

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF NEW YORK: IAS PART 25

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CAMPAIGN FOR FISCAL EQUITY, INC., *et al.*, : Hon. Leland DeGrasse
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Plaintiffs, : Index No.: 111070/93
: :
v. : Special Referees:
: Hon. William C. Thompson
THE STATE OF NEW YORK, *et al.*, : Hon. E. Leo Milonas
: John D. Feerick, Esq.
: :
Defendants. :
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STATEMENT OF THOMAS PARRISH

Background and Qualifications

1. I am a managing director in the Education and Human Development Program at the American Institutes for Research (AIR), based in Palo Alto, California. I also direct the Center for Special Education Finance, previously funded by the United States Department of Education and housed at AIR. I received my bachelor's degree from Bowling Green University in 1969; a master's degree in Teaching from Miami University, Ohio in 1973; and an Ed.D from Stanford University in 1987. I began my career as an elementary school teacher and taught for five years before becoming a researcher and education policy analyst. Over the past 25 years, I have directed and participated in numerous cost analysis, education policy, and evaluation projects for federal, state, and local agencies. As a researcher, my major area of expertise is fiscal policy in public education, and I have particular expertise in special education finance. Among the dozens of specific costing out and expenditure analysis studies I have conducted over the past 25 years was an extensive analysis of all special education funding for the state of New York, funded by the New York State Education Department, for which I was co-director from

2000-2002. I have also published over 100 articles and monographs in these fields. (*See* curriculum vitae attached hereto as Exhibit A.)

2. More than 20 years ago, my colleague Jay Chambers and I developed the methodology now known as the “professional judgment” approach (originally known as the “resource cost model”) through a series of cost analyses we undertook for the State Departments of Education in Illinois and Alaska. Our original model was further developed and implemented over the years by Management Analysis and Planning, Inc. (MAP), whose professional judgment study in Wyoming in the mid-1990s, which was approved by the Wyoming Supreme Court, is generally regarded in the literature as the leading example of a sound professional judgment approach. MAP has also conducted professional judgment studies in South Carolina and Maryland, and Augenblick and Palaich, among others, have used MAP’s professional judgment approach in North Dakota, Montana, Nebraska, and a number of other states.

3. Jay Chambers and I have been concerned with the fact that most of the recent cost analysis studies – virtually all of those that use the so-called “successful schools” methodology, as well as many of the professional judgment studies – have dealt with the substantial extra costs of providing services to students with special needs (i.e., students from poverty backgrounds, students with disabilities, and English language learners) by applying abstract “weightings” to the per-pupil costs they have established for the average student without special needs. These weightings are generally based either on current funding practices in certain states, which almost invariably result from guesses or policy decisions based on the amount of available funding, or from literature reviews, which usually summarize current practice. These weightings are essentially arbitrary and do not reflect the actual costs of providing adequate educational opportunities to students with special needs.

4. I note, in this regard, that some of our own analyses concerning expenditures for special education students have been misunderstood and misapplied in this manner. For example, on pages 49-50 of the written testimony that Dr. Robert Palaich submitted on behalf of the defendants in this case, he cited a major report Dr. Chambers and I completed for the federal government regarding average nationwide expenditures for special education to support the 110% weighting that the defendants have apparently used in the proposal they submitted to this court. Although this 110% weighting is consistent with current average special education expenditures nationwide today, as a nationwide expenditure study, it in no way addresses the cost of adequate special education services in New York. As we pointed out in the very first section of that report:

All of these studies (including the present study) are focused on expenditures with no implications about the results. The expenditure figures presented represent an estimate of the current behavior of the schools and districts across the nation and imply nothing about what spending is required to provide similar results for students with disabilities.¹

5. Several years ago, shortly after the trial court had issued its initial decision in this case and called for an analysis of the actual costs of providing the opportunity for a sound basic education in New York State, AIR was asked by the president of the Atlantic Foundation whether we would be interested in undertaking such a study. After further inquiry, we agreed to do so, especially because the Atlantic Foundation, as well as the Ford Foundation and Gates Foundation, who joined with Atlantic to fund the project, were willing to devote sufficient resources to allow us to develop and implement new techniques to deal with some of the limitations of previous studies. Specifically, after joining forces with the MAP team, we

¹ Jay G. Chambers, Thomas B. Parrish, Jennifer J. Harr, *What Are We Spending on Special Education Services in the United States, 1999-2000?* (United States Department of Education, Office of Special Education Programs, 2002), p. 2.

designed a study design that: a) would determine the *actual* costs of providing the an adequate level of services to students with special needs, without resort to abstract weightings; b) respond to the criticism in some of the literature that professional judgment panels tend to recommend inordinately high levels of funding by subjecting the panel’s findings to a series of reconsiderations and “checks and balances”; and c) combine relevant elements of all the established methodologies (successful schools, econometric, and expert judgment) with a core professional judgment approach to further ensure the accuracy of the final recommendations. Over a 15-month period from late 2002 through March 2004 at a total cost of \$1.5 million, we conducted a study based on this design, entitled *The New York Adequacy Study: Determining the Cost of Providing All Children in New York an Adequate Education*, also known as the “AIR/MAP Study.” I believe that this study has substantially advanced the state of the art and has become a model for scholars and practitioners throughout the country.

6. I served as one of the four principal researchers conducting this landmark study. As a principal researcher, I participated in all aspects of the study, including attending and leading meetings of the professional judgment panels and the stakeholders meetings. I submit this affidavit to respond to certain questions posed by the panel of special referees regarding the AIR/MAP study and to respond to certain allegations raised by the defendants in this case regarding the study.

