

and the other "promoted to high school" has been used during this time. I am pretty sure it was being used in 1926. The first time that it went into effect or that I would have used it was in June, 1927 and according to the best of my knowledge, it was used that year.

DR. ROBERT V. DAVIDS,

a witness of lawful age, produced on behalf of the Petitioners, having been first duly sworn, was examined and testified as follows:

I am at present consultant for the Commission of Higher Education for Negroes in Maryland. I have attended Taylor University and Columbia University. I received my degree at Johns Hopkins. I have attended Syracuse University and Northwestern University. I hold the degree of Dr. of Philosophy from Johns Hopkins. My dissertation upon which I received my Doctors degree at Johns Hopkins was a comparative study of white and Negro education in Maryland. In making this study, I made a statistical study chiefly of the records throughout the State of Maryland. That study included Baltimore County.

(Mr. Ransom) If the Court pleases, I am tendering Dr. Davids on the subject of comparative education between the white and negro population in the State of Maryland, particularly with respect to Baltimore County.

(Mr. Rawls) I am going to object to any tender. I will object to it when it is in proper form. Put the proffer in some definite form, and I will deal with it in the proper way.

(Mr. Ransom) Does counsel admit that Dr. Davids is qualified as an expert?

(Mr. Rawls) I am not going to admit anything until I hear it asked.

(Mr. Ransom) Not even Dr. Davids' qualifications as an expert to testify?

(Mr. Rawls) No, of course not. I am not familiar with

the qualification of any witness to answer a question until I know what it is.

(The Court) That is the point you make. He does not know what you are going to ask him about.

(Mr. Ransom) If the Court pleases, I am going to ask him a number of questions about education, particularly in Baltimore County.

(The Court) Ask the question, and then I can rule.

(Mr. Ransom) If the Court pleases, I am not setting myself up as an expert on Maryland law. As I understand the law in Maryland, the qualifications of one who is tendered as an expert must be admitted by the Court before I can ask the questions. I am asking them, if the Court will admit Dr. Davids is an expert on this particular subject.

(The Court) Tell me what you want to ask him.

(Mr. Ransom) If your Honor pleases, I am going to ask him first of all as to the methods used in the various counties, and to compare them with the method used in Baltimore County as admission to high school, as to white and colored children. I am going to ask him as to the comparative abilities, *determine* from his statistical studies of white and colored children in Baltimore County. There is testimony here with regard to the results of certain examinations. I am going to ask him a number of questions relative to the particular tests that were used in determining whether or not the petitioner in this case was entitled to enter high school. And such further questions as may cast some light on the testimony that has been offered in the case so far. Now, the specific questions that I intend to ask, as I say, will be developed from time to time as Dr. Davids' testimony goes along. I am offering him as an expert.

(The Court) There is the offer, Mr. Rawls. You have heard the offer.

(Mr. Rawls) Yes, sir. I object to it, may it please the Court.

(The Court) I will sustain the objection.

(Mr. Ransom) Note an exception.

(The Court) You will remember, gentlemen, as I said repeatedly, that I am going into the question about what is alleged in the original petition, that this child was not permitted to go to the high school, and that it was, to use the language in the petition, that it was illegally and arbitrarily refused. I do not think a comparison between the races figures in this case at all.

(Mr. Ransom) Now, if the Court pleases, again for the purpose of the record, I must state that we respectfully beg to differ from the Court as to the theory of the case.

(The Court) Well, of course, that is a matter that will have to go higher up. I have given you my views about it.

(Mr. Ransom) Yes, sir. Now, if the Court pleases, one of our contentions is that the examination, if such was given during the period of 1934 and '35, was an unfair test and examination, and was in and of itself an arbitrary attempt on the part of the County Board of Education, of Baltimore County, to discriminate against the infant petitioner and others of her race, to prevent her from having the benefits of higher education, so far as the high school is concerned. Now, that is one of the things that we beg leave to submit to the Court's consideration which, of course, as the Court says, is beyond the scope of the examination.

(The Court) I sustain the objection to that.

(Mr. Ransom) And further we beg leave to submit evidence to the fact that the system of sending children away from their home county for the purpose of education is an arbitrary discrimination. Now, unless I can go into those questions, I will have to ask for an exception to the Court's ruling.

(The Court) Oh, yes, you have that exception. I sustain the objection. I do not want it to be understood that he is not competent to testify to anything he testifies to, but that is not in this case.

(Mr. Ransom) Do I understand the Court to say that

the Court does not dispute or cast any aspersions upon Dr. Davids' qualifications?

(The Court) Oh, I do not know anything about Dr. Davids. This is the first time I ever saw him. He undertakes to testify. And he has degrees, he testified, from Hopkins, on certain subjects. And I know he earned them.

(Mr. Ransom) Is the Court willing to admit, for the purpose of that record, that Dr. Davids is an expert on the subject of comparative differences in education provided for the various counties in the State of Maryland?

(The Court) No, sir. I am not passing on that. I am excluding the testimony.

(Mr. Ransom) Note an exception to the failure to admit Dr. Davids' qualifications, please.

(By consent of Counsel the examination papers of Margaret Williams are admitted as the questions and answers of the said Margaret Williams, petitioner and marked Petitioners (?) Exhibits No. 19 and No. 20.)

My experience in teaching has been in Northwestern University, Syracuse University and I substituted at Hopkins. I taught education. I spent two summers at Columbia University studying education. I spent four years at Johns Hopkins University studying education. My dissertation at Johns Hopkins on the subject of the differences between Negro and white education was accepted by the controlling Board of that institution as a partial requirement, for the degree of Doctor of Philosophy. The balance of the requirements were residence and study.

(Mr. Ransom) If the Court pleases, at this time I again make the tender of Dr. Davids as an expert on education.

(The Court) Is that the same offer you made before?

(The Court) I never heard this question presented just in this way before. As I intimated, and I think I said so, when the question came up before recess, that there should be some question propounded to the witness, and it might be that there would be no objection to the question.

(Mr. Rawls) Exactly, precisely.

(The Court) But if there is an objection for the reason he is not an expert to talk on that subject, it will be time enough to rule upon the question then.

(Mr. Rawls) Precisely.

(The Court) But the first thing is to ask some question which may not be objected to.

(The Court) I just do not agree with you on that. Just ask your question, and then if they are objected to I will rule on them.

(Mr. Ransom) I am willing to follow the Courts suggestion, but for the purpose of the record take an exception to the ruling.

(The Court) What I have ruled on?

(Mr. Ransom) You have ruled that he could not be admitted as an expert, as a preliminary question. As a preliminary question the Court has ruled he can not be admitted as a qualified expert.

(The Court) That is right.

(Mr. Ransom) I take an exception to that.

Q. What, in your opinion, Dr. Davids, is the validity of that examination as the basis for promotion from an elementary school to a high school? A. Why, that involves a pretty thorough discussion of the purpose of the test. These tests—this, in particular, was devised for not one but several purposes. Primarily it is a remedial or diagnostic test. It is designed to not only reveal deficiencies in the elementary education in the tool subjects of the person taking the test, but of the system itself, for the purpose of not only remedying the education of the pupil, but of remedying deficiencies in the system. Now, the validity of the test as a requirement as an entrance examination is open to a great deal of question, I think. In the first place, a test to be valid for any such purpose should only be constructed by the use of very extensive samplings of the curriculum used in the education of the person tested. Now, manifestly, that was not done. This was accepted as a test de-

veloped, constructed after extensive sampling of the curriculum, the Los Angeles County school curriculum. I think it is open, therefore, to question of its validity on that particular point. I think that is the principal reason why you question its validity.

