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THE EVALUATION OF THE FREE PUBLIC SCHOOL FINANCE PRACTICE IN VIRGINIA

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Since the State of Virginia has recognized the principle that education is a state function it must also recognize its duty and responsibility by guaranteeing each child at least a satisfactory minimum educational offering. If the state should undertake to provide all of the funds necessary to maintain the schools in the local communities it would be intolerable for it to use its revenues, collected from the state as a whole, to support a program of education which was not available to all sections of the state. Such a course would be highly dangerous in a democracy. There is ample evidence in the present state aid system of an endeavor to provide that every child in the state shall have an opportunity to receive at least an elementary education.

The delegation of a part of the support and control of schools, to local communities, does not relieve the state of the necessity of providing facilities for education to all citizens of the state.

Moreover what the state offers must be financed so as to apportion the burden equitable over the entire state. In other words if the state were to assume the entire burden of the educational system, it would follow that it should make its offering of uniform quality throughout the state, and support it by a tax system which bore equally upon all parts of the state. This is what is generally meant by "Equalization of the Educational Opportunity".

The fundamental principles of equalization have been stated in Volume I of the Educational Finance Inquiry, Viz:

"To carry into effect the principle of "equalization of educational opportunity" and "equalization of school support" as commonly understood it would be necessary; (1) to establish schools or make other arrangements sufficient to furnish the children in every locality within the state with equal educational opportunities up to some prescribed minimum; (2) to raise the funds necessary for this purpose by local and state taxation adjusted in such a manner as to bear upon the people in all localities at the same relation to their tax-paying ability; and (3) to provide adequately either for the supervision and control of all the schools, or for their direct administration, by a state department of education."*

It is, then, the purpose of this thesis to suggest a plan whereby the funds distributed by the state of Virginia may be apportioned in such a way that; (1) every child in the State of Virginia will be insured at least a minimum offering regardless of where he or she lives; and (2) whereby the cost of such an offering will be distributed equally throughout the state in proportion to the ability of each locality to pay.

To be practical this plan must be flexible enough to be readily adaptable to the financial conditions of the state as well as to the changing standards of a progressing commonwealth, it must be simple to provide for easy and efficient administration, and at the same time it must insure an equitable distribution of support and burden.

Section 129 of the Constitution of Virginia provides that: "The General Assembly shall establish and maintain an efficient system of public free schools throughout the State."

It is evident that, as a result of this provision, the people of the State were conscious of the need and value of Public Free Schools. Certainly, they were also aware of the fact, that if such schools were to be provided some means would be necessary

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*Strayer, George D. and Haig, Robert M.; The Financing of education in the State of New York. Educational Finance Inquiry Volume I, Page 174.

for the continuation of the same.

No better provision could have been made than was made by the insertion of the section already referred to in this connection. Section 129 is inhibited, however, by section 135 of the Constitution of Virginia which provides that:

"The General Assembly shall apply the annual interest on the literary fund; that portion of the capitation tax provided for in the Constitution to be paid into the State treasury, and not returnable to the counties and cities; and an annual tax on property of not less than one nor more than five mills on the dollar to the schools of the primary and grammar grades, for the equal benefit of all of the people of the State, to be apportioned on a basis of school population; the number of children between the ages of seven and twenty years in each school district to be the basis of such apportionment; but if at any time the several kinds or classes of property shall be segregated for the purposes of taxation, so as to specify and determine upon what subjects State taxes and upon what subjects local taxes may be levied, then the General Assembly may otherwise provide for a fixed appropriation of State revenue tothe support of the schools not less than that provided in this section."

Since the literary fund is established it is no doubt a just and wise plan to distribute the income from it, to the benefit of the public free schools of the state. It is doubtful, however, if it is a good financial policy to continue the enlargement of this fund. There seems no particular financial gain to the state by increasing it.

Section 173 of the Constitution of Virginia provides that one dollar of the one dollar and fifty cents of the capitation tax be used for school purposes. This same section further makes it possible for a county or city to levy an additional capitation tax of one dollar for school purposes.

The Constitution places a minimum as well as a maximum limit on taxable property for school purposes, which is in fact an unsatisfactory arrangement as conditions are from time to time likely to vary so as to make it necessary for a higher rate or,

even by some unforseen possibility, for a lower rate than that provided in the constitution. A desire to provide for the equal distribution for the benefit of all the people is the spirit that furnishes the background for this study.

No doubt when the constitution was prepared the people felt that the school population would very satisfactorily take care of the plan of distribution. The basis for this reasoning naturally was that all children would take advantage of the free school system and attend. In case they did not attend the law of averages would make its showing equal in all parts of the state. We can readily see, however, that equal benefit of all the people is not realized in this way. To illustrate the case theoretically we may think of a given county having a great many children of school age but at the same time only a very few actually going to school. While in another case the school population of a county may be practically the same but all of the children of school age are attending school.

