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STATE OF MICHIGAN
DEPARTMENT OF EDUCATION
LANSING

MICHIGAN Department of Education

THOMAS D. WATKINS, JR.
SUPERINTENDENT OF
PUBLIC INSTRUCTION

TO: State Board of Education

FROM: C. Philip Kearney, Chairman, Accreditation Advisory Committee

DATE: November 12, 2002

SUBJECT: Interim Report of the Accreditation Advisory Committee

The State Board of Education approved *Education YES! – A Yardstick for Excellent Schools* on March 14, 2002, appointed members of the Accreditation Advisory Committee on April 11, 2002, and met with the Advisory Committee on May 9, 2002. The Advisory Committee was charged with advising the Board on:

- Initial Distribution of Schools in Grade Categories
- Measuring School Performance Indicators, and
- Alignment of *Education YES!* with Federal Legislation

An interim report from the Advisory Committee is included as Attachment A. The interim report has been updated since it was shared with the Board in October. The Committee met on October 31 and November 1 and was able to resolve these issues and to finalize its cut-score recommendations.

The report includes recommend cut-scores for status and growth in mathematics and reading for the elementary and middle school levels. In addition, the Committee brings substantive recommendations to the Board on the basic metric for measuring student achievement, the change grade, and the use of achievement data at the high school level. These recommendations are included in the report.

The setting of cut-scores and letter grades for state accountability systems is new and uncharted water. Very few states have taken thoughtful approaches to setting accountability cut-scores and assigning letter grades. Many states have done it poorly, and many have had to go back to the drawing board because of weaknesses in their systems. To avoid a similar outcome, the committee is striving to take the steps necessary to ensure the technical soundness of the system, particularly with respect to setting the cut-scores and assigning the letter grades.

Dr Edward Roeber is scheduled to discuss the report with the Board on November 14.

RECOMMENDATIONS OF THE MICHIGAN ACCREDITATION ADVISORY COMMITTEE TO THE STATE BOARD OF EDUCATION

Introduction

The recommendations set forth in the following pages are offered to the State Board of Education in fulfillment of the charge set before us on our appointment as the Michigan Accreditation Advisory Committee. The members of our committee are five in number and include:

Philip Kearney	University of Michigan – Ann Arbor
Sharon Johnson Lewis	Council of the Great City Schools – Washington, DC
Lawrence Lezotte	Effective Schools Products, Ltd - Okemos
Mark Reckase	Michigan State University – East Lansing
Edward Roeber	Measured Progress – Dover, NH

As noted in Superintendent of Public Instruction Thomas Watkins' memorandum to the State Board of Education dated April 29, 2002, each of us brought to the work of the committee some considerable expertise and experience in accountability, measurement, school improvement, and accreditation systems.

In that same memorandum, Superintendent Watkins laid out the committee's charge, namely to develop recommendations in three areas:

- Initial Distribution of Schools in Grade Categories
- Measuring School Performance Indicators
- Alignment of *Education YES!* with Federal Legislation

In fulfilling our charge, the committee met as a group on [*seven* [*to date*] separate occasions:

May 8-9, 2002	Crowne Plaza, Ann Arbor & Monroe ISD, Monroe
June 10-11, 2002	Washtenaw ISD, Ann Arbor
July 15-16, 2002	Washtenaw ISD, Ann Arbor
August 1-2, 2002	State Library, Lansing
September 9-10, 2002	Washtenaw ISD, Ann Arbor
October 10-11, 2002	Washtenaw ISD, Ann Arbor

Note: This is an interim report of the Accreditation Advisory Committee. Text in italics indicates material that is not yet available or text that will be updated in the Committee's final report. Examples include the high school cut scores, (for which MEAP data is not yet available) and the school performance indicators that are currently being pilot-tested.

October 31-November 1, 2002 Washtenaw ISD, Ann Arbor
[*add additional meetings*]

In addition, the committee met by telephone conference call on October 21,2002.

On September 14, 2002, and again on October 24, 2002, Philip Kearney, Chair of the Committee, met with the State Board of Education to provide an interim report summarizing the committee's work to date.

The Committee's Recommendations

As called for in its charge, the Committee has developed and offers recommendations in the following three areas:

- Criteria for Assigning Scores/Grades
- Measuring School Performance Indicators
- Alignment of *Education YES!* with Federal Legislation

In addition, the committee offers recommendations in a fourth area:

- The Initial Year of Statewide Implementation

The recommendations in all four areas are set forth below.

I. Criteria for Assigning Scores/Grades

A. The Committee recommends the following cut scores/letter grades for School Status, School Change, and Student Growth.

For School Status

The School Status score/grade is an index score that reflects a school's success vis-à-vis academic achievement, taking into account the school's success in serving sub-populations. The method of calculating the individual index scores for Michigan schools is set forth in Appendix A.

The committee recommends the following assignments of cut scores/grades for School Status. Following each recommended assignment, the distributions of cut scores/grades for School Status for 2002-03 are also provided:

Elementary Reading Status				
Grade	Index Score Range	Number of Schools	Percent of Schools	Cumulative Percent of Schools
A	Above 311	210	13.1%	13.1%
B	307 – 311	341	21.3%	34.4%
C	298 – 306	647	40.4%	74.8%
D	294 – 298	160	10.0%	84.8%
F	Below 294	244	15.2%	100.0%

The index score range is expressed in terms of the weighted achievement index recommended by the Accreditation Advisory Committee.