Initial Perspectives on the Professional Judgment Approach

7. The professional judgment approach to educational cost analysis, which is at the core of our New York State study, is not, of course, the only technique used by education finance researchers. Although in recent years, professional judgment has tended to be the predominant approach, a number of studies have used the “successful schools,” “cost estimation,” or “expert

judgment” approaches.² An important point to note in this regard is that all of the existing costing-out methodologies rely fundamentally on a series of judgments. Unlike a mathematical equation or a scientific proof, there is no definitive number that can be set forth that can precisely state how much money is needed to provide an adequate education. The professional judgment method relies primarily on the judgments of a carefully selected, representative group of highly qualified professional educators. The successful schools method relies on the judgments of policymakers, researchers, and statisticians who must establish the criteria for defining “success.” The “econometric” or “cost estimation” approach relies on a series of judgments by academicians like Professors Duncombe and Yinger about which outcomes to include or exclude in the analysis, the functional form of the equations used in estimation, the series of control variables (i.e., measures of pupil need, scale of district operations, and density of student populations), and the methods of statistical estimation (i.e., regression that uses ordinary least squares or instrumental variables) used for the models. The “expert judgment” approach relies on the educational policy views of leading writers in the field and the judgments of the researchers on how these policy views are translated into cost models. None of these approaches is value free, or free of significant judgments, on the part of policymakers and researchers.

² Over the past 10 years, 26 costing-out studies have been released in 23 states, not counting the studies in New York that are currently being reviewed by the Panel. In 12 of these studies, only the professional judgment approach was used (Indiana, Kentucky, North Dakota, Maryland, Massachusetts, Montana, Nebraska, Oregon, South Carolina, Washington, Wisconsin, and Wyoming), and five have used only the successful schools or successful school districts approach (Illinois, New Hampshire, Ohio twice, Oklahoma); two used solely the expert judgment approach (Arkansas and Kentucky); one used solely the econometric approach (Texas). Five studies used a combination of professional judgment and successful schools (Colorado, Kansas, Missouri, Vermont, and Maryland), and one combined the expert judgment and successful schools approaches (Maine). See the website of the ACCESS network, www.schoolfunding.info.

8. Although the AIR/MAP team is familiar with all of these methodologies, and used elements of each of them in the *New York Adequacy Study*, we relied primarily on the professional judgment approach for two main reasons. First, we believe that the judgments of a large number of highly qualified educators constitute the best source of information, insights, and policy perspectives on children’s actual needs, especially when the core concern is the relatively new concept of developing programs that will provide meaningful educational opportunities to children from poverty backgrounds, children with disabilities, and English language learners, whose needs have tended to be neglected in prior studies. Second, the professional judgment methodology is the most transparent approach, and it provides the most extensive information that allows policymakers – and in this case, the court – to clearly see the judgments underlying each of the numbers resulting from this study, and to accept or modify each of these judgments should they have substantial differences with them. The reason our final report is so voluminous – a total of over 500 pages in two volumes – is that every procedure and every judgment that was made was meticulously described and detailed to allow such a full understanding.

9. Consistent with the fact that judgments are at the core of our methodology, our report offers not a single figure, but a range of cost estimates for answering the core question of how much funding is needed to provide all New York students the opportunity for a sound basic education. The report offers four separate estimates. For New York City, these estimates, expressed in 2001-2002 dollars, are \$3.6 billion, \$4.1 billion, \$4.5 billion, and \$5.2 billion in increased funding over current expenditures.³ Although we recommend consideration of each of these estimates, our report highlighted the third figure, which included the full recommendations

³ See AIR/MAP Study, volume 2, p. 482.

that emerged from all three stages of our process and adopted the conservative “lump sum” approach for central administrative costs. CFE, working with the Fiscal Policy Institute, has estimated that to provide the level of educational services in our highlighted recommendation would require in current 2004-2005 dollars a \$5.6 billion increase over current funding levels for New York City.

10. Each of the four funding levels in the recommendation we set forth provides a concrete answer, based on a very carefully considered set of pooled professional judgments, to the basic question posed by the Court of Appeals in this case – namely what level of funding is necessary to provide all students the opportunity for a sound basic education. I have read the successful district analyses undertaken by Standard & Poor’s for the Zarb Commission in this case. It provides an informative matrix of information on the funding levels that emerge from a series of exercises based on a number of variables concerning poverty weights, cost of living indices, among others, but it does not purport to recommend the results of any of these exercises as an answer to the core question of what funding level is needed to provide the opportunity for a sound basic education.

Use of the Regents Learning Standards

11. I understand that one of the major questions posed by the panel of special referees in this case concerns the criteria that should be used in a costing-out study to determine whether or not the opportunity for a sound basic education is being provided. The Council on Costing Out, a group of about 40 education, community, and business groups, including CFE, which supported the study, expended an enormous amount of time and effort to answer this question before the professional judgment panels were convened. In fact, they organized a series of meetings attended by school superintendents, school board members, teachers, parents, and

business and community leaders from around the state in which this issue was considered at great length. Because the proper standard for assessing whether students receive the opportunity for a sound basic education is very much a matter of state policy, we believe that knowledgeable and concerned people in New York State should address this issue. Members of our research team attended some of the meetings the council convened to consider this issue and reported that they were impressed by the depth and range of the discussions. I am not aware of any process in any state that has devoted as much thought and deliberation to this key question of what the outcome standard should be for a statewide costing-out study.