In the former case not many children attend school which means that fewer teachers are to be employed. Thus total school costs in this county are relatively low. The state aid received by this county will likely pay most of the school costs leaving but a small amount of local funds to be raised. Now in the latter case because a very high percentage of those children actually residing in the county do attend school, we readily conclude that there will of necessity be required a greater number of teachers. This results in higher school costs. A greater sum will be required locally to provide the educational opportunity. Yet in that these counties had the same school population, it follows from the constitutional provision that they get the same

amount of state aid--unequal benefit to the people of the state.

To cite an actual case, in the report of The Superintendent of Public Instruction of Virginia for the school year 1925-1926 page 66 we find Mathews County with a school population of three thousand eight hundred seventy-five and Scott County with a school population of nine thousand eight hundred thirty-six. In this same report on page 27 we find that the percentage of attendance on population in Mathews County for the year 1925-1926 is 36% while in Scott County for the same year is 88%. With other things remaining constant in these counties we would have a condition in which one county actually is benefitted more than twice as much as the other with respect to the state support divided on the basis required by the constitution. Certainly there is no equality of distribution in these counties. These are not the only discrepancies but are given here to illustrate the fact in mind.

Let us develop another case showing the inequality of benefit as exists in Amelia County and Floyd County. For the school year 1925-1926 the school population of Amelia County was three thousand nine hundred seventeen. The attendance was 41.17% of the population which gives one thousand six hundred eleven as the average daily attendance. Multiplying the average daily attendance by one hundred fifty days (the number of days school was open in the county this year) gives the total aggregate pupil days for the year. Dividing this into the amount received from the State (on the basis of school population) which was $25,705.60, gives ten and a fraction cents.*

Now doing the same thing for Floyd County we find the school

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*Data taken from the Report of the Superintendent of Public Instruction for the school year 1925-1926.

population was four thousand eight hundred six, the percentage of attendance on this population was 85.64%, the length of school term was one hundred forty days, the state aid on the basis of school population was $31,594.12. Dividing the state aid by the total aggregate pupil days, as we did in the above paragraph, gives five and a fraction cents. Comparing this result with that for Amelia County, we find that Floyd County really gets only about fifty per cent as much benefit.*

Again let us consider the inequalities resulting from the communities that have a short school term as compared with those having a long school term. Referring to the same report we find that Lee County held school for a period of one hundred twenty-three days in 1925-1926 while Arlington County had school for a period of two hundred days. Surely there is not equality of educational opportunity when state funds are distributed on the basis of school population.*

Another point of inequality of educational opportunity is seen when we note that some counties have a high percentage of their enrollment in the high school department and other counties have a very low percentage of their enrollment in their high school department. From the Superintendent's report above referred to we find that in the case of Buchannan County one and one half per cent of the enrollment for the year 1925-1926 is in the high school department, while in Arlington County thirteen and nine tenths per cent of their enrollment is in the high school.*

Another approach to determine the inequality of benefit is by a comparison of one room rural schools. The most expensive minimum program is to be found in a small one room school.

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*Report of the Superintendent of Public Instruction of Virginia for the school year 1925-1926.

We can see then, where Franklin County with 128 rural one room schools does not get the benefit that Warwick County which has but one rural school.

We further understand that all over the State of Virginia equal benefit to all the people is not a fact of realization. For example a country community has a school provided, but because of the insufficiency of the state aid as well as the local conditions the school can not provide a program equal to that provided in more prosperous counties. This condition of affairs could be overcome by the state establishing a minimum program and rendering aid needed to bring the poorer schools up to such a program. The spirit of public free schooling is not maintained when we have the situation existing, in which the wealthy community is not desirous of rendering aid where needed.

The following provision is made in section 136 of the Virginia Constitution:

"Each County, city, town, if the same be a separate school district, and school district, is authorized to raise additional sums by a tax on property, not to exceed in the aggregate in any one year a rate of levy to be fixed by law, to be apportioned and expended by the local school authorities of said counties, cities, towns and districts in establishing and maintaining such schools as in their judgment the public welfare may require; provided that such primary schools as may be established in any school year, before any part of the fund assessed and collected may be devoted to the establishment of schools of higher grade. The board of supervisors of the several counties, and the councils of the several cities, and towns, if the same be separate school districts, shall provide for the levy and collection of such local school taxes."

Herein is one of the main weaknesses of the present policy of financing the public schools of Virginia. A thing may be good for one community and not so good for another. In this case one county is desirous of the best schools that it can provide while another is entirely satisfied with the least possible. In the latter case the county may or may not realize the value and need

for maintaining a good school system, but even so, they refuse to provide for the best that they can afford.

