BLUE RIBBON COMMISSIONS' RECOMMENDATIONS: A CORRELATION MATRIX
Correlating Commission Reports with the Ohio Mathematics and Science Coalition Report, *Finding the Solution*

Finding the Solution	**Glenn Commission**	**Teaching Success**	**Student Success**
	Action Strategies	Recommendations	Recommendations
1. Implement Learning Standards			
a. Continue to develop a uniform, statewide set of age-appropriate, research-based and professionally recommended learning standards that have been benchmarked against national and international standards. b. Continue to educate stakeholders about the new standards and how they apply to each component of the mathematics and science education system. c. Monitor how the standards are being applied to ensure they are reflected in curricula, instruction and assessment.			1. Ohio create clear rigorous academic standards in key subjects and grades. Standards should be high and realistic and focus on the core knowledge and abilities all students need as citizens. 2. Joint Council continue developing developmentally appropriate academic standards, with immediate focus on science, Soc. studies, and tech., followed by foreign languages and the arts. The standards-writing process should be inclusive, with all constituencies represented. 3. ODE approved academic standards become expectations for Ohio students.
2. Implement Research-based Curricula and Assessments			
a. Use curricula, instructional methods and assessment tools that reflect current scientific research in mathematics and science learning and that have been developed and tested by recognized experts. b. Ensure that mathematics and science curricula and instruction are carefully aligned with standards and assessments. c. Ensure that curricula and instruction reflect mathematics and science as inquiry-based disciplines; focus in greater depth on fewer core topics; are supported with appropriate resources; and are fair, genuine and useful to all students. d. Use research-based, professionally recommended assessments that specify, measure and report whether students meet specific content learning standards. e. Provide timely feedback from assessments so that schools and teachers can use the information to improve student learning in mathematics and science. f. Participate regularly (as a state) in national and international assessments to learn how Ohio's students are doing in comparison to students in other states and nations.			4. State create guidelines that define grade-by-grade standards and develop curriculum models to assist teachers. Practicing teachers should be involved. Schools not required to use "model" curriculum. 5. State phase out proficiency tests and build new achievement tests to match new standards. 6. ODE review testing requirements and determine tests to be eliminated. 7. Achievement tests to be developed in key subjects at key elementary grades. 8. Flexible achievement testing system should recognize that not all students learn at the same pace. 10. All school districts should administer diagnostic assessments in key subjects annually, through 8th grade. 11. ODE produce high-quality, developmentally appropriate assessments that school districts can use for diagnostic purposes in key subject areas. 12. All students should be required to take middle school achievement tests in key subject areas. 13. State develop a series of end-of-course (EOC) exams for key high school courses. 14. Students could pass a standards-based, cumulative HS examination as alternative to EOC exams. 15. Eliminate the current 12th-grade proficiency test. 17. Schools should be expected to provide intensive instruction and intervention services to students who may not reach academic standards. 19. ODE regularly identify and disseminate research-based practices that provide additional instructional time l identify examples of where it is working to increase student nievement.

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3. Empower Qualified Teachers			
a. Require school districts to use qualified mathematics and science teachers for all mathematics and science instruction. b. Develop a teacher licensure and training system that ensures all teachers who teach mathematics and science have adequate knowledge of (i) mathematics and science content; (ii) scientific research on how students learn mathematics and science; and (iii) instructional methods and appropriate, meaningful and effective materials for teaching the subjects at all grades specified on their license. c. Ensure that mathematics and science content and methods courses in colleges and universities are consistent with, and model, research-based content and instruction. d. Provide professional development learning opportunities in different forms, such as courses, coaching, mentoring, peer support groups and attendance at professional conferences. e. Set aside significant daily work time for teachers to devote to professional development activities (time away from regular teaching duties). f. Support development of school cultures that support professional collaboration among teachers, administrators and professional mathematicians and scientists, and that overcome professional isolation. g. Require school and district administrators to play an active role in collaboration with teachers and in designing and implementing in-service opportunities based on sound scientific practice for professional development. h. Provide resources to support long-term, sustained professional development. i. Offer statewide leadership, support, and requirements to help school districts implement continuous professional development programs at all grade levels. j. Provide compensation to mathematics and science teachers at a level that encourages them to remain in the classroom.	1.2 Establish *Summer Institutes* to provide professional development addressing needs identified 1.3 Create local *inquiry Groups* to enrich content knowledge and teaching skills 1.4 Carry out Leadership Training for Institute and Group facilitators 1.5 Provide Internet Portal dedicated to teacher concerns and interests 1.7 Initiate a reward and incentive programs 2.1 Identify *exemplary models of teacher preparation* *2.2 Find ways to attract additional qualified candidates into teaching* *2.3 Create Mathematics and Science Teaching Academies to provide one-year, intensive preparation for teaching M/S* 3.1 Enhance *induction* programs to acclimate new teachers, develop mentoring relationships, and introduce to Inquiry Groups 3.3 Provide incentives to teachers 3.4 Improve teacher salaries - competitive	1. Adopt clear standards for what all teachers and principals should know and be able to do at all stages of their careers. 5. Use "grow-your-own" recruitment and retain high-quality teachers and principals in hard-to-staff schools. 6. Improve teacher retention by creating teaching and learning environments characterized by a supportive professional culture: shared leadership; and time in the school day and school year for ongoing, job-embedded professional development and collaborative planning. 7. Raise the minimum salary for beginning teachers and assist school districts in developing and implementing new compensation systems that are linked to standards-based evaluations, that broaden the factors on which compensation is based and that include options for tiered career paths. 8. Ensure that teacher and principal preparation programs more closely reflect the realities and challenges educators face in today's classrooms by funding a variety of high-quality clinical and field experiences for teachers-in-training, principals-in-training and higher education faculty, including a variety of partnerships between teacher preparation programs and P-12 school districts. 10. Increase opportunities for qualified individuals to become teachers and principals through alternative routes - and ensure that all routes into teaching and the principalship are high quality and standards-based. 11. Require and fund high-quality induction experiences for all new teachers and principals, including those who enter the profession through alternative routes. In hard-to-staff schools, provide three years of structured mentoring designed to support teachers and principals. 12. Adopt statewide standards for professional development. 13. Require and fund additional high-quality professional development for all licensed school personnel that is aligned with the state's academic content standards for students and that builds instructional capacity by focusing on the analysis and use of data to improve student achievement. 14. Support teachers who pursue National Board Certification, reward those who attain National Board Certification and encourage school districts to engage National Board Certified teachers in ways that add value beyond their own classrooms.	

