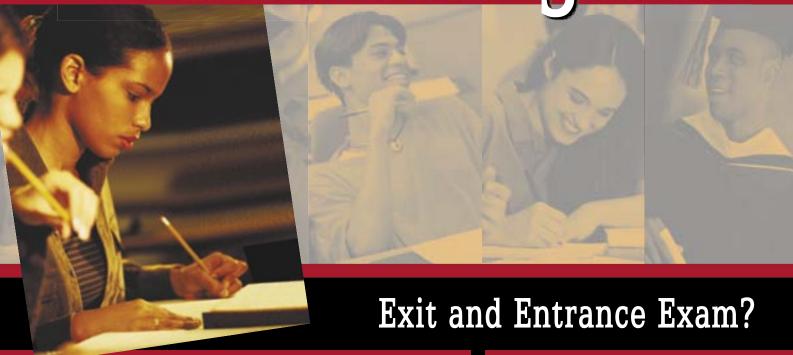
Advancing Ohio's P-16 Agenda



Joseph A. Rochford, Ph.D.

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A publication of the Stark County P-16 Compact with the Stark Education Partnership, Inc.













Fred F. Silk

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To increase per capita income and enable Ohio to be economically competitive with the most successful states, the state must set a bold and ambitious goal – to increase, by the year 2015, undergraduate and graduate enrollment in Ohio's public and private postsecondary institutions by 180,000....
This would be an increase of 30 percent...

(Pogue 2004)

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Exit and Entrance Exam?

A publication of the Stark County P-16 Compact with the Stark Education Partnership, Inc.

Principal Author:

Joseph A. Rochford, Ph.D. Vice-President, Stark Education Partnership

Contributing Author:

Adrienne O'Neill, Ed.D. President, Stark Education Partnership

Reviewers:

Patte Barth, Senior Associate
The Education Trust, Washington, D.C.

Guitele Nicoleau, Director, Research The Public Education Network, Washington, D.C.

Stephen R. Portch, Distinguished Senior Fellow Education Commission of the States, Denver, Colorado Chancellor Emeritus, University System of Georgia

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About the Stark County P-16 Compact

The Stark Education Partnership-in collaboration with educators from Stark County's school districts including the Educational Service Center, postsecondary education leadership, business representatives, civic leaders and parents-established a P-16 Compact for Stark County in 2002.

The purpose of the compact is to foster and sustain a community conversation on ways that Stark County can support and sustain all students in realizing their academic potential and achieving readiness to pursue and be successful in post secondary education. Additionally, the Compact seeks to sponsor research and promote the development of programs, such as Early College High School, which maintain high academic standards but which streamline completion times and foster successful transition from K-12 to higher education.

About the Stark Education Partnership

The Stark Education Partnership, Inc., is a 501(c)-3 non-profit organization in Stark County, Ohio crossing the lines of 17 public school districts. It was founded in 1989 by the Deuble, Hoover, Stark Community and Timken Foundations.

The Partnership-whose motto is "building excellent schools together"- is an independent organization that engages schools and school districts in fostering comprehensive education reform. It collaborates with educators and with business, community and civic leaders to create and respond to opportunities that will add substantial and measurable value to education and in doing so offers the county's school districts and schools new and cooperative ways to transform education.

About the Author

Joseph Rochford is Vice-President of the Stark Education Partnership. Prior to going to Stark County, Dr. Rochford served as a University Fellow at Kent State. He has also served as a doctoral fellow with the Cleveland Clinic Foundation and as research advisor to the Clinic's Public Education Initiative with the Cleveland Municipal Schools.

Before going to Kent State, Dr. Rochford was general manager of Ameri-rents, Inc. and spent several years in administrative positions at Baldwin-Wallace College. He is the author of both the "Class of 2021" and "Increasing College Access in Ohio" white papers which have been extensively circulated both in Ohio and at the national levels and is an adjunct professor of graduate education at both Walsh and Ashland Universities. Dr. Rochford has presented on education issues both nationally and internationally.

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Executive Summary

In March of 2005, Ohio's high school sophomores will take the new Ohio Graduation Test (OGT) for the first time – for keeps.

The major finding of the study is that the ACT assessments (social studies excluded) do an adequate to excellent job of measuring Ohio's academic content standards at the 10th grade and beyond into the 11th and 12th grades. When certain Ohio benchmarks are eliminated, the match becomes even more compelling.

For these students (and those who come after) the OGT will be the gateway to a high school diploma, post secondary education, good paying jobs and successful careers. Failure to pass the OGT will leave the limited options of a Graduate Equivalency Diploma (GED) or a complicated appeals process.

While a high stakes graduation exam is not new to Ohio, this test is different. By all indications it is far more rigorous than the old Ninth Grade Proficiency Test, there are less opportunities to re-take the test, and it is geared to measure an extensive set of new academic content standards.

Tests like the OGT are part of what has become known as the "standards-based" reform movement in education. Simply put, they allow states to measure whether or not students are learning according to whatever set of standards, benchmarks and indicators are adopted by that state. They also help meet, in part, the reporting requirements of the Federal "No Child Left Behind" (NCLB) Act.

Such tests, however, are not without problems. Most problematic is their relevancy to what is required by higher education and the workforce. Ohio has a new, evolving, P-16 agenda. Placing 39th among states in four-year college degrees, Ohio must begin to reconsider the entire continuum of education and the workforce to insure its economic future.

If educational systems are to be productive, serious questions emerge as to such issues as loss of instructional time due to testing, costs of such tests and whether or not such tests are "productive" from the aspect of improving instruction or promoting access to college and post secondary instruction.

What if a single test in Ohio could meet several needs at once? What if a test could not only measure Ohio's K-12 academic standards, but also serve for college admission and (given that the basic skills needed for both college and the workplace are now virtually the same) career entry?

The purpose of this study was to see whether or not the ACT test, or a combination of ACT's EPAS System or WorkKeys Assessment could, with some additions, serve this purpose.

The major finding of the study is that the ACT assessments (social studies excluded) do an adequate to excellent job of measuring Ohio's academic content standards at the 10th grade and beyond into the 11th and 12th grades. When certain Ohio benchmarks are eliminated, the match becomes even more compelling.

On the basis of this finding, the study offers the following recommendations:

- 1. That the Ohio Department of Education grant waivers to districts to use the ACT and/or ACT WorkKeys in lieu of the Ohio graduation test in conjunction with end of course tests or the Social Studies component of the OGT to augment areas not directly measured.
- 2. That districts consider, and the Ohio Department of Education consider for waiver purposes, employing the full EPAS system and other end of course tests considered appropriate from the 8th grade on.
- 3. That these waivers be especially considered by those districts who have formed Early College High Schools with partnering institutions of higher education in the state of Ohio.
- 4. That waivers be granted for a minimum of five years and that a joint system be established with the Ohio Board of Regents (HEI) to track high school graduation, college going rates, college retention and grade point averages in college along with other relevant indicators against comparable populations using the OGT alone.

Further research is recommended to answer the following five questions:

- 1. Is the ACT coverage comprehensive enough to meet the requirements not only of Federal and state agencies, but also to insure students, parents and teachers that mastery of all Ohio's key standards is present?
- 2. Are the entry level needs of Ohio's workforce and institutions of higher education converging?
- 3. Can we eliminate the need for college placement tests?
- 4. What is the correlation between high school courses, grades, the OGT and success in college?
- 5. Where does Ohio want its assessments to be a decade from now?
- 6. Is the coursework currently offered in Ohio's high schools sufficient to meet the demands of the OGT or ACT?

We are facing a new and challenging paradigm in education where competency and success on rigorous K-12 standards can no longer be viewed as separate and apart from competency and success in higher education or the workforce. The new paradigm is P-16 and we need a test that works for both. We need to advance Ohio's P-16 agenda.



Preface

To increase per capita income and enable Ohio to be economically competitive with the most successful states, the state must set a bold and ambitious goal – to increase, by the year 2015, undergraduate and graduate enrollment in Ohio's public and private postsecondary institutions by 180,000 (over Fall 2003 enrollment of 600,000). This would be an increase of 30 percent, or twice the National Center for Education Statistics' projected rate of national growth in postsecondary education enrollment over the next tenyear period. (Pogue 2004)¹

To some, high stakes high school exit exams are harbingers of doom, causing countless low income and minority students to dropout of high school. To others, such tests are new and powerful tools enabling states to enforce rigorous new standards, given timely interventions, with little or no impact on the graduation rate.

In concert with these two positions, the literature is mixed. What we do know with some certainty is that increasing numbers of American youth, far too many by the standards of the 21st Century, are not completing high school. Their numbers seldom reflect on final passage rates for high school exit exams. We also know that many who do finish high school go on to college lacking the essential skills to persist and succeed.

By 2007, nearly half of the states will have implemented high stakes high school exit exams. Students will have to pass these exams to obtain a high school diploma- the gateway to post secondary education bringing above average wages, career and some will even argue, life success.

High stakes exit exams today transcend the mere reporting requirements in the No Child Left Behind (NCLB) Act. For Ohio, the issue should not

¹ Pogue, R. W., Chair (2004). *Building on knowledge, investing in people: Higher education and the future of Ohio's economy*. Columbus, Ohio: The Governor's Commission on Higher Education and the Economy, p.21.

be whether the Ohio Graduation Test (OGT) adequately measures student achievement on the state's new standards; the issue should be whether it adequately measures AND is the best fit to promote college access and career success. Consider what *Achieve*, *Inc.* found in a recent study of six high school exit exams (Ohio included):

The tests measure only a fraction of the knowledge and skills that colleges and employers say are essential. A high school diploma should signify that students are prepared for their next steps in life, whether that means continuing on to postsecondary education or pursuing a fulfilling career. (Gandal 2004)²

The Achieve analysis suggests that the exit exams in these six states measure some of the skills essential for college and workplace success, but a significant number of those skills go largely unmeasured.

At a recent meeting of the Education Commission of the States (ECS) Patrick T. Terenzini put the need for these skills into a different light. "Access," Terenzini said, "is not so much an issue of funding, but an issue of deriving the benefits of higher education and having the ability to complete a degree."

If the OGT is not measuring a wide spectrum of the skills necessary to succeed in higher education and the workforce, then the question can fairly be asked, "Why administer it?"

What may have once made very good sense, simply will not hold up given the increasing pressures and demand for a highly skilled and highly educated Ohio workforce. The world is changing and changing dramatically. Ohio can not afford to be left behind. As economist Anthony Carnevale bluntly puts it:

If the United States is unable to rise to the challenge of better preparing all students and workers to meet increasing skill demands, there will be broad and diverse impacts on the economy that will be both economically and socially costly. A stabilization or decline in the United States' recent productivity gains, or a slowdown in growth, may be the primary economic ramifications. But the financial benefits that accompany a

² Gandal, M., Director (2004). *Do graduation tests measure up? A closer look at state high school exit exams*. (The American Diploma Project) Washington, D.C.: Achieve, Inc., pp. 30-31.

³ In a presentation on *Preparation, price, and performance: Barriers to college access and success—and what state policy makers can do about them* at the Education Commission of the States Annual Forum, Orlando, Florida, July 14, 2004, Patrick T. Terenzini, Professor and Senior Scientist, Pennsylvania State University described college access.

robust economy also may be dampened if companies are forced to move to off-shore production to find skilled workers—
American workers will lose out on job opportunities, foreign workers will spend their dollars overseas and U.S. state, local and federal governments will lose corporate and personal tax dollars. (Carnevale and Desrochers 2003)⁴

This reality underscores much of Ohio's recent economic history. United States Secretary of Education Rod Paige has made a similar case. This is what he told the San Francisco Chamber of Commerce:

We may not have much of a choice. Globalization has made quality education absolutely imperative. In the past, graduating students competed with job seekers in their community or country. Now our graduates compete globally. There is no longer any guarantee of employment with a high school diploma. Even a college diploma may not be a meaningful measure. Many employers are now asking for prospective employees' SAT scores. We have entered a new age: the 21st century is now a service economy dependent on technology, innovation, information and technical skills. We need what are called "knowledge workers." And knowledge workers must be well-educated. (Paige 2004)⁵

We are facing a new and challenging paradigm in education where competency and success on rigorous K-12 standards can no longer be viewed as separate and apart from competency and success in higher education. The new paradigm is P-16 and we need a test that works for both. We need to advance Ohio's P-16 agenda.

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⁴ Carnevale, A. P. & Desrochers, D.M. (2003). *Standards for what: The economic roots of K-16 reform.* Washington, D.C.: Educational Testing Service, p.65.

⁵Remarks by United States Secretary of Education Rod Paige at the Executive Leaders Forum, Committee of 100, San Francisco Chamber of Commerce, June 24, 2004, Available at: http://www.ed.gov/news/speeches/2004/06/06282004.html

Introduction: Changing the Context

What if a test both measured Ohio's standards and benchmarks and served in the greater capacity of promoting college access and success? As Stephen Portch notes:

...when these standards appear in the form of high school exit exams, as they do in some states, then linking them to public college-admission standards would be a suitable measure. That measure could review the extent to which a high school exit exam becomes truly high stakes, if linked explicitly to college admission. (Portch 2002)⁶

This document chronicles the study and review conducted by the Stark Education Partnership and Stark County P-16 Compact on the feasibility of using the ACT, ACT WorkKeys, or ACT's EPAS system to augment or replace the Ohio Graduation Test (OGT). The study was supported by the Paul and Carol David Foundation, Dominion, Hoover Foundation, Martha Holden Jennings Foundation, KnowledgeWorks Foundation, Ohio College Access Network (OCAN), Fred F. Silk Charitable Foundation, Sisters of Charity Foundation of Canton, Stark Community Foundation, Stark County Educational Service Center, Stark Education Partnership and the Timken Foundation.

Technical documentation and additional research support was contributed by ACT, Inc. and the International Center for Leadership in Education (ICLE).

An initial question might be why so many foundations and organizations saw fit to support this "exploration"?

The answer lies in what Dr. Adrienne O'Neill, President of the Stark Education Partnership told a group of educators and community representatives at a two day meeting at R.G. Drage Career Center in June, 2004:

As we looked at all of this data (Ohio and Stark County) we came to the conclusion that maybe different thinking would get us a different result. What if all students took the ACT instead of the OGT. What if we focused our attention on getting our students to improve their ACT performance? Currently most of those students going on to college take the ACT test and in Ohio 64% of the students take the test. The rub is time and acceptability. If we focus our attention on getting our students to

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⁶ Portch, S. (2002). *A noble opportunity: Leading education change through a P-16 accountability model*. Denver, Colorado: Education Commission of the States. Available at: http://www.ecs.org/ecsmain.asp?page=/html/IssuesPS.asp

pass the OGT test we often don't have time to focus on the ACT test. Passage of the OGT test is not an acceptable measure for college admission. (O'Neill 2004)⁷

Dr. O'Neill's comments provide a singular context for review at the school house level, but there are additional, far more global contexts as well. Those contexts lie within the paradigm of a P-16 system of education and its relationship to economic competitiveness and social well-being not only on a local or regional level, but also on a state, national and international basis.

The emergence of NCLB has brought a new wave of accountability for results to education. Those who see such accountability as pertaining only to K-12 systems ignore the reality that the entire continuum of education is linked. Today we are seeing the first efforts, through NCLB's emphasis on quality teachers, to assess the effectiveness of higher education on teacher training. What has started in Colleges of Education may eventually expand to all disciplines. The National Forum on College Level Learning exists today as a pilot effort in five states to assess what college students are learning and how that contributes to the education capital of those states.⁸

In Ohio, the work of the Governor's Commission on Higher Education and the Economy (CHEE) calls for a new form of accountability:

In addition, the Commission believes that the Ohio General Assembly should charge the Ohio Board of Regents, with input from the Business Alliance for Higher Education & the Economy, with establishing a clear, publicly reported accountability framework for higher education. For the performance measures that deal with the adult workforce education system, the Board of Regents should collaborate with the Ohio Workforce Policy Board and the Ohio Department of Education. The framework should link the data provided in the Board of Regents' Annual Performance Reports and in the Ohio Department of Education's evaluation of adult workforce education full-service centers to specific performance indicators. The framework also should include performance indicators that will assess progress on the goals of increasing participation in higher education and strengthening higher education's research base for creating and bringing to market new ideas and innovations. (Pogue 2004)⁹

⁷ In the *Welcome speech for the ACT study* from the conference on A Study to Replace the OGT with the ACT on June 19, 2004 at R.G. Drage Career Center in Massillon, Ohio.

⁸ The report, *Measuring Up 2000* is the premier work of the Forum. For complete information on this project: http://collegelevellearning.org./

⁹ Pogue, Building on knowledge, investing in people, p.41.

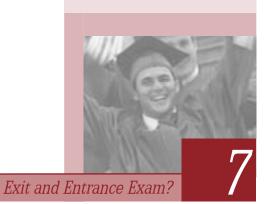
Such a framework clearly calls for a consideration of measurements and indicators which will work not only for K-12, but for higher education and the workforce as well. It is problematic whether the OGT by design or by evolution can meet the needs of the latter two sectors, while the ACT test and the EPAS System remain distinct possibilities. In a review of the August draft recommended actions of the State Board of Education's Quality High Schools for a Lifetime of Opportunities, the Education Trust has this to say about Ohio's dilemma:

The recommendations do not seem to anticipate that assessments used in high school and those used for admission and/or placement in college could ever be effectively integrated. This is unfortunate. Some states have already made important progress in doing just that; Ohio could too, and students would be better off for it. (Education Trust 2004)¹⁰

"Why consider the ACT and not the SAT or some other nationally normed test?" some might ask. The answer is that Ohio is already an ACT state. Over 66% of our high school graduates already take the ACT test. The other two components (EXPLORE, and more widely, PLAN) of the EPAS System are already in use by several districts within the state.

To understand the components of a high stakes exit exam, however, it is first necessary to understand the evolution of the "standards" movement in education and education reform.

¹⁰ Responses from readers at the Education Trust, Inc. to the *Draft recommendations* of the State Board of Education's Task Force on Quality High Schools for a Lifetime of Opportunities. Columbus; Ohio: State Board of Education. Available at: http://www.ode.state.oh.us/achievement_gaps/task force on quality high schools for a lifetime of opportunities/ExRe.asp



High stakes tests and high school exit exams, such as the OGT, are the direct outgrowth of what has come to be called the "standards movement."



Exit Exams: Swimming in a Sea of Standards

To understand high stakes exit exams, it is necessary to know about the origins of the standards movement in education reform and how that movement has now gained wide acceptance in the United States and Ohio. This section will further discuss the nature of the OGT and ACT assessments as well as current testing requirements of the NCLB Act.

In the simplest form, academic content standards are essentially common agreements as to what we want students to be able to know and do in specific subject areas. As Carnevale and Desrochers indicate, standards and the accompanying notion of accountability are a critical components in education reform:

The current wave of standards-based education reform, which began with the landmark report *A Nation at Risk*, has become a play in three acts. The curtain has come down on Act I now that educational standards are in place. But that was the easy part; setting standards is little more than making fond wishes for American youth.

Act II will be more difficult by far. The long march toward the alignment of standards with assessments, curricula and the professional development of teachers and administrators has just begun. Developing the means to ensure that all American youth meet the standards will require enormous effort and new resources.

The curtain has not fully risen for Act III, but the education reform narrative has opened up the accountability debate in higher education. As the culminating educational venue in the pre-K-16 education pipeline, higher education sets the standard for K-12 achievement. It is the keystone institution in aligning educational preparation, work and citizenship. (Carnevale and Desrochers 2003)¹¹

¹¹ Carnevale, A. P. & Desrochers, D.M., Standards for what, p.1

High stakes tests and high school exit exams, including the OGT, are the direct outgrowth of what has come to be called the "standards movement." They are tests swimming in a sea of standards. Today, all states, with the exception of Iowa have academic content standards in at least some, if not all, subject areas. To understand tests, it is necessary to understand the evolution of the standards movement and its accompanying call for accountability.

It is a mistake, however, to assume that communities, schools and teachers never had "standards" before the current era. Standards, accountability and assessments in one form or another have existed in education since its earliest days starting with the 1642 Massachusetts Bay School Law.¹²

In the mid-1980's, there was a growing conviction that America's public schools were poorly designed for the economic and social realities of the approaching new century. In response to a series of reports which focused on mediocre performance, President George H.W. Bush and the nation's governors jointly convened the first National Education Summit in 1989. Significantly, that summit not only set six long-term goals for public education but also led to several national commissions, task forces and study groups, including the National Council on Education Standards and Testing.