12. The core problem here is that the federal No Child Left Behind Act mandates that within the next ten years, 100% of public school students must meet state standards, which in New York means the Regents Learning Standards. However, virtually no professional educators believe that this 100% achievement goal is realistic or possible. Serious consideration was given during the deliberations sponsored by the Council on Costing Out to standards based on 90% or 80% of all students achieving the standards by specific points in time, but in the end, the consensus was that there was no legal, empirical or even analytic basis for choosing a specific numerical target figure. The group concluded that any figure chosen, other than the unattainable 100% figure, would essentially be arbitrary.

13. Consequently, the criterion recommended by the Council on Costing Out, which we then utilized in our study, was a judgmental criterion that focused on “opportunity” rather than 100% achievement. Furthermore, the council added the adjective “full” to the concept of opportunity to emphasize that the opportunities being provided needed to be thorough and meaningful. Specifically, the professional judgment panels were given instructions to design an instructional program that would provide “all students in the school a *full* opportunity to meet the

Regents Learning Standards.” Essentially, this criterion was asking the panels of highly qualified educators to design programs that would relate to every child’s needs and provide mechanisms that would reasonably allow every child, with sufficient interest and effort, to be able to compensate for any disabilities or environmental disadvantages that may affect them. This criterion does not assure that all children will ultimately meet the Regents Learning Standards, but it seeks to provide reasonable opportunities for all of them to do so.

14. I understand that the defendants have argued that referencing the Regents Learning Standards to the outcome measure of the costing-out study was inappropriate because the courts in this case explicitly rejected adoption of the Regents Learning Standard as being synonymous with the constitutional concept of sound basic education.⁴ The plaintiffs’ attorneys have informed me that although they agree that the Court of Appeals held that the Regents Learning Standards cannot *per se* be considered synonymous with the constitutional concept of sound basic education, at this point in time they are the operational definition of sound basic education in New York State. This follows from the fact that the Court of Appeals equated the constitutional definition of sound basic education to the concept of a “meaningful high school education.” At the present time, students must master the Regents Learning Standards and pass five regents examinations to obtain a high school diploma and receive a “meaningful high school education.”

15. Although I do not, of course, purport to offer a legal opinion on these points, what I can say from the point of view of a researcher designing a professional judgment process is that the reference to the Regents Learning Standards was appropriate and indeed necessary to obtain relevant input from the educators on the professional judgment panels. These experienced

⁴ See Defendants’ Brief, p. 43-44.

educators work everyday with the challenge of preparing their students to meet the Regents Learning Standards and passing the regents examinations. Designing programs to carry out this current state policy mandate presents a very important and meaningful task to them. If the output measure were phrased in terms of “sound basic education” or some other phrase with which they were not familiar, their judgments would be less grounded and less accurate. Given these realities, defendants’ charges that an outcome measure based on the Regents Learning Standards was “vague and subjective”⁵ is unfounded.

16. Both the regents and Standard & Poor’s used very precise outcome measures, based on target student scores on a range of as many as 13 different examinations, plus dropout rates and other criteria in some of their outcome scenarios. Such precision in defining outcome measures is appropriate for a successful schools study, which in essence is a computerized statistical modeling exercise, and a computer obviously can absorb and understand this degree of complexity in the variables used. I strongly doubt, however, that a panel of teachers and other professional educators could absorb and realistically utilize a complex outcome measure like this in a professional judgment process. Quite frankly, I don’t understand how Dr. Robert Palaich expected the professional judgment panels that were convened for his North Dakota study to make any sense out of the page and a half of detailed instructions, containing 12 specific test score outcome measures, which they apparently were supposed to keep in mind as they deliberated about educational resource models.⁶

17. I was surprised to learn that Dr. Palaich, as well as Professors Duncombe and Yinger, have assumed that the full opportunity standard used in our study is more demanding than the 80% standard or other standards based on specific outcome percentages on various

⁵ Ibid, p. 44.

⁶ See Plaintiffs’ Exhibit 4, appendix A.

Regents examinations that were used in the Standards & Poor's study, the regents study and the Duncombe and Yinger analysis that have been presented to the panel.⁷ This erroneous assumption is based on the premise that "full opportunity" somehow means that "all students [will] meet the Regents Learning Standards,"⁸ a premise that, as discussed above, was specifically rejected in the deliberations that led to adoption of this standard and is totally at odds with the straightforward meaning of the word "opportunity."

18. I do not believe that anyone can objectively assess whether the full opportunity standard we used, or the specific outcome standards used in the other studies, is more demanding. In light of the fact that only 18% percent of New York City students are currently passing the regents high school examinations and receiving a regents diploma, I would think that the assumed 80% success rate for the districts in the outcome standard used by the regents and by Standard & Poor's in some of their analyses would constitute an extremely optimistic expectation. In fact, this expectation may be beyond what New York City can achieve in the near future, even if all of its students are provided a full opportunity. In any event, I think that the judgments of a cross-section of distinguished and experienced educators regarding the specific educational programs that are needed to provide all students a full opportunity to meet the Regents Learning Standards is a more meaningful outcome measure than abstract, and essentially arbitrary, determinations by researchers or academics that 80% or any other fixed percentage of students passing particular examinations would be an appropriate criterion.

⁷ See Palaich Statement, p. 40; Yinger and Duncombe amicus brief, pp. 6-8, 33.