Elementary Mathematics Status				
Grade	Index Score Range	Number of Schools	Percent of Schools	Cumulative Percent of Schools
A	Above 537	354	22.1%	22.1%
B	537 – 528	409	25.5%	47.6%
C	528 – 513	590	36.8%	84.4%
D	513 – 508	111	6.9%	91.3%
F	Below 508	139	8.7%	100.0%

The index score range is expressed in terms of the weighted achievement index recommended by the Accreditation Advisory Committee.

Middle School Reading Status				
Grade	Index Score Range	Number of Schools	Percent of Schools	Cumulative Percent of Schools
A	Above 305	69	10.2%	10.2%
B	305 – 298	205	30.3%	40.5%
C	298 – 295	179	26.5%	67.0%
D	295 – 289	134	19.9%	86.9%
F	Below 289	88	13.1%	100.0%

The score range is expressed in terms of the weighted achievement index recommended by the Accreditation Advisory Committee.

Middle School Mathematics Status				
Grade	Index Score Range	Number of Schools	Percent of Schools	Cumulative Percent of Schools
A	Above 527	176	26.1%	26.1%
B	527 – 523	85	12.5%	38.6%
C	523 –512	268	39.6%	78.2%
D	512 – 501	100	14.8%	93.0%
F	Below 501	47	6.9%	100.0%

The index score range is expressed in terms of the weighted achievement index recommended by the Accreditation Advisory Committee.

Middle School Science Status				
Grade	Index Score Range	Number of Schools	Percent of Schools	Cumulative Percent of Schools
A	Above 399	136	20.6%	20.6%
B	399 – 387	134	20.3%	40.9%
C	387 – 373	156	23.5%	64.4%
D	373 –342	167	25.2%	89.6%
F	Below 342	69	10.4%	100.0%

The index score range is expressed in terms of the weighted achievement index recommended by the Accreditation Advisory Committee.

Middle School Social Studies Status				
Grade	Index Score Range	Number of Schools	Percent of Schools	Cumulative Percent of Schools
A	Above 517	143	21.8%	21.8%
B	517 – 512	72	10.9%	32.7%
C	512 – 503	166	25.3%	58.0%
D	503 – 483	197	30.0%	88.0%
F	Below 483	80	12.1%	100.0%

The index score range is expressed in terms of the weighted achievement index recommended by the Accreditation Advisory Committee.

Grade 11 Reading

The Committee's recommendation regarding cut scores for achievement status in reading at the high school level will be inserted at such time as three years of high school MEAP data are available in a format that allows calculation of the weighted achievement index recommended by the Accreditation Advisory Committee.

Grade 11 Writing

The Committee's recommendation regarding cut scores for achievement status in writing at the high school level will be inserted at such time as three years of high school MEAP data are available in a format that allows calculation of the weighted achievement index recommended by the Accreditation Advisory Committee.

Grade 11 Mathematics

The Committee's recommendation regarding cut scores for achievement status in mathematics at the high school level will be inserted at such time as three years of high school MEAP data are available in a format that allows calculation of the weighted achievement index recommended by the Accreditation Advisory Committee.

Grade 11 Science

The Committee's recommendation regarding cut scores for achievement status in science at the high school level will be inserted at such time as three years of high school MEAP data are available in a format that allows calculation of the weighted achievement index recommended by the Accreditation Advisory Committee.

Grade 11 Social Studies

The Committee's recommendation regarding cut scores for achievement status in social studies at the high school level will be inserted at such time as three years of high school MEAP data are available in a format that allows calculation of the weighted achievement index recommended by the Accreditation Advisory Committee.

NOTE: The committee recommends that, at the high school level, the State Board of Education consider using the MEAP scores in the place of the percent who qualify for the Michigan Merit Award (which currently can be earned via MEAP, ACT, SAT or Work Keys). The committee makes this recommendation because it anticipates that the *No Child Left Behind Act (NCLB)* requires states to assess all students at one high school grade. Since

NCLB Title I uses mathematics, reading/language arts scores to gauge Adequate Yearly Progress (AYP), we recommend that the MEAP tests be used to accredit/grade Michigan high schools. This may necessitate change in the MEAP testing policies.

The percent qualifying for the Michigan Merit Award could still be reported, but not included in the school's grades.

For School Change

The School Change score/grade is based on a school's target slope, i.e., a slope line depicting the change in percent proficient from one year to the next. The method of calculating the individual target slopes for Michigan schools is set forth in Appendix A.

The committee recommends the following assignment of cut scores/grades for School Change:

- A -- to a school that exceeds target (slope)
  - Slope is 125% or more of target
- B -- to a school that meets target
  - Slope is 75% to 125% of target, or the three year average of the percent proficient is above 100 minus the number of years remaining to the goal of 100% proficiency (88% for 2002-03)
  - Schools that score at high levels in status will be given this grade, unless their change score would qualify them for an A.
- C -- to a school that almost meets target
  - Slope is 25% to 75% of target
- D -- to a school that demonstrates no change
  - Slope is between 25% of target and 25% of target below zero
- F -- to a school that declines in performance (i.e., % proficient)
  - Slope is more than 25% of target below zero

Based on this recommendation, the distributions of cut scores/grades for School Change for 2002-03 are as follows:

Elementary Reading Change				
Grade	Change Slope Range	Number of Schools	Percent of Schools	Cumulative Percent of Schools
A	125% of target	295	16.6%	16.6%
B	75% to 125% of target	205	11.6%	28.2%
C	25% to 75% of target	330	18.6%	46.8%
D	Between 25% of target and 25% of target below zero	315	17.8%	64.6%
F	More than 25% of target below zero	627	35.4%	100.0%

The change slope range is expressed in terms of a comparison of a school's calculated slope to the target slope for the school as recommended by the Accreditation Advisory Committee.

