY MR. STRAWBRIDGE:

23 Q. I have handed you what has
24 been marked as Exhibit 7. I will
25 represent to you that this is information

1 D. Card

2 that's taken from your workpaper that
3 just shows the number of perfect
4 predictions both for admits and rejects
5 in your new model versus your old model.

6 And I will also note for the
7 record, and apologize that this should
8 have been printed landscape form, so you
9 kind of have to tear the two pages apart
10 and hold them next to each other to read
11 the exhibit.

12 If you flip over, if you are
13 looking for the final in the old models,
14 you have to flip over the page.

15 A. Okay.

16 Q. Sorry about that. Do you have
17 any reason to doubt that these numbers
18 accurately reflect the number of perfect
19 predictions in your models?

20 A. If it is accurately taken from
21 my workpaper, then it is correct, yeah.

22 Q. I will represent that it has
23 been.

24 A. Okay.

25 Q. Certainly if that's wrong, I'm

1 D. Card

2 sure the folks on the other side of the
3 table will let us know.

4 But this indicates that for
5 the old models that you used, that a
6 number of perfect predictions was 29,445
7 perfect predictions of reject; is that
8 right?

9 A. Right.

10 Q. And 527 perfect predictions of
11 admit?

12 A. Correct.

13 Q. And in the new model, the
14 number of perfect predictions of reject
15 is 5,675?

16 A. Yes.

17 Q. And the number of perfect
18 predictions of admit is one.

19 A. Right.

20 Q. So that shows that the vast
21 majority of perfect predictions both in
22 your old model and in your new model, if
23 this is accurate, were for rejects,
24 correct?

25 A. Correct.

1 D. Card

2 Q. You also updated your model to
3 incorporate the activity variables for
4 extracurricular activities that Professor
5 Arcidiacono used?

6 A. In one of the robustness
7 analysis, I did, I used his preferred
8 measures, yes. This would be Exhibit 16
9 of my rebuttal report.

10 Q. And is it your testimony that
11 that adjustment is -- is in your new
12 preferred model or only for one of the
13 robustness models?

14 MS. ELLSWORTH: Object to the
15 form.

16 THE WITNESS: I believe that
17 the full set of his preferred
18 specification is -- is in
19 Exhibit 16, his robustness
20 analysis.

21 BY MR. STRAWBRIDGE:

22 Q. Did -- do any -- strike that.

23 Professor Arcidiacono's models
24 in both his first report and his second
25 report include two different samples,

1 D. Card

2 any difference for the statistical
3 analysis, so.

4 BY MR. STRAWBRIDGE:

5 Q. And athletes is the only group
6 that you do that for?

7 A. Yes.

8 Q. Okay. And the reason why, and
9 I guess you say it right -- right --
10 right here in footnote 97, that your
11 understanding is that recruited athletes
12 are part of the same admissions process
13 as all other applicants. Is that
14 correct?

15 A. Yes.

16 Q. I'm sorry, before we go there,
17 let me just ask: Other than this model
18 that you are referencing in footnote 97,
19 you don't do any other modeling in either
20 of your reports that looks separately at
21 the non-ALDC population from the ALDC
22 population?

23 A. No, because as I explain in my
24 original report and, again, in my
25 rebuttal report, I believe that there is

1 D. Card
2 a variety of evidence from the
3 documentary -- or from the evidence from
4 the depositions and from the other
5 sources, including my direct query to the
6 dean by telephone.

7 But also there is a question
8 that was asked that shows up on a web
9 site, asking about whether athletes at
10 Harvard are part of the regular
11 admissions process.

12 Anyway, my understanding is
13 that these four groups are all part of
14 the regular admissions process.

15 Q. And when you say on the web
16 site, whose web site do you mean?

17 A. I believe it was on the
18 Harvard admissions web site.

19 Q. And the dean himself told you
20 that they are part of the regular
21 admissions process?

22 MS. ELLSWORTH: Object to the
23 form.

24 THE WITNESS: I asked him if
25 they were. He said they were.

1 D. Card

2 Q. And from that baseline, you
3 then do a number of simulations that
4 analyze the effect of various
5 race-neutral alternatives, correct?

6 A. Correct. I do the kind of
7 simulations that have been done in the
8 literature before and that Professor
9 Arcidiacono performs for Mr. Kahlenberg
10 as well, yeah.