Q. Isn't there another objection to its use? You said on a number of points. For the purpose of promotion.

A. That involves the criteria used in scoring.

Q. Will you explain to the Court what you mean by that, Dr. Davids? A. Well, if one should adopt the norms, for instance, which are used here as a basis for scoring, he might be very unfair. He probably would. That is to say, if a child, in order to enter the eighth grade, is compelled to pass with a score on this examination which is equivalent to the norm for a pupil of 7.9, and would miss that, say, by a month or two, I think that would be entirely too rigid a requirement.

Q. Now, at that point, allow me to interrupt you just a moment, Doctor. A. If I may suggest—

Q. Go ahead. A. If I may suggest how that might be used as one of the entrance criteria fairly, it might, perhaps, have been so used. If all those who had taken this test, if their scores had been entered upon a frequency curve, and then some reasonable criterion adopted in accordance with what we know of the frequency curve, and that 7, or at the most 10 per cent, were failures, then it would have a good deal of validity. But evidently not. From what I could see, that has not been used.

Q. Now, then, Doctor, you have been in the court room during the progress of this trial, have you not? A. Well, some; not altogether.

Q. Have you heard the testimony as given in this court room as to the grade made by this particular petitioner, and the norm set up for that petitioner? A. I do not recall exactly what it was, no.

Q. Assuming that the testimony was to the effect that the norm that petitioner should have reached in this test was 260, and that petitioner made actually 244 total score points, what would be your opinion as to the correct-

ness of marking that child as having absolutely failed to have shown that she was capable of entering the high schools of Baltimore City? A. You have the score——

(Mr. Rawls) Wait a minute. I think I shall have to object to that question. That is merely substituting the opinion of the witness for the duly constituted authorities, it seems to me, and that is a question to be determined from facts and not from opinion.

(Mr. Ransom) Now, if the Court please, at this time I renew the statement and the offer that I made earlier during the course of the examination of this particular witness as an expert on this subject, and I am asking him for his expert opinion.

(Mr. Rawls) I am not objecting to it on the ground that he can not testify to it as an expert; I am objecting to it on the ground that no one would be permitted to testify to it.

(The Court) I sustain the objection.

(Mr. Ransom) If the Court please, we note an exception.

Q. (By Mr. Ransom) Dr. Davids, I hand you the Petitioner's Exhibit 16, and ask you if you are acquainted with the nature of this exhibit and its purpose (handing exhibit to witness). A. Yes. This is an explanatory manual containing the norms of this particular test.

Q. Now, I will ask you to turn to the tables showing the norms for this particular test, and to tell the Court what is the norm for a child who has reached the end of the seventh year in an elementary school? A. Well, regarding 7.9 as the end, or 8.0 as the end?

Q. I will ask you, what should be the norm for a child who is in the ninth month of her seventh year and has not yet been promoted or graduated from that class? A. Well, according to this test it should be not less than 255 score.

Q. Now, then, if that score were dropped from 255 to 250, arbitrarily dropped from 255 to 250, and the child actually made a total point score of 244, what should be her grade placement?

(Mr. Roe) Just a minute, I object.

(Mr. Rawls) I will have to object to that, your Honor.

(Mr. Ransom) On what ground?

(The Court) Read the question, please. I did not quite get it.

(Question read by the reporter.)

(Mr. Rawls) My objection is that the question answers itself. She undoubtedly failed. That is the very hypothesis of the question.

(Mr. Ransom) If the Court pleases, I am not asking whether she failed. I asked, according to this manual what her placement was.

(The Court) I think you are right about that. I overrule the objection.

(Mr. Ransom) Read the question.

(Question read by the reporter.)

Q. (By Mr. Ransom) Considering that there had been a drop in the norm. A. Well, the question is not very intelligible to me. If we are going to drop five points like that, then you no longer have this table at all to depend upon. You have departed from this table of norms, and it is impossible to assign—if the question were put, however, as a basis of promotion, it might be something different; but on the basis of grade norms, once you get away from those, you get away from those. And I do not see what you could do.

Q. Assuming, Doctor, that it had been testified that there had been a grade drop, norms dropped from 255 to 250, or rather from 260 to 250. A. As a passing mark?

Q. As a passing mark; and then the child was notified she had made a grade placement of 7.6, would that be correct according to the manual that you have in your possession? A. Well, it is a complicated matter to figure that out. You get away from it, you see, by rather arbitrarily deducting from it, and then you try to get back to the scale of grade years and months that have been

calculated by a very complicated mathematical process; and I find myself unable to say as to that at all.

Q. Your position is, if I understand you correctly, that having arbitrarily abolished your norm, you can no longer use the scale for grade placement? A. Not accurately, no.

Q. Thank you. A. I mean by that that you can have an arbitrary scale that might be perfectly acceptable in a school system, and all that, but you can no longer say that you are within the framework of this scale. You are not.

Q. Exactly. A. You are in the framework of a new scale that you yourself are building.

Q. Now, Doctor, what would be your opinion of the use of the total sum made by a student on that examination, as a basis for promotion from the seventh to the eighth grade, or from the seventh grade to a high school, on that alone, using that alone? A. I have already said that I do not consider this to be a valid system as an entrance examination to anything in Baltimore County. In this particular environment, the relationship to this particular curriculum does not follow the instruction as a basis of exclusion.

Q. Assuming, Doctor, that this test was used in January of 1935 in the white schools, the white seventh grade in Baltimore County, and that after the results were known from that examination remedial work was given to the pupil who had taken the examination, and that the results of that examination plus an additional test given by the teachers in the white schools, in the seventh grade, plus their class-room work, was used as the basis of determining whether or not the white pupils should be admitted to the high schools, and comparing that with the fact that this test was given in June, 1935, to the negro pupils, and was used as the sole criterion for determining whether or not they should be admitted to the colored high schools in Baltimore City, would you say that the test provided a means of discrimination?

(Mr. Rawls) I object to that.

(Mr. Ransom) If the Court pleases, Mr. Rawls this

morning asked Miss Stern whether or not she thought it was a fair test for the purpose; and I insist that the witness has a right to sustain his opinion as an expert.

(Mr. Rawls) May it please the Court, my objection to it is again, not on the ground that the witness can not answer as an expert, but because the question contains several statements that are absolutely in conflict with the undisputed testimony in the case.

(Mr. Ransom) If the Court pleases, I will ask Mr. Rawls, first of all, what the undisputed testimony is that conflicts with the statements that I have there; and, secondly, I wish to call to the Court's attention that I have a right to base my question to the expert upon the facts as I assume them to have been established by our case, so long as I keep them within the limits of what I consider to have been proved by counsel for petitioner.

(The Court) Mr. Rawls, I will be very glad to have you say what the difference is between what the counsel on the other side has suggested and your views.

(Mr. Rawls) My understanding of the testimony, may it please the Court—may the question first be read, so that I can have it definitely in mind?

(The Court) Yes.

(Question read by the reporter.)

(Mr. Rawls) Your Honor sees that there are a number of assumptions that are in the teeth of the testimony. There is not the slightest evidence here that any remedial work was done in the white schools before the other test in June. There is no testimony here that any class-room work was considered in promoting the white pupils as the basis of the colored pupils. Absolutely not a suggestion of it. The testimony is as to both schools, in rare and extraordinary cases a child who had failed the examination was upon the recommendation of the principal or teacher and upon review of the superintendent in the case of white pupils and of the supervisors of colored schools in the case of colored pupils, was permitted to enter high school. But there is no testimony here whatever that there was any distinction between the treatment

of white and colored pupils in the matter of entrance to high schools. I think the testimony is perfectly clear and undisputed in those particulars. And I think the witness, if he is asked the question, ought to have it recite the testimony as it actually appears, and not based on a hypothesis that is foreign to the facts of this case.