If the county school board is desirous of providing better schools and better learning conditions and demonstrate their desire by submitting their budget to the county Supervisors, their work and efforts in the educational direction may come to naught by the board of supervisors voting down the budget recommended. As it is the local board has no real power whatsoever and at the same time is held responsible for the type of schooling the children of the county are subjected to for the given period. This situation might be overcome by making the county school board fiscally independent--making them responsible in the same way that they are now but giving them more responsibility by the added power they would assume. That is to say, if the school board is given power to levy taxes for school purposes they would then have more of a responsibility in that they would be required to show wherein the funds were spent. They certainly would be no more careless than they are now, but rather they would have the responsibility of keeping their local school up to a reasonable standard. Not only this but they would need to follow up their work and see to it that the school moneys were spent efficiently and wisely.

The recommendation in this respect by the Educational Commission of Virginia in the Virginia School Survey of 1919, page 22 reads as follows:

"The commission, therefore, recommends that Section 136 of the Constitution be amended to provide that each county, city, and town, if the same be a separate school division, shall levy on all classes of property subject to local taxation a tax for school purposes, the amount of funds needed to be determined by the school board of such county, city and town, and the necessary tax to be levied and collected by the county board of supervisors or city or town council, but said tax shall not be in excess of

a minimum to be fixed by law. The statute law should provide that not less than half of the funds derived from the local tax or an amount equal to the State fund for this purpose shall be used to pay salaries of teachers."

With reference to fiscally independent cities J. B. McGaughy,* in "The Fiscal Administration of City School Systems", draws the following conclusions on the superiority of independent over dependent cities, after having studied several hundred city systems throughout the United States.

"Independent cities are much more successful in keeping their sixteen and seventeen year old children in school than are dependent cities.

Independent and special cities provide much more adequate playground space for each pupil than do dependent cities.

Independent cities have a greater percentage of their pupils attending school all day, and in adequate buildings owned by the cities than have dependent cities.

Independent cities were successful in adjusting teachers' salaries so that they kept pace with the increasing cost of living from 1913-1914 to 1919-1920 than were dependent cities."

Again in the same book Mr. J. R. McGaughy draws the following conclusions on the comparative costs of these two classes of cities.

"The application of the statistical technique of the reliability of differences indicates that there is no significant difference in the total municiple tax rates in the independent and dependent group of cities. The tax rates for school purposes are undoubtedly higher in the independent cities. The chances are 50-50 that this difference is between $.10 and $.18 for each $100. of real valuation of taxable property. Moreover, the independent cities undoubtedly devote to school purposes a larger proportion of each dollar raised by local taxation. The chances are 50-50 that the average in the dependent cities lies between 32 percent and 34.5 per cent and in the independent cities between 40.5 and 42 per cent.

Certainly it is reasonable to favor fiscal independent districts if they retain the efficiency and success that was shown by this study.

If our compulsory educational requirement is to be enforced certainly the limit before referred to cannot provide for an adequate minimum program throughout the State of Virginia. On page 69 of the annual report of the Superintendent of Public Instruction for the year 1925-1926 we note that there are seven hundred and

*The Fiscal Administration of City School Systems. J. R. McGaughy.

three thousand children of school age in Virginia while only five hundred and forty three thousand children are enrolled in the public schools for the same year as shown by the same report page 115. If we had the information at hand we would see that the average daily attendance would drop far below the last figure given. This therefore means that if the compulsory educational requirement be enforced some means must be provided for furnishing instruction to them.

Quoting from the Acts of the General Assembly of 1926 page 152 we have the following appropriation:

"For maintenance of public free schools $1,414,800.00. Out of this appropriation there shall be expended under the rules and regulations of the State Board of Education for the establishment and maintenance of rural one-room and two-room and graded schools, and for the special supervision thereof, and to be apportioned among such schools by the State Board of Education and local authorities, not exceeding $440,000.00. For maintenance of public high schools $200,000.00. For promotion of vocational education $100,000.00. For maintenance and equipment of agricultural high schools and department of home economics $45,000.00.

From the small amount of benefit received by this appropriation we reason that instead of state support it is rather just a small amount of state aid. The state can expect no better schools than it pays for and if the aid is insufficient then the minimum program to be offered generally in the state will be correspondingly low. We are here referring only, to the special appropriation given above. However, by means of small amounts such as above it is possible for a nearer approach to the ideal or the better system. The General Assembly is certainly conscious of the need for funds and support in the free public schools by the enactment of such a provision. Even though it is small it is a step in the right direction. By making the appropriation for the one-room schools and the two-room schools and the graded schools they are certainly aware of the fact that it should be

spent in the right place. It would seem that a good thing in connection with this provision would be to get a standard for the distribution of the appropriation to insure equalization.