The council, in its 1992 final report, called for the development of national standards, in each of the major subject areas. Several public polls, research on effective schools, the growing involvement of business and industry leaders and Federal legislation under the Clinton administration added momentum to the standards movement. States, however, had their own notions about standards:

...the effort to establish national standards ran into stiff opposition from state policymakers, who insisted that they– not a national certification board or professional and scholarly organizations, as some standards proponents recommended -- should take the lead in designing and developing standards. Over the next five years, the states one by one undertook the difficult, complex and often controversial task of researching, drafting and formally adopting standards for students at various grade levels, in major subject areas. (Weiss 2000)¹³

In Ohio, the process began in 1997. The Joint Council, Joint Advisory Committee to the Joint Council, the Ohio Board of Regents and the Ohio Department of Education appointed writing teams for each content area (the arts, English language arts, foreign languages, mathematics, science and social studies) charged with drafting common expectations.

¹² Massachusetts Bay School Law (1642), Available at: http://personal.pitnet.net/ primarysources/schoollaw1642.html

¹³ Weiss, S. (2000). *The progress of education reform 1999-2001: Setting the standard - will higher expectations improve student achievement?* Denver, Colorado: Education Commission of the States. Available at: www.ecs.org/ecsmain.asp?page=/search/default.asp

In January 2000, Governor Bob Taft called for the creation of a Commission for Student Success which began its work in March 2000. The commission asked that the Ohio Department of Education develop a model draft of academic content standards that could enable the members of the Commission to see a set of quality standards.

After a process of review, writing and additional input, those standards were subsequently adopted by the State Board of Education. In doing so, Ohio followed a commendable process, not unlike 48 other states. In fact, in rating Ohio's standards. The Fordham Foundation noted, "Altogether, Ohio's standards are solid, coming up to our expectations in most areas." Thus, Ohio has completed a process begun in 1997.

The issues today with the enactment of NCLB, however, are far more complex than when the standards movement first began. NCLB has created a new powerful imperative, achievable perhaps for the first time in our history, that we truly do educate all children to high levels of achievement. Not only does this mean rigorous, widely agreed upon standards. It also implies that the role of schools is no longer to sort and track students as high or low achievers, but rather to see that as many students as possible achieve at the highest level possible and are prepared for post secondary education.

Carnevale and Desrochers have also underscored the emerging role which higher education must play in education reform. Beyond this, however, is an addendum. Increasingly, to educate all children will not just mean through the 12th grade. It will mean through college, or at the very least, through some type of post secondary education.

As Sandra Ruppert from the Education Commission of the States writes:

Providing a wide variety of postsecondary learning opportunities for all citizens is critical to both individual and collective well-being. This is the new public mandate of our age, just as extending a high school diploma was to an earlier generation. Without universal and lifelong access to the benefits of a college education, the nation simply will fail to meet the social and economic challenges of the years ahead. (Ruppert 2003)¹⁵

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¹⁴ Cross, R. W., Rebarber, T. & Torres, J. (2004). *Grading the systems : The guide to state standards, tests, and accountability policies*. Washington, D.C.: Fordham Foundation and Accountability Works, p. 28.

¹⁵ Ruppert, S. (2003). *Closing the college participation gap: A national summary*. Denver, Colorado, Education Commission of the States, p.7

There are several problems with standards. State standards are, in theory, based in part on standards published by national professional organizations beginning with the landmark publication of *Curriculum and Evaluation Standards for School Mathematics* in 1989 by the National Council of Teachers of Mathematics (NCTM). Yet, there is no universal set of standards common to all the states, and while many states (including Ohio) have involved higher education and K-12 educators in the writing of standards, questions remain as to which standards are the most powerful for transiting to higher education and the workforce. Whether or not these standards are sufficiently included and conversely, sufficiently tested by the states remains largely problematic.

Further, several state exit exams including Ohio, Massachusetts and Minnesota are targeted at the 10th grade level, not quite half way through a student's high school career. Also, are there too many standards? Ohio has one of the most comprehensive set of standards of any state. One problem, according to Dr. Douglas Reeves of the Center for Performance Assessment is that the school year would "...literally need to be 400 days long" to insure full coverage of Ohio's standards. Reeves contends that it is time to "stop the illusion of perfect coverage ... coverage does not equal learning." He proposes the notion of "power standards." These standards, taken from the entire array of standards would be based on three criteria:

- 1. Endurance. What students will recall
- 2. Leverage. What is necessary to, and will, promote further and better learning
- 3. What is necessary to transit to the next grade. 16

The corresponding issues are not only what "power standards" are necessary for transiting to the next grade, but also on to higher education and the workforce and whether such standards are better measured by the OGT or ACT.

What is the Ohio Graduation Test (OGT)?

The new Ohio Graduation Tests are a key part of Ohio's effort to establish an aligned system of standards, assessments (tests) and accountability for Ohio schools. The testing requirements were established by the Ohio General Assembly in 2001 (Amended Substitute SB 1) based on recommendations by the Governor's Commission for Student Success. Five tests in reading, writing, mathematics, science and social studies will make up the OGT.

¹⁶ Remarks by Dr. Douglas Reeves at the Stark County August 2004 Administrators Conference on August 4, 2004 at R.G. Drage Career Center in Massillon, Ohio.

The stated purposes of the OGT are as follows:

- Ensure that students who receive a high school diploma demonstrate at least high school levels of achievement;
- Measure the level of reading, writing, mathematics, science and social studies skills expected of students at the end of the 10th grade;
- Meet federal requirement for high school testing.¹⁷

The OGT replaces the Ohio Ninth-Grade Proficiency Tests. The test is meant to be a more rigorous measure of high school achievement on content learned through the end of the 10th-grade and is aligned to the new academic content standards.

Sophomores took the OGT in reading and mathematics in March 2003 and March 2004 to meet new federal testing requirements (NCLB). When sophomores in March 2005 (graduating class of 2007) take the OGT, passing all five tests will be necessary to meet graduation requirements in Ohio.

The new Ohio Graduation Tests are a key part of Ohio's effort to establish an aligned system of standards, assessments (tests) and accountability for Ohio schools.

What is the ACT Test and Educational Planning and Assessment System (EPAS)?

The ACT Assessment, or what is known as the ACT test is the third component of a larger assessment system known as the Educational Planning and Assessment System (EPAS). ACT, Inc. states that the EPAS system provides:

...a longitudinal, systematic approach to educational and career planning, assessment, instructional support and evaluation. The system focuses on the integrated, higher-order thinking skills students develop in grades K-12 that are important for success both during and after high school. (ACT Inc.)¹⁸

Through the system, student achievement is assessed at three key transition points in the 8th or 9th grades (EXPLORE), 10th (PLAN) and 11th/12th grades (ACT Assessment).

¹⁷ From *Ohio Graduation Tests frequently asked questions*, Ohio Department of Education. Available at: http://www.ode.state.oh.us/proficiency/OGT/default.asp
¹⁸ ACT, Inc. *ACT's Educational Planning and Assessment System (EPAS)*. Available at: http://www.act.org/epas/index.html

The EPAS System (EXPLORE, PLAN, and the ACT Assessment) measures students' progressive development of knowledge and skills in the same academic areas from grades 8 through 12 enabling the scores from the three programs to help educators monitor a students' academic growth over time.

What are the ACT Standards for Transition?

The EPAS System (EXPLORE, PLAN and the ACT Assessment) measures students' progressive development of knowledge and skills in the same academic areas from grades 8 through 12 enabling the scores from the three programs to help educators monitor a students' academic growth over time. The Standards for Transition is a set of standards-based statements which link the assessments to instruction and instructional strategies. The purpose of the Standards for Transition is to allow teachers to:

- Map the development of your students' knowledge and skills in English, mathematics, reading and science
- Analyze students' progress to identify areas of strength and areas that need more attention
- Help determine next steps in the instructional planning process. (ACT, Inc. 2004)¹⁹

The companion to the Standards for Transition which gives educators insight into a score's meaning, is the Pathways for Transition which suggests learning experiences for students to further develop their knowledge and skills. The Standards not only reflect learning from grades 8 through 12 but is also linked to college instruction.

What is the ACT WorkKeys Assessment?

In addition to the EPAS System, ACT has a companion assessment known as WorkKeys which is geared to measure student readiness for work in nine specific domains:

- Applied Mathematics
- Applied Technology
- Business Writing
- Listening
- Locating Information
- Observation
- Reading for Information
- Teamwork
- Writing

While the ACT Assessment itself helps colleges and students understand preparedness for academic study, the WorkKeys assessment helps in understanding preparedness for specific jobs and careers. The questions in the WorkKeys assessment resemble problems found in the everyday work world rather than in the world of academia.

¹⁹ ACT, Inc. (2004). *Linking assessment to instruction*. Available at http://www.act.org/standard/infoserv.html

In the past, some districts including Topeka, Kansas and Jefferson County (Louisville), Kentucky have used portions of the ACT WorkKeys Assessment as a graduation requirement.²⁰

What is the Relationship of the OGT to the No Child Left Behind (NCLB) Act?

The reauthorization of the Elementary and Secondary Education Act (NCLB) provides that certain high school assessments be administered. The act requires that by the 2005-06 school year, states must develop and implement annual assessments in reading and mathematics in grades 3 through 8 and at least once in grades 10-12. By 2007-08, states also must administer annual science assessments at least once in grades 3-5, grades 6-9 and also in grades 10-12. These assessments must be aligned with state academic content and achievement standards and involve multiple measures, including measures of higher-order thinking and understanding.

The following provisions from NCLB are relevant to any discussion of the Ohio Graduation Test (OGT):

- Alignment with State Standards. State assessments must be aligned with challenging academic content standards and challenging academic achievement standards.
- Inclusion. State assessments must provide for the participation of all students, including students with disabilities or limited English proficiency.
- Accommodations. State assessments must provide for reasonable accommodations for students with disabilities or limited English proficiency, including, if practicable, native-language versions of the assessment.
- Reporting. State assessment systems must produce results disaggregated by gender, major racial and ethnic groups, English proficiency, migrant status, disability and status as economically advantaged. The assessment system must produce individual student interpretive, descriptive and diagnostic reports. States must report itemized score analyses to districts and schools.
- Prompt Dissemination of Results. States must ensure that the results of state assessments administered in one school year are

²⁰ ACT, Inc., WorkKeys® as a graduation requirement: The story from Topeka and Louisville in *Activity*, Winter 2002. Available at: http://www.act.org/bprac/w02/topeka.html

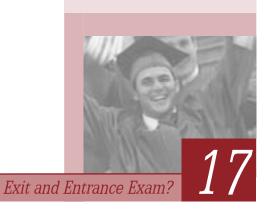
available to school districts before the beginning of the next school year. The assessment results must be provided in a manner that is clear and easy to understand and be used by school districts, schools and teachers to improve the educational achievement of individual students.

 Participation in State NAEP. States must participate in biennial National Assessment of Educational Progress (NAEP) assessments in reading and mathematics for fourth- and eighth-graders, beginning in 2002-03. State-level NAEP data will enable policymakers to examine the relative rigor of state standards and assessments against a common metric. (Paige 2002)²¹

The OGT serves to meet the 10th grade assessment requirements of NCLB as well as providing an exit exam for Ohio. NCLB, it should be noted, requires only that math and reading be assessed at present in 2004 (science will not be added until 2007), while the OGT this year will also assesses writing, science and social studies.

Having seen how the standards movement and the requirements of NCLB have furthered the development of statewide assessments and a growing number of high stakes high school exit exams, a review of the research on such exams is in order.

²¹ Paige, R., Secretary (2002). *NCLB: A desktop reference*, Washington, D.C.:U.S. Department of Education. Available at: www.ed.gov/offices/OESE/



By their very necessity, high stakes tests and high school exit exams are motivated by legislative or political considerations. As such, they are subject to many of the compromises which often surround such considerations.



What the Research Tells Us

This section describes findings from current research on the impact of high stakes exit exams, the pilot administration of the OGT and specific Ohio higher education outcomes.

The bulk of research on high school exit exams has focused on impact to marginal students, dropouts and on intended and unintended consequences for students. In this regard, the literature remains mixed with few firm conclusions.

One of the most recent studies in this area is entitled, *Pushed Out or Pulled Up? Exit Exams and Dropout Rates in Public High Schools* by the Manhattan Institute and published in May 2004. Even while finding that exit exams, controlling for other variables, seemed to have no substantial impact on graduation rates, the authors Greene and Winter still concluded:

It is possible that if exit tests become even more difficult in future years, they might begin to have a negative effect on graduation rates. But it appears that exit exams as they exist now do not have such an adverse effect. (Greene and Winters 2004)²²

A March 2003 panel discussion of experts conducted by the Center on Education Policy further underscored the lack of certainty in determining the effects of state exit exams, but found "one thing that we can conclude from the research to date is that there is no evidence of exit exams *decreasing* dropout rates. That is, exit exams are not helping to keep students in school."²³

Later that year in its second annual report on state exit exams, CEP also concluded that at least a small amount of evidence existed that state exit exams did have a relationship to higher dropout rates:

Exit exams appear to encourage school districts to cover more of the content in state standards, better align curriculum with

²² Greene, J. P. and M. A. Winters (2004). *Pushed out or pulled up? Exit exams and dropout rates in public high schools*. New York, New York: The Manhattan Institute., p.6. ²³ CEP (2003). *Effects of high school exit exams on dropout rates: Summary of a panel discussion*, Washington, D.C., Author., p.4.

state standards and add remedial and other special courses for students at risk of failing. But a moderate amount of evidence also suggests these exams may be associated with higher dropout rates. This accumulating evidence about the impacts of exit exams can help states and school districts better understand the tradeoffs to consider when deciding whether an exit exam will meet their reform goals or designing policies and programs to help students pass these tests. (Gayler, Chudowsky et al. 2003)²⁴

In an earlier study, Amrein and Berliner (2002) looked at the Ohio Proficiency Test and tests in several other states verses outside testing measures including the ACT, SAT, AP tests, and the National Assessment of Educational Progress (NAEP). Their theory was that these standardized and commonly used tests measured the same domains that state standardized tests measured. Though Ohio fared well in this analysis, most states did not. Ohio was not in NAPE at all levels during the point of analysis (1994) and did demonstrate negative effects in AP testing, while both ACT and SAT participation rates and scores were positive.

The researchers' conclusions remain controversial in many quarters:

At the present time, there is no compelling evidence from a set of states with high-stakes testing policies that those policies result in transfer to the broader domains of knowledge and skill for which high-stakes test scores *must* be indicators. Because of this, the high-stakes tests being used today do not, as a general rule, appear valid as indicators of genuine learning, of the types of learning that approach the American ideal of what an educated person knows and can do. Moreover, as predicted by the Heisenberg Uncertainty Principle, data from high-stakes testing programs too often appear distorted and corrupted. (Amrein and Berliner 2002)²⁵

Further, the authors found that states with higher poverty and minority populations were more likely to institute high school exit exams, concluding "…high school graduation exams affect students from racial minority backgrounds in greater proportions than they do white students."

Another distortion which often enters into state calculations on the impact of exit exams on students was pointed out by Chudowsky and others in a baseline report for Washington's Center on Education Policy:

According to our data, the percentages of students who don't pass exit exams on their first attempt range from 9% to 69% in mathematics, depending on the state, and from 5% to 53%

 ²⁴ Gayler, K., Chudowsky, N., Kober, N. & Hamilton, M. (2003). *State high school exit exams put to the test*. Washington, D.C.: Center on Education Policy., p.6
 ²⁵ Amrein, A.L. & Berliner, D.C. (2002). High-stakes testing, uncertainty, and student learning in *Education Policy Analysis Archives*, *10*(18). Available at: http://epaa.asu.edu/epaa/v10n18/

in English/language arts. (These wide differences in passing rates seem to be largely related to variations in the difficulty, characteristics and implementation years of state tests.) The great majority of test-takers do pass exit exams by the time they are ready to graduate. The Center retrieved information on cumulative passing rates from two states, Indiana and Ohio; in both states, approximately 98% of students who completed their course requirements eventually passed the exit exams and received a diploma. Data on cumulative passing rates can be very misleading, however, because the counts of students on which they are based apparently do not include students who drop out in high school, repeat their senior year, move away, or are excluded from testing because of disability or language status. (Chudowski, Kober et al. 2002)²⁶

The research on the impact of high stakes testing remains inconclusive. The actual impacts on student learning and outcomes over time is not understood. Additionally, there are ancillary impacts on faculty, schools and the environment of schooling. Among the greatest of these is the notion of "teaching to the test." The classic study in this area was conducted by the RAND Corporation on The Validity of Gains in Scores on the Kentucky Instructional Results Information System (KIRIS). What the authors found was that many schools lacked the capacity to implement large scale rapid changes in instruction for a variety of reasons, including having teachers who teach subjects outside their content areas, lack of upto-date text books, poor materials, inadequate facilities and the like:

Requiring faster changes than teachers can effect by appropriate means may exacerbate the problem of inflated scores. Teachers can improve students' mastery of tested material more rapidly than they can improve mastery of the much larger domains an assessment is intended to represent. If they cannot feasibly increase mastery of the domain rapidly enough, they will have a powerful additional incentive to narrow instruction by inappropriate teaching to the test. (Koretz and Barron 1998)²⁷

These ancillary effects and the complex nature of schooling are not new realizations. One of the earliest and most comprehensive studies on high stakes testing was conducted by the National Research Council at the request of Congress and the Clinton administration. One of the major findings of that study is often ignored or only tacitly acknowledged:

At the present time, there is no compelling evidence from a set of states with high-stakes testing policies that those policies result in transfer to the broader domains of knowledge and skill for which high-stakes test scores *must* be indicators. (Amrein and Berliner 2002)

²⁶ Chudowsky, N., Kober, N., Gayler, K. & Hamilton, M. (2002). *State high school exit exams: A baseline report*. Washington, D.C.:Center on Education Policy. Available at: http://ctredpol.org/pubs/statehighschoolexitexams2002/statehighschoolexitexams2002.htm
²⁷ Koretz, D. M. and S. I. Barron (1998). *The validity of gains in scores on the Kentucky Instructional Results Information System (KIRIS)*. Santa Monica, California: RAND Education., p. 118.

High-stakes decisions such as tracking, promotion and graduation should not automatically be made on the basis of a single test score but should be buttressed by other relevant information about the student's knowledge and skills, such as grades, teacher recommendations and extenuating circumstances. (Heubert and Hauser 1999)²⁸

Ohio, to an extent, has responded to this issue in part by allowing students an alternative high stakes decision option. Many argue however that these restrictions are still too severe.

In Ohio, a student may still graduate and receive a diploma without passing all five tests of the OGT if the following requirements are met:

- Pass four of the five tests and have missed passing the fifth test by no more than 10 points;
- Have had a 97 percent attendance rate through all four years of high school and must not have had an expulsion in high school;
- Have a grade point average of 2.5 out of 4.0 in the subject area missed and have completed the curriculum requirement in the subject area missed;
- Have participated in any intervention programs offered by the school and must have had a 97 percent attendance rate in any program offered outside the normal school day;
- Obtain letters of recommendation from each teacher in the subject area not yet passed. (Ohio Department of Education 2004)²⁹

What we can conclude from the research is that the question of high stakes testing will remain controversial for some time into the future. Clearly, not enough is known about such testing within the context of its impact on students, particularly marginal or "at-risk" students. Henry Braun, of the Educational Testing Service (ETS), in a recent study underscores the state of research and knowledge today:

... given a limited observational database to work with, there are many policy indices and numerous ancillary variables that can be used in different ways to support or debunk the efficacy of high-stakes testing efforts or any other reform initiative. If we acknowledge that most states have embarked on a number of initiatives that, to a greater or lesser extent, overlap in time, then we must recognize that attributing observed differences in results to one of those initiatives is very problematic. (Braun 2004)³⁰

²⁸ Heubert, J. P. & Hauser, R.M. Eds. (1999). High stakes: testing for tracking, promotion, and graduation. Commission on Behavioral and Social Sciences and Education, Washington, D.C.: National Research Council., p.279

²⁹ Ohio Department of Education. (2004). *Ohio Graduation Tests frequently asked questions*. ³⁰ Braun, H. (2004). Reconsidering the impact of high-stakes testing in *Education Policy* Analysis Archives, 12(1). Available at: http://epaa.asu.edu/epaa/v12n1/

On the Rigor of High School Exit Exams

Today, Ohio's high school students must pass a ninth grade test based on eighth-grade knowledge and skills to graduate. The Commission believes that this standard is too low for awarding a high school diploma. Instead, we believe that students should demonstrate that they have met the state's new academic standards. That means all students will have to show that they have mastered the basics and more —mathematics that includes elements of algebra and geometry; clear writing; and probably science courses such as biology, chemistry and physics—before graduating.—Governor's Commission on Student Success³¹

While research on the impact of high stakes testing may be inconclusive, we know far more about the rigor of such tests. As a cautionary note, however, rigor of the test does not always equate to efficacy of the testing.