⁸ Yinger and Duncombe amicus brief, p. 6; *see also* Palaich Statement, p. 40.

Class Sizes

19. A second specific question posed by the panel is whether the recommended class sizes in our study are required to provide a sound basic education, and what the “quantitative impact” would be if these assumptions were modified. The most notable aspect of the class size recommendations of our studies is the emphasis on very small classes in the early grades – and the recommendations for the middle and high school years to roughly correspond to the current average class sizes in those grades for all school districts outside of New York City. The proposed class sizes of 14 to 17 in the early grades stem from the strong consensus of all the panels that there must be a major effort to establish good learning patterns and overcome impediments in the early years. These class sizes also reflect the strong emphasis on special education inclusion in the proposed model. Many current special education classes with 6 to 15 students per class could be eliminated under this arrangement, thus providing potentially significant offsetting cost savings.

20. Neither the class sizes nor any other specific aspect of the study’s recommendations is definitively “required.” The strong emphasis on providing extra services and extra learning opportunities in the early grades could be satisfied by other educational arrangements. The panels realized that in New York City it would be impossible to immediately organize schools with the recommended class sizes because sufficient space to house the requisite number of additional classrooms is not currently available. Presumably, during an interim period until more classrooms could be built, team teaching, more after-school tutoring, creating smaller schools, or other alternatives would need to be put into place. For this reason – and also because the panel saw themselves as making recommendations that would need to be modified to meet the particular local needs of a district – the study specifically recommended

that the actual constellation of resources in any school district must be determined in accordance with local conditions and the sound discretion of the superintendent or chancellor. Nevertheless, the fundamental point of the professional judgment analysis is that approximately the recommended level of resources is needed to meet the challenge of providing all students, irrespective of the economic disadvantages, language barriers, or disabilities they face, a meaningful opportunity to meet the Regents Learning Standards.

21. For these reasons, if higher class sizes than the study recommends are actually instituted in New York City over the next few years, as I expect will be the case, there should be no quantitative impact on the adequacy amounts we have recommended because additional funds would be needed to provide alternative services that are necessary to provide all students a full opportunity to meet the Regents Learning Standards. For example, we would expect that as class sizes increase above the limits proposed in our study, there would be an increasing need for remediation, intensive small group reading instruction and other interventions necessary to provide students with the opportunity to meet current learning standards.

Special Education Costs

22. The next question posed by the panel is “what evidence is there that 95% of special education students should be educated in the same facility as mainstream students,”⁹ and what quantitative impact would flow from modifying that assumption? The “evidence” to support this conclusion was strong consensus regarding this point among all of the professional judgment panels, including the two additional special education panels. I consider the very high level of agreement in regard to this point to be one of the most striking outcomes of the study.

⁹ The specific premise that the professional judgment panels developed and used in their deliberations was that 95% of elementary school students would be educated in mainstream facilities in their neighborhood schools, and 90% at the middle and high school levels. *See* AIR/MAP Study, volume 1, p. 31.

As noted above, most special education finance systems – including the one currently in place in New York State – utilize extra percentage weightings for each child with a disability, and often utilize different weightings for different disabilities. These weightings are essentially arbitrary because prior to the present study, there have been few thorough analyses of how much appropriate additional services for students with disabilities actually cost. Moreover, basing state education finance systems on such weightings is often counterproductive to sound educational policy and applicable legal requirements because they may provide incentives for school districts to classify more students as disabled and to place them in separate, non-mainstream settings in order to maximize state aid entitlements.

23. Since the Illinois and Alaska studies in the 1980s, *The New York Adequacy Study* is the first large-scale empirical effort undertaken in the United States to develop a funding approach geared to delineating the actual programmatic costs of providing adequate educational services to the full range of students, including those in poverty, English language learners, and students with disabilities. Furthermore, both federal and state law promote mainstreaming and inclusion in special education placements. The virtually unanimous conclusion of the highly qualified general education and special education professionals included in our study regarding the proportion of students that on average can (and should) be educated in neighborhood schools is highly significant. It provides a meaningful benchmark for constructing a funding model based on student mainstreaming. The elements of the study that tie the numbers of supplemental special education personnel to projections about the numbers of special education students that can be best educated in general education classes that will have small sizes appropriate to their needs, provides a sound basis for deriving overall costs for special education. This is based on

the ranges of special education students in any school population, without the need to rely on specific per capita funding ratios.

24. Keep in mind, what was specified by the panels in conjunction with this study was always meant to serve as a basis for appropriate funding, not mandates for practice. Given the extensive problems of overcrowding in New York City's schools, and the large number of students with disabilities that currently are assigned to schools outside of their home districts – as well as the inordinately high proportion of New York City students with disabilities who are currently placed in separate class settings – I would not expect the 90/95% target figures in the costing out analysis to be met in the near future. The quantitative impact of this reality is that the city probably will have to spend more than the amounts reflected in our model to continue to pay for a large number of very small, separate class programs, extra special education transportation, and the range of special education and related services that these students need, although it is not possible to identify with precision the full extent of these additional costs.

Poor and ELL Students

25. The panel has also asked “what evidence supports the assumptions made about the cost of educating poor and ELL students,” and the quantitative impact of modifying these assumptions. As I noted above, determining the extra costs of meeting the needs of students from poverty backgrounds has been one of the major problems confronting the field of education finance in recent years. The S&P study candidly acknowledges this problem when it states that “insufficient empirical evidence exists in New York to determine how much additional funding is actually needed for different categories of students with special needs to consistently perform at intended achievement levels.”¹⁰ Standard & Poor's, therefore, specifically declined to

¹⁰ See S&P Study, p. 8.