(Mr. Ransom) If the Court pleases——

(The Court) Pardon me just a moment. I have no recollection of any testimony in the case that after that examination in January in the white schools, that there was anything remedial done to straighten out the pupils on the examination.

(Mr. Ransom) If the Court pleases, the principal of the Catonsville High School, Mr. Zimmerman, was recalled to the stand and asked that question for that specific purpose; and he testified that remedial work was done wherever it was needed. That was when we recalled him to the stand on the second day of the hearing.

(Mr. Rawls) I do not recall any such testimony.

(Mr. Ransom) And, of course, there is plenty of testimony, including that of Miss Stern this morning, to the effect that an examination—I am not sure now whether it was Miss Stern or one of the supervisors—that examinations were given in June to the white students that were made up by the teachers or the principals themselves, and were not a part of this examination. The testimony, if I am not mistaken, of Mr. Zimmerman is to that effect. And he was recalled expressly for that purpose; and he so testified.

(The Court) Have you the testimony of Mr. Zimmerman as to that?

(Mr. Rawls) I am sure, may it please the Court, that there is not a scintilla of evidence here that they considered class-room work in the treatment of the white students, except in the rare instances where an appeal was made to the superintendent; and that was permitted in those extraordinary cases alone in both white and colored.

(The Court) Wait until we get the testimony. He is looking for it now.

(Mr. Rawls) Yes. I might suggest, may it please the Court, that that question undoubtedly is improper, because it excludes from the hypothesis of it the fact with reference to the results attained in the January examination of the white pupils. I mean no one could possibly, on the very face of it, give a fair answer to the question that is attempted to be asked, without also weighing the fact that in the January examinations the results of the white pupils, from the white pupils, showed that they could have easily passed it by an overwhelming majority.

(Mr. Marbury) Less than 10 per cent failed.

(Mr. Rawls) Less than 10 per cent of them failed. So, manifestly, may it please the Court, we are wasting time in listening to an answer that does not contain one of the controlling factors of the question, of the issue.

(Mr. Ransom) If the Court pleases, I am at a loss to understand how counsel for the opposing side can say that the question can not possibly be asked unless it contains as a fact how many passed. I did not ask the witness how many passed and how many failed. And I am not concerned with it at the present time. I merely want to know the ability of using the test in two different manners that I have outlined in my question, as a basis for promotion. Now, whether they passed or whether they did not pass is immaterial to me at present. I may want to ask some questions about that later. But I, at least, think it has nothing to do with this question. And as to the waste of time, I wish to call the attention of the Court to the fact that the objection to the question was interposed by counsel for the other side.

(The Court) I am waiting to hear this testimony.

(Testimony referred to then read by the reporter.)

(The Court) Gentlemen, I will permit the question, I will overrule the objection.

(Mr. Rawls) I think I will reserve an exception.

Q. (By Mr. Ransom) Will you answer the question? Do you wish it read again? A. I wish it reread, yes, sir.

(Question read by the reporter.)

(The Witness) Yes.

(Mr. Rawls) I move to strike out the answer, may it please the Court, in order to preserve the record.

(The Court) Overruled.

(Mr. Marbury) And exception noted.

(Mr. Rawls) Note an exception.

Q. (By Mr. Ransom) Now, Doctor, assuming the same facts as stated in the previous question, with the exception that no particular remedial work was given after the examination given to the white students in January, 1935, would you still say that the use of the test as the sole criterion for the promotion of negroes to high schools in Baltimore City was a discrimination? A. On simply a lot of mathematical averages, yes.

(Mr. Rawls) May it please the Court, may I note an objection and exception to the question and answer?

(The Court) Very well.

(Mr. Rawls) And I move to strike it out, may it please the Court.

(The Court) Very well, overruled.

(Mr. Rawls) And exception.

Q. (By Mr. Ransom) Doctor, what, in your opinion, should be the basis of determining whether or not a student is capable of being promoted from the seventh grade to the first year of the junior high school system?

(Mr. Rawls) I object to that, may it please the Court.

(The Court) On what ground, Mr. Rawls?

(Mr. Rawls) May it please the Court, is this witness to sit here and dictate to the School Board, in whom the law has vested the power to determine a matter of that kind, without the slightest basis for stating his difference

of opinion? Your Honor has the testimony here that this Board in authority have inaugurated a certain policy and a certain rule. Now, if there is any fact that can aid your Honor in determining whether or not that was an arbitrary determination, that is one matter; but to permit the witness, simply out of his mind, and with no basis in fact disclosed, to say that he differs from the State authorities, why, you are simply letting him decide this case.

(Mr. Ransom) If the Court pleases, counsel for respondents in this case have stated that the Board of Education has the authority. And I do not want to enter into argument at this time, and I won't, but since he is stating his objection, where he assumes that the Board has such authority, I want to say that it has been consistently denied throughout the course of the proceedings and throughout the course of the evidence, your Honor, that the Board has no authority to establish such an arbitrary rule. Now, I am merely asking the doctor, the witness, as an expert what, in his opinion, should be the basis, a valid basis for promotion from one portion of an integrated school system to the next higher portion. I am not asking him to say whether the Board is right or wrong. That is for the court to determine.

(The Court) I am going to sustain the objection to that question.

(Mr. Ransom) And the Court will please note an exception?

(The Court) Yes.

(Mr. Ransom) If the Court pleases, for the sake of the report, I wish it to appear that if the witness had been allowed to answer the previous question, I would then have followed the question up with further questions to determine the facts upon which he had based the answer that he would have given.

(The Court) Proceed.

Q. (By Mr. Ransom) Now, then, Dr. Davids, again for the sake of keeping the record straight, I will ask you what, in your opinion, is the value of a total score made under a progressive achievement test as the sole basis

of promotion from one portion of an integrated school system to the next.

(Mr. Rawls) I object.

Q. That is, from the elementary system to the junior high.

(Mr. Rawls) I object, may it please the Court.

(The Court) Sustained.

Q. (By Mr. Ransom) Now, Dr. Davids, are you familiar with the results obtained in Baltimore County, as well as throughout the rest of the State, in this 1935 achievement test, as given under the auspices of the State Board of Education, and published in their annual reports for that year? A. I am familiar with the annual reports published by the State Board, yes.

Q. Have you studied the report, that portion of the report for the year 1935 which shows the result of this progress achievement test given in Baltimore County? A. Yes, the few figures that are there in those five classifications, I have seen them.

Q. Do those figures show that the negro students in Baltimore County are less capable of learning the standard materials provided in the course of study in Baltimore County than the white students?

(Mr. Rawls) I object.

(The Court) Sustained.

(Mr. Ransom) If the Court pleases——

(The Court) I have sustained the objection to that several times. You ought not to bring any questions of that sort up.

(Mr. Ransom) If the Court pleases, may I address one remark to the Court?

(The Court) Yes.

(Mr. Ransom) That is in line with the question that Mr. Rawls asked of Mr. Cooper, what was the opinion that he drew as to the relative abilities of white and negro children on the basis of that particular test. If

the respondents are permitted to go into it, I respectfully ask that we have the right to submit evidence to the contrary.

(Mr. Rawls) May it please the Court, I have denied several times in this case that I ever asked such a question. Certainly not intentionally; if I did it, I must have been unconscious, because I have no recollection whatever of ever addressing any such inquiry to anybody. My whole inclination is against such a comparison. What I did, may it please the Court, was to ask the results, and I think the results were put in the record, but as for attempting to——

(The Court) Gentlemen, whether it was asked before or not, we will not go into it any further. We will certainly not consider it in determining this case. I sustain the objection.