By necessity, high stakes tests and high school exit exams are motivated by legislative or political considerations. As such, they are subject to many of the compromises which often surround such considerations. The Ohio Graduation Test was established by the Ohio General Assembly in 2001 on the basis of recommendations from the Governor's Commission on Student Success. After finding that the previous Ohio Ninth Grade Proficiency Test had become the "standard" in itself, the commission recommended a new, more rigorous, 10th grade exam fully aligned with Ohio standards.

As a "local control" state, Ohio has always had a problem with dictating a state-wide curriculum. In the early 1990's when Ohio first introduced its Ninth Grade Proficiency Test, otherwise excellent districts were generating poor scores due to a lack of alignment between their curricula and the state test. The Commission's statement that the test had become the de-facto standard had a basis in truth. Yet, the Commission was quick to point out that the new test would not reinforce a "statewide curriculum." Standards and alignment to those standards would be the issue:

This is not a statewide curriculum. Teachers and districts would be able to determine how to deliver the prescribed content and whether and how they want to go beyond prescribed content. But it would provide consistency of expectations and schools or districts that want to exceed the state standards would be encouraged to do so. (Patient 2000)³²

The Ohio Graduation Test was established by the Ohio General Assembly in 2001 on the basis of recommendations from the Governor's Commission on Student Success.

³¹ Patient, F. W., Chair (2000). *Expecting more: Higher achievement for Ohio's students and schools*. Columbus, Ohio: Governor's Commission for Student Success., p.17 ³² Ibid, p.17

How rigorous then are high school exit exams? Specifically, how rigorous is the OGT? This question must be answered in two parts. The first part concerns the level of rigor today; the second considers the level of rigor in the future.

The most comprehensive study of state exit exams to date is Achieve, Inc.'s *Do Graduation Tests Measure Up? A Closer Look at State High School Exit Exams*. This report compared exit exams from six states (Ohio included) to a variety of content descriptors, including materials from the Third International Mathematics and Science Study (TIMSS), content descriptions developed by the Council of Chief State School Officers (CCSSO) and ACT's *Standards for Transition* (EPAS System). Achieve's conclusion was that "none of the tests ... presents unreasonable expectations for high school graduates. On the contrary, the tests cover material that most students study by early in their high school careers." On the basis of their findings, the researchers developed three primary recommendations for the states:

First, it is perfectly reasonable to expect high school graduates to pass these tests — they are not overly demanding. States should neither lower the standards on these exit exams nor delay their implementation.

Second, these exams will need to be strengthened over time to better measure the knowledge and skills high school graduates need to succeed in the real world. These improvements will need to be made gradually, so that as expectations rise, students are provided with the supports they need to succeed.

Third, states should not rely exclusively on these tests to measure everything that matters in a young person's education. Over time, states will need to develop a more comprehensive set of measures beyond on-demand graduation tests. (Gandal 2004)³³

While rigor is a function of the test itself, it is also a function of the "cut score." Simply put, what percent correct equals a passing grade? Achieve found that the "cut scores" required to pass the tests reflected only modest expectations:

To pass the math tests, students in these states need to successfully answer questions that, on average, cover material students in most other countries study in 7th or 8th grade. To pass the English language arts tests, students need to successfully answer questions that ACT considers more appropriate for the test it gives to 8th and 9th graders than its college admissions test. (Gandal 2004)³⁴

³³ Gandal, M., (2004). *Do graduation tests measure up?*, p.30

³⁴ Ibid, p.30

On the Ohio Graduation Test (OGT)

Ohio must provide evidence that the grade 4, 6 and 10 tests satisfy the requirement for "multiple up-to-date measures of student performance, including measures that assess higher order thinking skills and understanding." Other States have been required to provide documentation of either item development procedures or results from a post hoc analysis conducted by educators familiar with State standards as evidence that test items address higher order thinking and understanding. The eview letter on Ohio's assessment system.

A majority of the points on the tests across the six states were associated with questions at the lower end of the cognitive continuum. On a five-point scale of rigor, with one being lowest and five highest, more than half of the questions across the tests fall at the lowest two levels ... There are notable differences in the cognitive demand of the test questions across the states as well. For example, more than a third of the questions on the Maryland end-of-course tests tap Level 4 and 5 skills, while only 12 percent of Florida's and 16 percent of Ohio's test questions aim at that level. ³⁶ (Gandal 2004)

In March of 2004, the Reading and Mathematics portion of the OGT was administered for the first time. This administration did not count toward graduation requirements as the class of 2007 will be the first class to whom this applies. A total of 128,007 students took the reading test, and a total of 127,618 took the mathematics test. Figures below include students enrolled in community schools and other public educational entities. Students with Individualized Education Plans (IEP) and/or Limited English Proficiency (LEP) are also included in the figures. Students enrolled in chartered non-public schools are not included.

Table I March 2004 OGT Results³⁷

	Reading		Mathematics	
Level	Number	Percent	Number	Percent
Advanced	32,768	25.6%	21,180	16.6%
Accelerated	33,020	25.8%	25,080	19.7%
Proficient	33,387	26.1%	39,381	30.9%
Basic	13,353	10.4%	19,283	15.1%
Limited	15,479	12.1%	22,694	17.8%

Note: Percents may not add up to 100% due to rounding.

³⁵ Moore, S. C. (2001). *Review letter on Ohio's assessment system under NCLB. To: S. T. Zelman.* Washington, D.C.,U.S. Department of Education. Available at: http://www.ed.gov/admins/lead/account/finalassess/ohio.html

³⁶ Gandal, M., (2004). Do graduation tests measure up?, pp. 16-17

³⁷ Ohio Department of Education, *March 2004 reading and mathematics Ohio Graduation Tests*, Available at: http://www.ode.state.oh.us/proficiency/March2004Highlights.asp

On the basis of these results, it appears that Ohio students did well on the OGT. More than three quarters (77.5%) of the students achieved at least a proficient score on the reading test, and approximately two thirds (67.1%) achieved at least a proficient score on the mathematics test.³⁸

What must be considered, however, are the cut scores subsequently determined by the Ohio Board of Education. In reading, for instance, the scores are as follows for the various categories of standing, percentages are supplied:

Table II OGT Cut Scores³⁹

	Reading OGT Cut Score (out of 48)	Percent of Total Points
Limited		
Basic	13.5	28%
Proficient	20.0	42%
Accelerated	31.5	66%
Advanced	39.0	81%

In Math, out of 46 possible points, Advanced was 37.5, Accelerated 30.0, Proficient 19.0, Basic 13.5 and Limited below 13.5. Once again, these are the only two subjects required for assessment by NCLB in 2004. The 2004 administration established a baseline for Ohio.

States are notoriously reticent about discussing their arrangements with providers on test construction and design. Ohio is no exception and posts little to substantiate the OGT. This leads to confusion both in the minds of policy makers and the public. For an Ohio Board of Education discussion on "cut scores," see Appendix C.

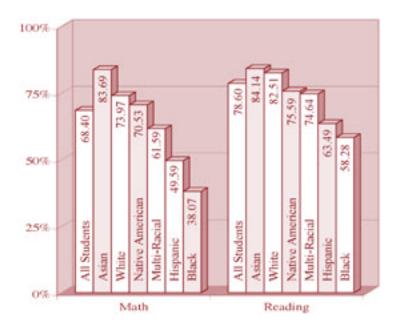
In addition to "cut scores" there are other issues. Under NCLB, all students must meet state proficiency by 2014. As tests progressively become more rigorous and "cut scores" are adjusted, genuine concern exists in some quarters, including Ohio's Closing the Achievement Gap Task Force:

³⁸ Ohio Department of Education, *March 2004 reading and mathematics Ohio Graduation Tests*, Available at: http://www.ode.state.oh.us/proficiency/March2004Highlights.asp
³⁹ Section 3301.0710(A)(2) of the Ohio Revised Code (ORC) requires the State Board of Education to prescribe five ranges of scores on each of the achievement tests required that those ranges of scores shall be deemed to demonstrate the following levels of achievement: advanced, accelerated, proficient, basic and limited.

The class of 2007 will be the first class of Ohio students who must pass the five sections of the new Ohio Graduation Test in order to graduate. These students were in the sixth grade in 2001. So, Sixth-Grade Ohio Proficiency Test results from 2001 might foreshadow the performance of these students on the new Ohio Graduation Test. Alarmingly, only 43 percent of white students in the class of 2007 passed all sections of the Sixth-Grade Ohio Proficiency Test. Even more distressing is the fact that only 11 percent of African American students in the class of 2007 passed all sections of the Sixth-Grade Ohio Proficiency Test. If we fail to take immediate, intensive and intelligent action, tens of thousands of students will not meet the state's academic expectations and will not graduate from high school. (Schloemer and Johnson 2003)⁴⁰

Part of the Task Force's concern seemed to be supported by the first administration, albeit on a trial basis for the OGT in 2004. Once again, however, this test did not count and experience from other states has demonstrated that once the test does count, students take it more seriously and pass rates increase. Yet, the gap was still there:

Table III
Passing Rates for Subgroups on the Ohio Graduation Test March 2004⁴¹



⁴⁰ Schloemer, G. R. and J. Johnson, J.F., Co-chairs (2003). *Towards high achievement for all students: The report of the State Board of Education Closing Achievement Gaps Task Force*. Columbus, Ohio: State Board of Education., p.9

⁴¹ As reported in: Gayler, K., Chudowsky, N., et. al. (2004). *State high school exit exams: A maturing reform.* Washington, D.C.: Center on Education Policy., p.228

On the ACT Test and Educational Planning and Assessment (EPAS) System

While the OGT is a discrete test in time, EPAS (nominally beginning in 8th grade) is a system which enables both students and faculty to assess strengths and deficiencies in preparation to do college-level work. While it is recognized that Ohio has the right, indeed the obligation, to assess progress towards students meeting its own standards, the objective of this study is to determine whether or not the ACT assessment and the EPAS system both adequately meet that criterion, plus promote additional knowledge and skills necessary to succeed in college and the workforce. ACT is moving to rephrase its standards of transmission as "standards for college readiness."

The three systems (EXPLORE, PLAN, ACT) are so closely related that at each level, predictions can be made as to college success, i.e. 50% probability or better that a student will score a B or higher in college level coursework. They are as follows:

Table IV

Student Scores Predicting 50% or Better Probability
of a "B" in College Coursework⁴²

	ACT	PLAN	EXPLORE
English	18	15	13
Math	22	19	17
Science	24	21	20

EXPLORE can be administered in the 8th grade. PLAN normally is a 9th or 10th grade application, the ACT 11th or 12th grades.

Yet, it also appears that the EPAS system is a substantial measure of high school curriculum as well as college readiness. In a study of the graduating class of 2002 who took the ACT, Daniel J. Woodruff found the following:

In summary, the final conclusions of this study are three. First, the three test batteries comprising EPAS have substantial correlations with HSGPA. This result supports the validity of EPAS as a measure of the high school curriculum. Second, the three test batteries are highly correlated with each other despite

⁴² From a presentation by Sean Moore, ACT's Elementary and Secondary consultant given at the NCCEP National Conference in Washington, D.C., July, 2004

test administration gaps of one to four years, and are consistently measuring common attributes as students progress through grades 8 to 12. These high Composite score correlations are consistent with the primary goal of EPAS, which is to measure the skills and knowledge students acquire in junior high and high school. Third, no matter what their academic level before high school, as represented by their EXPLORE Composite score, students taking the core set of courses in high school are more likely to have higher ACT Composite scores than students taking less than the core set of courses. (Woodruff 2003)⁴³

On Diminishing Time and Resources

Schools are places of "finite energy." In other words, there is just so much time in a day, so many days in an academic year and multiple tasks and interruptions confronting both students and staff. One of the major questions surrounding high stakes tests or exit exams is the extent to which they focus this finite time away from other issues which might correctly be termed part of the high school experience.

As a Federal Commission found in 1994:

Learning in America is a prisoner of time. For the past 150 years, American public schools have held time constant and let learning vary. The rule, only rarely voiced, is simple: learn what you can in the time we make available. It should surprise no one that some bright, hard-working students do reasonably well. Everyone else-from the typical student to the dropout- runs into trouble. (Schwartz 1994)⁴⁴

Teachers and students have time to prepare for one test or another. The findings of the Governor's Commission on Student Success indicate (as well as the findings of Stark Education Partnership and Stark County P-16 Compact) that substantial risks exist that the test can become the "standard" for curriculum and instruction.

While it is difficult to assess the actual expense involved in both the design and administration of the OGT, it is not just the test itself which contributes to this expense. A recent study by the Center for Education Policy (CEP) attempted to assess the direct and hidden costs of state exit exams:

⁴³Woodruff, D. J. (2003). *Relationships between EPAS scores and college preparatory course work in high school*. Iowa City, Iowa: ACT, Inc., p.14

⁴⁴ Schwartz, C., Chairman. (1994). *Report of the National Education Commission on Time and Learning*, Washington, D.C.: U.S. Department of Education Archived Information. Available at: www.ed.gov/pubs/PrisonersOfTime/Prisoners.html

The direct costs of developing and administering the tests themselves make up a tiny fraction of the total costs of implementing an exit exam policy. The bulk of the costs go toward other "hidden" expenses necessary to give students a strong chance of passing the mandatory exams. These include remedial services for students who fail, programs to prevent failure and professional development to upgrade the skills of teachers who must prepare students for the exams...the true costs of an exit exam policy are often invisible to state policymakers, because the expenses are being borne mostly by local school districts—and often by shifting existing funds away from other educational priorities. (Gayler, Chudowsky et al. 2003)⁴⁵

CEP, looking at Indiana's exit exam estimated the cost at \$444 per student per year to "achieve the current level of performance," however, to raise the level of achievement to "commendable" in the state would cost another \$685 per pupil per year. This equates to approximately 5.5% of Indiana's total 2001-2002 education expenditure. In the absence of a concrete study, it is difficult to say what the direct and hidden costs are in Ohio. In Ohio.

In a recent study published by Ohio's KnowledgeWorks Foundation, author J.D. Weiss calls for "...additional inquiry into the overall impact of public schools as an industry...." ¹⁴⁸

Considering education as an industry, productivity within the industry itself becomes critical. Much has been said about the gap in available instructional time in academic subjects between students in the United States and other nations.⁴⁹ If educational systems are to be productive, serious questions emerge as to such issues as loss of instructional time due to testing, costs of such tests and whether or not such tests are "productive" from the aspect of improving instruction or promoting access to college and post secondary instruction.

⁴⁵ Gayler, K., Chudowsky, N., et al., (2003). Exit exams put to the test., p.11

⁴⁶ Ibid, pp. 11-12

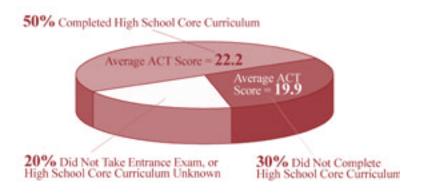
⁴⁷ Some notion of Ohio's direct assessment expenses can be obtained through the Government Accounting Office (2003). *TITLE I characteristics of tests will influence expenses; information sharing may help states realize efficiencies.* Washington, D.C., Government Accounting Office and Driscoll, W. & Fleeter, H. (2003). *Projected costs of implementing the federal "No Child Left Behind Act" in Ohio.* Columbus, Ohio, Levin, Driscoll & Fleeter. ⁴⁸ Weiss, J. D. (2004). *Public schools and economic development: What the research shows.* Cincinnati, Ohio: The KnowledgeWorks Foundation., p.32

⁴⁹ See international comparison indicators such as *Mathematics instructional time in grade eight*. Available at http://nces.ed.gov/surveys/international/IntlIndicators/pdf/time_math_text.pdf

On Transition to College, Remediation and Persistence

In Ohio, there is a direct relationship between taking a core curriculum, ACT scores and the need for remedial coursework:

Table V
Academic Preparation of
Traditional First-Year Students (FY 2001-2002)⁵⁰



While many factors contribute to the successful transition from high school to college, one of the most significant factors is the rigor of the high school curriculum taken by students. In this regard, students who take a solid academic core curriculum in high school are better prepared for college according to data collected by the Ohio Board of Regents. These findings are subject to the following:

- A minimum college preparatory curriculum (core) in high school is defined as four units of English and three units each of math, laboratory science and social studies.
- Information on core course-taking patterns in high school is available for the 80% of recent high school graduates beginning college in 2001-2002 who took college entrance exams.
- The 50% of incoming students who are known to have completed a high school core curriculum had an average ACT (college entrance exam) score of 22.2.
- The 30% of students known not to have taken core courses had an average ACT score of 19.9 (OBR 2004)⁵¹

 ^{50 (2004).} The performance report for Ohio's colleges and universities, 2003. Columbus,
 Ohio: Ohio Board of Regents. Available at: http://www.regents.state.oh.us/perfrpt/
 51 Ibid

ACT's own research further confirms the relationship between students taking a core college preparatory curriculum in high school and ACT scores:

It is sensible that students may be able to improve their ACT scores by taking the core set of college preparatory courses. Previous studies listed above have found this result. This study has found that regardless of EXPLORE (Middle School Assessment) Composite scores in the 8th grade, students who commit to taking the core set of courses in high school can, on average, increase their ACT Composite scores by almost one point. Thus it appears worthwhile for parents, teachers and counselors to encourage students to commit to taking the core set of courses (Woodruff 2003).⁵²

Further, there is a relationship between the need for remedial coursework, whether or not students passed that coursework in the first year, success in college and returning to college:

Table VI
Remedial Course Success Measures for
First-Year Degree-Seeking Freshman FY 2001-2002⁵³

	Autumn 2002 Outcomes			
Remedial Course-Taking Pattern	Number of Students	% Returning to College in Autumn 2002	Passage Rate for Credits Taken	Average GPA
Did not enroll in remedial courses	45,096	75%	88%	3.0
Enrolled in remedial courses	29,250	61%	76%	2.6
Passed all remedial courses	15,686	75%	81%	2.7
Passed some, but not all, remedial courses	5,614	59%	63%	2.2
Passed no remedial courses	7,950	34%	64%	2.2

⁵² Woodruff, Relationship between EPAS scores and college prepatory course work, p.14

⁵³ Also from *The performance report for Ohio's colleges and universities*, 2003.

There is a further relationship between ACT scores and timely graduation in Ohio. In fact, Ohio is substantially above the national average in this regard. One supposition is that the ACT test may more accurately reflect what is needed to succeed in Ohio colleges:

Table VII Six-Year Graduation Rates at Baccalaureate Institutions by Average ACT Score of Incoming Class⁵⁴

Ohio Public Institutions Compared to the Nation^A Fall 1996 Cohort of Full-Time, First-Time Degree-Seeking Students

	Six-Year Graduation Rates (Bachelor's Degree or Higher)			
Average ACT Score of Incoming Students - Fall 1996	Students in 1996 Cohort	Ohio	National Sample ^B	Ohio Compared to National Sample
Schools with avg. ACT > 24	3,388	81%	68%	+ 13%
Schools with avg. ACT >= 22.5	9,153	62%	55%	+ 7%
Schools with avg. ACT >= 21 and < 22.5	7,669	51%	43%	+ 8%
Schools with avg. ACT < 21	7,227	37%	34%	+ 3%
Statewide	27,437	55%	54%	+ 1%

^A National data obtained from The Consortium for Student Retention Data Exchange (CSRDE)

The findings in this section outline a specific path for the state of Ohio. While there are many variables, the relationship between rigorous high school coursework, ACT scores and college success is clear. What this means is that Ohio can no longer afford "scaled-down" courses, including the old "general math" or multiple track systems.