11 Q. And, in fact, your method
12 closely follows that used by Mr.
13 Kahlenberg, assisted by Professor
14 Arcidiacono. Right?

15 A. Right, but this is a method
16 that is pretty standard in the literature
17 and was used by several of the other
18 papers in the area.

19 Q. There were two key
20 differences, I think, between your
21 approach with -- between your approach
22 and those of Mr. Kahlenberg's, at least
23 in your initial report?

24 MS. ELLSWORTH: Object to the
25 form.

1 D. Card

2 Q. But in your -- I guess I just
3 -- I just want to understand. You're on
4 record as saying that this doesn't, this
5 simulation, does a poor job of generating
6 racial diversity.

7 Do you think it does a poor
8 job of generating socioeconomic
9 diversity?

10 MS. ELLSWORTH: Objection.

11 THE WITNESS: Well, the
12 difference is that these are the
13 categories of race that I'm using
14 in this analysis.

15 Now, there are other
16 categories of race, but -- and
17 other ways of counting, for
18 example, who is Asian American or
19 who is African American.

20 But in socioeconomic
21 diversity, for instance, I have, in
22 my preferred specification of the
23 model, I would like to take account
24 of, in the admissions process, I
25 would really like to take account

1 D. Card
2 of parental occupation. You might
3 also want to take account of
4 parental education.

5 So socioeconomic status is a
6 very, very broad category, very
7 important for understanding things.

8 These are the categories that
9 I was able to come up with quickly,
10 but -- in this analysis, come up
11 with in this analysis, but you
12 could -- I would be reluctant to
13 make an assessment of socioeconomic
14 diversity just on these four
15 numbers.

16 BY MR. STRAWBRIDGE:

17 Q. So basically the size of the
18 increases here are not sufficient to
19 convince you that this scenario does a
20 good job of increasing socioeconomic
21 diversity?

22 MS. ELLSWORTH: Objection,
23 asked and answered.

24 BY MR. STRAWBRIDGE:

25 Q. That's your testimony?

1 D. Card

2 BY MR. STRAWBRIDGE:

3 Q. And, again, I'm just staying
4 in paragraph 192.

5 A. He eliminates the preferences,
6 yeah, and he changes the -- the four SES
7 characteristics slightly.

8 Q. Right. And you determined
9 that these simulations, you know, as he
10 -- as he -- as he makes those
11 adjustments, are insufficient because the
12 race-neutral alternative "produces a
13 class that is different from the current
14 class in the dimensions I understand
15 Harvard cares about."

16 That's in paragraph 195,
17 correct?

18 A. Yes, that's what I say, yes.

19 Q. All right. So looking at the
20 Exhibit 26 in your report.

21 A. Okay.

22 Q. Which differences in your view
23 render this as insufficient because it
24 produces a class that is different from
25 the current class in dimensions that you

1 D. Card

2 Q. It's 26 percent compared to
3 the 30 percent drop that you termed as
4 dramatic, correct?

5 A. Right.

6 Q. But, again, do you -- do you
7 have a -- do you have any understanding
8 of what difference would be acceptable to
9 Harvard, even if it were a decline in any
10 of these racial categories?

11 MS. ELLSWORTH: Object to the
12 form.

13 THE WITNESS: No.

14 BY MR. STRAWBRIDGE:

15 Q. And you don't have a personal
16 understanding as to what you think is an
17 acceptable or not acceptable decline for
18 purposes of a race-neutral alternative?

19 MS. ELLSWORTH: Object to the
20 form.

21 THE WITNESS: No.

22 BY MR. STRAWBRIDGE:

23 Q. Did the committee tell you
24 that an African American class that
25 represents 10 percent of the admitted

1 D. Card

2 table?

3 A. So if we look in my Exhibit
4 13.

5 Q. Your Exhibit 13?

6 A. Um-hum. We can see how
7 starting with -- with my model at the
8 bottom, now this is -- already I'm
9 including ALDCs in my analysis, how the
10 effect of interactions and personal
11 rating and so on, of parental occupation,
12 changes the -- changes the coefficients
13 in my model and gets you from my model to
14 Professor Arcidiacono's model.