(Mr. Ransom) Note an exception.

At this time, then I respectfully move the Court, if I understand counsel for the respondents correctly, with counsel's permission, to strike from the record all reference to opinion as to the relative abilities of white and negro students in Baltimore County, brought out in his cross-examination.

(Mr. Rawls) May it please the Court, I think my statement is a sufficient answer to that. I am not conscious of any such statement. If it is to the effect that the whites have more capacity to pass an examination, I am perfectly willing for it to go out; but it is like asking——

(The Court) Well, if it is in, it will go out.

(Mr. Rawls) Yes.

(Mr. Ransom) Yes, sir, that is it.

Q. (By Mr. Ransom) Doctor Davids, in your study of educational provisions made for whites and negroes throughout the State of Maryland, have you discovered whether or not in any counties of the State of Maryland whites and negroes do attend the same school system.

(Mr. Roe) Objected to.

(Mr. Rawls) I object.

(The Court) I sustain the objection.

(Mr. Ransom) Note an exception.

Q. (By Mr. Ransom) Doctor, in your experience with these progressive achievement tests and your knowledge of them, from a study of them, would it, in your opinion, make any difference if the child had never before taken such a test, and had been used only to the essay type of examination, and when given this progressive achievement test, he was given the test in a new environment, by a teacher whom he had never seen before as a teacher, and under strange circumstances so far as his school room is concerned.

(Mr. Rawls) I object to that, may it please the Court.

(The Court) I sustain the objection.

(Mr. Ransom) Note an exception. Your witness.

CROSS EXAMINATION.

By Mr. Rawls:

Q. This progressive test that was given in January, 1935, in the white schools, have you any information as to the results of that examination? A. In Baltimore County, only as published in the State records.

Q. I mean, have you consulted the records to find out what that was? A. Meaning by records the State reports?

Q. I mean the information that is contained in the reports as to the results attained, or obtained, from those examinations in the white schools of Baltimore County? A. In so far as the summaries in the State reports, yes.

Q. What does it show to be the result in the white schools in Baltimore County? Consult the records, if you want to. A. Do you want them in terms——

Q. Not percentage, but what was the proportion? A. The white students passed—this refers, however, to all, as evidently there were a great many other grades besides the seventh grade.

Q. I am speaking of the seventh grade entirely. A. No, sir, I do not have them as such.

Q. Well, are they contained in the State report separately? A. No, the only report that I have been able to find has been on another basis, 12,682 tests.

Q. Suppose I told you that the percentage of those pupils in the white schools in Baltimore County, in the seventh grade, who passed was——

(Mr. Rawls) I want to get that proportion correct, your Honor.

Q. (By Mr. Rawls) That eighty per cent of the pupils in the white schools in Baltimore County had passed by a mark above the required passing mark, what would that indicate as to the fairness of that examination in testing the achievement of the pupil, with respect to its being a severe test or an easy test.

(Mr. Marshall) If your Honor pleases, we object to that question, on the same objection put forth by Mr. Rawls before, that that is a fact that is not in evidence. In other words, I do not remember that 80 per cent figure.

(The Court) Well, I think it was put the other way; probably eight or ten per cent failed.

(Mr. Rawls) I asked Miss Stern. She understood. She gave the figure 80 per cent.

(The Court) It may have been reversed.

(Mr. Rawls) It may have been.

(The Court) That is all right, I think.

(Mr. Marshall) Your Honor, I do not recall that.

(The Court) Well, I think that is the evidence. If it is not there, we will get it in.

(Mr. Marshall) Yes, but for the purpose of the record, there is an objection.

(The Court) All right.

(Mr. Marshall) And an exception.

(The Court) Take the exception.

Q. (By Mr. Rawls) What is the answer to that question? A. Well, on that hypothesis, which is merely a hypothesis—

Q. Well, for your purpose it is. A. Yes. I would still say that it was too severe a test, because tests ought to be so arranged that not more than ten per cent in graduation should fail.

Q. You think that ten per cent in any group is excessive, or everything above ten per cent is excessive. A. All I go on is the general information, or fall in what we call the normal curve, as the Missouri system, for instance, of examination, is based very definitely upon that, and whatever the scores are, and whatever scale they may be using, they are spotted upon a distribution curve; and it is then assumed that the upper seven per cent, or thereabouts, are exceptional, and that the lower seven per cent are definitely failures.

Q. If you have eighty per cent who attain above the required mark, isn't that, in your judgment, a fair examination to that group of pupils? A. Well, my only answer to that would be, if I may be hypothetical, if it is a fair question, then a great many white pupils in the other counties were most unfairly treated.

Q. Well, isn't the percentage of 80 regarded in educational circles generally as being a fair proportion? A. No, it is too severe, too rigid.

Q. That is your judgment, isn't it? A. Yes. And I think judgment generally would conform to that.

Q. You think it would? A. Yes.

Q. You think that Mr. Cooper and Miss Stern and the other people who have testified in this case, when they regarded that passing mark as a liberal passing mark, you differ in judgment from them, do you?

(Mr. Marshall) If your Honor please, I object to the question, on the ground that he is calling upon one witness to give his opinion and his idea about another witness. Under the general rule, that is not admissible.

(The Court) The testimony of the other witnesses is in, Mr. Rawls.

(Mr. Marshall) Yes, sir.

(The Court) And this gentleman's testimony is in. Let it go without any comparison.

Q. (By Mr. Rawls) The number 260 that was required for the June examination, what is your testimony with respect to that, that it was too high, too severe a requirement? A. I do not remember testifying to that.

Q. Well, was it? Was it too severe? A. Well, as I am saying, the test was not for the purpose of forming an excluding and passing test. It was a remedial test. And using a remedial test as a screen to exclude those who are unfit to go further is an improper use of the test.

Q. You differ in judgment, then, from those who used it for that purpose? A. Decidedly, decidedly.

Q. And you think that 260, a pupil who did not attain 260, or, as the testimony here shows, a colored pupil who did not attain above 250, you think that that is too severe a test? A. Well, when you stop to think that the manual states that the reliability of this test is 97.1 for the whole test, and as low as a reliability of 95 plus, that means to say that the makers of the test themselves have established by mathematical procedure that there is an error of from three to five per cent either way. We don't know, see. Now, certainly, that ten per cent of the total score of 260 at 10 points less is less than the margin of error, the probable error that may be in this thing.

Q. You think that when they allowed the colored pupils a margin of 10 points over the whites in the passing mark, or 9 points over the whites, you think that that was not enough?

(Mr. Marshall) If your Honor pleases, I hate to object, but I do not think that the Doctor has testified to that. If you remember, the statement was it was 255 to 259. The colored was 250. I do not see where he gets his ten points.

(Mr. Marbury) The whites, as testified to by Mr. Cooper, had 260, and the colored 250.

(Mr. Marshall) The manual is right there, and the Doctor has read from the manual, 250 to 255. And 250 was required for the colored. And Mr. Rawls has said——

(Mr. Marbury) 260 is the testimony.

(Mr. Rawls) 260 is the testimony as to what was used in the schools in Baltimore County?

(The Court) That is my recollection.

(Mr. Marshall) If your Honor pleases, I just want to make this one statement as to what the testimony is, and what this witness has testified from the manual, as to what the manual says. Now, if Mr. Rawls wants to bring out the point as to what Mr. Cooper said, all well and good; but he testifies what he says, and Dr. Davids testifies what he says.

Q. (By Mr. Rawls) This test in Baltimore County, you assume for the purpose of answering my question, was 250 and above, above 250 given in June, but the examination given in June of 1935, didn't that allow a far greater margin of error than any suggested in that manual? A. No, I think that is just about, probably about the same amount.