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4. Commit to Shared Accountability and Responsibility			
a. Implement a comprehensive, coordinated statewide mathematics and science education system that guides and connects the following components: learning standards, curricula and instruction, assessment, teacher licensure, university programs for teacher education, teacher professional development and education funding. b. Implement a mechanism for regularly monitoring and analyzing the functioning of mathematics and science education goals, including their implementation and results at the state, district, school and classroom levels. c. Conduct a public review of all components of the statewide mathematics and science education systems by experts every five years. d. Encourage all stakeholders to commit to the shared vision for mathematics and science education in Ohio. e. Educate all stakeholders about the benefits of implementing scientifically sound, professionally recommended practices in mathematics and science education. f. Put aside differences based on specific stakeholder interests to work together to promote improved teaching and learning in mathematics and science. g. Encourage all high school students to take mathematics and science courses beyond state minimums.	3.2 Develop *district/business partnerships* to support acquisition of materials, equipment, stipends, and other resources	2. Develop a framework of essential criteria for school districts to follow when creating locally determined evaluation systems to assess the performance of teachers and principals. 3. Establish an integrated, data-driven, statewide plan to assist school districts and schools in recruiting and retaining high-quality teachers, principals and other school personnel. 4. Expand and develop the pool of high-quality teachers and principals by making more effective use of the state's colleges and universities. 9. Strengthen teacher-and principal-preparation programs' accountability for the performance of their graduates.	4. State should provide the guidelines to parents to help them understand what children are to be learning and how parents can support their children's education. 9. All concerned constituents should be involved in design and preparation of all tests in assessment system. 16. All school districts required to publicly disclose what, when, who, and why they test, and who developed the test. 22. State should begin holding individual schools publicly responsible for student achievement. 23. State provide monetary and other rewards to schools and school districts that make significant annual progress. 24. State to provide assistance to poor-performing schools and school districts and to those making insufficient progress. 26. State gain authority to intervene in persistently failing schools. 27. State develop a new set of report cards to publicly identify how students are doing against state standards and other key measures. 28. Amend state law to allow the state to disaggregate student performance data based on race, ethnicity, gender and economic status. 29. Develop a new system of performance designations for Ohio schools and school districts reflecting absolute level of student performance and success in improving student achievement.
5. Align the System			
a. Develop a unified, coherent vision that guides all aspects of mathematics and science education in Ohio. b. Support cooperating mechanisms at the state level to assure that mathematics and science programs and policies are research-based and led by experts in mathematics and science education, and that standards, curricula, instructional strategies and assessments are aligned. c. Secure a commitment from all stakeholders to design, implement, support and share responsibility for an accountability system for mathematics and science education that meets the needs of ***all*** students. (paraphrased) d. Formulate and implement a multi-year, integrated improvement plan that addresses all elements of Ohio's Pre-K-16 mathematics and science education system.	1.1 State complete needs assessment 1.6 Create a nongovernmental *Coordinating Council* to coordinate and assess accomplishments	15. Appoint a Task Force on Regional Service Delivery to develop a plan for aligning and restructuring Ohio's configuration of regional service delivery agencies.	25. ODE take lead in realigning and strengthening Ohio's regional service delivery system to provide assistance 30. Establish a commission of the teaching profession to assist in developing policies, strategies and incentives to attract, prepare and retain quality teachers to improve student achievement. 31. Continue the current effort to redesign the Education Management Information System.