15 Q. Right. Do you actually cite
16 Table 4.2N anywhere in your rebuttal
17 report?

18 A. I can't say for sure I do cite
19 that table directly, but I cite or
20 address each of the issues, I think, that
21 he is trying to address here.

22 Q. Setting aside the
23 disagreements that I know you have with
24 Professor Arcidiacono about his modeling
25 choices, anywhere in your expert report

1 D. Card
2 do you challenge the calculations on
3 Table 4.2N?

4 MS. ELLSWORTH: Object to the
5 form.

6 THE WITNESS: So, in other
7 words, you're asking me if we took
8 what Professor Arcidiacono says is
9 his model and estimated it the way
10 he says he's doing it here, you
11 would get these numbers?

12 BY MR. STRAWBRIDGE:

13 Q. Right.

14 A. Yes, I believe that's correct.

15 Q. I mean, do you think he is
16 misstating his model? Not -- not do you
17 disagree with his modeling decisions, but
18 do you think he is not actually
19 reflecting -- do you think his
20 calculations somehow reflect a
21 misunderstanding of his own model?

22 MS. ELLSWORTH: Object to the
23 form.

24 THE WITNESS: Well, this is
25 not his model. This is his

1 D. Card
2 adjustments to my model in my
3 original report.

4 BY MR. STRAWBRIDGE:

5 Q. Thank you. Thank you. That's
6 correct. So I guess my question is do
7 you think he is misstating your -- you
8 referred to his understanding of the
9 model. Like I guess my question is do
10 you think that, setting aside the
11 modeling choices, there's something in
12 here that makes the calculations
13 incorrect because he is not accurately
14 reflecting the data that underlies your
15 model?

16 A. I think these calculations are
17 correct. I would have to read carefully
18 to understand if these -- if his row
19 descriptions are a complete description
20 of everything he has done, but my
21 understanding, for example, row 1, tells
22 us that right from the beginning, this is
23 different than my -- the model in my
24 original report because he has excluded
25 the ALDCs. And then row 2 says he is

1 D. Card

2 doing interactions and so on.

3 Q. Right. But he didn't -- he
4 didn't, as far as you know, and I guess
5 your report doesn't contain any challenge
6 to the calculations of the numbers that
7 are reported here?

8 A. I don't believe we found any
9 errors in this, I found any errors in
10 this calculation, no.

11 Q. Okay. You mention the fact
12 that you do what you call a robustness
13 analysis. And that's set forth in
14 Exhibits 14 through 16 of your report or
15 18 of your report, rebuttal report?

16 A. And sometimes in the footnotes
17 and other places, yes.

18 Q. Right. So let me just ask you
19 about Exhibit 13, which you just referred
20 to.

21 A. Yes.

22 Q. This is -- this is -- this is
23 a chart in which you purport to
24 demonstrate that if you make adjustments
25 to Professor Arcidiacono's model, it has

1 D. Card

2 A. Yes.

3 Q. And that is, in fact, what
4 this exhibit suggests, correct?

5 A. Yes.

6 Q. Okay. Did you ever construct
7 a model of the personal rating in either
8 of your reports?

9 A. No.

10 Q. You referred several times to
11 Professor Arcidiacono's model, but you
12 did not do your own model of personal
13 rating, correct?

14 A. Correct.

15 Q. And is that because you felt
16 that there was not enough observables in
17 the data to estimate a reliable model of
18 the personal rating?

19 A. I personally felt like we
20 could use the personal rating and the
21 academic rating and the extracurricular
22 rating as ratings. We could include the
23 other variables, some of the other
24 variables that go into the determination
25 of those ratings, and that it would be

1 D. Card

2 BY MR. STRAWBRIDGE:

3 Q. But it could also be because
4 of racial bias?

5 MS. ELLSWORTH: Object to the
6 form.

7 THE WITNESS: Well, I can't
8 actually rule that out.

9 BY MR. STRAWBRIDGE:

10 Q. Can you come up with a logical
11 explanation as to why the essays would
12 explain that difference?

13 MS. ELLSWORTH: Objection.

14 THE WITNESS: No. I haven't
15 really given any thought to that.
16 I -- it's pretty standard in this
17 kind of statistical analysis to
18 have unobserved components and to
19 be carefully thinking about what
20 exactly is missing and how that
21 could potentially play a role, but
22 it's -- in my experience it isn't
23 always useful to speculate much
24 more beyond that, just other than
25 to notice that there are lots of

1 D. Card

2 look at is Professor Arcidiacono's model,
3 correct?