Elementary Mathematics Change				
Grade	Change Slope Range	Number of Schools	Percent of Schools	Cumulative Percent of Schools
A	125% of target	936	52.8%	52.8%
B	75% to 125% of target	239	13.5%	66.2%
C	25% to 75% of target	151	8.5%	74.7%
D	Between 25% of target and 25% of target below zero	146	8.2%	83.0%
F	More than 25% of target below zero	302	17.0%	100.0%

The change slope range is expressed in terms of a comparison of a school's calculated slope to the target slope for the school as recommended by the Accreditation Advisory Committee.

Middle School Reading Change				
Grade	Change Slope Range	Number of Schools	Percent of Schools	Cumulative Percent of Schools
A	125% of target	87	12.9%	12.9%
B	75% to 125% of target	121	17.9%	30.8%
C	25% to 75% of target	185	27.4%	58.1%
D	Between 25% of target and 25% of target below zero	174	25.7%	83.9%
F	More than 25% of target below zero	109	16.1%	100.0%

The change slope range is expressed in terms of a comparison of a school's calculated slope to the target slope for the school as recommended by the Accreditation Advisory Committee.

Middle School Mathematics Change				
Grade	Change Slope Range	Number of Schools	Percent of Schools	Cumulative Percent of Schools
A	125% of target	321	47.6%	47.6%
B	75% to 125% of target	108	16.0%	63.6%
C	25% to 75% of target	117	17.3%	80.9%
D	Between 25% of target and 25% of target below zero	67	9.9%	90.8%
F	More than 25% of target below zero	62	9.2%	100.0%

The change slope range is expressed in terms of a comparison of a school's calculated slope to the target slope for the school as recommended by the Accreditation Advisory Committee.

Middle School Science Change				
Grade	Change Slope Range	Number of Schools	Percent of Schools	Cumulative Percent of Schools
A	125% of target	15	2.2%	2.2%
B	75% to 125% of target	38	5.7%	7.9%
C	25% to 75% of target	165	24.6%	32.5%
D	Between 25% of target and 25% of target below zero	360	53.7%	86.1%
F	More than 25% of target below zero	93	13.9%	100.0%

The change slope range is expressed in terms of a comparison of a school's calculated slope to the target slope for the school as recommended by the Accreditation Advisory Committee.

Grade 8 Social Studies

Because five years of achievement data are needed for the computation of the calculated slope, the measurement of social studies for achievement change will begin when 2002-03 data become available.

Grade 11 Reading

Because five years of achievement data are needed for the computation of the calculated slope, the measurement of high school reading for achievement change will begin when data for the class of 2004 become available.

Grade 11 Writing

Because five years of achievement data are needed for the computation of the calculated slope, the measurement of high school writing for achievement change will begin when data for the class of 2004 become available.

Grade 11 Mathematics

Because five years of achievement data are needed for the computation of the calculated slope, the measurement of high school mathematics for achievement change will begin when data for the class of 2004 become available.

Grade 11 Science

Because five years of achievement data are needed for the computation of the calculated slope, the measurement of high school science for achievement change will begin when data for the class of 2004 become available.

Grade 11 Social Studies

Because five years of achievement data are needed for the computation of the calculated slope, the measurement of high school social studies for achievement change will begin when data for the class of 2004 become available.

For Student Growth

In order to validly and reliably measure student growth three requirements are necessary: (1) the domain is specified; (2) there are measures at adjacent grade levels; and (3) these measures are equated with one another and reported on a vertically equated scale.

Since these requirements have not yet been met, and likely will not be met until the implementation of testing for *No Child Left Behind* begins, the Student Growth cut scores/grades for 2002 are based on the interim solution set forth in Appendix A.

The single cut score/grade is assigned to both the feeder and receiving schools (i.e., the 4^{th} and 7^{th} grade pair, or 7^{th} and 11^{th} grade pair) since one cannot validly attribute student growth to either school separately.

In keeping with that interim solution, the committee recommends the following assignment of cut scores/grades for Student Growth. Following each recommended assignment, the distributions of cut scores/grades for Student Growth for 2002-03 are also provided.

Elementary to Middle School Growth in Reading				
Grade	Growth Score Range	Number of Schools	Percent of Schools	Cumulative Percent of Schools
A	Above 33	266	15.4%	15.4%
B	33 – 29	611	35.4%	50.8%
C	29 – 25	442	25.6%	76.4%
D	25 – 20	273	15.8%	92.2%
F	Below 20	135	7.8%	100.0%

The growth score range is expressed in terms of the "interim solution" recommended by the Accreditation Advisory Committee.

Elementary to Middle School Growth in Mathematics				
Grade	Growth Score Range	Number of Schools	Percent of Schools	Cumulative Percent of Schools
A	Above 44	376	21.8%	21.8%
B	44 – 38	452	26.2%	48.0%
C	38 – 32	475	27.5%	75.5%
D	32 – 24	288	16.7%	92.2%
F	Below 24	135	7.8%	100.0%

The growth score range is expressed in terms of the "interim solution" recommended by the Accreditation Advisory Committee.