“explicitly recommend a particular set of weightings.”¹¹ Instead, it used a 35% weighting figure drawn from the “literature” as an illustrative example for the analyses discussed in its report, but “encouraged” readers to compute spending levels with alternative weightings through its EdResource Calculator.¹²

26. Because of the major importance of this issue, we attempted in our study to determine the extra costs of educating students from poverty backgrounds through two empirically based methodologies – something which, as the S&P study noted, has never been done in New York State. First, we undertook a “successful schools” analysis, not simply of school districts that had high achievement results, as in the S&P analysis, but of specific schools that had high achievement results, taking into account the demographics of their population, such as schools with substantial numbers of children from poverty backgrounds that had consistently high results over a number of years. We then intended to analyze and compare the results of these successful school profiles with the findings of our professional judgment panels, especially in regard to the staffing patterns in schools that were “beating the odds.” However, we encountered a major problem with this analysis in that there simply were too few schools in New York State with substantial numbers of students from poverty backgrounds that were consistently demonstrating high achievement to allow us to produce statistically significant results.¹³

27. Our second empirically oriented approach to determining the extra costs of educating students from poverty backgrounds was built into our basic professional judgment methodology. We asked each of the panels to identify the programs that would be needed for

¹¹ Ibid., pp. 8-9

¹² Ibid., p. 9

¹³ See AIR/MAP Study, volume 2, appendix I. We did use the schools that were identified as being successful in this analysis as the prime source for identifying teachers and administrators to serve on our professional judgment panels.

hypothetical schools with varying levels of poverty based on 4.5% to 90% percentage eligibility for a federal subsidized meal program within the school district. For New York City, this meant that the panels deliberated at length about the specific programs that would be needed to provide a full educational opportunity to schools with 34.2%, 65.8%, 85.3%, 93%, and 96.6% poverty levels. Our final funding recommendations, and the formula on which they are based, are substantially influenced by the strong consensus that emerged from the panel deliberations about the specific programs (pre-k, small class size, after school programming, support services, etc.) that are needed to meet the specific needs of students in schools with varying levels of students from poverty backgrounds. Our formula actually assigns a specific dollar amount to every school in New York City based on its proportion of students from poverty backgrounds, students with disabilities, and ELL students. This method does not calculate any abstract per student weights. Rather it focuses on specifically delineated program needs of schools with differing concentrations of students in poverty and with special needs. I believe that this is the most extensive consideration of the costs of educating students with special needs that has ever been conducted in the United States.

28. The panel has also asked what the “quantitative impact” would be if the assumptions in our study regarding the education of poor students were changed. As indicated above, the method we used does not employ abstract weightings or other “assumptions.” It is based on the professional judgments and personal experiences of a large number of education practitioners about the specific extra programs that are required to meet the needs of these children. Although we have not done calculations that would yield “weightings” comparable to those used in the S&P study, the regents’ study and Duncombe and Yinger’s analyses, generally speaking, I think that the poverty factor that is implicit in our findings would be at a lower level

than the weightings these studies used – and certainly substantially below the 100% poverty weighting used by the regents and the 120% poverty weighting used by Duncombe and Yinger – and that if somehow one were to build their weightings into our calculations, the resulting recommendations would be substantially higher than those we in fact reached.

29. To the extent that the conclusions reached by our panels are more moderate than the poverty weightings utilized by scholars such as Duncombe and Yinger, that difference may reflect the fact that our panelists, being experienced educators who deal with the realities of school district administration and school programming on a daily basis, were guided by a realistic sense of the level of additional funding that schools in New York City and elsewhere could properly absorb and effectively utilize in a four-year period. Such a reality basis was undoubtedly infused into the panel deliberations by the school business managers that we included on each panel to ensure that concerns for fiscal realities were fully considered in all of the panel deliberations.

30. In regard to English language learners, the recommendation of the initial professional judgment panels was that there was a substantial overlap in most New York schools between students from poverty backgrounds and English language learners. Moreover, in light of the small classes, extended time programs, and other services being provided to students living in poverty by the model, additional levels of resources were not required to meet the needs of English language learners. As one of the panels noted, ELL students did not require additional teachers or other resources as much they needed teachers and other personnel with different qualifications. The stage one and stage two recommendations in the study's range of funding recommendations reflect this perspective.

31. Many of the participants at the stakeholder meeting, however, felt strongly that there should be a modest increase in teacher allocations and supplies to meet the needs of ELL students. The summary PJP panel accepted this recommendation, noting also the opinion of Kenji Hakuta, the ELL expert advisor for the project, that the initial PJP recommendations did not take into account the high percentage of ELL schools (especially in New York City) where a multitude of different languages are spoken. The small increase in resources for ELL students recommended by the summary professional judgment panel is included in the stage 3 and stage 4 funding recommendations. This increase would appear to be substantially below the ELL weighting of 100% recommended by Duncombe and Yinger; the 13% weighting used by the regents; and the 20% utilized by Standard & Poor's in their exercises. However, as discussed above, I don't think that abstract weightings, especially when dealing with students with multiple special needs such as poverty and language issues, are appropriate to determine the actual costs of providing an adequate education.