4 A. Correct, because I'm -- my
5 personal view is that we should use the
6 personal rating, rather than a model of
7 the personal rating. You should take the
8 personal rating as given.

9 Q. Because Dean Fitzsimmons told
10 you race doesn't affect it?

11 MS. ELLSWORTH: Object to the
12 form.

13 THE WITNESS: Well, because
14 among other pieces of evidence in
15 the records, it seems like the
16 general belief is that race is not
17 a component of a personal rating,
18 yeah.

19 BY MR. STRAWBRIDGE:

20 Q. Do you think that -- do you
21 think that -- do you agree that there is
22 a gap in the personal ratings that white
23 applicants receive versus Asian
24 applicants?

25 A. Yes. Well, that's what we

1 D. Card

2 incentives of Harvard.

3 And I disagree with that type
4 of analysis -- that type of conclusion on
5 the basis of statistical evidence.

6 MR. STRAWBRIDGE: Can we take
7 a short break?

8 MS. ELLSWORTH: Okay.

9 THE VIDEO OPERATOR: The time
10 is 3:13. We are off the record.

11 (A recess was taken at
12 3:12:14 p.m., after which the deposition
13 resumed at 3:28 p.m.)

39

14 THE VIDEO OPERATOR: The time
15 is 3:28. We are back on the
16 record.

17 BY MR. STRAWBRIDGE:

18 Q. Do you think that Asian
19 Americans on average have less attractive
20 personal qualities than white applicants
21 in Harvard's application pool?

22 MS. ELLSWORTH: Objection.
23 Are you asking for a personal
24 opinion?

25 MR. STRAWBRIDGE: No.

1 D. Card

2 THE WITNESS: I have no way of
3 knowing that.

4 BY MR. STRAWBRIDGE:

5 Q. Can you think of -- do you
6 have any reason to believe that Asian
7 Americans are not as effervescent as
8 whites in Harvard's applicant pool?

9 MS. ELLSWORTH: Objection.

10 THE WITNESS: I have no way of
11 knowing that.

12 BY MR. STRAWBRIDGE:

13 Q. So it could be true?

14 MS. ELLSWORTH: Objection.

15 THE WITNESS: May or may not
16 be true.

17 BY MR. STRAWBRIDGE:

18 Q. It is one possible explanation
19 for the difference in their personal
20 ratings?

21 MS. ELLSWORTH: Object to the
22 form.

23 THE WITNESS: Well, if -- if
24 effervescence was, indeed, a
25 significant determinative personal

1 D. Card
2 rating conditional on the other
3 factors then -- and you could
4 measure effervescence and you found
5 that, I guess I would -- then I
6 would say, well, you found that and
7 I would agree with it, but no one
8 has done that exercise so I don't
9 really know what to say.

10 BY MR. STRAWBRIDGE:

11 Q. Well, someone's assigned
12 personal ratings to all of the
13 applicants?

14 A. They are, yes.

15 Q. Right. So I am just asking,
16 do you -- do you think that an
17 explanation for the gap in the personal
18 ratings between Asian Americans and white
19 applicants is a lack of effervescence in
20 the Asian American pool?

21 MS. ELLSWORTH: Object to the
22 form.

23 THE WITNESS: I think the --
24 my understanding is that the
25 readers look for something they

1 D. Card
2 call personal qualities. And I
3 don't exactly know what those are,
4 but they -- they talk about that in
5 some of the materials I've seen.

6 And so I think that what I
7 would probably believe to be true
8 is that they see slightly fewer
9 personal qualities conditional on
10 academic qualities. Again, this is
11 all conditional on academic
12 qualities.

13 BY MR. STRAWBRIDGE:

14 Q. And why do you think that's
15 the case?

16 A. I don't know exactly.

17 Q. Well, you can't rule out the
18 fact that it is racial bias. What other
19 explanation could there be for why the
20 white applicants in Harvard's pool
21 receive higher personal ratings than the
22 Asian American applicants?