Given these conclusions, it is of interest to survey what some other states are doing to incorporate the ACT into their high school assessment systems.



^B Fall 1995 cohort

Several states are incorporating the ACT or the EPAS system into their state-level assessments.



What Some Other States Are Doing

Several states are incorporating the ACT or the EPAS system into their statelevel assessments. The following is a brief overview of the work in those states:

Colorado

Colorado Senate Bill 186 was signed into law in April 2000 by Governor Bill Owens and established an accountability system for that state. The system included various grade-level assessments, collectively called the Colorado Student Assessment Program (CSAP).

The final stage of CSAP is an 11th grade achievement-based assessment which gives the state an indication of how well schools did in educating students at the K-12 level. For the 11th grade assessment, the state uses the ACT Test.

An ACT Case Study relates the following:

In 2002, the number of in-state ACT tested college freshmen increased by 25%. Included in the increased college enrollments in 2002 were 12 percent of the ACT-tested students who said they did not intend to go to college when they took the ACT as high school juniors. The number of ACT-tested Colorado graduates who aspire to further their education after high school increased by 33 percent in 2003 compared to 2001. The number of in-state, ACT-tested minorities enrolled in Colorado colleges increased by 20 percent in 2002 over 2001. (ACT 2004)⁵⁵

While some question the fit of the ACT to the Colorado Model Content Standards, they recognize two other primary rationales for administering the ACT to all 11th graders in the state. First, it enables more students to pursue a college education and second, provides the opportunity to correct deficiencies in the 12th grade.⁵⁶

⁵⁵ ACT, Inc. (2004). *Measuring Colorado students' progress toward state learning standards*, Iowa City, Iowa: Author. Available at: http://www.act.org/epas/case/colorado.html
http://www.act.org/epas/case/colorado.html
http://www.act.org/epas/case/colorado.html
http://www.act.org/epas/case/colorado.html
https://www.act.org/epas/case/colorado.html
https://www.act.org/epas/case

Oklahoma

It's 2010, and Oklahoma and its citizens are thriving in a vibrant, global economy. Over the past 12 years, Oklahoma has targeted its efforts toward increasing the proportion of its population with college degrees, and the impact has been phenomenal. Oklahoma, with 38 percent of its population holding associate degrees or above, now ranks in the top one-third of all states for its educational and economic performance. Businesses and industries from around the world are looking at relocation opportunities in Oklahoma, attracted in large part by the state's growing and highly qualified college-educated workforce. (Massey 1999)⁵⁷

Oklahoma makes wide use of ACT assessments in preparing students for college as part of a series of comprehensive initiatives on the part of the State Board of Regents. Ohio is not the only state with an ambitious plan to raise the percentage of its college educated citizens. In Oklahoma plans are well underway to grow that state's college educated population.

Oklahoma makes wide use of ACT assessments in preparing students for college as part of a series of comprehensive initiatives on the part of the State Board of Regents. Among these are:

EPAS-Educational Planning and Assessment System is a voluntary student assessment and instructional support program that provides feedback to middle and high schools about their performance in preparing students for college. EPAS also provides individual students with information about the probability of the grades that they would earn in college based on their current high school performance. Currently, 82 percent (447) of all districts and 38 private schools participate in EPAS, reaching more than 97 percent of the state's eighth and tenth graders.

ACT Standards for Transition -a feedback tool allowing school districts to see as early as the eighth and tenth grades, a clear picture of core academic skills that students need to succeed in postsecondary education. Additionally, individual students will be informed of specific areas that will enhance their preparation for college. (Glass 2004)⁵⁸

The need for remediation among first time college students is decreasing in Oklahoma. The EPAS program remains a voluntary program in Oklahoma in addition to the mandated K-12 testing requirements. The system, however, comprises the only system in the state which measures student readiness along a continuum of college readiness benchmarks.

Massey, J., Chair (1999). Brain gain 2010: Building Oklahoma through intellectual power: summary. Oklahoma City, Oklahoma: Oklahoma State Regents for Higher Education, p.3
 Glass, J., M., Chair (2004). Student remediation report. Oklahoma City, Oklahoma, Oklahoma State Regents for Higher Education, p.5

Illinois

The Prairie State Achievement Exam (PSAE) is taken by all 11th graders in Illinois. The PSAE includes three components: (1) ISBE-developed writing, science and social science assessments;⁵⁹ (2) the ACT Assessment, which includes reading, English, mathematics and science tests; and (3) two WorkKeys assessments (*Reading for Information* and *Applied Mathematics*).

An ACT (EPAS) Case Study relates the following summary of results for Illinois:

- The number of Illinois graduating seniors taking the ACT Assessment was 51 percent higher in 2003 than in 2001, before the PSAE was introduced.
- The most dramatic increases in test takers can be seen among:
 - Males (+61%)
 - Minority graduates (+50%)
 - Graduates from families earning \$30,000 per year or less (+45%)
- The number of in-state, ACT-tested fall freshmen enrolled in Illinois colleges in 2002 (the first graduating class affected by PSAE testing) was up by 23 percent compared to the previous year.
- The number of these college freshmen from families earning \$30,000 per year or less was up by 6 percent compared to 2001.
- Included in the increased college enrollments in 2002 were 15
 percent of the ACT-tested students who said they did not intend to
 go to college when they took the PSAE as high school juniors.
- The number of in-state, ACT-tested minorities enrolled in Illinois colleges increased by 17 percent in 2002 over 2001.
- The number of ACT-tested Illinois graduates who aspire to further their education after high school increased by 23 percent in 2003 compared to 2001.
- The number of Illinois high school graduates earning an ACT Composite score of 18 (the low end of the range for admission to colleges with liberal admission policies) or higher was 27 percent higher in 2003 than in 2001.
- Illinois' state average ACT Composite score rose from 20.1 in 2002 to 20.2 in 2003, despite an increase in the number of students tested. (ACT 2004)⁶⁰

⁵⁹ Note: Recent legislation has eliminated the writing and social sciences portion of this test ⁶⁰ ACT, Inc. (2004). *Measuring Illinois students' progress toward state learning standards*, Iowa City, Iowa: Author, p.2.

In some ways, Illinois underscores the awareness that the rigorous high school coursework is critical to the process of increasing college access and success. The following is from the Illinois State Board of Education 2003 report on the PSAE:

- Science scores improved by 1.1% from 2002 to 2003.
- Significantly more Illinois graduates were ready for college algebra (21%) and English composition (29%) in 2003 than in 2001, based on their ACT scores.
- Significant achievement gaps remain between white and minority student groups, and between low-income and nonlow-income groups.
- There is a strong correlation between high school achievement and taking "core courses" in English, mathematics, science and social science. However, fewer than half of Illinois high school students take a full complement of core courses as compared to 57% of students nationally. While Illinois boasts an 86% graduation rate, too many students are graduating with minimal coursework that may endanger their future opportunities for employment or higher education. With most new jobs requiring some form of post-high school education, a core curriculum prepares the student for higher education opportunities. (Steiner 2003)⁶¹

In an effort to boost the college-going rate in Mountain State, the West Virginia Department of Education will be providing the ACT PLAN assessment to all 10th grade students as part of its annual statewide assessment.

West Virginia

In an effort to boost the college-going rate in Mountain State, the West Virginia Department of Education will be providing the ACT PLAN assessment to all 10th grade students as part of its annual statewide assessment. The ACT PLAN closely correlates to that of the achievement tests in the ACT Assessment, which 60 percent of all West Virginia students take as their college entrance and placement exam.

Students who participate in the ACT PLAN tend to perform better on the ACT Assessment because they have been provided an estimated ACT Assessment composite score, allowing students to learn where they need to refocus their efforts. It also helps students with post-high school choices and provides schools with important feedback for planning and allocating guidance and instructional resources.

⁶¹ Steiner, J., Chair (2003). *The condition of public education 2003*. Springfield, Illinois, Illinois State Board of Education. p.15

"We believe that when students participate in the ACT PLAN assessment, they will gain a better idea what to expect when they prepare for the ACT Assessment," said State Schools Superintendent David Stewart.⁶²

Only 16.3% of West Virginia's citizens have a college degree. The state's Promise Scholarship Program is a major effort on the part of that state to increase its numbers. The West Virginia PROMISE (Providing Real Opportunities for Maximizing In-state Student Excellence) Scholarship Program was approved by the Legislature in 1999. The program offers each West Virginia high school graduate who completes school in West Virginia with a 3.0 grade point average in the core and overall coursework as well as a composite ACT score of at least 21, or a combined SAT score of 1000 a full tuition scholarship to a state college or university or an equivalent dollar scholarship (\$2800) to an in-state private college.

One of the reasons the ACT Test is critical to West Virginia is in that the PROMISE Scholarship is based on a "student's achievements – not on his or her parent's financial resources, not on the college's resources, not on other factors."

Michigan

Michigan is currently at a crossroads in its testing program due to a press by several organizations within the state to change its high school testing program. While Michigan does not have a high stakes exit exam, the current program (MEAP) does determine eligibility for state scholarship dollars. A review of the Michigan case is in order as it underscores some of the unique political and economic challenges faced by states in altering their assessment systems. The following from the *Daily Oakland Press* summarizes what has emerged as a controversial and political issue:

The vast majority of Michigan's high school principals are looking for citizen support. They want to see a change in the test given high school pupils, a substantial change for the better. This is what all of those mysterious headlines about the MEAP and American College Testing program have been about, an opaque controversy that strikes most of us as a squabble of no apparent interest to the general public.

But it really is a substantive subject, and the outcome means a lot to our teenagers, whether or not they end up college-bound.

WVDE (2002). ACT PLAN will be provided as part of statewide assessment program, West Virginia Department of Education. Available at: http://www.wvde.state.wv.us/archive/
 DeFrank-Cole, L., exec. dir. (2004). PROMISE facts, Charleston, West Virginia: State of West Virginia. Available at: http://www.promisescholarships.org/facts.asp

The MEAP exam is useful only for determining eligibility for a state scholarship - the Michigan Merit Awards - and achievement levels.

The principals, the Michigan Congress of Parents, Teachers and Students (PTSA) and many other groups associated with K-12 education want to drop the MEAP in favor of reliance on the ACT. The ACT is a nationwide test that three-quarters of our high school students already are taking annually.

The proponents of the ACT have data that say it costs less to administer, takes less time, determines Merit Award acceptance and - most important - is a nationally accepted indicator of college admission eligibility. The last factor is something the MEAP is not. (DOP 2004)⁶⁴

The Michigan Association of Secondary School Principals (MASSP) along with a consortium of K-12, higher education groups and the Michigan Manufacturer's Association has been advocating replacing the Michigan Educational Assessment Program High School Test (MEAP-HST) with the Michigan Merit Examination, a combination of the nationally recognized ACT Assessment and ACT WorkKeys, as an assessment tool for Michigan high school juniors.

On the basis of a comprehensive study conducted on behalf of the state legislature by the Education Alliance of which the MASSP is part, the following rationale are cited for the use of the ACT/WorkKeys combination:

- a. A high school exam that utilizes both the ACT and WorkKeys will provide pertinent information for students, parents, educators, business people and legislators relative to real life criteria (i.e, readiness for college and work) to ensure the Michigan Curriculum Frameworks are being met.
- b. Custom test development is very expensive. Quality needs to be brought into the cost of consideration. Michigan cannot afford to produce as high a quality test that meets the closest of public scrutiny as does the ACT.
- c. Both Colorado and Illinois, states currently using the ACT and WorkKeys (Illinois) assessment, won approval for their state accountability plans as required by NCLB.
- d. Michigan, like other states, has had problems with maintaining stable testing programs over years because of shifts in

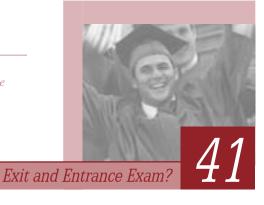
⁶⁴ (2004). State should reject the MEAP for superior ACT program. Oakland, Michigan: The Daily Oakland Press, June 2, 2004.

- management and priorities. As a result, test results have typically not been comparable over long periods of time.
- e. The high school assessment would become a turnkey operation. Using ACT & WorkKeys, Michigan would not have to manage item development, testing bias studies, or the timing of returning the individual reports to the students and schools.
- f. The Michigan Merit Award Program would continue to be administered much as it has in the past.
- g. It is time to move beyond separate systems, in which curriculum and assessment systems in K-12 and postsecondary education bear little relationship to each other.
- h. Since nearly three-quarters of all high school graduates enroll in postsecondary education within a year or two of graduation, the time calls for conforming school practice to education reality. ...the best preparation in high school readies students for postsecondary education, work and life.
- i. The MEAP-HST has little creditability among high school students and parents. (MASSP 2003)⁶⁵

The debate over replacing MEAP still continues in Michigan and is involving the legislature as well as the Michigan Department of Education. MEAP, it should be noted, is not a high stakes high school exit exam in the same mode as the OGT. While it satisfies NCLB reporting requirements, it is also used for the Michigan Merit Scholarships.

The Michigan case, in part, indicated a model for how to proceed in conducting a review of a high school assessment system which might benefit from the addition of ACT components. Portions of this model were utilized in determining the methodology for this study.

⁶⁵ MASSP (2003). A study in regard to a proposal by the Michigan Association of Secondary School Principals to change the assessment instrument used to measure Michigan high schools. Lansing, Michigan: Michigan Association of Secondary School Principals. pp.3-4



Should a waiver be sought
from the Ohio Department of
Education to pilot replacing the
Ohio Graduation Test with the
ACT? If such a pilot is advisable,
how might it be done? What
would it look like?



Methodology of the Study

This section discusses the methodology used in conducting an in depth investigation on the ACT as both an exit and entrance exam.

This specific study involved three separate investigations. The first was a "crosswalk" between the EPAS system and the Ohio standards. Normally, ACT Inc. does such crosswalks across all the states on a three year basis. Pursuant to this study, ACT Vice-President for Research Cyndie Scmeiser agreed to accelerate the normal cross study and have the same completed by the end of June 2004 (see Appendix A) to accommodate a two day conference being sponsored by the Stark Education Partnership to consider if there was enough justification to request a pilot from the Ohio Department of Education to use the ACT test or EPAS system to augment or replace the OGT and what such a pilot might involve. Consequently, Dr. Scmeiser also assigned Midwest Region Vice-President Eddie Pawlawski to further consult with the Stark Education Partnership and to serve as the liaison to the two day conference.

The second part of this exploration involved the two day conference A Study on Using the ACT to Replace the Ohio Graduation Test (OGT) On a Five-Year Pilot Basis In Stark County and Other Places in Ohio. Superintendents, K-12 and higher education faculty and administrators, as well as philanthropic and community representatives (see Appendix B) from the Stark County P-16 Compact were invited to attend.

The purpose of the conference was to review information on the nature of the ACT and EPAS assessment systems and how they were being used in other states to supplement existing assessment systems and to increase the collegegoing rate. Practicing educators at both the K-12 and higher education level were additionally asked to consider two key questions:

- Should a waiver be sought from the Ohio Department of Education to pilot replacing the Ohio Graduation Test with the ACT?
- If such a pilot is advisable, how might it be done? What would it look like?

On the first day, following a welcome and overview of the study and activities, Eddie Pawlawski, Vice-President of ACT's Midwest Regional Office provided informational briefings on the ACT:

- Nature of the Test
- The Educational Planning and Assessment System (EPAS)
- Conditions for Use as Part of a Statewide Assessment
- Forthcoming Writing Component
- ACT's Crosswalk with Ohio Standards
- The Illinois Experience

Following this overview, a conference call was held with educators from Illinois High School District 214 on the use of the ACT assessment in that district and the statewide use of the ACT in Illinois. An additional conference call with Dale Eggebraaten of the International Center for Leadership in Education was held in the afternoon concerning the crosswalk being conducted by that agency between the EPAS system, OGT and Ohio academic content standards as part of the study. Educators convened in groups at the end of the day to discuss findings.

The second day began with presentation of the research on high stakes exit exams followed by a review of ACT Case Studies from Iowa, Colorado and West Virginia. Educator groups reconvened for the afternoon.

The third part of the study involved research conducted for the Stark County P-16 Compact and Stark Education Partnership by the International Center for Leadership in Education (ICLE). Though the ACT crosswalk gave a good indication of the match of the EPAS system to the Ohio Academic Content Standards and Benchmarks, the question remained as to what specifically each relative assessment system (EPAS and OGT) measured. Hence, a comparison was needed.

ICLE's Academic Research Teams for English language arts, mathematics and science had previously reviewed, analyzed and aligned the state standards and benchmarks with the respective state-wide assessment in 49 states and the District of Columbia. This included a study of Ohio state standards, benchmarks / indicators and the Ohio Graduating Test assessments. ⁶⁶

These Academic Teams were used in the research project for this study and used the following resources as the basis for the review and analysis of ACT Assessments and OGT:

ICLE's Academic Research Teams for English language arts, mathematics, and science had previously reviewed, analyzed, and aligned the state standards and benchmarks with the respective state-wide assessment in 49 states and the District of Columbia.

⁶⁶ The ICLE website contains sample charts and a summary of the grades and subjects researched for each of the 49 states and the District of Columbia. www.daleicle.org/SampleCharts.htm

 International Center for Leadership in Education Provided Research Materials:

Aligning Standards, Tests and Essential Skills to Improve Instruction - A Resource Kit Incorporating the Curriculum Matrix for Ohio

ACT Provided Research Materials:

ACT/Writing: The ACT provided crosswalk data used in the Curriculum Matrix crosswalk for ACT/Writing assessments is: Ohio Academic Content Standards Compared with ACT's EPAS Assessments, June 10, 2004; ACT Assessment Technical Manual; Content Validity Evidence in Support of ACT's Educational Achievement Tests; Standards for Transition, Descriptions of the Skills and Knowledge Associated with EPAS Test Scores; ACT Assessment – Form 58B 2000-01; ACT Assessment – Form 58 – 2001-2002.

ACT WorkKeys: The ACT provided crosswalk data used in the Curriculum Matrix crosswalk for WorkKeys assessments is: Comparison of ACT WorkKeys Assessments to the Ohio Department of Education Content Standards and Benchmarks for English Language Arts and Mathematics Grades 9-12, February 2004; WorkKeys, Technical Handbook, March 2001; WorkKeys, Preparing for the WorkKeys Assessments, 2003; Standards for Transition, Descriptions of the Skills and Knowledge Associated with EPAS Test Scores; Characteristics of the WorkKeys Assessments, Fall 2002.

ICLE Study Methodology

English Language Arts – 8th Grade and 10th Grade

The academic team began by using the International Center for Leadership in Education's English Language Arts Curriculum Matrix for Ohio data charts. This data identifies which standards/benchmarks/indicators had a strong (High), moderate (Medium) or district/classroom (Low) assessment link to the OGT. This was based on the state provided Test Blueprint identifying the number of items and points at the broad standard level (see Appendix E).

The academic team reviewed and crosswalked the ACT provided *Ohio Academic Content Standards compared with ACT's EPAS Assessment* document with the Ohio English language arts standards/benchmarks/indicators. A "Y" (Yes) was designated to the standard/benchmark/indicator if a direct or embedded (indirect) link between the test descriptors and the

standard/benchmark exist. If the crosswalk was a partial match, the part of the benchmark/indicator that matched was underlined. (8th grade – ACT Explore, 10th Grade ACT Plan)

The academic team continued with a review and crosswalk of the English Test and Reading Test of the *ACT Assessment 2000-2001 Form 58B and the 2001-2002 Form 58E* to the standards/benchmarks/indicator on a question-by-question basis. It was the opinion of the academic team these assessments concurred with the ACT produced report.

The academic team crosswalked the ACT WorkKeys' "Reading for Information" Characteristics of Reading Materials and Items and Skills to the Ohio English language arts standards/benchmark/indicators. A "Y" was designated if the standard/benchmark/indicator matched the characteristics.

Mathematics – 8th Grade and 10th Grade

The academic team began by using the International Center for Leadership in Education's Mathematics Curriculum Matrix for Ohio data charts. This data identifies which standards/benchmarks/indicators had a strong (High), moderate (Medium), or district/classroom (Low) assessment link to the OGT. This was based on the state provided Test Blueprint identifying the number of items and points at the broad standard level.