Middle School to High School Growth in Reading

The Committee's recommendation regarding cut scores for achievement growth from middle school to high school in reading will be inserted at such time as three years of high school MEAP data are available in a format that allows for students scores to be matched and calculation of the weighted achievement index recommended by the Accreditation Advisory Committee.

Middle School to High School Growth in Mathematics

The Committee's recommendation regarding cut scores for achievement growth from middle school to high school in mathematics will be inserted at such time as three years of high school MEAP data are available in a format that allows for students scores to be matched and calculation of the weighted achievement index recommended by the Accreditation Advisory Committee.

B. The Use of a Standard Setting Panel in Setting the Cut Scores/Grades

Standard-setting is the term used to label the judgmental process that leads to establishment of cut scores or grades in certain assessments. Standard-setting is always, in every field of endeavor, a judgmental process. There is no one correct or "safe" way to do it.

The committee chose to recommend a formal standard-setting process for several reasons. First, the wide variety of variables on which schools are to be graded (achievement and school performance variables) suggests that weighting among these variables would need to be considered. Second, the grading of schools is controversial. Third, there is relatively little experience in setting overall grades for schools based on such variables. Finally, it is the committee's desire that attention shift from the process of determining the grades to helping schools improve their performance. One way to do this is to try to set standards for schools through the most inclusive process possible.

Careful conceptualization and implementation of the process requires that the judges examine actual score/grade profiles. The role of the judges is not to set the standard but rather to recommend cut scores/grades to the policy makers, whose responsibility it is to decide the actual cut scores/grades, considering the recommendations from the judges as well as other factors that may legitimately influence their final decisions.

Consequently, the committee, to fulfill its charge in a responsible way, asked Department staff to convene a standard-setting panel broadly representative of teachers, administrators, parents, and members of the business community. The panel, in a two-day work session in late September and following a carefully guided procedure, examined actual score profiles and, based on that examination, offered its recommendations on cut scores/grades for School Status and Student Growth to the Accreditation Advisory Committee for its review. In the view of the committee, this process is a sound one, one that adheres to the standards of the measurement community, and one that will ensure the validity as well as the acceptability of the scores/grades to be assigned to Michigan schools.

The process of developing performance standards usually includes three phases: (1) defining the standards with descriptive language that communicates the differences among the performance levels; (2) setting *weights* for the individual components (or scores/grades) that make up the aggregate performance standard; and (3) making *judgments* about the cut scores/grades to be assigned to different levels of performance in the individual components, and for aggregate performance.

Using grades to report school performance, the State Board may decide whether to use typical school definitions of the grades to be assigned. For example, an "A" means that a school did outstanding, while a "B" designates a school that is above average, a "C" a school that is average, a "D" a below-average school, and an "F" a failing school. Standard setters might embellish these definitions with other aspects of these schools, depending, for example, on a school's performance on the school performance indicators.

In *Education Yes!,* the second phase was done by policy fiat, i.e., the State Board set the weights to be assigned to the individual components that would make up a school's aggregate score/grade. On a total weighting of 100 points, 33 points were assigned to the eleven indicators of performance that aggregate into three major areas (engagement, instructional quality, and learning opportunities); the remaining 67 points were assigned to the three achievement measures: School Status, School Change, and Student Growth.

The third phase was assigned to our committee, i.e., the five-member Accreditation Advisory Committee appointed by the State Board. The committee, to ensure the soundness, validity, and acceptability of the cut scores/grades that would be assigned to different levels of performance in the individual components, and for aggregate performance, chose to follow the path identified above. This path, as noted above, calls for a process that is carefully conceptualized and implemented, and that includes examination of actual school score/grade profiles. The schools were carefully selected to represent the full range of building level performance across a full range of MEAP.

The accreditation committee, based on its review of the work of the standard-setting panel (and on its own judgments with respect to the School Change cut scores/grades), recommends the set of School Status, School Change, and Student Growth scores/grades identified above to the State Board of Education. The State Board, of course, has final responsibility to set the actual cut scores/grades to be assigned to schools.

A complete description of the standard-setting process is set forth in Appendix B.

II. Measuring School Performance Indicators

The committee recommends that a three-year developmental process be undertaken for the generation, refinement and eventual adoption of the performance indicators to ensure that valid and reliable measures are established as an integral part of *Education YES!*

This developmental process should include a large-scale pilot in Year 1, the results of which will guide needed modifications for Year 2, and again for Year 3, with the understanding that, if analyses of Year 1 results warrant it, scores/grades—provisional or actual—could be reported. These could be partial scores for sub-components and/or one or more of the three areas, i.e., *Engagement, Instructional Quality,* and *Learning Opportunities.*

However, until such time as valid and reliable scores/grades for the three areas are produced, no performance indicator scores/grades would enter into the calculation of the composite school score/grade.

[*ADDITIONAL TEXT IS YET TO BE DETERMINED AND INSERTED*]

III. Calculating the School's Composite Score

As set forth in Education YES!, a composite school score set on a scale from 0 to 100, along with a corresponding letter grade of A, B, C, D or F, will be reported for each public school in Michigan. Schools that receive an A, B, C or D-Alert will be accredited. Schools that receive an A will be summary accredited. Schools that receive B, C or D-Alert will be in interim status. Schools that receive a F will be unaccredited.