23 MS. ELLSWORTH: Objection.

24 THE WITNESS: I don't really
25 -- I haven't really given that any

1 D. Card

2 thought directly.

3 BY MR. STRAWBRIDGE:

4 Q. Isn't that the entire question
5 that we need to answer when we decide
6 whether the personal ratings should be
7 included in the model?

8 MS. ELLSWORTH: Object to the
9 form.

10 THE WITNESS: No, not at all,
11 because we see a difference between
12 Asian applicants and white
13 applicants in their extracurricular
14 rating and their academic rating,
15 statistically significant positive
16 gap.

17 I don't think that -- and, in
18 fact, I would never conclude that
19 that means that there is positive
20 racial bias in favor of Asian
21 applicants. So the presence of a
22 significant coefficient doesn't say
23 that there is a racial animus
24 against whites in the assignment of
25 academic credentials.

1 D. Card

2 break, one question would be: Do Asian
3 Americans as a whole have higher or lower
4 or the same personal qualities as, say,
5 white Americans?

6 But that's not really what's
7 relevant for my statistical model. And I
8 -- my interpretation of how someone might
9 answer that would be they might be
10 thinking, well, as a whole, they are the
11 same, but when I'm assigning the personal
12 rating, what's relevant is I have got
13 some of these characteristics that I can
14 see, and some that I can't. There is a
15 deficit on some of the ones that I can't
16 see.

17 So that could contribute to a
18 negative coefficient for Asians in that
19 assignment, just as there must be some or
20 there -- my interpretation is there must
21 be some unobserved characteristics of the
22 academic credentials of Asian Americans,
23 conditional on this broad set of other
24 academic qualities that we can observe in
25 the data and that Professor Arcidiacono

1 D. Card

2 A. Let me look at my -- the
3 appendix -- you don't have tabs on
4 appendices here, so I am having a little
5 bit of trouble finding the right tabs.

6 Q. If I told you it was 46, does
7 that number sound more or less correct?

8 A. 46 per year?

9 Q. 46 parental occupations.

10 A. It seems to show in my
11 Exhibit 28 of my -- of my rebuttal report
12 that there is 28 categories -- 23
13 categories, excuse me.

14 Q. 23 categories for fathers,
15 right?

16 A. Yes.

17 Q. And 23 categories for mothers?

18 A. Yes.

19 Q. So that's 46, right?

20 A. Correct. And then there is
21 one omitted for each.

22 Q. So 47?

23 A. 44.

24 Q. 48?

25 A. 44.

1 D. Card

2 prevent them from performing a stronger
3 role as they would in the model, if I had
4 some measures that did not have that
5 misclassification error.

6 Q. We discussed this earlier, but
7 I just want to make sure I understand.
8 When you were deciding to put the
9 parental occupations in, did you test for
10 statistical significance?

11 A. I'm not entirely sure of
12 whether, at what stage of the analysis
13 that kind of exercise would have been
14 done, so I can't say for sure.

15 Q. You don't dispute that some of
16 the parental occupation categories vary
17 substantially from year to year?

18 MS. ELLSWORTH: Object to the
19 form.

20 THE WITNESS: I don't dispute
21 that, for example, the category
22 unemployed disappears in some
23 years, and so one of the reasons --
24 or is much less frequent in some
25 years.

1 D. Card

2 for each race, your model?

3 A. No.

4 Q. None of that is disclosed
5 anywhere in your report, I take it?

6 A. That I --

7 Q. There is no -- there is no
8 such estimations disclosed anywhere in
9 your report?

10 MS. ELLSWORTH: Object to the
11 form.

12 BY MR. STRAWBRIDGE:

13 Q. If you didn't do it, you
14 couldn't put it in your report?

15 A. I believe that would be true.

16 Q. It's not a trick question.
17 It's just late in the day.

18 Can you turn to Table 5.1N of
19 Mr. Arcidiacono's rebuttal report.

20 A. Would this be in the text or
21 in the appendix?

22 Q. It is page 47 of the report.

23 A. Okay.

24 Q. Did you in your rebuttal
25 report disclose any -- any dispute with

1 D. Card

2 the calculations on this table?