The academic team reviewed and crosswalked the ACT provided *Ohio Academic Content Standards compared with ACT's EPAS Assessment* document with the Ohio Mathematics standards/benchmarks/indicators. A "Y" (Yes) was designated to the standard/benchmark/indicator if a direct or embedded (indirect) link between the test descriptors and the standard/benchmark exist. If the crosswalk was a partial match, the part of the benchmark/indicator that matched was underlined. (8th grade – ACT Explore, 10th Grade ACT Plan)

The academic team continued with a review and crosswalk of the Mathematics Test of the *ACT Assessment 2000-2001 Form 58B and the 2001-2002 Form 58E* to the standards/benchmarks/indicator on a question-by-question basis. It was the opinion of the academic team these assessments concurred with the ACT produced report.

The academic team crosswalked the ACT WorkKeys' "Applied Mathematics" to the Ohio mathematics arts standards/benchmark/indicators. A "Y" was designated if the standard/benchmark/indicator matches the characteristics.

Science – 8th Grade and 10th Grade

The academic team used the International Center for Leadership in Education's Science Curriculum Matrix for Ohio data charts. The Test Blueprint for Science is not available at this time.

Next, the academic team reviewed and crosswalked the ACT provided *Ohio Academic Content Standards compared with ACT's EPAS Assessment* document with the Ohio Science standards/benchmarks/indicators. A "Y" (Yes) was designated to the standard/benchmark/indicator if a direct or embedded (indirect) link between the test descriptors and the standard/benchmark exist. (8th grade – ACT Explore, 10th Grade ACT Plan)

Finally, the academic team reviewed and crosswalked of the Science Test of the *ACT Assessment 2000-2001 Form 58B and the 2001-2002 Form 58E* to the 8th grade and 10th grade standards/benchmarks/indicator on a question-by-question basis. It was the opinion of the academic team these assessments concurred with the ACT produced report.⁶⁷

The three specific investigations discussed in this methodology section resulted in a series of findings to be discussed in the following section.

⁶⁷ This section on the ICLE study methodology is based extensively on: Daggett, W. R., President (2004). *Review of the ACT assessments and OGT to Ohio academic state standards/benchmarks/indicators: Eighth grade and tenth grade english language arts, mathematics, and science*. Rexford, N.Y: International Center for Leadership in Education, pp1-5.

None of the state tests

approaches the level of

demand of the ACT college

admissions test. (Pellegrino 1999)



Findings

The findings from the in depth investigation conducted by the Stark County P-16 Compact and Stark Education Partnership are discussed in this section.

While participation in the two days conference remained fluid, those educators present on the final day were able to give a group report of their discussions and findings in the break out sessions. The following is an overview of the reporting session:

- In math it was felt that the Ohio academic content standards for the lower grades were quite specific and that EXPLORE might not be an exact match. However, the ACT was a solid match to 11th and 12th grade standards.
- In science, there was some concern as to whether the 40 questions on the ACT adequately measures the current content in the Ohio science standards. Science teachers felt an additional test might be required as the ACT predominantly tested science reasoning, rather than content.
- In social studies, educators felt that since the ACT does not directly measure this area that the social studies portion of the OGT or some similar test should be put in place.
- In reading and writing (although the ACT will not add a specific writing test until 2005), it was felt that the match was satisfactory, although additional comments were made on the difference between what the OGT is seeking to measure (grades 8-10) and what is required for college readiness.
- Educators were cognizant of the amount of concentrated effort being put into preparing both teachers and students for the OGT. Concern was expressed over what a change in direction might imply for districts who were aligning curriculum and for teachers who were in the process of developing instructional new strategies and preparing students to take the OGT, if now required to switch to the ACT (which was perceived to have different question focus and questioning modality despite matches with content standards).

While educators were briefed during the conference (via telephone with Dale Eggebraaten) of the progress being made by the International Center for Leadership in Education on the two-way crosswalk (see next section) between the EPAS System, OGT and the Ohio standards, they did not have access to those pending results. Hence, the primary reference document remained ACT's comparison of the EPAS System with the Ohio academic content standards.

On the basis of this information and the group report and in response to the two primary questions posed, educators proposed several possible options for further consideration:

- That we remain with the "status quo." In other words, request no waivers and continue with the development and local administration of the OGT.
- That the OGT and the ACT test both be administered and both be considered as options for meeting graduation requirements. In this scenario, if a student failed the OGT and did well on the ACT, or poorly on the ACT, but passed the OGT, the requirement would be met.
- That the ACT test and EPAS system be used in lieu of the OGT.
- That the EPAS system be used by all, but the OGT still be administered separately and required for graduation.
- That the EPAS system and OGT be used in tandem. In this scenario, the OGT continues to directly measure Ohio academic content standards, but the EPAS system is used to supplement the OGT with additional measures that look at college readiness. This varies from option four in that the relationship between the two assessment systems is not considered separate (as in some Ohio districts today) but requires additional focus to enable teachers to use the systems in tandem to achieve both goals.

After this conference, three Stark County districts Canton City, Jackson Local and Canton Local have decided to implement the full EPAS system.

The findings of the ACT crosswalk were illustrative:

- In reading, the match ranged from 57% for grades 8 and 9 to 42% for grades 11 and 12.
- EXPLORE and PLAN measure all or portions of the grade-level indicators that correspond with the 3 writing standards, all of which deal with various aspects of composing text (i.e., pre-writing; drafting, revising and editing; and publishing) (a 52% to 59% match for grades 7-10). The ACT Assessment English Test measures all 3 of Ohio's writing standards (a 54% match for both grade levels).

After this conference, three Stark County districts Canton City, Jackson Local and Canton Local have decided to implement the full EPAS system.

- All of the EXPLORE, PLAN and the ACT Assessment Reading Test Standards for Transition are a match to the Ohio reading standards. Almost all (90% or more) of the EXPLORE, PLAN and the ACT Assessment English Test Standards for Transition match the Ohio writing standards.
- The EXPLORE Mathematics Test provides a strong match (72% at grade 7 and 69% a grade 8) to the skills described in the Ohio document (6 standards though the sixth standard is infused throughout the other five). The PLAN Mathematics Test provides a better match (79%) to the Ohio document for grade 9, the grade 10 match was lower at 56%. The Ohio document posted a 78% match at grade 11. and a 68% match at grade 12.
- Overall, the EXPLORE Science Test is an excellent match with the Ohio document for grades 7 and 8 (more than a 90% match). Four of the 6 Ohio science standards and their corresponding grade-level indicators post a perfect match. Standard 4 (Science and Technology) addresses content that is not measured by the EXPLORE Science Test, so it was not included in the match process. Some of the indicators in the Scientific Ways of Knowing Standard (Standard 6) are not a match because they require performances from students that would best be assessed in a classroom setting.

Seventy percent or more of the PLAN Science Test is a match to the Ohio science document (the same six standards). Of those grade-level indicators that do not match, many fell under the subheading of "Historical Perspectives and Scientific Revolutions," which is an area that is not typically measured by the PLAN Science Test.

The match at grades 11 and 12 was similar to PLAN, posting a 70% or more match to the ACT Assessment Science Test. Three Ohio standards and their grade-level indicators are a perfect match: Standard 1 (grade 12), Standard 3 (grade II) and Standard 5 (grades 11 and 12). Many of the indicators for Standard 6, Scientific Ways of Knowing, could not be matched at this grade level because they called for performance assessments that are not addressed by the ACT Assessment Science Test.

All of the EXPLORE, PLAN and ACT Assessment Science Standards for Transition are encompassed by the Ohio Standards (Standards 1-3 and 5-6) and their grade level indicators.⁶⁸

⁶⁸ ACT, Inc. (2004). *Ohio academic content standards compared with ACT's EPAS assessments*. Iowa City: Iowa: Author (These are full text descriptions from the Executive Summary), pp. 1-3

The following chart is a summary of the ICLE crosswalk of the Ohio Academic Content Standards, the Ohio Graduation Test and the ACT assessments. An excerpt of the complete charts exhibiting standards, benchmarks and indicators plus the relative coverage of both the ACT and ACT/WorkKeys as compared to the OGT is contained in Appendix E:

Table VIII
Stark County OGT/ACT Study: Curriculum Matrix Summary⁶⁹

			OGT	ACT/Writing WorkKeys					
English LA*	# Standards	# Benchmarks Indicators		ACT / Writing	Reading for 'Information				
8th Grade	10	79	69 (of which 23*)	34	12				
High School Test 10 th Grade	10	75	65 (of which 25*)	31	10				
Mathematics									
8 th Grade	5	51	38 35		14				
High School Test 10 th Grade	5	39	39	23	6				
Science									
8th Grade	6	35	no test data available	30					
High School Test 10 th Grade	6	50	no test data available	35					

^{*} The English language arts OGT Test Blueprints provides the number of items and number of points assessed at the broad "standard" level. As one compares the ACT, including Writing assessment and the OGT to the benchmarks/indicators we offer a caution. An asterisk identifies those High or Medium benchmarks/indicators the academic team requests Ohio educators review for their interpretation of statewide testability. (Example: "Use available technology to compose text.") There are 23 asterisk benchmarks/indicators at 8th grade and 25 at 10th grade.

⁶⁹ Daggett, W. R., President (2004). *Ohio standards compared with ACT*

On the basis of these findings, the ACT system (EPAS) does an adequate to excellent job of matching Ohio's academic content standards. The ACT and ACT/WorkKeys also do an adequate job of measuring many of the benchmarks and indicators. While this match is not exact and the OGT does have broader coverage, the issues remain as to the relative level (8th-12th grades) and rigor of measurement. There are also indications from the ICLE assessment that some Ohio benchmarks and indicators may not readily lend themselves to state-wide testability (see Curriculum Matrix Summary).

One of the most telling indications of the relative rigor of measurement comes not from the ACT crosswalk or ICLE assessment, but rather from the Achieve Study which compared reading in six state exams against ACT's six levels of demand which differentiate the content and skills measured on its tests.

As Achieve notes:

(Our) experts coded each item on all six state tests using ACT's six levels of demand. They then compared the levels on the state tests with the levels found on the ACT tests. When looked at in the aggregate, the level of demand on the six tests most closely resembled that of the ACT 8th and 9th grade EXPLORE test — the vast majority of points (86 percent) are tied to the less demanding content that is emphasized on the EXPLORE test... None of the state tests approaches the level of demand of the ACT college admissions test. (Gandal 2004)⁷⁰

Given these findings from the three separate investigations in this study, a series of conclusions were indicated.

Exit and Entrance Exam? 53

As reflected in both the Achieve study and the ICLE assessment, rigor is not a problem with the EPAS System and the alignment is solid.



Conclusions

The findings from the investigation outlined in the previous section and study of current research have led to the conclusions discussed in this section:

The Commission believes that there could be at least two ways that students can demonstrate that they have met the standards—either by passing a cumulative high school achievement test or by passing several end-of-course exams after they complete particular courses. (Patient)⁷¹

The State Board of Education has recommended to the General Assembly that end of course exams not be developed. (Ohio Department of Education 2004)⁷²

What might the world of educational assessment practice be like at the end of the current century? ... Classroom-based and external assessments are seamless such that no discontinuities exist and both can be related to the same underlying theory of knowledge and measurement... We will have ways to sample and aggregate data to address multiple needs, including the audit and accountability purposes that are so prevalent in driving the assessment agenda as we begin the 21st century. Such a world is worthy of striving for during this, the second century of mental testing. (Pellegrino 1999)⁷³

Before arriving at any conclusions from the results of the OGT/ACT conference, ACT crosswalk and ICLE review, some key issues need to be addressed. These issues are of a critical nature since results of this study must be interpreted within a larger context or frame. The OGT for Ohio is not just a test. It is a political tool meant to accomplish a distinct end. It is the

⁷¹ Patient, F. W., Chair, *Expecting more*, p.17

⁷² Ohio Graduation Tests frequently asked questions

⁷³ Pellegrino, J. W. (1999). *The evolution of educational assessment: Considering the past and imagining the future*. Princeton, New Jersey: Educational Testing Service., p. 18.

state which has an interest in determining whether or not students meet "state curriculum requirements and pass all tests associated with graduation in order to earn an Ohio diploma."

The first issue centers directly on the nature and purpose of standards and assessments. One of the most succinct statements made in the early days of the "standards movement" came from a workshop held by the National Research Council. It was almost prophetic in nature:

Encouraged by the Goals 2000: Educate America Act and other federal and state legislation, a movement is under way to reform education by establishing ambitious standards at the national and state levels to guide the content of learning in core subjects, the performance expectations for all students and the opportunities to learn afforded all children. Important components of this strategy are assessments aimed at measuring the progress of students, schools, districts and states toward the achievement of the content standards. This shift toward voluntary national goals, standards and assessments is a watershed in American education history and will influence the course of public schooling for years to come. (Newman 1995)⁷⁴

The key word here is reform, for reform is the common denominator of standards and the root of large scale assessment systems, such as the OGT. On the nature of the latter, an equally prophetic statement was made at the same workshop by Michael Kean of Macmillan/McGraw-Hill when he stated that "in the name of reform, we are about to create a more complex, more technically problematic, more burdensome and perhaps less useful assessment system."⁷⁵

In Ohio, as elsewhere, standards are the chief pillars of school reform; they are the key to understanding high stakes tests. Tremendous resources have been devoted to the creation of what are essentially forty-nine separate systems of state standards and forty-nine separate assessments.

Driven by concerns of international competitiveness, political pressure and demands from the business community and, further prompted by NCLB, standards have become the key, the coinage of the reform realm for essentially, they provide a system. Even more critically, when backed by aligned assessments, numbers can be generated; reform can be quantified.

None of this is to discount the value of school reform or accountability. What must be understood in the first instance, however, is that high stakes exit exams in their current form are not about students. Students, to be sure, must take the

⁷⁴ Newman, C. B., Vice-Chair (1995). *Anticipating goals 2000: Standards, assessment, and public policy: Summary of a workshop.* (Board on Testing and Assessment) Washington, D.C.: National Research Council., p.1.

⁷⁵ Ibid, p.18.

tests and suffer the consequences, but the tests are about quantifying school reform and about justifying the expense of education.

If then, standards and assessments are about reform, a primary question emerges, "how much is enough?"

At a one day conference on the OGT in Dayton⁷⁶, education reformer Chester E. Finn, Jr. posed several key questions which he felt anyone should ask concerning a high stakes exit exam. Among these were whether or not the test was aligned with the standards and whether the standards were any good to begin with.

It is far too early in the testing game in Ohio to say whether or not the OGT (only two of five sections have yet to be administered) is well aligned with Ohio's 10th grade standards. What we do know from the Achieve study, however, is that the test in its current form often incorporates skills studied in middle or early high school.

Insofar as Ohio's standards are concerned, they generally receive high marks. The problem for Ohio may not be in the quality of its standards, but rather in the "quantity" of the standards. Full coverage may be difficult, so difficult in fact that teachers may revert to focusing on the procedure of taking the test, rather than full coverage of the standards. All this refers to another of Finn's questions. Namely, can students and teachers adequately prepare for the test?

Once again, the question of how much is enough comes to light. Coupled with this is what is probably the key question of all, "Does the test have meaning for transition to higher education and the workforce, or is it only another K-12 exercise?"

As the Achieve study indicates, Ohio has performed no better nor any worse than its state-level contemporaries. The major problem is that Ohio and other states have failed to recognize that this is no longer about reforming the K-12 system; it is about a P-16 system and the summative value of that system is successful college and workplace access. This is the major shortcoming of the "standards" reform movement, not only here, but elsewhere. The paradigm has shifted. Further, Ohio and its contemporaries are no longer in the 19th or even 20th Centuries. Competition for Ohio and the rest of the United States is now global. Yet, insofar as our K-12 and higher education systems (though to a lesser extent) are concerned, we herald to a curious form of local provincialism which says that our locally developed standards and assessments are adequate enough to meet the challenges of the European Union and other political entities elsewhere in the world who now realize that an educated populace is the key to global competitiveness.

^{...}high stakes exit exams in their current form are not about students. Students, to be sure, must take the tests and suffer the consequences, but the tests are about quantifying school reform and about justifying the expense of education.

⁷⁶ The Ohio Graduation Test: Perspectives on high stakes testing. Conference cosponsored by the Fordham Foundation and the University of Dayton on August 19, 2004 at Sinclair Community College in Dayton, Ohio.

While in single states like Ohio, the validity of the OGT for college admissions has yet to be considered and articulation and transfer of college credits are argued between institutions, whole nations elsewhere are moving ahead.

While in single states like Ohio, the validity of the OGT for college admissions has yet to be considered and articulation and transfer of college credits are argued between institutions, whole nations elsewhere are moving ahead. Education ministers from the European Union representing 32 signatories met in Prague in May of 2001 to establish joint priorities, such as transfers of credit and degrees between EU nations enabling student and faculty mobility. In other words, an effort to gear up a new higher education powerhouse to not only promote EU competitiveness, but to market EU higher education to the world. The goal of the European Union is clear, to "become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion".⁷⁷

This study concludes that in order to be effective within this context any Ohio test will need to meet several distinct criteria. These criteria form the basis for this study's recommendations:

1. Any high stakes exit exam in Ohio ultimately needs to be aligned with 11th and 12th grade standards as well as with college admissions and post secondary training or workplace entrance criteria. Ohio needs one test to meet all these needs. In its most current assessment of state exit exams, the Center on Education Policy reached the following conclusion. "Using exit exams for purposes other than awarding a diploma, such as to indicate college readiness or to meet the accountability provisions of the No Child Left Behind Act, is proving to be challenging for states."78 This is a challenge for Ohio as well. Can the ACT be used to meet the reporting requirements of NCLB? The answer is almost certainly. Colorado, for instance, has the ACT built into its assessment plan for the Federal government. The results of both the ACT crosswalk and the ICLE assessment in this study provide ample basis for insuring that Ohio's academic content standards in Math and Reading are well assessed, as well as Science when that subject is added to the reporting requirements. Further the ACT is a college admissions exam. Coupled with the ACT WorkKeys, the system also provides for assessing the competencies needed for workforce entry or post secondary training. The utility of the OGT for both these purposes is in question. It will only be with the Fall of 2004 that concrete discussions will begin between Achieve, the Ohio Board of Regents and Ohio Department of Education on what needs to be included in the OGT to increase its efficacy for post secondary transitions. 79 Even if OBR and ODE reach conclusions regarding the OGT, many Ohio students attend colleges outside of the state. Colleges elsewhere must be willing to accept the OGT as well. The ACT, however, is already accepted nationally.

⁷⁷ European Union (2003). *Concrete future objectives of education systems*, Directorate General for Education and Culture. Available at: http://europa.eu.int/scadplus/leg/en/cha/c11049.htm.

⁷⁸ Gayler, K., Chudowsky, N., et al (2003). Exit exams put to the test. p.6.