The following provision for the public schools is taken from the Code of Virginia, section 2205:

"Segregation of taxable real estate and tangible personal property for local taxation only, with certain exceptions--All taxible real estate and all taxable tangible personal property and the tangible personal property and the tangible personal property of public service corporations (except rolling stock of corporations operating railroads by steam) and also the capital of merchants, is hereby segregated and made subject to local taxation only, except that there shall be a school tax of twn eents on every hundred dollars of the assessed valur of said real estate, and tangible personal property, which tax shall be applied to the support of the public free schools for the equal benefit of all the people of the State, to be apportioned on a basis of school population."

The amount raised by this provision for the year 1925-1926 as taken from the Annual Report of the Auditor of Public Accounts to the Governor of Virginia for the fiscal year ending June 30, 1926, was on real estate $1,048,188.85; on tangible personal property $154,012.13; on intangible personal property $410,641.65. This is a very good sum and little schooling would be given in some localities in it were not for the aid and the support that is furnished by this fund. The greatest failing of this amount to do its greatest good is the fact that the code of Virginia as above referred to provides that it is to be distributed on the basis of the school population, which is far from being the best way that it could be distributed.

On another page of this paper we referred to the Virginia Constitution, section 135, and there we have the provision for two thirds of the capitation tax to be paid over to the education department. In the report of the State Auditor for 1926 we find that the amount of income due to this tax is $1,036,445.00.

All of these sums are to be placed in a common fund and distributed over the state on the basis of school population. It actually distributes it in a manner anything but equal to all the people of Virginia.

The Assembly of Virginia in 1918 passed a special act known as the special four cent tax for schools. From the auditors report we find that the net proceeds for the year ending June 1926 for this purpose was on real estate $419,371.58; on tangible personal property $61,550.59; on intangible personal property $100,546.05. In addition to this amount there is the tax on public service corporations and shares of bank stock and the tax on money which added together make in these groups over a half million dollars. To these items should be added the inheritance taxes, omitted taxes and omitted capitation taxes which amount to $260,276.35. From these state taxes, the literary fund interest, and so forth, we get a total of about five and a quarter million dollars to be distributed on the basis of the school population.

MINIMUM PROGRAM

The preceding work has demonstrated the fact that the State of Virginia through legal and constitutional provisions has recognized its responsibility for the educational opportunity offered the children of the state. The method by which it seeks to make the provision and the development of the present system has been outlined in detail. It is the purpose of the present work to analyze the principles underlying the distribution of state funds and to lay the foundation for a more equitable and satisfactory method.

In an unpublished report prepared by Mr. J. E. Stanley,

Principal at Paquoson, Virginia, on the minimum educational offering that Virginia should provide, we are shown that for each and every teacher unit in the state there should be $475 expended. This means that no teacher unit of expense should be less than this amount but that those counties or school districts desiring to present a better program may increase this to an amount in keeping with their wishes by local taxation.

Commenting upon raising money Mr. Stanley says:

"The number of teacher units for a county was computed by adding to the number of elementary teachers twice the number of high school teachers. The cost of the minimum program in this county was determined by multiplying the number of teacher units by the cost of the offering. This figure divided by the total wealth of the county yields the tax rate which would be needed to provide the minimum program. If each county were then expected to put forth the same effort as the wealthiest county the total amount raised locally can then be determined by multiplying the total wealth of all of the counties in the state by the same rate. .....The difference between this amount and the total amount needed in the state to provide the minimum offering is the amount which the state must equalize and is shown in column 5.* The uniform tax rate, total cost of the uniform program, the amount to be raised locally and the amount to be equalized by the state was computed for each of the costs of the several offerings..... Virginia is distributing $4,400,000. to the counties of the state but it is evident from facts set forth elsewhere in this study that she is equalizing neigher educational opportunity nor burden of support. It appears that $475 per teacher is the least possible offering that Virginia can afford to equalize since that will require $4,406,923.00 in the counties.

THE ABILITY TO SUPPORT EDUCATION

We have been contending through this work that the wealthiest counties need no state aid and that the others should receive aid inversely with respect to wealth. If the state were to support the schools then it is understood that another meaning is referred to here. A uniform tax rate over the state, when property is assessed uniformly on its sales value, would result in equalization of burden. These factors of equality, however, are lacking in Virginia.

Ability by no means can be readily arrived at because so

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*See table at the end of this paper.

many factors must be considered when calculating the ability to pay. In one county a farm may have a high sales value and at the same time produce relatively poor crops. The farmer may strive very earnestly to get all that is possible out of the land yet it may amount to a very insignificant sum. While on the other hand we may think of another county in which the sales value of the land is relatively low and at the same time it may be a fertile farm. This means then that the farmer, in this case can without putting forth his best efforts, produce a fairly good crop. Suppose for instance, that the first case is typical of one county and that the second case is typical of a second county. It would not be logical to say that the two cases have equal abilities to pay for schools.