Q. In other words, you think 255 is the equivalent of 250? That is your mathematics, is it? A. The question again, please?

Q. You think that 250 is the same as 255; is that your judgment?

(Mr. Marshall) If your Honor pleases, is that a fair question, sir?

(The Court) Cross-examination, gentlemen.

(Mr. Marshall) All right.

A. If you are at all familiar with the theory of probable error in statistics, 250 is often taken as the same as 255.

Q. You think it is? A. Why, that is as near as you can come to it. In artillery fire, artillery fire allows for probable error that much.

Q. If you keep going down 5 per cent for each probable error, you get down to zero after a while. A. Oh, no, that is an absurdity.

Q. Sure, it is an absurdity, but it is no more of an absurdity than saying you work out the fair probability of error as five points, that it is logical to make that five points ten points, isn't it? A. Oh, no, I did not say that.

Q. Why did you stop at ten points? Why wouldn't you make it fifteen points? A. Because by mathematical procedure these tests have been found to have a spread of error over from 3 to 5 per cent. Therefore, in interpreting them, and if a person taking an examination had failed within from 3 to 5 per cent, one would say, well, perhaps, the fault had been in the instruction, and, therefore, we will decide the matter in favor of the human individual. That is the difference.

Q. If you had considered that probability of error when you fixed your passing mark at 260, and you considered that range of error as being 5 points, then there would be no justification, would there, for varying from that 5 points, would there? A. Well, I imagine that whatever justification one would take in using a test like this for the purpose for which it was never designed is arbitrary throughout, anyway.

Q. In other words, you think the whole thing is wrong? A. Yes, I do.

Q. You think the whole method is wrong in giving that examination? A. As the sole entrance examination, yes.

Q. And you would say that as to any examination, would you? A. Well, I would say that the most thorough study or secondary education in the United States was the secondary survey of the United States Government, and only about 11 per cent of American high schools depend upon an examination for promotion to high schools.

Q. Don't you know that in the State of Pennsylvania

it is the recognized method of promotion? A. No, I don't know that.

Q. You don't know that? A. No.

Q. Don't you know that there are several States in which the examination is the sole method of determination of entrance into high school? A. I only know that the only authoritative survey is the survey of the United States Bureau of Education upon the subject; that is all I know.

Q. Can you deny, or do you deny that it does prevail as the method of entering high school in several of the States? A. Yes—I do not deny that, but in the majority of the States I do deny that.

Q. You do deny that in the majority of the States it is used as the exclusive method? A. Yes.

Q. You do not know about Pennsylvania? A. I deny that in the majority of the counties in Maryland it is used that way.

Q. The counties in Maryland? A. Yes.

Q. Do you know how many in Maryland do use it? A. It has only so far been brought into evidence that Baltimore County is using it.

Q. I am asking you of your own knowledge now. Are you sufficiently familiar with the public schools in Maryland to say in how many counties it is used as the sole method of promotion into high school? A. I have said that it has so far been brought in evidence only.

Q. I am not talking about evidence. I am talking about what you know about it. A. That is all I know about it.

Q. You do not know anything except what you heard here? A. Yes, sir.

Q. And you are not able to say whether it is used in any other county or not? A. Precisely.

Q. Now, this examination in 1934, have you seen that examination? A. If you show me what you have in mind, I will tell you.

Q. Well, that was exhibited to you, I thought, this morning, during your examination. A. This is—

Q. That is 1934. A. That is only one sheet of the questions.

Q. There are four sheets here, if you will examine it. You will see that there are four sheets here, with the answers attached. That is the complete examination. A. Yes, I have gazed over this.

Q. You have gazed over this? A. Yes.

Q. Did you just gaze at this other one that you have been testifying about? A. Well, must we have an exact definition of the word "gaze"?

Q. You are testifying, purporting to testify, as an educational expert on these examinations, and I am asking you if you have examined that paper. A. Yes, I examined that.

Q. And these questions, for the purpose of forming an opinion, for the purpose of testifying? A. Yes, I have examined it.

Q. Now, that examination in 1934 was a different type of examination from the one in 1935, wasn't it? A. Oh, yes, radically different.

Q. Radically different, you think? A. Yes.

Q. Is it a severer examination, or not, than the one in 1935? A. Well it is not as scientific an examination, as good an examination. I could not say how severe it is without a reexamination, point for point, of these questions against the curricula, which I do not have.

Q. You do not think it is an accurate method of ascertaining the requirements of the child, the achievements of the child, as the one in 1935, do you? A. Well, the essay type is notoriously unreliable.

Q. With even this type, however, is it or not a fair examination, assuming you are using the essay type, is that examination a fair examination of seventh grade children? A. You mean as fair as an unfair examination could be?

Q. No, I am talking about a fair examination, as compared to any examination.

(Mr. Marbury) Is that particular one?

Q. (By Mr. Rawls) Is that particular examination a fair examination? A. This essay?

Q. Yes. A. Well, I have said that I do not think, and I think educational thinkers agree that essay types are not fair.

Q. In other words, you would cut out that type of examination altogether as being unfair? A. Yes.

Q. You think so. You think both of them are unfair then? A. I think in the purpose, in the way in which it was used it was unfair, yes.

Q. You think for the purpose of ascertaining whether or not a child had successfully done seventh grade work, you think those examinations were not fairly reflective of that purpose. A. As a test of whether they had or had not done seventh grade work in the County of Baltimore, yes, it was unfair.

Q. In what way? A. Because, as I said, it is not a valid test.

Q. It is not a valid test to you. You do not think from your viewpoint that indicates the achievement of the child? A. No, not with reference to the curriculum of the County.

Q. Well, now, with respect to that, what do you know about the curriculum of Baltimore County? Have you ever taught in the Baltimore County schools? A. No.

Q. Have you ever been inside of a Baltimore County school? A. Yes.

Q. When did you go in one? A. Oh, just casually visited them.

Q. Yes. A. Not to study them, I will admit that.

Q. You are not familiar with Baltimore County schools at all? A. No.

Q. Now, how do you propose to answer that is not

a fair test of the Baltimore County curriculum if you have not made any examination of the Baltimore County curriculum? A. For the same reason——

Q. You can not do it? A. For the reason that it was not devised from samplings of the Baltimore County curriculum. That is right on the test itself, that it was devised in California.

Q. What samplings of the Baltimore County curriculum have you made in order to ascertain that? A. Well, I have not made any.

Q. You have not made any, and yet you, on that stand, are swearing that that is an unfair examination, because it does not reflect the seventh grade work in Baltimore County. A. I am simply basing an opinion upon the mathematical impossibility that it would be.

(Mr. Rawls) May it please the Court, I move to strike this witness' testimony from the record. It seems to me that he has demonstrated that he is absolutely incompetent to testify with respect to the matters that he has sworn to on that stand.

(Mr. Ransom) If the Court pleases——

(The Court) Let it stand. Anything further, Mr. Rawls?

(Mr. Rawls) I note an exception, may it please the Court. No further questions.

Q. (By Mr. Rawls) There is one other question. This examination in which she got 244, that was 11 points below the allowance that was made for any possible error in that examination, wasn't it? If 255 was the mark prescribed, then she was 11 points below that mark, wasn't she? A. Yes.

Q. And even if you had allowed 11 points, or 10 points, in addition to the 5 points that we already allowed in the manual itself, she would have failed, wouldn't she? A. That would have depended upon the judgment of the person, of course. If I had been giving the tests, no.