3 A. No, I don't think so. No.

4 Q. Is it also true with respect
5 to Table 5.2N, which is on page 50?

6 A. I agree with the calculations
7 underlying this table, yeah.

8 Q. And is that also true with
9 respect to 5.3N?

10 MS. ELLSWORTH: What is the
11 question exactly?

12 BY MR. STRAWBRIDGE:

13 Q. Does he have any dispute with
14 those calculations?

15 MS. ELLSWORTH: Just want to
16 know if there is any dispute --

17 THE WITNESS: I do have a
18 dispute with the calculation in
19 Table 5.3N, yes.

20 BY MR. STRAWBRIDGE:

21 Q. Did you disclose that dispute
22 in your rebuttal report?

23 A. No.

24 Q. What is your dispute?

25 A. Well, this gets to a question

1 D. Card

2 A. Oh. Yes.

3 Q. So you conclude that the --
4 that given the years that you just
5 described and the different racial
6 categories, that the actual probability
7 of seeing a pattern over a three-year
8 period is about 17 percent?

9 A. Assuming for the sake of
10 simplicity that there's a 0.2 chance that
11 the group's average rate matches the
12 average admission rate for other
13 applicants, so that would be the same
14 kind of calculation that he does, so
15 assume that number, then take the 92
16 combinations, that's what I did.

17 Q. You earlier said you didn't
18 challenge that number, you hadn't
19 challenged that calculation?

20 MS. ELLSWORTH: Object to the
21 form.

22 THE WITNESS: That 0.2 is his
23 calculation, yes.

24 BY MR. STRAWBRIDGE:

25 Q. The -- your calculation

1 D. Card

2 assumes that each of those outcomes is
3 independent with one another?

4 A. Yes.

5 Q. Is that true?

6 A. It would not be exactly true.
7 It would be -- it might be approximately
8 true, depending on the race group you are
9 thinking of.

10 Q. What makes something
11 "approximately true"?

12 A. Well, the actual calculation
13 for the permutations, I didn't try and
14 do. I tried to do a simplified
15 calculation. That's what I have done
16 here.

17 Q. For example, you would agree,
18 right, that the Hispanic methodology
19 between IPEDS and the new methodology
20 does not differ?

21 MS. ELLSWORTH: Object to the
22 form.

23 THE WITNESS: No, I would
24 disagree with that.

25 BY MR. STRAWBRIDGE:

1 D. Card

2 one-pagers -- do you know what I mean by
3 a one-pager?

4 A. I have a vague understanding
5 of what that is, yeah.

6 Q. Have you seen any one-pagers
7 prepared by the admissions office during
8 the committee meeting process listing
9 IPED statistics before January 2013?

10 MS. ELLSWORTH: Object to the
11 form.

12 THE WITNESS: Repeat the
13 question again?

14 BY MR. STRAWBRIDGE:

15 Q. Have you seen a one-pager
16 prepared by the admissions office during
17 the committee meeting process that lists
18 the IPED statistics prior to January
19 2013?

20 MS. ELLSWORTH: Object to the
21 form.

22 THE WITNESS: I have -- I have
23 only seen a couple of these forms,
24 and so I can't say I have done an
25 exhaustive search. I was never

1 D. Card

2 searching for that. But I don't
3 believe I would have seen that.

4 I believe the forms I looked
5 at are the ones that are referred
6 to in Professor Arcidiacono's
7 report.

8 BY MR. STRAWBRIDGE:

9 Q. And you also referred to some
10 in some documents in your report, right?

11 A. I did.

12 Q. Have you -- did you see
13 Professor Arcidiacono's note that the
14 IPEDS' number was stored differently in
15 the admissions database as it was
16 produced to him before the 2017
17 admissions cycle versus after?

18 A. I believe that there is a
19 different field that it is captured in,
20 that's right.

21 Q. And your report doesn't
22 challenge the -- that statement in
23 Professor Arcidiacono's report?

24 MS. ELLSWORTH: Objection to
25 form.

1 D. Card

2 THE WITNESS: I don't know
3 whether that field existed before,
4 but that's my understanding. That
5 information has to be obtained from
6 a different field.

7 BY MR. STRAWBRIDGE:

8 Q. You noted that there was a
9 calculation error in calculating the
10 standard error of his double difference
11 in chart 2.6N in your rebuttal report?