School Size

32. The next question posed by the panel was “what evidence supports [AIR/MAP's] proposed school size limits . . . and are these limits required to provide a sound basic education.” The school sizes used in the exercises represented the average sized schools within each of the four categories of districts for which we selected professional judgment panels. We did not extrapolate beyond the school sizes that were used in the exercises conducted by the professional judgment panels. Based on the collective resource specifications developed by the panels, larger per pupil quantities of resources appeared to be associated with the operations of smaller schools (i.e., there were some economies of scale associated with larger school sizes). That is, the panels made the judgment that smaller schools required additional funding to cover basic staffing and

infrastructure needs and that, correspondingly, larger schools would exhibit economies of scale that should be reflected in the analysis.

33. Dr. Palaich has criticized the fact that we did not project further economies of scale for very large New York City high schools that were beyond the average ranges of schools that our panels considered.¹⁴ I don't know what basis Dr. Palaich has for testifying about methods for utilizing school size factors in a professional judgment study since the studies that he has done do not appear to have even considered this important factor.¹⁵ In any event, after considering these issues at length, we concluded that going beyond the size limits of these average school sizes to estimate costs would be inappropriate, given the existing evidence, though limited, on the positive impact of smaller schools on student outcomes. There is no evidence of which I am aware that there would be substantial economies of scale for the very large schools in New York City, and in fact, the additional resources that very large, often overcrowded, urban schools need for security, discipline, and other problems might require greater spending. In any event, the simulations regarding school size that we presented to the professional judgment panels focused on average ranges. Since very large schools were outside these ranges, the panels did not consider them, and they were not included in the study.

Central District Overhead Expenses

34. A further question posed by the panel concerning our professional judgment analysis concerned the manner in which "overhead" expenditures for district level expenditures were treated. The question actually contained an erroneous premise: our study does not assume that "overhead expenditures . . . must grow in proportion to changes in instructional spending."

¹⁴ Palaich Statement, p. 36.

¹⁵ See North Dakota study, Plaintiffs' Exhibit 4. School size was one of the important issues that the courts emphasized in the professional judgment study that MAP conducted in Wyoming. *Campbell County Sch. Dist. v. State*, 19 P.3d 518 (Wyo. 2001).

On the contrary, the first three estimates in our range – including the stage 3 estimate that we highlighted and CFE adopted for its recommendations – add back current district level spending and provide *no increase whatsoever* for the increased overhead that probably would accompany the substantial increases in instructional expenditures that our study recommends.

35. The fourth and highest of our recommendations differs from the stage 3 recommendation for the precise reason that it does add back an additional amount for increased district overhead, but this addition is not calculated to provide overhead increases that are directly proportional to the recommended increases in instructional costs. The district overhead cost calculation at stage 4 utilizes a combined “lump-sum ratio” approach that assumes that certain core overhead factors, such as maintenance and operations, finance administration, staff administration, and curriculum development and supervision – but not all central administrative functions—would grow with increases in instructional spending. This factor added \$.8 billion to our base recommendation for increased funding for New York City – an amount that is *not* included in the CFE proposed increase that has been presented to the panel.

Regional Cost Indices

36. The panel has also inquired as to the specific index that should be used to adjust for regional cost differences. The index used in our study was the Geographic Cost of Education Index (GCEI) developed specifically for this project by my colleague Jay Chambers. Dr. Chambers developed the original GCEI for the National Center for Education Statistics¹⁶ and revised that model for use in New York State in the current study based on a fresh analysis of all of the available current data. His NCES index is probably the most widely used such index in

¹⁶ See Chambers, J.G., *Measuring Geographic Differences in Public School Costs*. (Washington, DC: U.S. Department of Education, National Center for Education Statistics working paper, 1997.)

the United States. Essentially, the GCEI bases its analysis of regional cost differences on differences in the costs of hiring teachers and other personnel, who constitute the overwhelming bulk of all educational costs. The analysis uses a “hedonic wage model,” which differentiates between discretionary costs that school districts incur in hiring personnel and costs that are beyond its control. Discretionary costs include items like years of teaching experience, educational preparation, and the nature of job assignments such as the extent to which qualifications match subject matter taught. Uncontrollable factors include items like population density, housing costs, and unemployment rates in the area. Controlling for the discretionary factors, we found that the cost of personnel in New York City are approximately four percent higher than those in the district attended by the average student in the state. (Note, of course, that the average, which is student weighted, is itself substantially influenced by New York City, which accounts for 38% of the students in the state. That is, the district attended by the average student has a geographic cost of education index value of 1.00.)

37. Our GCEI provides a more moderate cost index increase for New York City than the regional labor approach used by the regents and the cost index developed by Duncombe and Yinger. Duncombe and Yinger strongly criticize the GCEI because they believe that it substantially understates the increased salaries that would actually be needed to hire fully qualified teachers for all New York City schools. They may be right. We do not believe, however, that sufficient objective evidence exists at this time to determine a precise increase in salary that would be necessary to attract a pool of fully qualified teachers to staff all of New York City’s schools. Increases in demand for highly qualified teachers that would result from full implementation of our model may well require salaries to be driven up even further than we are currently able to observe.

38. The GCEI is premised on an expectation that school districts provide an acceptable level of working conditions in terms of reasonable class sizes, safe environment, and other factors. We anticipate that if our funding recommendations were accepted and implemented, working conditions in the city would be substantially improved, and it might then be possible to attract teachers at the salary scale levels the GCEI recommends – or, at the least, there would be a better data base for calculating the amount of salary increases that would be necessary to attract a sufficient pool of qualified teachers. If working conditions are not improved, then more substantial salary increases undoubtedly would be necessary to attract a fully qualified staff. It is important to recognize that the sheer size of New York City (representing 38% of the students) has substantial impact on the average GCEI value, and one of our objectives in constructing the index was to ensure that the GCEI, in and of itself, was fiscally neutral. That is, it is intended to reflect the relative cost across districts in New York State of employing comparable teachers.