Q. Now, let me ask you, did the marking of that 1935

examination depend upon the judgment of the person marking the examination? A. The marking did not depend. It is supposed to be as nearly abjective as anything could be. And it is objective in the sense that it is either there or is not there. But the interpretation of the final result is subjective.

Q. Now, the question of whether or not the pupil has attained the passing mark is a mathematical matter, isn't it, under the 1935 examination? A. The passing mark as set by——

Q. As set, as established by whatever the passing mark is, but the ascertainment of that on that paper is a matter of mathematics, isn't it? A. Yes.

Q. The judgment of the marker does not enter into that at all? A. No. That is, as to the finding of a point on that scale, the judgment does not enter.

Q. Precisely. In other words, whether you are going to set 255 as a passing mark, or 250 as a passing mark, or as you would have it, as low as 244 as a passing mark, that is a matter of judgment, isn't it? A. Yes.

Q. That is a matter of judgment, but in the particular case of that test it was judgment based upon actual experience, wasn't it, with children in taking that examination? A. Based upon California children in Los Angeles County, yes.

Q. Yes, 1100 children, wasn't it? A. Yes.

Q. And wasn't that examination used generally throughout the United States? A. If you mean generally, sporadically here and there, it was. But the weakness of that particular thing is brought out by the fact that States like Illinois and Indiana developed their own achievement tests, because they realized that certain factors of environment enter into not only the making of the test but in the taking of the test.

Q. That test—now, follow my question—that test had been used quite generally, had it not, in the United States, in different States of the United States? A. I can not say as to that.

Q. You can not say. Well, do you know or not? A. No, I don't know.

Q. You don't know. Well, now, you do know that the manual prescribed 255, you say, in reading it, as the allowance for the five points margin for error, didn't it? I understand your testimony to be that. A. No, I did not get you. Will you please repeat that?

Q. You read a mark from that manual, or a number, my recollection is 255, which was an allowance of five points below the prescribed 260; am I correct about that? I may be wrong. A. No, there is nothing like that in there. The prescribed 260 for passing is simply a local matter. There is nothing said about that in the manual.

Q. Well, doesn't the examination itself fix 260? A. No, 255 to 260 would place the child at the achievement grade level of 7.9. That is all it says.

Q. Now, 7.9, why do you take 7.9 for the seventh grade in Baltimore County? A. I never took it for that.

Q. Well, who did take it? A. I don't know.

Q. Well, where do you get 7.9 from? A. There is 7.9 on here, which corresponds to the figure mentioned. But as to the test itself in Baltimore County, I do not know anything about that.

Q. You don't know? A. No.

Q. You did not know at the time this examination was taken what point it should be, whether 7.9 or 7.10? A. No. I understand that the mark was set at 260 on this examination, but I did not know that they set any mark at 7.9.

Q. Well, there never was, was there? A. I thought you said it was.

Q. No, I understood you to testify just a moment ago that it was 7.9, didn't you? A. No, I testified that a score on this test of 255 to 260 on the schedule of norms used, located the pupil at the achievement grade of 7.9.

Q. 7.9? A. On this score, that is all.

Q. Precisely. A. Yes.

Q. You do not know, though, whether Baltimore County at the time that that examination was taken was at 7.9 or not, do you? A. No.

Q. Suppose—— A. Now, be clear. What do you mean by Baltimore County being at the point 7.9 at that time?

Q. I am talking about the point you are talking about. You say on that manual that 7.9 would give you the figure 255, is it, 260? A. That is——

Q. In other words, if you assume—let me be perfectly fair to you—if you assume that at the time this examination was taken that the pupil's status was the 7.9 status, then translated into numbers that would be 255. A. Somewhere along there.

Q. 255 to 260. A. That is to say, if some one were using these synonymous terms, he would mean when he said 7.9, he would mean what this scale gives between 250 and 260, or if he were using 255 to 260 on this scale, he would mean the same thing that the scale meant at 7.9; that is all.

Q. Well, suppose I tell you that in Baltimore County at the time this examination was given that the status of the pupil was at 7.10, would that increase.

(Mr. Marshall) If your Honor pleases, there is no testimony of that seven point ten.

(The Witness) You mean 8.

(Mr. Marshall) I do not remember that.

(The Court) I do not remember that. I know somebody testified about seven point 9 to seven point 10. I do not know who it was.

(Mr. Rawls) Yes, your Honor. Let me see if I can not translate that into something we can understand.

Q. (By Mr. Rawls) What does that seven point nine mean? A. In terms of this score?

Q. Yes, in terms of that score. No, I do not mean in terms of the score exactly; I mean with respect to

the time that the child is taking the examination. A. It has no connection that I can see, because this examination was given at two different times, wasn't it?

Q. I am assuming now that it was given in June of 1935 to the colored children; and you say according to the scale that would place the child at 7 point 9, would it? A. If the scoring was 255 to 260 on this scale.

Q. Yes, but suppose you had a 10 months school year, doesn't that seven point nine mean that they have nine months schooling? A. Well, these tests are usually developed on the basis of nine months schooling, which allows a one percentage point.

Q. Suppose I tell you in Baltimore County it is ten months schooling? A. Yes.

(Mr. Marshall) If your Honor please, I am perfectly willing to let it come in, I mean that line of testimony, but I thought that these hypothetical questions were supposed to assume facts already in evidence.

(Mr. Rawls) Not on cross-examination, may it please the Court.

(The Court) Yes, that makes a difference, that makes a difference.

(Mr. Marshall) Unless he is going to follow it up, I mean, you have got a blank statement there.

Q. (By Mr. Rawls) In other words, if you have a ten months course in Baltimore County, according to the scale, that would give you a higher mark for passing at the end than if you had a nine months course, wouldn't it? A. Will you repeat that question again, please?

Q. If you have a ten months course in Baltimore County, translated into time, doesn't that give you a passing mark of 260? A. I still fail to get the point you are driving at. If you mean to readjust the age grade, or the grade placed here for the ten months, rather than nine months school—

Q. Precisely. A. —the 8.0 would probably correspond to the norm of the—

Q. What is the norm at 8.0? A. I think it is just the next five points swing.

Q. It would be 260?

(Mr. Marbury) 260 to 265.

(Mr. Ransom) May it please the Court, we object to testimony coming from counsel here.

Q. (By Mr. Rawls) 260, is that right? A. Yes.

Q. That is correct.

(Mr. Marbury) Let him look at it. 260 to 265.

Q. Do you know where to find that on that paper that I handed you? A. This?

Q. Yes. Do you know how to read that sufficiently to answer my question? A. Yes, but the norms are not on here.

Q. You swear that the norms are not on this paper that I hand you and that you are now looking at? A. The schedule of norms is not on there, no.

Q. In other words, you can not ascertain the norms? You do not know how to ascertain the norms from that paper that I handed you? A. No. I do not think you can either, can you?

Q. You are testifying here as an expert, aren't you? A. I never called myself an expert, no.

Q. Well, that is what your counsel called you. He probably sees now he made a mistake.

(Mr. Marshall) Now, if your Honor pleases, we hate to be facetious, but these statements are going in the record.

(The Court) Just a minute.

(Mr. Marshall) This record has got to be kept open.

(The Court) Just a minute.

Q. (By Mr. Rawls) Do you swear that the norms are not ascertainable from the paper that I now hand you? A. They are ascertainable, but they are not there

in schedule form. They can be obtained by the use of the profile.

Q. Do you know how to ascertain the norms from that paper that I am handing you? A. Yes. Not readily.

Q. Yes, what? A. Not readily. Yes, I can ascertain it.

Q. But a moment ago you told me you could not. A. I said they were not there in the schedule. They are not. They are there on the profile form.