Again we may think of a commercial center in which there is little wealth in the form of real estate and at the same time there is a great amount of intangible personal property. In terms of real estate this community has very poor ability to pay, while from the stand point of earning power it may have a very high ability to pay.

Superintendent T. D. Foster of Sussex, County, Virginia, in determining the ability of the various counties and cities to support education presents the following in an unpublished report.

"In the case of Virginia, however, we are not able to get either from the federal or state authorities the taxable income and the income tax payments for each county in the state. On the other hand, since both federal and state governments tax incomes it does not seem fair for the counties to impose an additional tax on income. This revenue from the state income tax could very appropriately be used by the state as a part of its revenue for equalization of burden. Therefore general property composed of real, personal and corporate property must be relied upon as the source of local revenue for the support of education in Virginia and constitutes the best measure of ability of the counties to support education.

Another obstacle with which we have to deal in determining the ability of the counties of Virginia to support education is

the gross inequality in the distribution of the tax burden. The constitution requires property to be assessed at the "Fair Market Value". This provision has been disregarded by a great majority of the officers charged with assessment. The Report of The Virginia Commission on Simplification and Economy of State and Local Government to the General Assembly in 1924 on page 122 has this to say on Equalization of Assessments: "The assessors in each county and city are left to adopt their own standards, and there are as many standards as there are counties and cities. No authority exists in the law to correct the wrong. Even the courts are powerless. Our tax system, as between political subdivisions, is purely a voluntary affair." The Commission then goes on to give specific illustrations to prove the above assertion.

For the purpose of comparing counties to determine their relative ability to support schools, the sales value of all property as given in Bulletin No. 31 by the State Tax Board has been accepted.

In order to determine the ability of each county to support its schools the total taxable values based on the actual sales value for each county was divided by the Average Daily Attendance in each county. The Average Daily Attendance was taken from the Annual Report of the Superintendent of Public Instruction pages 75, 76 and 77 for the session 1925-1926.....

The County of greatest ability has a valuation of $20,295. per pupil. The county of least ability has a valuation of $1,312. per pupil. The most able county is 15.46 times as able to support schools as the county of least ability. The median of the counties is $3934. which is nineteen percentum of the ability to pay as the county of greatest ability."*

EDUCATIONAL NEED

Numerous bases have been used in apportioning money to local school systems in the several states. The school census, enrollment, average daily attendance, teachers employed, aggregate days of attendance, and special grants for special purposes still used in many states. Various combinations of these bases have been employed in order to more adequately support education or to serve a special need or reward some effort.

The purposes back of these different systems can be grouped into two classes which are antagonistic in actual practice. The one purpose aimed at the granting of aid in proportion to the need of the local schools. The purpose in itself is quite defensible, but it has generally suffered because of the lack of an accurate

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*An unpublished report made by a class of graduates at the College of William and Mary.

measure of need. Various measures have been tried. The school census is unsatisfactory for the simple reason that the task of any community is not necessarily proportional to the number of children of school age in the community. The number of children who do not attend the schools do not add to the cost of education. This measure is undesirable further more because it leads to certain abuses, chief of which is the padding of census figures in order to obtain more aid. And even in those communities in which such procedures are not used there is little incentive to encourage school attendance. Enrollment figures have been substituted for census in several states and while it is a better measure of the need it still retains the objection that the enrollment does not represent accurately the number of pupils the school must educate, as may readily be demonstrated by a comparison of enrollment and average daily attendance data. The daily attendance more nearly represents the real need, but there are those who argue that even here the need is not really measured as the length of term is also a vital factor. They therefore suggest that the aggregate daily attendance, (the average daily attendance multiplied by the number of days the school is in session) be used in its place.

This last measure overlooks the fact that the per capita costs of education vary in schools of different sizes. The cost of maintaining a school in a sparsely settled community where it is necessary to employ one teacher to teach ten pupils costs more per pupil in average daily attendance than in another school in which one teacher may teach thirty pupils even though the school terms are equal length in both cases. A similar variation will be found in schools of different sizes even though the same

number of pupils may be assigned each teacher. Furthermore the cost per pupil of high schools is nearly twice as large as the elementary schools.

To provide for these variations in per capita costs Dr. Mort has developed the technique of measuring the need in terms of the "equated" pupil in which allowance for the differences in the cost of the different sizes and types of schools.* Somewhat opposed to the payment on the basis of need is the reward for effort. The criteria used in determining the effort differ. Sometimes the effort is measured by the number of teachers employed, the length of the school term, or in some cases the state offers grants of money for a specific purpose provided the local community raises a like sum. It should be noted that if the poor community contributes to the state fund from which the grants are made that it is the rich community and not the poor community which is able to make the "effort" which is a necessary condition of the distribution.

The minimum program as developed by Mr. J. E. Stanley provides for raising $1,302,576.71 locally in the counties and $769,848.04 in the cities and $5, 410,340.25 by the state to be redistributed to the counties and cities. That is to say that the cost of the minimum program in the state is $7,482,775. The amount to be raised by the state is practically the same as is now provided.