Response to Defendants' Allegations

39. In their Memorandum of Law dated September 1, 2004, defendants made a number of misleading and erroneous allegations regarding the AIR/MAP study that I would like to briefly address. These attacks on our methodology apparently stem from the two experts that defendants retained for these hearings. The first expert, Dr. Chester Finn, totally rejects the professional judgment methodology, even though I understand that he acknowledged that he has never conducted a costing-out study and does not consider himself an expert in education finance. Defendants' other expert witness, Dr. Palaich, obviously does not share Dr. Finn's disparaging views on professional judgment, since his firm also extensively utilizes the professional judgment methodology. With all due respect, however, I believe that many of his

criticisms, stem from his limited understanding of the advanced techniques we were able to use in this study, most of which were not used in the more limited, small state studies with which Dr. Palaich is familiar.

40. Thus, the comments in defendants’ brief that one of our expert reviewers differed to some degree with the panels’ judgments on class sizes¹⁷ and that minor changes were made in the resource allocations for ELL students based on input from the stakeholder panels¹⁸ simply reflects a misunderstanding of the basic strength of the extensive checks and balances approach that we were able to incorporate into this large- scale professional judgment study. As discussed above, one of the major innovations we were able to include in the *New York Adequacy Study* was the capability to obtain an extremely broad range of discussion and judgmental input – a broader range of views than I believe has ever been included in any prior professional judgment study. Some of these views obviously will differ from the ultimate recommendations that emerge from the study. Although this approach allows critics to find dissenting voices they can quote at any point in this highly transparent process, the fact that a range of views is being seriously considered is a strength and not a weakness of this process.

41. Defendants’ irresponsible charge that that our conclusions “primarily reflect the predetermined policy judgments of CFE and its contractors”¹⁹ is simply false. The core decision-makers in this process were the 55 professional educators who served on the 10 professional judgment panels. Our methodology – which we consider a significant advance over prior professional judgment processes – carefully established six stages for maximizing input to

¹⁷ See Defendants’ Brief, pp. 46-47.

¹⁸ Ibid., p. 48.

¹⁹ Ibid., p. 45.

the panels and for testing and reevaluating their judgments and conclusions.²⁰ Since we unabashedly describe this approach as a judgmental process, we sought to maximize the number of judgments that were brought to bear on the critical issues under consideration. Our methodology, therefore, sought information on the experiences of parents and community members on programs that work, summaries of the professional literature,²¹ specific analyses of the panels' proposals by highly regarded experts in the field, and "stakeholder" reviews by business leaders and policymakers on the practicality of the proposals. All of these perspectives were fed to the panels, and reconsidered by summary panels, to create what is probably the most balanced, well-considered and transparent professional judgment process that has ever been conducted in the United States. The extent of any judgments by the research team were limited to technical issues in the design of the simulation and cost models used to interpret and analyze the data provided by the professional judgment panels as influenced by the external expert consultants and the stakeholder panel members.

42. The research team insisted in the conduct of this study that it operate independently of CFE and the Council on Costing Out.²² Moreover, I can affirmatively state that

²⁰ See summary chart of the 6-stage process in AIR/MAP Study, volume 1, p. 9.

²¹ Our goal in providing this information was to summarize the research in the field in order to help "level the playing field" and facilitate a common vocabulary among the participants. Based on our observation of the panel deliberations, the reality is that these panel members were well informed about research and about community and parent perceptions well beyond what we provided them and they were capable of making their own judgments about these issues.

²² Although the foundation funding that supported the project was funneled through CFE, we clearly established as a primary term of our contract that "The final report . . . will be based on the independent judgment of the research team, informed by the recommendations of the panels, the expert advisers, and public input through various public engagement processes. The recommendations will not be governed by the litigation or policy positions of CFE, NYSSBA, or any of the other participating groups or individuals." See AIR/MAP Study, volume 2, p. 10. Two of the four principal

on at least two major issues, CFE and the majority of the members of the Council on Costing Out strongly disagreed with the recommendations in our preliminary report and argued that we should reconsider our methodology and our conclusions. Specifically, these groups were critical of the GCEI and questioned why it yielded lower costs for New York City than the index the regents had used. They also cited works by Duncombe and Yinger and others, which argued that much higher teacher salary costs for urban areas should be used than the salary levels that were reflected in our analyses. Although we very carefully considered these comments, we rejected them in the end for the reasons I set forth in paragraphs 37-38 above.

43. Defendants’ failure to understand the iterative nature of our professional judgment methodology also would explain their baseless charge that we used “statistical analyses . . . primarily to *change* the panels’ judgments rather than to make projections,”²³ and that the “researchers overrode the panel members’ judgments.”²⁴ The strength of our extensive

researchers on this study had actually testified for the defendants in this case. The defendants’ implication that our presenting a summary of the views of parents and community members to the professional judgment panels (along with summaries of the literature, detailed opinions of our consulting experts, and other relevant information) somehow biased the process is ludicrous. At the stakeholder meetings we also presented panelists with the views of the chairs of the assembly education and senate education committees, the executive director of the Zarb Commission, and a representation of the governor’s office. In addition, we had extensive briefings and interchanges with the members and staff of the Assembly Education Committee and the staff of the Senate Finance and Education Committees. Would the defendants claim that this input also biased the proceedings?