12 A. Yes.

13 Q. He has acknowledged that
14 error?

15 A. Yes.

16 Q. I will go ahead and mark the
17 supplemental report.

18 (Card Deposition Exhibit
19 14, Errata to Rebuttal Expert Report of
20 Peter S. Arcidiacono, was marked for
21 identification.)

22 THE WITNESS: Yes.

23 BY MR. STRAWBRIDGE:

24 Q. Do you dispute the math for
25 his new calculation for standard error?

1 NAME OF CASE:

2 DATE OF DEPOSITION:

3 NAME OF WITNESS:

4 Reason Codes:

5 1. To clarify the record.

6 2. To conform to the facts.

7 3. To correct transcription errors.

8 Page _____ Line _____ Reason _____

9 From _____ to _____

10 Page _____ Line _____ Reason _____

11 From _____ to _____

12 Page _____ Line _____ Reason _____

13 From _____ to _____

14 Page _____ Line _____ Reason _____

15 From _____ to _____

16 Page _____ Line _____ Reason _____

17 From _____ to _____

18 Page _____ Line _____ Reason _____

19 From _____ to _____

20 Page _____ Line _____ Reason _____

21 From _____ to _____

22 Page _____ Line _____ Reason _____

23 From _____ to _____

24 _____

25 _____

1 NAME OF CASE : **SFFA v. Harvard, D. Mass. 14-cv-14176**

2 DATE OF DEPOSITION : **April 27, 2018**

3 NAME OF WITNESS : **David Card**

4 Reason Codes:

5 1. To clarify the record.

6 2. To conform to the facts.

7 3. To correct transcription errors.

8 Page _____ Line _____ Reason _____

9 From **Please see attached errata sheet.** to _____

10 Page _____ Line _____ Reason _____

11 From _____ to _____

12 Page _____ Line _____ Reason _____

13 From _____ to _____

14 Page _____ Line _____ Reason _____

15 From _____ to _____

16 Page _____ Line _____ Reason _____

17 From _____ to _____

18 Page _____ Line _____ Reason _____

19 From _____ to _____

20 Page _____ Line _____ Reason _____

21 From _____ to _____

22 Page _____ Line _____ Reason _____

23 From _____ to _____

24
25 

April 27, 2018 Deposition of David Card – Errata Sheet

<i>Page</i>	<i>Line</i>	<i>Instruction</i>	<i>Reason for Change</i>
34	14	Change “into” to “of”	Clarification
37	10-14	Change “What – what we were showing was that children from – from black and Hispanic families were – of high academic ability – were” to “What we were showing was that children of high academic ability from black and Hispanic families were”	Clarification
54	20	Change “New Hard Models” to “New Card Models”	Mistranscription
57	7	Change “analysis” to “analyses”	Mistranscription
67	7	Change “it’s a Canadian” to “as a Canadian”	Mistranscription
81	7	Change “the” to “an”	Clarification
89	12	Change “a fact” to “effect”	Mistranscription
100	25	Change “model was fed pooling” to “model was fit pooling”	Mistranscription
101	21	Change “class of always fitting” to “approach of always fitting”	Clarification
107	10	Change “score is not” to “score is, it is not”	Clarification
118	11	Change “Yes” to “Yes, 3.5 percentage points”	Clarification
136	17	Change “criteria, very important criteria” to “criterion, very important criterion”	Mistranscription
148	23	Change “unacceptable word” to “word unacceptable”	Clarification
158	23-25	Change “she is – she is defining – first of all, she is not – she is using as a sample, or as a” to “she is using a”	Clarification
167	6	Change “selectivity matric” to “selectivity matrix”	Mistranscription
212	4	Change “some more” to “similar”	Mistranscription
274	13	Change “attention to the committee” to “attention of the committee”	Clarification
287	15	Change “that that’s” to “that”	Clarification
291	3	Change “rating scores and the – and the” to “rating scores and not the”	Clarification
294	4	Change “order probit” to “ordered logit”	Clarification
294	6	Change “indexes” to “indices”	Mistranscription
297	8	Change “coefficients” to “positive coefficients”	Clarification
302	13	Delete “sort of”	Clarification

314	3	Change “of complicated variable” to “of a complicated variable”	Clarification
325	22	Change “observable” to “unobservable”	Clarification
363	7	Change “IPEDS” to “IPEDS”	Punctuation