The amount of support any city or county should receive is equal to the minimum offering of $475. multiplied by the number of teacher units in the city or county, minus the amount raised locally by the levy of .864 mills. This amount must include all of the special grants as the special high school fund, the

*Mort, Paul R. State Support of Public Schools.

agricultural fund, the home economics fund, the special grade fund and so forth.

THE WEIGHTED TEACHER UNIT

Above we referred to the equated pupil which is another way of saying weighted pupil. Once having determined the weighted pupils we calculate, by Mort's type of formulas, the weighted teachers.

Mr. R. C. Jennings, in an unpublished report on educational need in Virginia,* developed formulas after Mort's plan for determining the weighted teacher units in various sizes of high schools. He prepared the following table for calculating the teacher units in the various sizes of high schools.

Range of average daily attendance	Slope of line of best fit	Constant value
0-53	.0145	2.732
54- 64	.0356	1.594
65-242	.0320	1.826
243-up	.0504	0.000

The weighted teacher units are scientific calculations of the number of teachers to be employed. The principle point to consider is the size of the school. The different formulas take care of various sizes of schools. One formula is used for a school of a given range of average daily attendance and a second formula for another size group and so on.

In determining the number of weighted teacher units for a given school we take from the high school report the average daily attendance. If it is 53 or less we multiply the exact average daily attendance by .0145, the slope of line of best fit, and add the constant value 2.732. This result gives the weighted

*Jennings R. C. Principal in Norfolk, Va. A report in Educational need to the class of graduates at William and Mary College

teacher units for that school. To illustrate this concretely let us take Middlebrook High School in Augusta County. The average daily attendance for 1925-1926 was thirty-seven. Referring to the table we note that this school falls under the first group. Therefore multiplying 37, the average daily attendance, by .0145 we get .5365; and to this we add the constant value 2.732, which gives 3.2685 teacher units. We drop all fractions below one half and for one half and above we add another unit. Then we conclude that the number of teachers that should be employed in Middlebrook High School is three. This is the same as the number actually employed. The weighted teacher units for a county or city would be the sum for all schools in the county or city. By means of similar tables worked out for rural and elementary schools we would obtain the grade weighted teacher units. These figures would be substituted for the actual numbers used in the table at the end of this article.

The total weighted teacher units for a given county or city is multiplied by the minimum offering, which was established as $475 per teacher unit. This product is the cost of the minimum program in that particular city or county. From this total we subtract the amount raised in the county or city by the uniform tax levy determined by the process discussed above. The remaining amount obtained is the support to be rendered by the state.

In the work prepared by Mr. Jennings we find that in some high schools, which are attempting to provide a better offering than the average, more teachers were employed than would be provided by this computation. In other instances the number of teachers actually employed did not meet this requirement.

In several cases no change was noted. In the case of Elizabeth City County seven teachers more are employed while in Gloucester County three teachers less are employed than is found to be needed to equal the weighted teachers calculated. This would seem to indicate that Elizabeth City County is providing a better educational opportunity for their children than the average while in the case of Glauster County it seems as if the opposite is true.

Because of the lack of data it was impossible for us to prepare the weighted teacher units for all county and city elementary schools. Since we do not have the means at hand for determining the number of weighted teacher units we will illustrate how the state funds are to be distributed by using the actual number of teachers in the cities and counties. The tables giving the information as to counties and cities were prepared by Mr. J. E. Stanley and the writer. These tables are to be found at the end of this article. Since the cost of high school education is about twice that of elementary education when figured on the bases of teacher units the number of high school teachers was multiplied in each case by two. This renders the high school teacher units comparable to elementary teacher units which are used throughout this report.

Referring to the table on counties we find Accomac county listed first. The estimated actual sales value of all real estate in this county is $40,399,513.* This amount produces $34,905.17 by a uniform tax of .864 mills. That is to say the county must raise this amount. From the table we find that there are 126 elementary teachers and 51 high school teachers. When the latter is doubled a total of 228 teacherxunits are obtained. The total teacher units multiplied by $475 gives $108,300 as the

cost of minimum program. From this we subtract $34,905.17 the local taxes raised leaves $73,394.82 to be supplied by the state. This is slightly less than is now provided by the state.

Computing the same thing for Patrick County, we find the minimum program to be $72,200. of which $6,513.17 is to be raised locally, and the state aid is $65,586.83. This is approximately one third more than they now receive.

In the tables on the following pages the costs of the minimum programs for the various cities and counties are given.

In conclusion we wish to explain that only white schools were considered in this report. We were handicapped in that we could not get the desired data and as a result our plan is presented and solved in this report with arbirtary figures. We suggest that the State Board of Education assemble the required data from the Division Superintendents of the State and by this plan provide a table accordingly.