- 2. Ohio needs a more rigorous test than the current OGT. Granted, Ohio will continue to foster development of the OGT and the "cut scores" presumably will continue to rise. The question is when and at what expense? We already conclude on the basis of the Achieve study that Ohio currently is not rigorously testing math and reading at the 10th grade level, let alone at the 11th and 12th grade levels. Part of raising the bar over time is a necessary political process. Districts, teachers and students need time to prepare for the specific nature of the OGT and what it measures. Yet, over 66% of our graduates currently take the ACT and Ohio's average is above the national average. Does incrementalism towards a more rigorous test make sense?
- 3. Ohio needs more than just a single high stakes test; it needs a diagnostic assessment system which enables students to meet and teachers to foster achievement throughout the high school years. The OGT, though students may take repeated administrations, is a single point-in-time test. While students and teachers may well receive indications of what items were successfully or unsuccessfully answered, students move on to the 11th and 12th grades. While such scores may be used in remedial activities, the OGT is not a long term assessment system. ACT's EPAS system and Standards for Transition, however, comprise a system which extends onward from the 8th grade. It is problematic whether Ohio will have this type of coordination, predictability and reporting capacity between the diagnostic tests given in lower grades and the OGT for some time to come. Interestingly, the value of the EPAS system has already been seen by the Ohio Quality High School Task Force:

To ensure that high school students and their families have credible and timely information about their readiness for college and careers, ODE should develop a strategy for administering college readiness assessments – either in high schools or online – early enough so appropriate interventions can be offered. For example, students could be encouraged to take the pre-tests for SAT or ACT (i.e., PSAT or PLAN) during the seventh, eighth, ninth or tenth grades. This would give them time to take additional coursework in areas of identified weakness and thus to reduce the need for remediation in college. (Wick and Ingwersen 2004)⁸⁰

Additionally, the Quality High School Task Force calls for "ODE should develop tools for providing every high school student (and his or her

⁷⁹ As related in Dayton Ohio by Susan Bodary the Governor's Executive Assistant for Education, on August 19, 2004 at *The Ohio Graduation Test: Perspectives on high stakes testing conference*

⁸⁰ Wick, C. & Ingwersen, M., Co-Chairs (2004). *Quality high schools : A summary of the task force's draft policy options*. Columbus, Ohio : State Board of Education., p.12.

teacher) who takes the eighth-grade Ohio Achievement Test or the OGT detailed information about his or her academic strengths and needs, as measured by the assessments. This information should be provided in a manner..."⁸¹ further underscoring the current lack of a diagnostic system. The irony here is that many Ohio high schools currently use the PLAN Test from the EPAS System. In the Fall of 2003, 64,636 copies of the PLAN Test were ordered by Ohio high schools. Those same schools administered the test to 48,451 students.⁸²

4. There is a need to focus not just on knowledge of content but on the application of standards in higher education and workplace settings. There is a curious dichotomy about high school exit exams. When asked whether or not the OGT meets the needs of employers, Richard Stoff, President of the Ohio Business Roundtable has pointed out that the state's Fortune 500 Companies no longer hire high school graduates.⁸³ The Roundtable has further issued a statement saying that "the cognitive demand of the OGT in mathematics (the international 'language' of science) could be stretched to a far greater extent by including more problem solving and advanced reasoning questions – and fewer questions using recall and routine procedures."84 The question of exit exam compatibility with college admissions standards is another serious question. In a 2003 study conducted by Standards for Success (S4S), a consortium of 17 sponsoring and 11 endorsing universities that are members of the Association of American Universities (AAU) 20 state high school exit exams in English/Language Arts and Mathematics were reviewed to determine the degree of alignment with college admissions requirements. Pointing out that "while states have raised academic standards, they have rarely considered how their standards contribute to improved student success in college," the consortium further advises that:

State high-school tests should be revised to include additional optional items for college-bound students. This could be accomplished through computer-adaptive testing. State tests should also assess more complex cognitive skills. If such adjustments were made, results could eventually be a source of information in the admissions and placement processes. Such changes would help make the tests more relevant to students, parents and teachers. 85

⁸¹ Ibid, p.13.

⁸² This information is based on figures supplied to the Stark Education Partnership by Eddie Pawlawski, Midwest Regional Vice-President ACT, Inc. on August 25, 2004.

⁸³ Remarks at *The Ohio Graduation Test: Perspectives on high stakes testing conference*.

⁸⁴ Stoff, R., President (2004). *Ohio Business Roundtable statement of policy on systemic reform and the new Ohio Graduation Tests*. Columbus, Ohio: Ohio Business Roundtable.

⁸⁵ Conley, D. (2003). *Mixed messages: What state high school tests communicate about student readiness for college*. Eugene, Oregon: Center for Educational Policy Research, University of Oregon, Eugene, Oregon., p.5.

The psychological paradigm of high stakes testing must be altered for students, teachers, districts and the public. A test can not just be a K-12 exercise. It must have relevance for the real world and be worth taking, particularly in Ohio's urban and low wealth rural districts. There is often little hope for the future among youth and families in Ohio's inner cities. There is often little opportunity for realization of the "American Dream" in Ohio's low wealth rural and Appalachian counties. Dropouts are high and college participation is low. To many, attending or finishing high school makes little difference. Under these conditions, striving to score well on a high school exit test is of little consequence.

Many of these students did not sit for the final 12th grade administration of the old Ninth Grade Proficiency Test. They did not make it that far. The dichotomy is that while Ohio could claim a 98% pass rate on its old test, its dropout rate has progressively increased over the years. The number of age 18 to 24 Ohioans with a high school credential has dropped from 90% to 87% over the last decade. Of the current number of credentials, four percent are GEDs. ⁸⁶ Now with the Graduate Equivalency Exam (GED) increasing in rigor, what once was a viable option for many dropouts is narrowing.

We know that we must work harder to make high school relevant for many populations. We must also open the door to an educational and well paying employment future for all Ohio's children.

Consider an urban or rural future in which the focus for teachers and students is on a college admissions, rather than a high school test. Two things might invariably happen. Teachers will begin to prepare all students for college; students will begin to think of themselves as having college potential. This seems to be the experience in Illinois (see what other states are doing). It is even recognized in West Virginia with the Promise Scholarships. Ohio can hardly afford to do less.

Will this really make a difference? No one, obviously, has yet done this type of study. We do, however, know two things. The first is that universal high expectation for students is one of the most powerful quotients in reform and in raising student achievement. We also know that the effects of poverty can be eliminated, first generation, through a college degree.

In its most recent report on high school exit exams, the Center on Education Policy outlined the dilemma faced by Ohio and other states in considering alternatives to their own testing systems:

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⁸⁶ The National Center for Public Policy and Higher Education (2004). *Measuring up* 2004: *The state report card for higher education-Ohio*. San Jose, California: Author, p.5.

First, although multiple measures of students' competence are desirable, many testing experts would argue that a test like the SAT was designed to predict success in college, not to determine whether a student has earned a high school diploma. If the SAT is used as a substitute for an exit exam, problems arise because it is not aligned with the content taught in high school. Second, states face the dilemma of where to set an appropriate cut score on the substitute test that is equivalent to an exit exam passing score. Third, widespread use of substitute exams may undermine support for the existing exit exam, as parents or the media may ask why the state is spending money on an exit exam when an existing test like the SAT serves the same purpose, which of course it does not. If substitute tests are used, they should be aligned as closely as possible to what students are actually taught in high school, and should be similar in rigor to the state standards. (Gayler 2004)87

Yet, CEP found that five states today (Florida, Idaho, North Carolina, New York and Virginia) will allow nationally normed, standardized tests, including the GED, PSAT, SAT, or ACT, to be used as a substitute test in some cases. The numbers of students actually taking such tests remains small. In Ohio, the High School Task Force has also called for alternative assessments, noting ODE should "use the ACT or SAT test an alternative way of demonstrating proficiency when students have not passed the OGT."88

In the final analysis, this study deals directly with the issues in the CEP quote and will deal with each concern in turn:

The ACT periodically scans the academic content standards of the various states and conducts crosswalks between those standards and its assessments.

• Success in college vs. whether a student has earned a high school diploma. While it is true that tests like the SAT and ACT are designed to predict whether or not a student is successful in college, such claims ignore the fundamental reality that success in college is predicated on mastery of high school content and the ability to apply learned standards. The ACT periodically scans the academic content standards of the various states and conducts crosswalks between those standards and its assessments. The crosswalk in this study was conducted by ACT in the summer of 2004. Another relevant question concerns the purpose of a high school education in the 21st, not 20th Century. Much has been written and researched to date about the reform of the American High School. One of the critical emerging components in this reform centers on transitions. As the U.S. Department of Education states:

⁸⁷ Gayler, K., Chudowsky, N., et al (2003). Exit exams put to the test, pp. 102-3.

⁸⁸ Wick, C. and M. Ingwersen, Co-Chairs (2004). *Quality high schools*, p.15.

Educators and parents of high school students should be concerned not only with getting students to graduation, but also with preparing students for the transition into a good job or additional education. Too often, this transition is overly difficult, with students unprepared for college work or lacking in essential workplace skills. High schools must work with higher education and the business community to define the necessary knowledge and skills for success after high school, to make sure students know what those requirements are, and to give students every opportunity to acquire them. (Paige 2004)⁸⁹

One of the purposes of this study has been to indicate where that alignment currently exists between the ACT and EPAS system and Ohio's Academic Content Standards.

- Where to set the cut score? This was a recurring question during the two day conference. A handful of states currently allow either the SAT or ACT to be used as alternative assessments. In Florida an ACT score of 15 on English and 15 on Math will qualify. In Idaho, scores of 17 on English and 19 in Math can be substituted. As noted, the use of the ACT in this instance is as an alternative assessment and the decision is largely political. In Ohio, we know that the higher the ACT composite score, the greater the likelihood that a student will finish and graduate from college (37%<21; 81%>24). West Virginia uses a composite score of 21 plus high school grade point average to qualify students for the Promise Scholarship. A study by Dr. John McGrath, former president of Stark State College of Technology has also indicated that a composite score of 21 eliminated the need for remediation at that institution. 90 Cut scores for the ACT should be set at a level commensurate with the current pass rates of the OGT. In this regard, a composite of 15 to 18 would not seem to be unreasonable. The end result would be to progressively target increases to the 21 level.
- Will substitute exams undermine support for the existing exam? At a recent constituents hearing on the draft recommendations of the Quality High Schools for a Lifetime of Opportunities Task Force, a Portage County superintendent sent a clear message. "Tell ODE if they go back on the OGT, they'll have no credibility left."

⁸⁹ Paige, R., Secretary (2004). *The secretary's high school initiative: Accelerated transitions*, Washington, D.C.: U.S. Department of Education. Available at: http://www.ed.gov/about/offices/list/ovae/pi/hsinit/trans.html

⁹⁰ As related to the Stark County P-16 Compact (2003).

⁹¹ Constituent Meeting on the *Draft recommendations of the Quality High Schools for a Lifetime of Opportunities Task Force* on August 6, 2004 at the R.G. Drage Career Center in Massillon, Ohio.

The first question to ask is support among whom? To Thomas J. Lasley, II, Dean of the School of Education and Allied Professions at the University of Dayton and William L. Bainbridge, President of SchoolMatch and a Distinguished Research Professor at the University of Dayton the prospect of using the OGT alone is not good. "Without solutions, good solutions, it is likely that large numbers of students will just not make it. We already have a system where students drop out. Ohio must create something better...and that means that more than a test must be put in place." They call for end of course assessments, a better appeals system for students who fail the test and more secondary school structures which meet the needs of a diverse population of secondary school students. 92

Concerns were also expressed at the OGT Conference in Dayton, including remarks by Ellen Belcher, editorial page editor for the Dayton Daily News who said that "I think a lot of our decisions as a state are fairly disconnected from what makes sense to parents and citizens and, maybe most importantly, to students," she said. "I think we're kidding ourselves to say we can have minimum competency standards in a society where we need to have high standards for children. ... All of this is happening at a time when kids are expected to know more."⁹³

The latest CEP report⁹⁴ has also sparked what has been just one of the latest series of articles both within and without the state of Ohio including one by AP reporter Ben Feller in the August 19th edition of the Canton Repository entitled, "Report Flunks High School Grad Tests." Ohioans, according to the KnowledgeWorks Foundation 2004 poll are nearly evenly split on the subject of the OGT. Only 46.6% feel that all must pass the test; 47.8% feel that students should be allowed to pass based on other things, such as grades, difficulty of classes and teacher recommendations. ⁹⁵

Fisher and Elliot's May 2004 series in the Dayton Daily News⁹⁶ provided yet another perspective. Among professional organizations, the Ohio Federation of Teachers (OFT) has proposed a two-year moratorium on requiring students to pass the five subject tests in order to graduate.

⁹² Lasley, II., T.J. & Bainbridge, T.L. (2004). *Ohio Graduation Test will deliver shocks to many*, Available at: http://www.educationnews.org/commentaries-and-reports-archive14.htm
⁹³ (2004). *Educators, policymakers discuss Ohio Graduation Test*, Dayton, Ohio: University of Dayton. Available at: http://alumni.udayton.edu/np_story.asp?storyID=1685
⁹⁴ Gayler, K., Chudowsky, N., et al (2003). *Exit exams put to the test*.

⁹⁵ KnowledgeWorks Foundation (2004). *Ohio's education matters: KnowledgeWorks foundation 2004 poll*. Retrieved on September 16, 2004 from http://www.kwfdn.org/Press/2004poll.html

⁹⁶ Fisher, M. and S. Elliott (2004, May 25). Changes planned, but will test problems be solved? *The Dayton Daily News*.

"Teachers and students have not had time to adapt unit and lesson plans to teach to the new standards, and have yet to receive model lesson plans in some subjects," the OFT notes.⁹⁷

Elsewhere, political and financial considerations are beginning to erode support for testing. The Illinois General Assembly recently passed what is known as Public Act 09-0838 which now states, "...beginning with the 2004-2005 school year, the State Board of Education shall not test pupils under this subsection (a) in writing, physical development and health, fine arts and the social sciences (history, geography, civics, economics and government)."

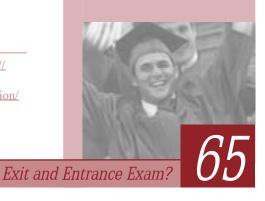
• Substitute tests need to be closely aligned and similar in rigor to state standards

As reflected in both the Achieve study and the ICLE assessment, rigor is not a problem with the EPAS System and the alignment is solid with Ohio standards, benchmarks and indicators.

What follows is a series of recommendations and calls for further research on the basis of this study.

...rigor is not a problem with the EPAS System and the alignment is solid with Ohio standards, benchmarks, and indicators.

⁹⁸ Illinois General Assembly, *Bill summary*. Available at: www.legis.state.il.us/legislation/publicacts/fulltext.asp?Name=093-0838



⁹⁷ Ohio Federation of Teachers (2004) *OFT update, June 22, 2004*. Available at: http://www.oft-aft.org

If educational systems are to be productive, serious questions emerge as to such issues as loss of instructional time due to testing, costs of such tests, and whether or not such tests are "productive" from the aspect of improving instruction or promoting access to college and post secondary instruction.



Recommendations

The conclusions revealed in the previous sections have resulted in a series of recommendations which will be discussed in this section, outlining what the authors believe will be a forward looking agenda for the state of Ohio.

The purpose of this study is two fold. First to start a "supported" dialogue on the issues surrounding high stakes exit exams through a review of what we know and do not know. We also offer an alternative which makes sense given the new state goals for post secondary enrollment and graduation as proposed by the Governor's Commission on Higher Education and the Economy (CHEE).

The second purpose is to present a body of evidence through the ACT crosswalk, Stark County Conference and ICLE assessment for districts wanting to make a case to seek a waiver to pilot an alternative mode of testing.

The two operant terms here are "waiver" and "pilot." Ohio does not need to repeat the Michigan experience where debate over the replacement of their high school assessment system with the ACT and ACT/WorkKeys has immersed itself in political controversy. It should be noted that ACT, Inc. in concert with the literature does not believe that its assessments alone should form the sole basis of a statewide assessment system. We concur as reflected in these recommendations.

Given these two purposes, the following is recommended:

- 1. That the Ohio Department of Education grant waivers to districts to use the ACT and/or ACT WorkKeys in lieu of the Ohio Graduation Test in conjunction with end of course tests or the Social Studies component of the OGT to augment areas not directly measured.
- 2. That districts consider, and the Ohio Department of Education consider for waiver purposes, employing the full EPAS system and other end of course tests considered appropriate from the 8th grade on.

- 3. That these waivers be especially considered by those districts who have formed Early College High Schools with partnering institutions of higher education in the state of Ohio.
- 4. That waivers be granted for a minimum of five years and that a joint system be established with the Ohio Board of Regents (HEI) to track high school graduation, college going rates, college retention and grade point averages in college along with other relevant indicators against comparable populations using the OGT alone.

On the basis of the results of such waivers and pilots, the authors of this study feel that Ohio will begin to amass the evidence necessary to counter many of the criticisms of high stakes exit exams based on their lack of compatibility with the needs of the workplace and higher education while providing rigorous and adequate measurement of Ohio Academic Content Standards and benchmarks.

Further, as it is known that the bulk of the expense associated with high stakes exit exams is incurred at the local level through implementation of the test and remedial activities and that over 66% of Ohio's graduates currently take the ACT, the process should be streamlined and expenses reduced by having students and teachers focus on one test.



Where does Ohio want its assessments to be a decade from now?



Further Research

While this study and investigation has added to our understanding of the relationship of both the OGT and ACT to the measurement of Ohio's academic content standards, benchmarks and indicators, further research is indicated. This section will offer some suggestions in this regard.

This study has begun a process and raised a key question. Can Ohio have an exam which is both a high school exit and college entrance exam?

There are many other questions as well. Often called questions for "further research," the answers to these questions will also inform Ohio's journey towards meeting the challenges of the Governor's Commission on Higher Education and the Economy and becoming one of the highest educated and most productive states in the union.

Question One: This study has established that the ACT and ACT WorkKeys system does an adequate to excellent job proportionally of measuring Ohio's Academic Content Standards benchmarks and indicators across Math, Reading and Science. Writing on the basis of WorkKeys and the forthcoming ACT Writing Test appears equally as promising. Social Studies will require using the OGT component or end of course tests. The ACT assessments while clearly more rigorous do not provide as extensive measurement coverage as the OGT. Is the ACT coverage comprehensive enough to meet the requirements not only of Federal and state agencies, but also to insure students, parents and teachers that mastery of all Ohio's key standards is present?

Question Two: Most skilled and semi-skilled jobs now require some form of post secondary education. Are the entry level needs of Ohio's workforce and institutions of higher education converging? This needs to be established through further research.

Question Three: Colleges and universities look at the results of admissions exams like the ACT; they also give placement exams such as the Compass test. The research begun by Dr. John McGrath former president of Stark State College of Technology in determining a cut off score (21) for the ACT which eliminates the need for remediation should be continued. Can we eliminate the need for placement tests?

Question Four: The relationship between taking a core curriculum in high school, ACT score and college grade point average and persistence is known in Ohio. What is the correlation between high school courses, grades, the OGT and success in college? The University of Washington has been conducting such studies with the Washington Assessment of Student Learning (WASL), the ACT and SAT. While this study makes recommendations concerning the use of the ACT assessments, Ohio needs the same type of research on the OGT. This will not be a quick fix. Clearly, such a study will have to track the class of 2007 into college. Without such research, colleges and universities will have little confidence in ever accepting the OGT as an admissions test.

Question Five: Where does Ohio want its assessments to be a decade from now? Some might view this more as a philosophical, rather than a research question. The question begins with some assumptions. The first is that Ohio will still have academic standards; the second is that requirements will still exist to measure student, school, district and state achievement on the basis of those standards.

Question Six: Given the requirements of both the OGT and ACT, is the coursework currently offered in Ohio's high schools sufficient to meet these demands? This may require an extensive review of disciplinary content, specific skills and knowledge covered in such coursework specific to Ohio's academic content standards, benchmarks and indicators.

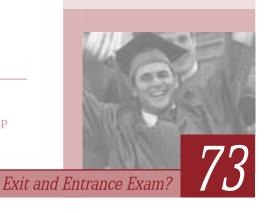
Single admission standardized tests always will pose problems as sole indicators of student achievement. Ohio has invested heavily in creating a technology infrastructure for its schools. If such an infrastructure contained Ohio's standards and those standards were aligned with college admission and workforce entry needs, a powerful tool would emerge. If that infrastructure also contained a vast library of instructional units, remedial components, diagnostic and classroom assessments linked to those standards, a new reality would begin to emerge. Assessment of student mastery and competency against Ohio's standards would be continuous from kindergarten through the 12th grade. As such assessment would take place over time and be geared to individual, as well as corporate mastery, many of the problems with a modality of testing which first developed in earnest as a sorting tool during the First World War would begin to disappear. Fully developed in a P-16 environment, such a system could revolutionize education in Ohio. Pellegrino's vision of seamless assessment systems could be rationalized.⁹⁹

⁹⁹ Pellegrino (1999). Education of educational assessments. See page 55 of this study.

While all of this may seem far fetched, one web-based project called AlignOhio¹⁰⁰ is already developing many of these components.

Further research on the development of systems such as AlignOhio is necessary to determine whether this vision is a proper fit for Ohio. Much needs to be learned but the potential, with such a powerful tool, is there to return the art of teaching to teachers and the challenges of learning and progressing to students - a departure from the helplessness generated by today's high stakes tests .