The General Procedure

Education YES!, through its fore-ordained weighting scheme, sets forth the method of calculating the composite score for any given school. Under that weighting scheme, from a total weighting of 100 points, 33 points are assigned to the eleven indicators of performance that aggregate into three major areas (engagement, instructional quality, and learning opportunities); the remaining 67 points are assigned to the three achievement measures: School Status, School Change, and Student Growth. The six major components to which grades are to be assigned and their weights are:

Component	Weight
Achievement	
School Status	23
School Change	22
Student Growth	22
Performance Indicators	
Engagement	9
Instructional Quality	12
Learning Opportunities	12
Total:	100

In calculating a school's composite score, first the subject area scaled scores for each of the achievement measures for the school are transformed to scores on a 0 to 100 scale, then averaged to produce a single score; for example, the index scores for *4th grade Reading* and *4th grade Mathematics* are transformed to scores on a 0 to 100 scale, then averaged to produce a single score for *School Status*. The process is repeated for *School Change* and *Student Growth*. Then the scaled scores for the sub-components of each of the three

performance indicator areas are transformed to scores on a 0 to 100 scale, then averaged to produce a single score for each area; for example, the scaled scores of the sub-components *performance management systems*, *continuous improvement*, and *curriculum alignment* are transformed to a 0 to 100 scale, then averaged to produce a single score for *Engagement*. The process is repeated for *Instructional Quality* and *Learning Opportunities*. The resulting scores for the six major components listed above are then multiplied by their respective weights, totaled, and divided by 100 to give, on a 0 to 100 scale, a single score for the school. This single score is then transformed to the appropriate corresponding letter grade, e.g. A or B or C or D or F.

A complete description of the actual method for calculating the composite school score, including the transformation from the scaled score to a score on the 0 to 100 scale, and then transforming the score to a letter grade is set forth in Appendix C.

The Problem of "Missing Data"

The State Board of Education will need to decide how to handle accreditation decisions for schools that, for legitimate reasons, have "missing data" and for which no composite score, at least as described above, can be calculated. These schools will fall into one of two categories: (1) the school that consists only of grades at which no MEAP scores currently are available, e.g., a K-3 school; and (2) a school that is newly formed and as a consequence does not have the minimum of 3 years of MEAP scores required to calculate Status, Change and Growth scores, e.g., a newly formed charter school.

IV. Alignment of *Education Yes!* with Federal Legislation

A. Setting the Baseline for AYP

At its June meeting, the Committee met with Department staff and, following a review and discussion, supported the staff's initial recommendations for the 2002-03 school year, namely:

- Use total scores on only Reading and Math for triggering sanctions
- Use NCLB target of the 20th percentile for the baseline
- Report all results under the AYP format
- Urge schools to disaggregate and review/analyze their data in anticipation of using sub-populations as sanction triggers for 2002-03

A baseline set at the 20th percentile school (20th percentile of the State's total student population) seemed appropriate and reasonable to us – on average about a 40% proficiency level, i.e., some 60% are not proficient.

Templates of school results could be overlaid on a graph of the state AYP (irrespective of where the state baseline is eventually set), thus relating or referencing a school's Change score/grade to the AYP "score."

B. Tying *Education Yes!* to NCLB

The committee also considered an approach advanced by Department staff to tie the two systems even closer together. Essentially the approach would use the School Status score, and its assigned grades, to set the bar for proficiency e.g., a grade of D or F on *Education Yes!* School Status score would trigger the AYP sanction unless the School Change grade was B or better (the federal "safe harbor"). The bar would be raised from year to year, or from a block of years to a block of years, so that a D, then a C, then a B, and on to an A, in effect, would become the bar - gearing all of this to the expectation of 100% proficiency at the end of 12 years.

The committee is in general agreement with linking *Education Yes!* and AYP. It is not of a single mind about how tight the link ought to be. On the one hand, two members argue that, while closely related, *Education YES!* and NCLB are separate systems serving similar but somewhat different purposes. To too tightly link *Education Yes!* to NCLB would mean that the success of *Education Yes!* would become very closely intertwined with NCLB's success (and lasting power?). On the other hand, two members argue that this tight link is in accord with a major purpose of *Education YES!,* namely ensuring that all students reach proficiency—and in a set period of time, i.e., the 12 years of NCLB.

At root, how tight the link ought to be is a policy decision and one that the SBE is best able to consider and make. Department staff certainly can, and will present, the particulars for the State Board of Education.

C. Focus on Performance in Mathematics and Reading

The Accreditation Advisory Committee recommends that *Education YES!* grades for accreditation include Mathematics, Reading, Science and Social Studies. However, the Accreditation Advisory Committee recommends that for the calculation of AYP under NCLB, that AYP should focus on performance of students in the areas of mathematics and reading. We recommend this change for the following reasons:

1. NCLB Title I focuses primarily on the achievement of students in mathematics and reading;

2. NCLB is intended to give parents/guardians of students most at risk because of low mathematics and reading scores the opportunity for their children to receive additional instructional support or to move their children to a school not in need of improvement in these areas;

3. Adding schools to the "in need of improvement" category because of low performance in science (or social studies) will greatly increase the number of schools deemed to be "in need of improvement;"

4. Increasing the number of schools "in need of improvement" will greatly reduce parental options to seek help for children in mathematics or reading;

5. While mathematics and reading are not more important than science or social studies, in order to meet the NCLB goal of 100% proficiency in twelve years, schools, districts, and the state must be very pointed and focused with their efforts and resources;

6. The addition of science and social studies to NCLB AYP will dilute the resources and efforts needed to help schools achieve universal proficiency, thereby increasing the likelihood of failing to help all students achieve at high levels in mathematics and reading; and

7. Projections and calculations of schools "in need of improvement" in Michigan have not yet addressed subgroup performance, which are anticipated to greatly expand the number of identified schools.