Q. But they are there to a man familiar with the examination just as readily as the paper you now hold in your hand.

(Mr. Marshall) If your Honor pleases, in deference, we feel a sort of duty to the witness in putting him on the stand, and I object here to any brow-beating of the witness, and that is all that is going on now.

(The Court) I do not understand it that way. The gentleman is able to take care of himself.

(Mr. Marshall) Yes, but I think it is quite fair.

Q. (By Mr. Rawls) You have undertaken to criticize this examination. Isn't it true that when I first got you on cross-examination that you were not sufficiently familiar with it to know that the norms were ascertainable from the paper I just now handed you? A. Oh, no, I was familiar with it. I understood you to mean that the norms were presented in these forms, with these intervals.

Q. Yes. A. They certainly are very difficult of quick-ascertaining them on this chart here.

Q. You think it is difficult to ascertain from this paper the norm for the particular— A. In the terms of these intervals that you have been using, yes.

Q. Not readily ascertainable from this paper, the examination paper itself? A. Not very readily, no.

Q. You did not know it was on there until I called your attention to it, did you? A. Certainly I knew it was on there.

Q. And you think you so testified? A. I certainly do.

Q. Now look at that——

(Mr. Marshall) If your Honor pleases—just one moment, Mr. Rawls—for the purpose of keeping the record straight, all through the testimony he has been pointing to one paper or the other, and the record will not show which he is talking about. Could we read into the record which is which that he was speaking about?

(Mr. Rawls) I have deliberately taken up each paper when I referred to it, and I called one the examination paper and the other the manual.

(Mr. Marshall) Mr. Rawls, you may have meant to, but you did not.

(The Court) It can be easily designated.

(Mr. Marshall) Refer to the examination paper and the manual.

Q. (By Mr. Rawls) You have been asked if the norm for a ten-months period was not ascertainable from the examination paper itself. You recall I asked you that. A. Yes.

Q. And your first answer was that it could not be ascertained from it, wasn't it? A. I do not recall exactly what I said. I was thinking in terms of ready ascertaining. I myself can hardly see these.

Q. I know, but I can not remedy that. You have been told that Baltimore County, to assume that Baltimore County has a ten-months course. A. Yes.

Q. Now, looking at the examination paper, what would be the norm for the ten-months course? I can give you a magnifying glass, if you want it.

(Mr. Marshall) Your Honor, could that be stricken from the record?

(Mr. Rawls) No; I mean that seriously, for the witness to read it. I do not mean that facetiously. The Court has a magnifying glass there.

(The Court) Give it to him, Mr. Crane.

(The Witness) These are so fine.

(Mr. Rawls) It is so fine, your Honor. I am serious about that.

(The Court) Yes, I have a glass. It will be here in a minute. Just suspend for a moment.

(A short recess was then taken.)

Q. (By Mr. Rawls) At the time of the adjournment, I had asked you to look at the norm upon that examination paper itself, as distinguished from the manual, which would correspond in the seventh grade to 8.0 grade, assuming that to be the correct grade at the time this examination was given in June, 1935. A. Yes.

Q. What would that norm be? A. You mean the grade norm?

Q. Yes, the grade norm. You are assuming the grade norm of 8.0. A. You want the grade norm in numbers?

Q. Yes, in numbers. A. It would be 260.

Q. 260 to what? A. 265.

Q. 260 to 265. A. Yes.

Q. And what is indicated by the 260 to 265? Isn't that the margin of error that you have spoken of? A. Well, it is a margin of error, yes, but not sufficient to take care of three to five per cent of error.

Q. Three to five per cent. Of course, not three to five per cent of 260, but isn't there a margin of five points upon your norm? A. Yes.

Q. And you found that upon that examination paper there; it is there very clearly, isn't it? A. Yes, in very small print.

Q. Small print, but it is ascertainable from that examination paper. A. I think you need a ruler to do it.

Q. Yes. And it took you a little while to find it, didn't it? A. Yes, I could not see it.

Q. You could not see it. As a matter of fact, you

did not know it was there until I told you, did you? A. Well, I knew it was on there, yes. I do not profess to know every item on that thing.

Q. Now, then, if you assume the 8.0 for the ascertainment of the norm, and you say it is between 260 and 265, and you were incorrect in your testimony, at least your testimony that 255 to 260 would have been the correct norm for the Baltimore County schools.

(Mr. Marshall) If your Honor pleases, that question is unfair. His other question is based on the assumption that the Baltimore County school system is 8.0. Now, he comes back and says, when you said that the Baltimore County School system was between 255 and 260, you are wrong. He is putting a hypothetical question upon a misstatement of facts.

Q. (By Mr. Rawls) If that assumption is correct, you were wrong in your statement. A. Well, these tests have been developed with the idea of presenting steps of difficulty or areas of difficulty intervening between actual grade steps. For instance, between 7.0 and 8.0. And then, for the purposes of final statement by mathematical numbers, they have been divided into nine steps in between. Now, you might assume that the intention of the makers of the test was that 7.9 would represent the completion of either a nine month or ten month term.

Q. In other words, you think that a nine months course is just as good as a ten months course? A. Well, nobody knows that.

Q. Well, that is the basis of your testimony, isn't it? A. Nobody knows exactly whether it is or not.

Q. In other words, you are basing your testimony on the theory that a ten-months course is not any better than a nine-months course; is that correct? A. I am saying that the makers of this test based their test upon the completion of the year's work, whether it is nine months or ten months.

Q. You say that their basis is identical for a nine and a ten months course? A. Well, as far as we have any idea—I have no information about that.

Q. You have no information? A. No.

Q. Well, can you testify on the subject at all if you do not know one month's— A. I can not testify on that subject, no.

Q. You can not? A. No.

Q. And you do not know on that very examination paper itself why it discloses that a ten months' course requires a higher norm than a nine months' course? A. I do not remember having read that, no.

Q. You can not find that on that? A. I might. I do not remember having read it.

Q. Have you ever taught in any elementary school? A. Not for a number of years, no.

Q. Well, how long since you taught anywhere? A. In any elementary school?

Q. In any school. A. A couple of years.

Q. Have you been a school teacher all your life? A. Indeed not, no.

Q. How long have you been interested in education, as a profession, I mean? A. For sixteen years.

Q. Were you formerly connected with the Federation of Churches? A. Yes.

Q. What is your situation there? A. I was Executive Secretary of the Baltimore Federation of Churches.

Q. For how long? A. For two years.

Q. For two years. And you have never taught in any elementary school in Maryland? A. No, I never have.

Q. Or anywhere else? A. Oh, yes.

Q. Where did you teach? A. I taught in Elk County, Pennsylvania, substitute teacher.

Q. Substitute teacher? A. Yes.

Q. How long did you teach? A. Oh, I could not say now. Probably two or three weeks in a year.

Q. Anywhere else that you have taught in any elementary school? A. No.

Q. How long since you were secretary of the Federation of Churches? A. Four years ago.

(Mr. Rawls) That is all.

RE-DIRECT EXAMINATION.

By Mr. Ransom:

Q. During your cross-examination, Doctor, you said that the test, the progressive achievement test given in 1935 to the petitioner was, in your opinion, not a fair test, because it did not represent a thorough sampling of the Baltimore County elementary curriculum; is that correct? A. No, I did not say it like that. I said it was developed in Los Angeles County, constructed through, according to the statement of the makers of the test, samplings of the curriculum in Los Angeles County. Now, if the curriculum in Baltimore County is identical with that in Los Angeles County, then this test would be constructed upon fair samplings. But my judgment is that it is highly improbable that they are identical.

Q. Where do you obtain the information that that was based upon samplings taken from the Los Angeles County system? A. Simply because that is the general practice in constructing tests.