¹⁰⁰ An initiative of the Stark/Portage Area Regional Computer Center (SPARCC) with support from the Ohio Department of Education, Battelle for Kids, the Timken Foundation, Stark County Educational Service Center, and Stark Education Partnership



The research on the impact
of high stakes testing remains
inconclusive. The actual impacts
on student learning and outcomes
over time is not understood.



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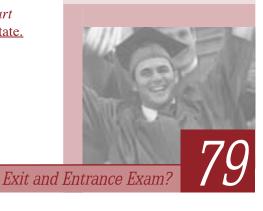
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The key findings of this report
seem to be: the ACT is a proven
predictor of success in college
freshmen courses; the predictive
value of the OGT is unknown;
the ACT does "an adequate to
excellent job of measuring Ohio's
academic; content standards" for
high school students; and the OGT
has fewer high-level test items than
the ACT items. (Education Trust 2004)



National Reviews

A response from the Education Trust, Inc. September 15, 2004



The members of the Stark County P-16 Compact have carved out a forward-looking agenda with this report. As the authors show, it is no longer sufficient in today's world for high school to aim toward minimum competency. For the sake of its economy, Ohio needs to significantly raise the college-going rates of its high school graduates. From the Education Trust's perspective, for the sake of equity, all of Ohio's young people deserve to be prepared to make that choice. Both goals will be served by aligning high school standards for all students with the knowledge and skills they will need to be successful in college.

This is not a new idea in Ohio. Other high-profile commissions and task forces in the state have addressed high school and higher education alignment. But it's unclear whether current graduation requirements, particularly the new Ohio Graduation Test, will fit the bill. For this reason, the Stark County Compact undertook this study to examine the OGT, the Ohio standards and the ACT — the state's most widely used college admissions test — to determine if a single test could be used to measure proficiency on the Ohio's high school standards and readiness for college and the workplace. If such a test exists, and if it were administered to all high school students, it would assure that graduates of Ohio's high schools are adequately prepared for all options, including college.

The key findings of this report seem to be:

- the ACT is a proven predictor of success in college freshmen courses; the predictive value of the OGT is unknown;
- the ACT does "an adequate to excellent job of measuring Ohio's academic content standards" for high school students; and
- the OGT has fewer high-level test items than the ACT items.

These findings were compelling enough to the Compact to recommend that individual school districts be granted five-year waivers from the OGT in order to replace it with the ACT. While we don't believe it's appropriate to allow

districts to opt out of a state-determined test, we do think it would be a valuable experiment to administer the ACT alongside the OGT in districts that choose to do so. Then, once a year or two of data was in hand, the state and district could agree on a performance level on the ACT that would be at least equivalent to the level of performance required to pass the OGT, with the district then allowed to substitute that level of performance on the ACT for the remainder of the waiver period.

For one thing, such a move would signal the immediate expectation that college is an option for all students in the system. As the report shows, in states such as Colorado, Illinois and Oklahoma that administer the ACT to all high school students, they have seen increases in college going rates, especially among minority students, students from low-income families and others who said they had not before considered the possibility. At the same time, they are seeing lower rates of remediation on their college campuses. Not only are more students going to college in these states, they are better prepared when they get there. There is every reason to believe that Ohio districts will see the same results.

We think that this is a sensible approach to K-16 alignment. There is enough evidence from this study, as well as from the experiences of other states, that suggest that using the ACT as part of the high school assessments would have a positive effect on the college readiness of high school graduates. In addition, by using pilot districts to administer both the ACT alongside the OGT, Ohio is in a good position to learn about the effectiveness of both tests — information that will serve as a strong basis for shaping a statewide K-16 strategy.

However, we also found a few issues that will need consideration beyond what the Stark County Compact recommends to inform the state and district plans. We list these below:

- The study methodology for examining the ACT assessments and the OGT was based mostly quantifying the number of items that aligned to the Ohio standards. An earlier study by Achieve was also cited that compared the rigor of the OGT to the ACT admissions test. While these analyses reveal much about the proportion of the Ohio standards that are measured by the ACT assessments and how well, they don't provide information about the disciplinary content that is, the topics, concepts and specific skills that these tests emphasize. The amount of algebra vs. computation, or literary analysis vs. reading for information, for example, is equally important to understanding what these tests measure. A content analysis of the proposed tests should therefore be undertaken to provide this missing piece of information.
- In addition to passing the OGT, Ohio high school students have to meet minimum curriculum requirements in order to earn a diploma. Among other courses, these requirements include four units of English language arts and three units of mathematics. However, it is unclear whether the content of these courses, or the standards that they are based on, will satisfy the requirements of higher education. It is one thing for all students

to take the ACT. It is another to provide all students with a curriculum that will prepare them to do well on the test, and by extension, in college. For example, colleges typically want to see evidence of Algebra 1, Geometry and Algebra 2 on an applicant's high school transcript. The state and districts need to make sure that the three years of mathematics required for high school graduation, as well as the other courses, will prepare students to meet admissions criteria.

• We fully endorse the recommendation to "track high school graduation, college going rates, college retention, and grade point average in college" based on OGT scores and would take this recommendation even further. The data system should also track students who took the ACT in the pilot districts and include data on remediation, degrees earned, and employment, as they do in Florida. We think Ohio could be a leader in this regard.

We appreciate the opportunity to review this report. We will continue to watch with interest as Ohio continues to work toward aligning its K-16 system.





Thanks for inviting me to be a reviewer of the study. I enjoyed reading it and found it to be very instructive. The question you take up in the study is timely and I believe that it exemplifies the critical role that intermediary organizations like LEFs play in working to ensure a system of quality public education. Below, I provide more specific feedback under the rubrics of strengths and weaknesses.

I think the topic of the study is important, as it opens up an important debate about which tests provide appropriate indications of students' preparedness for higher education and the workplace. Moreover, the topic is aligned well with the agenda that Stark and the P-16 Compact have taken on in terms of supporting the creation of a system of education that does not draw an arbitrary line between K-12, higher education, and workforce development.

The crosswalk between the ACT, EPAS, and OGT is very instructive. It is an important methodology that others reading the study might make use of as they take up the issue within their own states.

The study offers a timely critique of high stakes tests like the OGT and reviews these tests' validity in the broader context of the standards movement. You raise, to some effect, the sensitive issue of the "political" nature of these tests, and their inability to really address the instructional value of assessments that are aligned to curricular standards.

Stephen R. Portch

Distinguished Senior Fellow, Education Commission of the States, Chancellor Emeritus, University System of Georgia September 15, 2004

As we have come to expect of work out of the Stark County Educational Partnership, "Advancing Ohio's P-16 Agenda: Exit and Entrance Exam" is a through, and thought-provoking piece of work. It is based on available research which, given the dominance and importance of standards and assessment of standards in the K-12 environment, is disappointingly thin. To supplement the available research and commentary of experts, Stark commissioned additional research and convened practitioners and those closest to Ohio's exit exam and the ACT to look at specific questions and to help formulate recommendations. This is the "through" part, and it is impressive.

The timing of the project could not be more perfect. The OGT is coming up on full implementation (March 2005). Governor Taft has endorsed the key recommendations of his recently concluded Commission on Higher Education and the Economy. This Commission, with broad representation including the business community, recommended that Ohio needed to increase participation in postsecondary education by 30% over the next ten years if it wished to increase its economic competitiveness. Thus, business as usual in Ohio cannot be an option.

The paper thoughtfully lays out the issues, unknowns, and dilemmas. Will the OGT demonstrate that students are deserving of a high-school diploma and ready for work and/or postsecondary education? In particular, will it help increase postsecondary participation (and, more importantly, postsecondary success by students) or will it simply increase drop-outs? So the ACT and related tests and processes match well with the Ohio academic standards, benchmarks, and indicators.

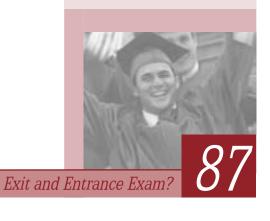
More will simply have to be done if Ohio is to meet its very aggressive economic development goals, built on the sound notion that it has to become a more educated state. And certainly the ACT and ACT WorkKeys® have a proven track-record of demonstrating student readiness for college or the workplace respectively. Yet any proposal to use the ACT in lieu of a state high school exit exam is guaranteed to be thought-provoking. Can the ACT serve a function beyond its original design? What would be the benefits and the drawbacks? Again the paper explores these issues. Clearly one of the primary benefits would be to simplify the assessment process in Ohio, thereby freeing teacher time for teaching. A majority of students in Ohio already take the ACT and, therefore, if more students take the ACT,

Ohio's state ranking might decline causing public and political consternation. Nobody said these were easy choices.

Race further compounds the complexity of the issue. Minority students have consistently not done as well on standardized tests as majority students. To date this has proven to be true both for national tests and state tests. Tied directly to the state standards and state curriculum, state tests ought to be more responsive to the needs of its own students. The research remains frustratingly thin on this topic. And so, too, in this paper. In the next phase of the project, it will be crucial that the potential input on minority students be examined in greater depth. If using the ACT does indeed get more minority students to take the core curriculum (an untested hypothesis), minority achievement levels will go up.

And that ultimately is the beauty in the proposal and recommendations. The paper does not purport to have all the answers. While at times perhaps prematurely pessimistic about the OGT, the paper recognizes that we need to know more. What better way than to try both the OGT and ACT and examine the results over five years. It will be important that the design of the evaluation be quite sophisticated given the stakes and convening researchers to design the evaluation should be on early next step. It might also be useful to set a target (or even a minimum and maximum) for the percentage of students in the state who would be tested under the waiver.

As validated by the number and type of funders for this paper, Ohio has a deep interest in looking for bold alternatives. This one seems worthy of testing because the lessons learned about both the OGT and ACT as tools for increasing student achievement are vital to Ohio's future.



The three systems (EXPLORE,
PLAN, ACT) are so closely related
that at each level, predictions can
be made as to college success, i.e.
50% probability or better that a
student will score a B or higher in
college level coursework.



Appendix A: Ohio Academic Content Standards Compared with ACT's EPAS Assessments Executive Summary (ACT, Inc., June 2004)

The Ohio Academic Content Standards (hereafter Ohio document) were compared to ACT's EPAS/Educational Planning and Assessment System® in the curricular areas of English, reading, mathematics and science. In addition, specific standards of the Ohio English Language Arts document for grades 11 and 12 were compared to the ACT Assessment Writing Test. ACT's review revealed a good match between the Ohio document and the EPAS Reading and English Standards for grades 7-12. The review revealed a strong match for Ohio's mathematics document and an excellent match for science for grades 7-12.

Trained consultants and ACT staff compared the Ohio document (December 2001 edition of the K-12 Grade-Level Indicators for English Language Arts and Mathematics as well as the December 2002 edition of the K-12 Grade-Level Indictors for Science) with the skills and understandings measured in ACT's three EPAS programs-EXPLORE®, PLAN® and the ACT Assessment®. The comparison involved 3 steps: identifying the Ohio standards and grade-level indicators that are assessed on the EPAS tests, identifying the EPAS Standards for Transition® that correspond to Ohio's standards and grade-level indicators and identifying the EPAS Standards for Transition that are absent from the Ohio document.

The match process calls for the content experts to err on the side of conservative interpretation of a state's standards. For the Ohio document, a greater degree of match to the EPAS Tests would have resulted had the ACT staff isolated specific content knowledge and skills from the context of the Ohio standards and grade-level indicators. Chapter IV of this document presents a full discussion of the match considerations.

Reading

Five of Ohio's English Language Arts standards connect primarily to the area of reading. Of these five content standards, ACT conducted a review of four (the first standard, Phonemic Awareness, Word Recognition and Fluency, applies to grades K-3 only). It was determined that the EXPLORE, PLAN and ACT Assessment Reading Tests provide a good match to the Ohio reading standards and their corresponding grade-level indicators. ACT staff examined academic content standards 2 through 5 and their respective grade-level indicators, which focus on the application of various reading skills to comprehend a variety of texts. The match ranged from 57% for grades 8 and 9 to 42% for grades 11 and 12.

Writing

Three of Ohio's English Language Arts standards connect primarily to the area of writing. All three of these standards were compared to the EXPLORE, PLAN and the ACT Assessment English Tests and to the test specifications of ACT's newly formed ACT Assessment Writing Test (grades 11 and 12 only, to be released 02/2005). EXPLORE and PLAN measure all or portions of the grade-level indicators that correspond with the 3 writing standards, all of which deal with various aspects of composing text (i.e., pre-writing; drafting, revising and editing; and publishing) (a 52% to 59% match for grades 7-10). The ACT Assessment English Test measures all 3 of Ohio's writing standards (a 54% match for both grade levels). Content specialists also conducted a match between the ACT Assessment Writing Test, designed for grades 11 and 12, and the Ohio Writing Process, Writing Applications and Writing Conventions Academic Content Standards for grades 11 and 12. The 17 Ohio Writing Process grade level indicators posted a modest overall match of 41% to the ACT Assessment Writing Test scoring criteria. The Ohio Writing Applications indicators match to the ACT Assessment Writing Test was limited to 2 of the 6 indicators. The 3 Ohio Writing Conventions indicators were a total match to the ACT Assessment Writing Test.

Standards for Transition

All of the EXPLORE, PLAN and the ACT Assessment Reading Test Standards for Transition are a match to the Ohio reading standards. Almost all (90% or more) of the EXPLORE, PLAN and the ACT Assessment English Test Standards for Transition match the Ohio writing standards. The English Standards for Transition that did not match were in the Word Choice strand.

Mathematics

The EXPLORE Mathematics Test provides a strong match (72% at grade 7 and 69% a grade 8) to the skills described in the Ohio document (6 standards though the sixth standard is infused throughout the other five). The PLAN Mathematics Test provides a better match (79%) to the Ohio document for grade 9, the grade 10 match was lower at 56%. The Ohio document posted a 78% match at grade 11 and a 68% match at grade 12. The content standards and grade-level indicators that impacted the match rate for grades 10-12 were those that required students to demonstrate proficiencies best observed in a classroom environment.

Standards for Transition

Almost all (91%) of the EXPLORE Mathematics Standards for Transition are a match to the Ohio document for grades 7 and 8. Four of the 8 strands are a complete match: Numbers: Concepts & Properties (NCP), Algebraic Expressions (AEX), Equations & Inequalities (EQI). and Properties of Plane Figures (PPF). The four Standards that did not match were located in the lower score ranges (13-15 and 16-19).

Eighty-six percent of the PLAN Mathematics Standards for Transition are a match to the Ohio document for grades 9 and 10. One strand was a complete match to the Ohio document EQI Of the 11 Standards for Transition that did not match, 3 were in the lower ranges (13-15 and 16-19) while the other 8 were in the two highest ranges (24-27 and 28-32).

Eighty-seven percent of the ACT Assessment Standards for Transition are a match to the Ohio document at the eleventh and twelfth grade levels. The Probability, Statistics, & Data Analysis strand is the only complete match. Nine Standards for Transition were absent from the highest score range, 33-36 and cross six of the nine strands. Three additional Standards from the other score ranges could not be matched in the Functions strand.

Science

Overall, the EXPLORE Science Test is an excellent match with the Ohio document for grades 7 and 8 (more than a 90% match). Four of the 6 Ohio science standards and their corresponding grade-level indicators post a perfect match. Standard 4 (Science and Technology) addresses content that is not measured by the EXPLORE Science Test, so it was not included in the match process. Some of the indicators in the Scientific Ways of Knowing Standard (Standard 6) are not a match because they require performances from students that would best be assessed in a classroom setting.

Seventy percent or more of the PLAN Science Test is a match to the Ohio science document (the same six Standards). Of those grade-level indicators that do not match, many fell under the subheading of "Historical Perspectives and Scientific Revolutions," which is an area that is not typically measured by the PLAN Science Test.

The match at grades 11 and 12 was similar to PLAN, posting a 70% or more match to the ACT Assessment Science Test. Three Ohio Standards and their grade-level indicators are a perfect match: Standard 1 (grade 12), Standard 3 (grade 11) and Standard 5 (grades 11 and 12). Many of the indicators for Standard 6, Scientific Ways of Knowing, could not be matched at this grade level because they called for performance assessments that are not addressed by the ACT Assessment Science Test.

Standards for Transition

All of the EXPLORE, PLAN and ACT Assessment Science Standards for Transition are encompassed by the Ohio Standards (Standards 1-3 and 5-6) and their grade-level indicators.

Note: For a more information, contact ACT Education Division, 500 ACT Drive, PO Box 168, Iowa City, Iowa 52243-0168, www.act.org, phone 319-337-1000, or fax 319-339-3021.

Appendix B: Attended OGT to ACT Meeting June 29 & 30, 2004

Hon	First Name	Last Name	Organization Name	Work Title Position
Ms.	Catherine	Aukerman	Canton City Schools	Assistant Superintendent
Ms.	Deborah	Barrett	KnowledgeWorks	Program Associate,
Ms.	Susan	Bashoor	Foundation Canton City Schools	Growth Initiatives
Mr.	Mike	Bayer	SCESC SCESC	Curriculum Consultant
			Herbert W. Hoover	
Ms.	Ellen	Beidler	Foundation	Executive Director
Ms.	Terry	Bishop	Dominion East Ohio	Senior Philanthropy Coordinator
Mr.	James	Bower		Coordinator
Ms.	Vickie	Briercheck	Reedurban Elementary	Gifted Coordinator
	VICKIC		School East Regional Professional	Office Coordinator
Ms.	Joan	Burrier	Development Center	Director
Dr.	George	Burwell	Canton City Schools	Director, Technology &
				Assessment Professional Associate
Ms.	Kathy	Buttermore	Walsh University	Professor
Ms.	Carol	Carlin	Moffitt Heights Elementary	Principal / Curriculum
Ms.	Patty	Carmola	Washington High School	Director
Ms.	Paralee	Compton	Gear-Up Grant	Director
Mr.	Mark	Conrad	CCS-TV	Student
Dr.	Jeffrey	Cramer	Stark State College of Technology	Department Head/ Associate Professor,
Mr.	Michael	Daulbaugh	Minerva Local Schools	Sciences Curriculum Director
Ms.	Peg	Deibel	North Canton City Schools	Instructional Supervisor
Dr.	Jane	Dessecker	SCESC	Director, Instructional
				Services
Ms.	Polly	Doyle	Louisville High School The Paul and Carol David	Principal Executive Assistant/
Ms.	Becky	Duplain	Foundation	Program Coordinator
Mr.	Tom	Forbes	Timken High School	Trogram Coordinator
Mr.	Michael	Gallina	Minerva Local Schools	Superintendent
Ms.	Adele	Gelb	Stark Education Partnership	
Ms.	Carol	Green	Hoover High School	Math Department Chair
Mr.	David	Harding	Washington High School	
Ms.	Cheryl	Haschak	Jackson Local Schools	Superintendent & Curriculum Director Assistant Professor,
Dr.	Leslie	Heaphy	Kent State Stark Campus	Assistant Professor, History SCESC Special Educ.
Ms.	Patricia	Hinkel	SCESC NS/SS	SCESC Special Educ. Supv./Ed
Ms.	Sue	Hoffmeyer	R. G. Drage Career Technical Center	Staff and Curriculum
Mr.	Larry	Horton	Plain Local Schools	Curriculum Coordinator/ Supervisor
Mr.	Richard	Hull	Fairless Local Schools	Curriculum Director
Ms.	Kimberly	Landis	ACCESS - Ashtabula County	Executive Director
Ms.	Joyce	Lemke	Timken Learning Center	21st Century