V. The Initial Year of Statewide Implementation

The committee recommends that 2002-03 be viewed as "the first year of statewide implementation" of Education YES!, subject to further study and refinement, especially in terms of identifying measures, indicators, areas that will need particular attention.

During the first year of implementation, we recommend that several actions be taken:

1. A small set of schools should be randomly-selected to be visited in person to review their school performance indicator information and MEAP scores to determine how accurately they described the school and whether the grades that the school received are accurate in the eyes of the community, school board, administrators, teachers, and parents.

2. These visits should include an exploration of what technical support might be helpful to the school in their continuing efforts to raise proficiency levels.

3. A procedure should be established for identifying schools that have developed successful approaches to communicating an understanding of Education YES! to their school community, and have used data and information from Education YES! to initiate actions aimed at school improvement.

4. An appeals process should be established so that any school or person who receives the school's grades or receives reports of them may appeal them and provide a rationale for the appeal. Such appeals might be based on a contention that the grade(s) assigned are too high or too low, given what the appellant knows of the school situation. Individual instances should be reviewed, and the areas of potential inaccuracy tracked, to determine whether there are broader issues that need to be reviewed and possibly modified.

5. Research studies using the assigned grades to investigate the quality of the scales used for the school performance indicators should be undertaken. Since some of these are new and, in some cases, provide measures of school attributes not previously measured, the scales used to collect the data need to be further investigated.

6. In addition, research should be carried out on the manner in which the school performance indicators are measured and combined to yield school grades, since the set of variables used is unique and has not been used for such purposes in the past.

7. If time does not permit a comprehensive standard-setting process to be conducted prior to first year reporting, we suggest a more complete process be carried out. It is our belief that the more care that is taken in how the various school performance measures and the student achievement measures are combined into an overall school grade(s), the greater will be the support provided by educators and the public for the grades that are assigned, and the less time will be spent in squabbles over the grades and more time on improving building-level performance.

8. Once these steps have been taken, recommendations for appropriate modifications in the accreditation system be presented to the State Board of Education, for implementation in the 2003-04 school year. Periodically following the year 2003-04 (e.g., every three to five years), we recommend the State Board of Education re-visit the system to make sure that it continues to work well and that no further modifications are needed.

APPENDIX A

Methods for Calculating Cut Scores/Grades For School Status, School Change, and Student Growth

The Committee's bases for calculating the cut scores/letter grades for School Status, School Change, and Student Growth follow.

A. **The basic premise** for scores/grades for the categories of **School Status & School Change** is that they reflect a school's success vis-à-vis academic achievement, taking into account the school's success in serving sub-populations.

   Scores/grades for **Student Growth** are limited to one score/grade reflecting the success of both the feeder and receiving school until such time as the state develops a cross-grade scale in grades 3-8 in response to the requirements of *No Child Left Behind, Title I.* The development of a cross-grade scale will allow valid and reliable measurement of student growth. It is our understanding that a cross-grade scale will first be implemented in 2004-05.

B. **The basic metric for School Status** is an index score calculated as follows:

- The score(s)/grade(s) for a given year for a given school reflect a 3-year MEAP score average.
- The categories follow the MEAP categories, i.e.:
  - **For Math:**
  - **Exceed expectations) Advanced**
  - Meets expectations) Proficient Basic (1)
  - Less than Basic
  - For Reading (until 2003-04, then identical to above)
  - Satisfactory) Proficient
  - Moderate
  - Low
- Weights are applied to the 3-year score averages of the selected MEAP assessments (Reading and Math at the elementary level, reading, mathematics, science and social studies at middle school and high school to produce the measures of School Status).
- The following weights are used:

  4 (apprentice), 3 (basic), 2 (meets Michigan standards), 1 (exceeds Michigan standards)

- The weight is applied to the individual student's scaled score.
- The index is formed by dividing the sum of the weighted scores by the sum of the weights.

C. The basic metric for School Change be calculated as follows:

- The score(s)/grade(s) for a given year for a given school reflect three 3-year MEAP score averages, e.g., 98-99-00; 99-00-01; 00-01-02.

- The score(s)/grade(s) are tied to the end-point of NCLB Title I Adequate Yearly Progress (AYP) by virtue of setting the goal that all schools will achieve 100 percent proficient, i.e., Exceeds Standards plus Meets Standards on the MEAP within 12 years.

- Each school is given its own target (slope) from a base year annually to achieve 100% proficiency in 12 years, so that each school's annual Change grade will depend on whether it exceeded, met, or did not meet its own desired target (slope).