SUMMARY

1 Virginia recognizes the principle of public free schooling and is desirous of presenting a better educational program.

2 The State recognizes its responsibility for supporting its public free schools.

3 She is striving to give equal educational financial support to all her people but has not yet found a satisfactory workable means of distributing state funds.

4 Inequalities of benefits are existing because of the present practice of distributing state school funds, "for the equal benefit of all of the people of the State, to be apportioned on a basis of school population".

a The per cent of average daily attendance on the school population varies greatly over the state.

b The length of the school term in some localaties is very short while in others it is rather long.

c Some school districts provide good high school facilities while other provide little or nothing beyond the seventh grade.

d The per pupil cost of education in one-room schools is relatively higher than in large schools.

e A poor community cannot even provide satisfactory schools for their children under the present plan of state aid.

f The lack of a minimum educational program makes equality of benefit impossible.

5 Independent school boards are much more efficient and successful and at the same time practically no more expensive than dependent school boards.

6 The principle sources of state school money are the ten and the special four cent taxes, the interest on the Literary fund and the appropriations of the General Assembly.

7 A minimum educational program of $475 per weighted teacher is proposed.

8 The uniform tax rate is obtained by dividing the cost of the minimum program in the wealthiest county by the estimated actual sales value of all real estate in that county.

9 The system of developing the weighted teacher unit is suggested.

10 The total state financial support is equal to the difference between the minimum program and the amount raised locally by the uniform tax of .864 mills.

11 Ability to support education varies among the cities and counties. The wealthiest county is about fifteen times as able to support education as is the poorest county.

The plan proposed involves:

a A uniform effort on the part of the cities and counties which is determined by the tax rate required in the wealthiest cou county to support the minimum program in that county.

b The uniform tax shall be levied and used locally and is to be supplemented by the state aid.

c The cost of a program, as near the average as present funds permit, is to be calculated.

d The difference between the amount raised by the uniform tax and the cost of the minimum program is the amount of support that the state must grant each county or city.

e The need used in computing the minimum program is stated in terms of the weighted teacher unit.

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TABLE SHOWING FOR THE COUNTIES AND CITIES OF VIRGINIA:
(1) Estimated actual sales value of all real estate,
(2) Actual number of elementary school teachers,
(3) Actual number of high school teachers,
(4) Total number of teacher units needed,
(5) Cost of the minimum program.

County	Estimated actual sales value of all real estate	Number elementary teachers	Number high school teachers	Number teacher units needed	Amount needed in each county and city for minimum program
Accomac	$40,399,513	126	51	228	$108,300
Albemarle	22,072,176	114	28	170	80,750
Alleghany	17,303,795	99	9	117	55, 575
Amelia	6,648,341	46	4	54	25,650
Amherest	9,101,054	85	20	125	59,375
Appomattox	5,657,084	49	14	77	36,575
Arlington	37,994,262	79	34	147	69,825
Augusta	51,589,670	217	61	339	161,025
Bath	8,381,132	45	11	67	31,825
Bedford	20,918,424	182	31	244	115,900
Bland	7,534,713	40	10	60	28,500
Bottetourt	13,671,330	104	20	144	68,400
Brunswick	11,808745	77	18	113	53,675
Buchanan	12,967,641	110	6	126	59,850
Buckingham	5,643,158	72	13	98	46,550
Campbell	18,791,108	108	25	158	75,050
Carolina	7,662,615	52	18	88	41,800
Carroll	13,862,633	143	11	165	78,375
Charles City	3,686,643	8	4	16	7,600
Charlotte	10,745,125	73	30	123	58,425
Chesterfield	17,033,966	93	18	129	61,375
Clarke	11,502,291	31	19	69	32,775
Craig	5,386,346	31	7	45	21,375
Culpeper	15,853,684	65	17	99	47,025
Cumberland	4,056,225	24	10	44	20,900
Dickenson	18,364,225	117	11	139	66,025
Dinwiddie	7,824,920	53	25	103	48,925
Elizabeth City	11,672,352	47	6	59	28,825
Essex	3,274,646	35	10	45	21,375
Fairfax	26,646,034	113	27	167	79,375
Fauguier	26,308,865	96	30	156	74,100
Floyd	11,178,280	109	11	131	62,225
Fluvanna	4,923,032	35	11	57	27,025
Franklin	15,054,341	180	12	204	96,900
Fredrick	16,989,809	78	13	104	49,400
Giles	10,001,679	90	21	132	62,700
Gloucester	5,796,301	45	13	71	33,705
Goochland	4,872,755	31	8	47	22,325
Grayson	18,699,608	137	9	155	73,075
Greene	3,476,003	33	3	39	18,525
Greensville	8,368,571	33	9	51	24,225
Halifax	25,474,336	176	45	266	147,250
Hanover	12,146,072	66	22	110	52,250
Henrico	33,119,072	89	31	151	71,725
Henry	13,920,139	91	21	133	63,175
Highland	8,754,824	42	10	62	29,450