²³ See Defendants’ Brief, p. 51. In their brief, defendants even (mis)cited for this supposed methodological flaw Professor James Guthrie, who was one of the other principal researchers on this project. Dr. Guthrie obviously would not have participated in practices that were inconsistent with his published professional views. Which of his statements the defendants claim to be inconsistent with our methodology cannot, however, be deciphered, since the issue they raise is not discussed anywhere on page 213 of the article on “Enabling ‘Adequacy’ to Achieve Reality,” which they cite on page 51 of their brief.

²⁴ See Palaich Statement, p. 36.

professional judgment methodology was that it did not utilize “raw data.” Instead, it emphasized constant checks and balances and reconsideration to ensure that the final judgments that were rendered were as balanced and thoroughly considered as possible. The study team members provided no input of any kind during the professional judgment panel process. In fact, all panel members were asked to specifically comment on this point at the end of each panel session, and we received unanimous agreement that this was the case. Of course, the expert review and stakeholder components of the project were designed to potentially influence the process. However, this information was not available until the latest phases of the panel meetings, during which only slight modifications were made. In addition, input from the stakeholders or experts only affected the professional judgment process to the extent that the panel members agreed that the information from these sources was important and to the extent that they agreed that it should be reflected in the final findings. Moreover, the specific modifications that were made at each stage were described in detail so that readers and policymakers could understand and accept or reject any of these judgments. The stage one, stage two, and stage three reference points in the range of funding amounts we recommended were specifically designed to allow readers to understand and accept or reject the input that led to judgmental modifications at each stage.²⁵

44. Dr. Palaich has stated that “it was not clear why regression equations were used” to analyze the initial professional judgment panel input.²⁶ I realize that in the simple professional judgment studies Dr. Palaich has conducted in North Dakota and a few other states, the range of data and the complexity of the issues were not as great as the range and complexity in our enormous New York State study. Given the fact that our panel deliberations had resulted in extensive information from 10 different panels on 48 basic data points, a regression analysis was

²⁵ See AIR/MAP Study, volume 1, pp. 67-70.

²⁶ See Palaich Statement, p. 34.

necessary to synthesize all of this complex data into a format that would be meaningful and useful for further deliberation and consideration by the summary professional judgment panel.²⁷ From these regressions, we created new worksheets that permitted the panels to view and understand the overall statewide estimates that emerged from the initial panel deliberations and to interpret and revise them as they saw fit.

45. Defendants also note that the per pupil costs for schools with high concentrations of poverty students in our final recommendations are higher than the estimates that resulted from the original New York City panels.²⁸ The initial low estimates for New York City may have reflected a hesitancy among New York City educators whose experience has been in a highly resource scarce environment to fully articulate the extent of resources that are actually needed to provide all students a full opportunity to meet the Regents Learning Standards. (The upward slopes associated with poverty were more marked in other urban districts that have similar concentrations of students with poverty similar to those in New York City.) In any event, the critical point here is that after the statewide data was synthesized, the educators from New York City who participated in the summary panel discussions fully joined with their colleagues from other parts of the state in agreeing on the final estimates.

²⁷ We used F-tests to assess the statistical significance of the regression modes and where the F-tests showed no statistically significant relationship, we substituted averages for individual resources. As to Dr. Palaich's questioning of the stability of coefficients in the needs index factor, the coefficient in our Exhibits C-4 a-f (AIR/MAP Study, vol. 2 at 122-124), are all statistically significant at the 1% level; since we recommend undertaking a new cost analysis after four years, the needs index we propose clearly would support a stable state aid formula during that time period.

²⁸ See Defendants' Brief, p. 48.

46. Defendants' implication that our study's conclusions regarding special education are inconsistent with the requirement for individualized planning based on student needs²⁹ distort legal requirements regarding mainstreaming under federal law.³⁰ The federal Individuals With Disabilities Act specifically requires students to be placed in the "least restrictive environment,"³¹ which in the overwhelming majority of cases should be the general education classroom, with appropriate supports and services. The conclusions of our study actually will maximize the possibilities for complying with the federal law. They support placement options that respond directly to the need for more well-designed inclusion programs to substitute for current inordinately high proportion of separate class placements in New York City, which have repeatedly been criticized by state and federal officials as being in violation of state and federal least restrictive environment requirements.

47. In sum, the AIR/MAP study represents the culmination of over 25 years of thinking, analysis, and implementation of costing-out studies by Dr. Chambers, Dr. Guthrie, Dr. Smith, and myself, and has advanced the state of the art of professional judgment studies and costing-out analysis. I believe that the conclusions and recommendations in our final report specifically answer the core question posed by the Court of Appeals in that they set forth the "actual costs" of providing the opportunity for a sound basic education in New York City (and every other district in the state). In addition, I believe that the extensive data in the report provides a reliable basis for the panel's deliberations and recommendations.

²⁹ Ibid., p. 47.

³⁰ I find it inconsistent and strange, to say the least, that although Dr. Palaich praises my writings for reflecting "the best thinking and practice" in the field of special education finance (*see* Palaich Statement, p. 49), and the S&P Study (n.16) cites nine of my articles and studies on special education finance,] defendants attribute to our study a gross ignorance of the federal law in this field.

³¹ *See* 20 U.S.C. § 1412(a)(5); 34 U.S.C § 300.550.