- Calculation:

  For each school:

  1) identify the percent proficient in Year 1;
  2) set the slope from Year 1 to Year 12;
  3) identify the MEAP data for three three-year periods;
  4) calculate the slope of the three three-year MEAP data averages;
  5) in Year 2 determine if the school exceeded (125% or more of target), met (75% to 125% of target), almost met (between 75% of target and 25% of target), or did not meet its target (slope) (less than 25% of target);
  6) assign grade of A to school which exceeds target (slope), B to meets target, C to almost meets, D to no change, or F to a school that declines in performance;
  7) provide a slope for the sub-groups but without a grade, for interpretative purposes (did each sub-group meet its target or not);
  8) in Year 3 and subsequent years, recalculate the slope and repeat the process. Therefore, if a school fails to improve in Year 3, it will have an even higher Change score target for Year 4; this keeps all schools on track for achieving 100% proficiency in 12 years.

- Note: This is different from how NCLB Title I defines AYP. The Federal definition is tied to whether schools' scores exceed, match or fall below a common slope defined for the entire state at each grade and in each subject area leading to 100% proficiency in 12 years. We believe that by providing each school with its own target, each school will be encouraged to improve, whether or not it exceeds the state's Federal target. This should

also increase the likelihood that the state and schools make the 100% proficiency target in twelve years.

- Constant monitoring and reporting of results will be necessary to determine if adjustments are needed.

D. The basic metric for Student Growth:

- The committee is of the view that to validly and reliably measure growth three requirement are necessary: (1) the domain is specified; (2) there are measures at adjacent grade levels; and (3) these measures are equated with one another and reported on a vertically equated scale. Since these requirements have not yet been met, and likely will not be met until the implementation of testing for *No Child Left Behind* begins, currently set for 2004-05 in Michigan, the committee developed the following two-part recommendation:

  - Long-term Solution

    The committee recommends that the state create a cross-grade MEAP score scale as an integral part of the new assessment system being developed to comply with No Child Left Behind (NCLB). This will permit growth from grade-to-grade to be measured in a reliable and valid manner, e.g., from grade 3 to grade 4; grade 4 to grade 5; grade 5 to grade 6; and so on. In order to do this, the following steps are necessary:

    1. Create grade-level benchmarks for the assessment of grades 3-8 plus high school in each subject area to be assessed;
    2. Create a MEAP testing system that measures these grade-level benchmarks in such a manner that a cross-grade scale can be developed;
    3. Implement a system to track students across grades within districts, including demographic variables such as racial-ethnic data and length of time in the school. Students who have been enrolled in the building for less than one year will not be included in growth reporting at the building level; and.
    4. Report Student Growth at the building level across the multiple grade comparisons within schools at each level, reporting each feeder school and the school it feeds as a pair of schools.

  - Interim Solution

    Since current plans call for first implementing such a system in 2004-05, student growth measures will not be available until after the 2005-06 school year, it will not be possible to fully implement the system outlined above until the new MEAP system has been used for two years (since

current plans call for implementing this system for the first time in 2004-05, it will be after the 2005-06 school year). We therefore recommend the following interim solution:

1. Create a common scale for MEAP mathematics scores at grades elementary, middle school, and high school; create another common scale for the reading assessments;
2. Using an expected-growth scale from a nationally-available norm-referenced test (NRT), determine an anticipated "growth" score starting from the base line.
3. Anchor this expected gain in a baseline year;
4. Calculate the average gain for the state from the lower to the higher grade level of an assessed subject area (e.g., from 4^{th} to 7^{th} grade mathematics);
5. Use this expected gain to calculate the extent to which local schools exceeded, matched, or did not meet this expected gain; and report Student Growth scores by assigning a single score/grade to both the feeder and receiving schools, i.e., the pair, since, until the new system is implemented, one cannot validly attribute student growth to either school separately.

APPENDIX B

The Standard-Setting Process

This technical material will be made available on request.

APPENDIX C

The Methodology for Calculating Composite Grades for Schools

As noted in Section III, Education YES! requires that a composite school score set on a scale from 0 to 100 school, along with a corresponding letter grade of A, B, C, D or F, be reported for each public school in Michigan. Schools that receive an A, B, C or D-Alert will be accredited. Schools that receive an A will be summary accredited. Schools that receive B, C or D-Alert will be in interim status. Schools that receive a D will be unaccredited.

Education YES!, through its fore-ordained weighting scheme, sets forth the method of calculating the composite score for any given school. Under that weighting scheme, from a total weighting of 100 points, 33 points are assigned to the eleven indicators of performance that aggregate into three major areas (engagement, instructional quality, and learning opportunities); the remaining 67 points are assigned to the three achievement measures: School Status, School Change, and Student Growth. The components to which grades are to be assigned and their weights are:

Component	Weight
Achievement	
School Status	23
School Change	22
Student Growth	22
Performance Indicators	
Engagement	9
Instructional Quality	12
Learning Opportunities	12
Total:	100

In calculating a school's composite score, first the subject area scaled scores for each of the achievement measures for the school are transformed to scores on a 0 to 100 scale, then averaged to produce a single score; for example, the index scores for *4th grade Reading* and *4th grade Mathematics* are transformed to scores on a 0 to 100 scale, then averaged to produce a single score for *School Status*. The process is repeated for *School Change* and *Student Growth*. Then the scaled scores for the sub-components of each of the three performance indicator areas are transformed to scores on a 0 to 100 scale, then averaged to produce a single score for each area; for example, the scaled scores of the sub-components *performance management systems*, *continuous improvement*, and *curriculum alignment* are transformed to a 0 to 100 scale, then averaged to produce a single score for *Engagement*. The process is repeated for *Instructional Quality* and *Learning Opportunities*. The resulting for the six major components listed above are then multiplied by their respective weights, totaled, and divided by 100 to give, on a 0 to 100

scale, a single score for the school. This single score is then transformed to the appropriate corresponding letter grade, e.g., A or B or C or D or F.