Continued

County	Estimated actual sales value of all real estate	Number elementary teachers	Number high school teachers	Number teacher units needed	Amount needed in each county and city for minimum program
Isle of Wright	$ 7,341,345	46	18	82	$ 36,950
James City	3,041,596	13	5	23	10,925
King George	2,279,074	27	5	37	17,575
King and Queen	3,880,690	35	12	59	28,025
King William	5,623,349	27	8	43	20,425
Lancaster	4,008,047	28	16	60	23,500
Lee	16,840,914	147	30	207	98,325
Loudon	28,322,920	98	33	164	77,900
Louisa	7,560960	79	13	105	49,875
Lunenburg	9,314,735	68	18	104	49,600
Madison	7,106,548	42	11	64	30,400
Mathews	5,900,744	33	13	59	28,025
Mecklenburg	18,720,919	111	27	165	78,375
Middlesex	4,741,754	24	12	48	22,800
Montgomery	19,743,708	119	28	175	83,125
Nansemond	11,022,004	47	29	105	49,875
Nelson	10,364,225	89	23	135	64,125
New Kent	4,065,665	14	4	22	10,450
Norfolk	93,479,055	96	37	170	80,750
Northampton	20,772,243	55	30	115	54,625
Northumberland	5,881,531	44	16	76	36,100
Nottoway	11,703,298	57	21	99	47,025
Orange	12,571,790	64	21	108	53,300
Page	11,914,943	95	15	125	59,375
Patrick	7,654,137	132	10	152	72,200
Pittsylvania	49,392,661	286	66	318	150,810
Powhatan	3,136,740	19	5	29	13,775
Prince Edward	8,832,388	21	22	65	30,875
Prince George	16,125,670	33	11	55	26,125
Princess Anne	17,128,889	47	17	81	38,475
Prince William	9,387,939	59	15	89	42,275
Pulaski	20,895,889	92	19	130	61,650
Rappahannock	8,317,604	38	9	56	26,600
Richmond	3,026,233	32	8	48	22,800
Roanoke	36,396,677	127	25	177	84,075
Rockbridge	19,567,854	131	25	181	85,975
Russell	21,439,087	162	24	208	98,800
Rockingham	40,850,574	229	44	317	150,575
Scott	17,599,910	130	29	188	89,300
Shenandoah	26,526,157	141	26	193	92,375
Smythe	17,853,676	145	26	197	94,575
Southampton	17,384,484	74	30	134	63,650
Spotsylvania	5,442,884	47	15	77	36,575
Stafford	4,610,700	43	2	47	22,325
Surry	6,458,850	30	10	50	23,750
Sussex	3,321,291	32	22	76	36,100
Tazewell	38,484,010	187	30	241	114,375
Warren	7,254,196	52	5	62	29,450
Warwick	6,300,337	21	8	36	17,100
Washington	17,235,017	210	42	294	139,650

County	Estimated actual sales value of all real estate	Number elementary teachers	Number High school teachers	Number teacher units needed	Amount needed in each county and city for minimum program
Westmoreland	$ 3,868,221	37	14	65	$ 30,875
Wise	33,171,700	237	45	327	155,325
Wythe	24,151,046	131	27	185	87,875
York	4,166,020	26	6	38	18,050
TOTAL	$488,				$5,709,600
Cities					
Alexandria	$15,953,610	48	18	84	$ 39,900
Bristol	9,753,620	34	16	66	31,350
Buneva Vista	2,724,754	16	6	28	13,300
Charlottesville	17,881,306	45	21	87	41,325
Clifton Forge	5,621,787	27	12	51	24,225
Danville	37,497,443	65	24	113	53,675
Fredricksburg	6,222,239	18	11	40	19,000
Hampton	7,245,197	28	21	70	33,250
Hopewell	2,220,054	39	11	61	28,975
Lynchburg	47,848,996	139	47	233	110,675
Newport News	56,266,297	72	45	162	71,950
Norfolk	198,126,712	380	184	748	355,300
Petersburg	34,774,357	78	38	154	73,150
Portsmouth	57,123,196	116	46	208	98,800
Radford	6,034,979	24	9	42	19,950
Richmond	242,301,570	473	237	947	449,825
Roanoke	104,679,959	264	81	426	202,350
Staunton	12,184,447	27	13	53	25,175
Suffolk	11,354,241	37	13	63	29,925
Williamsburg	1,621,615	7	5	17	8,075
Winchester	13,501,448	30	25	80	38,000
TOTAL	$891,027,827	1967	883	3733	$1,773,175
Aggregate	$2,398,639,762				$7,482,775