Q. Is there anything on the manual that accompanies this test that indicates the source of the samplings? A. I will have to examine the manual to be sure.

Q. Will you please look at it. A. (After examining manual) According to that, it was based upon the curriculum in some of the educational systems; it does not state it was based upon the curriculum in Los Angeles County.

Q. Where do you find that statement that you just made, Doctor? A. "The most progressive curriculum of those grades now in use in some of the outstanding educational systems."

Q. That is on page 1 of the manual? A. Yes.

Q. All right. Now, for the purpose of clearing up the record here, Doctor, you have spoken about a spread of error, according to the authors, which might vary from about three to five per cent; is that correct? A. Yes.

Q. What is the total possible grade that might be made upon that examination? A. As I recall it, a score—you mean score?

Q. Total possible score? A. 360.

Q. Is it 360 or 390? A. Just a moment. 390. That is right.

Q. Now, in speaking of that spread of 3 to 5 per cent error, did you mean to confine yourself to the proposition that a variation of five points would account for that spread of error? That is, if the total score or total norm for a 7.9 placement were from 255 to 259, did you intend to indicate that that five points spread in error would be the equivalent of a 3 to 5 per cent spread of error? A. No, I did not mean to say that one point on the scale was equivalent to one per cent, no, sir.

Q. Exactly. Now, you have spoken during your cross-examination of a proper method of ascertaining the normal percentage of failures by the use of such an examination, and you spoke of placing the grades on a so-called normal curve, according to the Missouri plan; is that correct? A. Yes, so-called.

Q. What do you mean by placing the grades on a normal curve? Will you explain that as simply as possible? A. Well, the grades are spotted on a diagram, representing vertical and horizontal values. The number of those grades is represented by the vertical graph line, while the grade itself runs from zero to the highest grade, to the right of the zero point horizontally, and then by connecting those points normally we get a bell-shape curve, with the high point of the bell ranging about the average of the distribution. Does that answer the question?

Q. Yes. Now, you said, I believe, that somewhere around seven per cent of the grades on that curve should be excessive, and about seven per cent should represent

failures; is that correct? A. I did not say that it should. But it is pretty generally, as I remember it, agreed that that is about the way it works out; that if the test questions are properly prepared, if they are objective, if the work of the school is done properly, then normally about seven per cent of them can be expected to fail.

Q. Now, if that examination were given in a system, and you were told that fifty per cent of those who took the examination failed, what would you say that that tended to indicate? A. It indicates, I think, that something is wrong with the system, with the teaching, with the curriculum or something not with the pupil.

Q. Exactly. Now, assuming, Doctor, that you had an essay examination of the type used in 1934, when this petitioner—I believe you have seen a copy of that? A. Yes.

Q. And assuming that that examination *were* made up by supervisors and teachers who have never come in contact with this particular pupil, or with the school in which she was taught, and is presumably based upon a course of study which is supposed to be standard throughout the system, and yet the compilers of the examination do not know whether that course of study is or is not a method for the benefit of a particular group of students, among which petitioner is placed, would you then say that such an essay examination of that type would be a fair test as the sole criterion of determining whether or not that child should be promoted to high school? A. I think that—

(Mr. Rawls) I object to that, your Honor.

(The Court) Sustained.

(Mr. Ransom) Note an exception, if you please.

Q. (By Mr. Ransom) There has been some testimony during your cross-examination, Doctor, as to the question of a ten-months system being the equivalent of an 8.0 grade placement. Assuming that a child enters school during the first or second week of September, and that the examination is given during the first or second week

of June the following year, should the norm under this progressive achievement test be placed at 8.0 or 7.9?

(Mr. Rawls) Objected to, may it please the Court.

(Mr. Ransom) If the Court pleases, Mr. Rawls on cross-examination made a great deal of the fact that this was an 8.0 norm rather than 7.9.

(The Court) I will let him answer the question.

(Mr. Rawls) If you give June 20th as the correct date, I have no objection. Make it specific, and I won't object.

Q. (By Mr. Ransom) I will make it the third week. I will make it definite. Make it June 20th. Would the norm for the 8.0 grade placement level, or the norm for the 7.9 grade placement level be the proper one to use? May I add to that, assuming the fact that was assumed in cross-examination, that 8.0 on this particular scale corresponds to seven years and ten months? A. I should say that the 8.0 would be. Of course, these fine gradations, the fine gradations here in this scale were never intended for sectioning. They never section such fine shades as that. Ten, or nine or ten different grade levels within a grade, they are intended to give some idea of the comparative stages of achievement, but they are not intended to provide such fine gradations as that.

Q. Now, then, one other question, Doctor. In the light of your last answer, assuming that a student had taken a progressive achievement test and had reached the norm shown on the manual which accompanies this particular test for her age and grade placement, would you then say that such an examination would be a fair criterion, used alone, for the purpose of determining whether or not that child should be promoted to the next higher grade?

(Mr. Rawls) I object, may it please the Court.

(The Court) Sustained.

(Mr. Ransom) Note an exception.

Q. (By Mr. Ransom) During your cross-examination, Doctor, you testified that the most authoritative survey

on secondary education in the United States was a survey put out by the United States Department of Education. Is this the survey to which you referred (handing paper to witness)? A. I don't know that I said most authoritative. I said the most comprehensive. Yes, this is it. I intended to say most comprehensive. This is it. This is the one of the thirty-one or thirty-two monographs of the series, yes.

(Mr. Roe) We object to it.

(Mr. Ransom) We offer it in evidence as the basis for the Doctor's testimony.

(The Court) Objection sustained.

(Mr. Ransom) Note an exception.

(Mr. Rawls) I want to say in that particular case we have no objection to any particular data going in the record that may be testified to by the Doctor as the basis for his own opinion.

(Mr. Ransom) I note an exception to the refusal to receive the entire pamphlet in evidence.

Q. (By Mr. Ransom) You made a statement during your cross-examination that the majority of the schools throughout the United States—if I am quoting you incorrectly you can tell me later—say that the use of an examination as the sole criterion for admission to the next higher grade is not good practice. Can you find that in there, the source of your report? A. Well, not in precisely that way. On page 471 in the summary of this, it has this to say, "In nearly all schools studied, the passing mark means promotion. And in the final last analysis it is the teachers who usually decide who shall pass and who shall fail." Whether that is the same meaning or not—

Q. Is that the basis of your statement? A. Yes.

Q. That it is contrary to good educational practice? A. I would not say. I can not pass upon the goodness of it. I am saying the prevailing practice.

Q. Is it based, then, on your statement that the pre-

vailing practice is to rely upon something other than the examination alone? A. Yes.

(Mr. Ransom) That is all.

RE-CROSS EXAMINATION.

By Mr. Rawls:

Q. Do you think that the statement you have read from that pamphlet is equivalent to the statement that the promotion of pupils to high school as the result of an examination alone is not good educational practice? A. No, I do not say that. I do not base it upon the goodness or badness of it. I say it is not the prevailing educational policy.

Q. Do you think that the statement that you read is even a statement that the prevailing practice is not to promote as a result solely of an examination? A. I so interpret it that way.

Q. You interpret it that way? A. Yes.

Q. And the statement that you refer to——

(Mr. Rawls) Did your Honor hear it when it was read?

(The Court) Yes.

(Mr. Rawls) I won't repeat it, then.

Q. (By Mr. Rawls) It appears at the bottom paragraph of page 471 of the pamphlet? A. Yes.

Q. And it has been read into the testimony? A. Yes.

Q. And that is the basis of your statement? A. Yes.

(Mr. Rawls) That is all.

(Mr. Ransom) That is all, Doctor, thank you.

(Examination of witness concluded.)