General examples of the method for calculating the composite school scores on a 0 to 100 scale and transforming them to letter grades are presented below. A technical note that describes the methodology for transforming the initial scaled scores to scores on a 0 to 100 scale follows the general examples.

Classification of Schools

Public Schools in Michigan fall into one of 7 categories:

- Type I School: A school containing a grade 4 but no grade above a grade 6 (e.g., an elementary school) N = 1,882
- Type II School: A school containing a grade 7 but no grade below a grade 5 nor above a grade 9 (e.g., a middle school) N = 577
- Type III School: A school containing both a grade 4 and a grade 7 but no grade above a grade 8 (e.g., a K-8 school) N = 122
- Type IV School: A school containing a grade 11 but no grade below a grade 8 (e.g., a secondary school) N = 612
- Type V School: A school containing a grade 4 plus all grades through grade 11 (e.g., a K-12 school) N = 72
- Type VI School: A school containing a grade 7 plus all grades through grade 11 (e.g., a 7-12 school) N = 168
- Type VII School: A school with no MEAP grades tested (e.g., a K-3 school) N = 718

General Examples

The examples presented below demonstrate the general method for calculating composite school scores on the 0 to 100 scale and designating the corresponding letter grades for the Type schools identified above. For the purposes of the examples, the below-listed letter grade transformation table is used; the table can be modified as deemed appropriate by the State Board of Education.

A Type I School (Grade 4)

		Initial Scores	First Composite	Multiplier	Second Composite	Divisor	Third Composite
Status:							
	Reading	88	84	23	1932	100	19.32
	Math	80					
Change:							
	Reading	90	88.5	22	1947	100	19.47
	Math	87					
Growth:							
	Reading	77	78.5	22	1727	100	17.27
	Math	80					
Engagement:							
		95	95	9	855	100	8.55
Instructional Quality:							
		89	89	12	1068	100	10.68
Learning Opportunities:							
		78	78	12	936	100	9.36
						Sum:	84.65

84.65 = Composite Letter Grade of "B"

A Type II School (Grade 7)

		Initial Scores	First Composite	Multiplier	Second Composite	Divisor	Third Composite
Status:							
	Reading	90	84.25	23	1937.75	100	19.38
	Math	80					
	Science	78					
	Social Studies	89					
Change:							
	Reading	91	84.5	22	1859	100	18.59
	Math	89					
	Science	80					
	Social Studies	78					
Growth:							
	Reading	77	77	22	1694	100	16.94
	Math	79					
	Science	72					
	Social Studies	80					
Engagement:							
		85	85	9	765	100	7.65
Instructional Quality:							
		77	77	12	924	100	9.24
Learning Opportunities:							
		82	82	12	984	100	9.84
						Sum:	81.64

81.64 = Composite Letter Grade of "C"

A Type III School (Grades 4+7)

		Initial Scores	First Composite	Multiplier	Second Composite	Divisor	Third Composite
GRADE 4							
Status:							
	Reading	91	85.5	11.5	983.25	100	9.83
	Math	80					
Change:							
	Reading	87	88	11	935	100	9.35
	Math	89					
Growth:							
	Reading	78	79	11	869	100	8.69
	Math	80					
GRADE 7							
Status:							
	Reading	85	82	11.5	943	100	9.43
	Math	77					
	Science	80					
	Social Studies	86					
Change:							
	Reading	92	85.5	11	940.5	100	9.41
	Math	89					
	Science	82					
	Social Studies	79					
Growth:							
	Reading	77	76	11	836	100	8.36
	Math	79					
	Science	71					
	Social Studies	77					
Engagement:		95	95	9	855	100	8.55
Instructional Quality:		89	89	12	1068	100	10.68
Learning Opportunities:		83	83	11	913	100	9.13
						Sum:	83.43

83.43 = Composite Letter Grade of "C"

A Type IV School (Grade 11)

		Initial Scores	First Composite	Multiplier	Second Composite	Divisor	Third Composite
Status:							
	Social Studies	86	88.6	23	2037.8	100	20.38
	Reading	93					
	Writing	95					
	Mathematics	85					
	Science	84					
Change:							
	Social Studies	84	86	22	1892	100	18.92
	Reading	90					
	Writing	89					
	Mathematics	87					
	Science	80					
Growth:							
	Social Studies	81	82.2	22	1808.4	100	18.08
	Reading	84					
	Writing	87					
	Mathematics	80					
	Science	79					
Engagement:							
		82	82	9	738	100	7.38
Instructional Quality:							
		80	80	12	960	100	9.60
Learning Opportunities:							
		78	78	12	936	100	9.36
							83.72

83.72 = Composite Letter Grade of "C"

For a **Type V School (Grades 4+7+11)** & a **Type VI School (Grades 7+11)**, the composite scores are calculated and the letter grades designated in the same manner.

A Technical Note on the Transformation of Scaled Scores to Scores on a 0 to 100 Scale

[*To be inserted*]