Mr.	Clada	Lonlov	Laviavilla City Sahaala	Cunquintandant
	Clyde	Lepley	Louisville City Schools	Superintendent Director of Special
Dr.	Ruth	Liles	SCESC	Education
Ms.	Mel	Lioi	SCESC	Assistant Superintendent
Ms.	Belinda	Manard	Canton City Schools	Curriculum Specialist
Ms.	Gail	Martino	Louisville City Schools	Director of Curriculum
Ms.	Peggy	McClain	North Canton City Schools	Curriculum Director
Ms.	Deborah	Miller	Jackson Middle School	Math Department Head
Ms.	Monica	Myers	Jackson High School	Assistant Principal
Mr.	Enrique	Navas	SPARCC	
Ms.	Michelle	Nervo	SCESC	
Ms.	Kathy	Nichols	Perry Local Schools	Curriculum Director
Dr.	Adrienne	O'Neill	Stark Education Partnership	President
Mr.	Eddie	Pawlawski	ACT Midwest Regional Office	
Ms.	Linda	Petz	SCESC	Consultant
Ms.	Marilyn	Preas	Marlington Local Schools	Assistant Superintendent
Ms.	Teresa	Purses	Canton Local Schools	Superintendent
Judge	W. Don	Reader	Board Chair–Stark	(Retired) Ohio Court of
Ms.	Kim	Redmond	Education Partnership Timken Senior High School	Appeals-5th District Principal
Ms.	Anne	Ritchey	Mount Union College	Timeipai
Dr.	Joseph	Rochford	Stark Education Partnership	Vice President
Mrs.	Kimberly	Ross	Stark Education Partnership	Graphics Designer
Ms.	Lynn	Rudd	Malone College	Adjunct Professor
	•			Gifted/Elementary
Ms.	Linda	Salom	Jackson Local Schools	Curriculum Coordinator
Ms.	Linda	Salsberry	The Alliance Review	
Ms.	Peggy	Savage	Hoover High School	Assistant Principal
Ms.	Cheryl	Schoffman	Canton Local Schools	Curriculum Supervisor
Ms.	Susan	Shuster	Alliance City Schools	Curriculum Director
Mr.	Mark	Smilaycoff	Canton City Schools	Technology/Assessment, Data Analyst
Dr.	James	Smith	SCESC	
Ms.	Mary	Southards	Kent State Stark Campus	Assistant Dean of Enrollment
Mr.	Walter	Stanislawski	The Paul and Carol David Foundation	Enrollment Director & Executive Vice President
Ms.	Mary Beth	Stefanko	Washington High School	
Ms.	Tracy	Stevens	Dominion	
Ms.	Deidre	Stokes- Davis	McKinley High School	Assistant Principal
Dr.	David	Swedlow	National College Access Network (NCAN)	Director of Research and Technology
Ms.	Dianne	Talarico	Canton City Schools	Superintendent
Mr.	Mark	Thauvette	McKinley High School	Assistant Principal
Mr.	Thom	Thompson	Alliance City Schools	Curriculum Coordinator
Mr.	Ward	Timken	Timken Foundation of Canton	President
Ms.	Veronica	VanDress	The Repository	
Mr.	Jeffrey	Wendorf	Lake High School	Assistant Principal
Ms.	Lori	Williams	The Independent	Education Writer
Mr.	George	Woods	Jackson Local Schools	Math Coordinator K-12

Appendix C: ACT/OGT Conference Agenda



Tuesday, June 29TH

Wednesday, June 30th

9:00 - 9:15

- Welcome
- · Overview of Study & Activities

Dr. Adrienne O'Neill Stark Education Partnership

9:15 - 10:30

The ACT

- · Nature of the Test
- · The Educational Planning and Assessment System (EPAS)
- · Conditions for Use as Part of a Statewide Assessment
- · Forthcoming Writing Component
- · ACT's Crosswalk with Ohio Standards

Eddie Pawlawski ACT Midwest Regional Office

10:30 - 11:00

· Break

11:00 - 12:00

· The Illinois Experience

Educators Presentation Illinois High School District 214

12:00 - 1:00

· Lunch

1:00 - 2:00

· ACT and OGT Comparison to Ohio Standards

Conference call with Dale Eggebraaten International Center for Leadership in Education

2:00 - 3:00

· Core Content Teamwork

9:00 - 10:00

Core Content Teamwork Assignment Completion

10:00 - 10:30

What the Research Tells Us

- · High Stakes Exit Exams
- · Cont
- · Impact on dropouts and GED

Dr. Joseph Rochford Stark Education Partnership

10:30 - 11:00

 ACT Case Studies, Iowa, Colorado, West Virginia Eddie Pardanski ACT Midwest Regional Office

11:00 - 11:30

Break

11:30 - 12:30

· Core Content Teamwork

12:30 - 1:30

Lunch

1:30 - 2:30

Core Content Teamwork

2:30 - 3:00

· Reporting Out/Next Steps

Appendix D: Excerpt From the Ohio State Board of Education's Regular Meeting and Annual Retreat

June 7-8, 2004 – Resolution and Discussion on OGT Cut Scores

Mr. Cochran presented the following recommendation (Item 1):

1. RESOLUTION TO ADOPT STANDARD SCORES INDICATIVE OF ADVANCED, ACCELERATED, PROFICIENT, BASIC AND LIMITED SKILL LEVELS ON THE MATHEMATICS AND READING TESTS OF THE OHIO GRADUATION TESTS

The Standards Committee **RECOMMENDS** that the State Board of Education **ADOPT** the following Resolution:

WHEREAS Section 3301.0710 of the Ohio Revised Code (ORC) directs the State Board of Education to adopt rules establishing a statewide program to test student achievement; and

WHEREAS Section 3301.0710 of the ORC further directs the State Board of Education to prescribe tests to be known as the Ohio Graduation Tests (OGT) to measure the level of reading, writing, mathematics, science and social studies skill expected at the end of tenth grade; and

WHEREAS Section 3301.0710(A)(2) of the ORC requires the State Board of Education to prescribe five ranges of scores on each of the achievement tests required by Section 3301.0710 of the ORC and that those ranges of scores shall be deemed to demonstrate the following levels of achievement: advanced, accelerated, proficient, basic and limited; and

WHEREAS Amended Substitute Senate Bill 1 required all tenth graders to take OGT reading and mathematics tests in March 2004 as partial fulfillment of federal testing requirements; and

WHEREAS achievement of a proficient skill level as indicated by the OGT will be a graduation requirement beginning with the class of 2007, with their first opportunity to take the test as sophomores in March 2005; and

WHEREAS standard-setting advisory committees consisting of Ohio teachers, educators, parents and business/community representatives following generally accepted standard-setting procedures have recommended the scores indicative of advanced, accelerated, proficient, basic and limited levels of achievement on the mathematics and reading OGT; and

WHEREAS said recommendations were reviewed by the Testing Steering Committee and the Technical Advisory Committee; and

WHEREAS the reviewing groups concurred with the recommendations for scores indicative of advanced, accelerated, proficient, basic and limited in relation to the above-specified tests; and

WHEREAS on May 10, 2004, the State Board of Education passed a Resolution of Intent to Adopt Standard Scores Indicative of Advanced,

Accelerated, Proficient, Basic and Limited Skill Levels on the Mathematics and Reading Tests of the Ohio Graduation Tests: Therefore, Be It RESOLVED, That the following raw scores be established for tests administered in March 2004 as the score levels indicative of advanced, accelerated, proficient, basic and limited skill levels of achievement on the OGT in reading and mathematics:

Reading (out of a possible 48 points)

Advanced—39.0 Accelerated—31.5 Proficient—20.0 Basic—13.5 Limited—below 13.5

Mathematics (out of a possible 46 points)

Advanced—37.5 Accelerated—30.0 Proficient—19.0 Basic—13.5 Limited—below 13.5

and, Be It

FURTHER RESOLVED, That the corresponding standards for subsequent forms of the reading OGT and mathematics OGT be equated to the standards established pursuant to this resolution for the test form administered in March 2004, such that the level of competency necessary to achieve each standard on the new test form is equivalent to the level of competency required to achieve the corresponding standard established for the test form administered in March 2004; and, Be It

FURTHER RESOLVED, That the State Board of Education hereby directs the Superintendent of Public Instruction to communicate said score levels to the school districts in Ohio.

It was Moved by Mr. Cochran that the above (Item 1) recommendation be approved. No Second was required.

Mr. Hovis asked for a response to the issues raised in a June 4 newspaper editorial. Stan Heffner, associate superintendent, Center for Curriculum and Assessment, explained that the cut scores had been provided in the previous month's Minutes in Volume 2 of the Board book materials. It is not appropriate to compare the graduation test with a classroom test—they are two different types of assessment. There are questions about whether the cut scores are appropriate. There are five classifications for students—limited, basic, proficient, accelerated, and advanced. The standard-setting committees addressed the industry standards for the book-marking process. This test is more difficult than the current ninth-grade proficiency tests—open-ended questions are included. There are additional vocabulary items in the reading test. There are more data-analysis questions in the area of mathematics. Algebra and data analysis make up 22 to 24 percent of the mathematics questions. The percentage of the test that focuses on lower-mathematics skills decreased.

Mr. Heffner explained that students will need to pass five tests in order to earn a diploma. There are concerns about the achievement gaps. He reviewed the passage rates of both African-American and Hispanic students. Schools will need to make changes in their curricula to assure greater success on this test. The academic content standards are more difficult than the earlier outcomes.

Mr. Hovis asked if the OGT is more difficult. Mr. Heffner responded "yes."

Mr. Cochran asked how Board members should explain that the OGT should not be compared to a typical test in a classroom. Mr. Heffner stated that the OGT tests cumulative amounts of learning at that point in time. It is different than a unit test in a classroom. The cut scores represent a categorization of where a student falls along a ranking order of the difficulty of the questions. Jan Crandell, director, Office of Assessment, explained that the students who recently took this test do not have to pass the test in order to graduate. This is a time of difficult transition.

Mr. Cochran expressed concern about how he could answer questions from the public. Mitchell Chester, Assistant Superintendent for Policy Development, added that the standard-setting process is entirely different from developing a classroom test. The standard-setting committees looked at all the items sorted from easiest to hardest based on the percentage of Ohio students who got the items correct. The committee looked at the range of difficulty to determine a point that would be the delimiter between proficient and non-proficient students.

Mr. Griffin expressed concern about the racial gap and low-income schools. Mr. Heffner agreed with the concern about the racial gap. All schools will need time to adjust their curricula to match the standards.

Mr. Griffin asked what would happen if a student does not pass the test. Ms. Crandell responded that students are welcome to come back to school to take the available graduation test. The ninth-grade proficiency test will be available until September of 2008. In order to get a diploma, students must meet both the curriculum and testing requirements.

In response to a question from Mr. Griffin, Mr. Heffner stated that it is a local school district decision if a student who has not passed the test can participate in a commencement exercise.

Mr. Wick stated that the editorial identifies a letter that creates the perception that there is a problem. This could be a "no-win" situation. He stressed setting a path to either change the test or to develop effective communication. He stressed developing an accurate portrayal of the cut scores. Dr. Zelman spoke about the need to make it clear that the OGT is based on a curriculum that would be two grade levels above the ninth-grade test. She also spoke about the need for providing opportunities to learn the new curriculum, and to communicate a sense of fairness and to emphasize raising the bar and closing the achievement gap. Work is needed on curriculum alignment, student intervention, and professional development for teachers.

Dr. Owens Fink expressed concern about creating a test that would encourage students to drop out of school, and about the issues of fairness and of the test being unattainable. The test was also designed to look at advanced and accelerated students. She spoke about the small number of questions on a test that needs to address five ranges of proficiency.

Dr. Zelman spoke about a value-added analysis as part of an accountability system. There must be items on the test that reflect the advanced level.

Mrs. Thatcher stressed the need to encourage students to be responsible for their education.

Mr. Cochran raised the question of perception. How can the Board members explain to the public that a score of 42 percent is proficient? He asked the Department to develop a one-paragraph response, in layman's language, to explain the cut scores.

Mrs. Stewart asked what efforts will be made to relate achievement levels of districts and students to the rigor of curriculum opportunities. She suggested establishing designations for students and districts that do well. Dr. Chester spoke about a couple of initiatives that review curricular offerings. This concern is being addressed by the high school task force. In addition, there is a new initiative that asked teachers how they spend instructional time over a school year.

Mrs. Stewart asked about the link to the value-added analysis. Dr. Zelman responded that that analysis focuses on grades three through eight. Good value-added analysis requires a range of items on the test. The Department needs to do a better job of explaining to the public the different way this test is constructed. This whole issue is more complicated because of AYP (adequate yearly progress). The higher the cut scores are set, the lower the requirement for AYP. The lower the cut scores are set, the higher the AYP.

Mr. Brown stated that it is a local decision if a student participates in commencement exercises. There is a requirement that students pass the test to obtain a diploma. Mr. Heffner agreed.

Mr. Hovis agreed with the comments of Mr. Cochran. It would be a mistake to allow editorials and news coverage to go unanswered. He asked the Department to submit for publication a response to the recent editorial.

Vice President Baker stated objection—half of the article is inaccurate and the other half is a writer's opinion. It is hard to respond to inaccuracies. President Sheets stated that Dr. Zelman will review the concerns with the Department's communications staff in order to develop a positive response.

Mr. Cochran spoke about the need to speak to a broader audience. He agreed with the need to rebut the recent editorial. Dr. Zelman stated that staff will work with the Board's Executive Committee regarding a communications strategy. President Sheets asked for a report to the State Board at its next meeting.

Mr. Ross stated that the Board has done something different and new. It is obvious that the Board and Department would not harm Ohio's students. A different method is being used to measure progress. Dr. Zelman added that there will be good recommendations from the high school task force.

The President called for a roll call vote.

YES VOTES

Richard Baker Virgil E. Brown, Jr. Michael Cochran Jim Craig Robin C. Hovis Virginia E. Jacobs Deborah Owens Fink Emerson J. Ross, Jr. G. R. "Sam" Schloemer Jennifer L. Sheets

Jennifer Stewart Jo Ann Thatcher Sue Westendorf Carl Wick

NO VOTES

John W. Griffin Cyrus B. Richardson, Jr.

ABSTENTION VOTE

Stephen M. Millett

Motion carried.

Appendix E - Review of Ohio Academic State Standards, Benchmarks and Indicators

The following is an excerpt from *Review of ACT Assessments and OGT to Ohio Academic State Standards/Benchmarks/Indicators Eighth Grade and Tenth Grade English Language Arts, Mathematics and Science - August 5, 2004, Prepared for Stark Education Partnership.*

For a complete copy, contact International Center for Leadership in Education at 1587 Route 146, Rexford, NY 12148, phone 518-399-2776, fax 518-399-7607, or email info@LeaderEd.com.

Ohio Curriculum Matrix for 8th Grade English Language Arts

Ohio English Language Arts	Curricul		် အ အ	eys For tion	
Benchmarks/Indicators Grade 8	National Rank	Essential Skill	TDO	ACT Includes Writing	WorkKo Reading Informat
Phonemic Awareness, Word Recognition and Fluency			OGT Reading		
Fluency continues to develop past the primary grades. Readers increase their rate of oral reading to near conversational pace. They show their appropriate use of pauses, pitch, stress and intonation that they are reading in clauses and sentence units to support comprehension. They gain control over a wider, complex sight vocabulary and over longer syntactic structures, so that they are able to read progressively more demanding texts with greater ease. Silent reading becomes considerably faster than oral reading and becomes the preferred, more efficient way to process everyday texts.					
Acquisition of Vocabulary					
Contextual Understanding					
1. Define unknown words through context clues and the author's use of comparison, contrast and cause and effect.	e9	Know how to decipher unfamiliar words using such strategies as context cues, word structure analysis, letter-sound relationships, and word histories.	М	Y	Y
Conceptual Understanding					
2. Apply knowledge of connotation and denotation to determine the meaning of words.	e9	Know how to decipher unfamiliar words using such strategies as context cues, word structure analysis, letter-sound relationships, and word histories.	M	Y	Y

Ohio English Language Arts	Curricul		es	eys For tion	
Benchmarks/Indicators Grade 8	National Rank	Essential Skill	L90	ACT Includes Writing	WorkK Reading Informa
3. Identify the relationships of pairs of words in analogical statements (e.g., synonyms and antonyms) and infer word meanings from these relationships.	e9	Know how to decipher unfamiliar words using such strategies as context cues, word structure analysis, letter-sound relationships, and word histories.	M		
4. Infer the literal and figurative meaning of words and phrases and discuss the function of figurative language, including metaphors, similes and idioms.	e9	Know how to decipher unfamiliar words using such strategies as context cues, word structure analysis, letter-sound relationships, and word histories.	M	Y	Y
5. Examine and discuss the ways that different events (e.g., cultural, political, social, technological, and scientific events) impact and change the English language.	e9	Know how to decipher unfamiliar words using such strategies as context cues, word structure analysis, letter-sound relationships, and word histories.	M		
Structural Understanding					
6. Use knowledge of Greek, Latin and Anglo-Saxon roots, prefixes and suffixes to understand complex words and new subject-area vocabulary (e.g., unknown words in science, mathematics and social studies).	e9	Know how to decipher unfamiliar words using such strategies as context cues, word structure analysis, letter-sound relationships, and word histories.	M*		
Tools and Resources					
7. Determine the meanings and pronunciations of unknown words by using dictionaries, thesauruses, glossaries, technology and textual features, such as definitional footnotes or sidebars.	e21	Use dictionary, grammar books, and thesaurus to aid in editing and understanding words.	M*		
Reading Process: Concepts of Print, Comprehension Strategies and Self-Monitoring Strategies					
In Grades 8 through 12, students should read purposefully and automatically, using the comprehension and selfmonitoring strategies outlined in previous grades. As they encounter increasingly challenging contentarea and literary texts, student may more consciously employ these strategies and benefit from teacher modeling of the reading process.					
Comprehension Strategies					
Apply reading comprehension strategies, including making predictions, comparing and	e5	Identify, collect and/or select pertinent information while reading.	M		
contrasting, recalling and summarizing and making inferences and drawing	e15	Discriminate important i unimportant ideas w			
conclusions.	e18	Assess the validian information			
	e24	Summarize organize reading			
	e44	So			
	PART				

Ohio Curriculum Matrix for 10th Grade English Language Arts

Ohio English Language Arts	Curricul		S 50	ys For	
Benchmarks/Indicators Grade 10	National Rank	Essential Skill	190	ACT Include Writing	WorkKe Reading Informat
Phonemic Awareness, Word Recognition and Fluency			OGT Reading		
Fluency continues to develop past the primary grades. Readers increase their rate of oral reading to near conversational pace. They show their appropriate use of pauses, pitch, stress and intonation that they are reading in clauses and sentence units to support comprehension. They gain control over a wider, complex sight vocabulary and over longer syntactic structures, so that they are able to read progressively more demanding texts with greater ease. Silent reading becomes considerably faster than oral reading and becomes the preferred, more efficient way to process everyday texts.					
Acquisition of Vocabulary					
1. Define unknown words through context clues and the author's use of comparison, contrast and cause and effect.	e9	Know how to decipher unfamiliar words using such strategies as context cues, word structure analysis, letter-sound relationships, and word histories.	M	Y	Y
2. Analyze the relationships of pairs of words in analogical statements (e.g., synonyms and antonyms, connotation and denotation) and infer word meanings from these relationships.	e9	Know how to decipher unfamiliar words using such strategies as context cues, word structure analysis, letter-sound relationships, and word histories.	M		
3. Infer the literal and figurative meaning of words and phrases and discuss the function of figurative language, including metaphors, similes, idioms and puns.	e9	Know how to decipher unfamiliar words using such strategies as context cues, word structure analysis, letter-sound relationships, and word histories.	М	Y	Y
4. Analyze the ways that historical events influenced the English language.	e9	Know how to decipher unfamiliar words using such strategies as context cues, word structure analysis, letter-sound relationships, and word histories.	M		
5. Use knowledge of Greek, Latin and Anglo-Saxon roots, prefixes and suffixes to understand complex words and new subject-area vocabulary (e.g., unknown words in science, mathematics and social studies).	e9	Know how to decipher unfamiliar words using such strategies as context cues, word structure analysis, letter-sound relationships, and word histories.	M*		
6. Determine the meanings and pronunciations of unknown words by using dictionaries, glossaries, technology and textual features, such as definitional footnotes or sidebars.	e9	Know how to decipher unfamiliar words using such strategies as context cues, word structure analysis, letter-sound relationships, and word histories.	M*		
Reading Process: Concepts of Print, Comprehension Strategies and Self-Monitoring Strategies					

	Curricul			z c	
Ohio English Language Arts Benchmarks/Indicators	National	um Survey of Essential Skills	OGT	ACT sludes riting	kKeys ling Fo
Grade 10	Rank	Essential Skill	0	Inc	Wor Read Infor
In Grades 8 through 12, students should read purposefully and automatically, using the comprehension and self-monitoring strategies outlined in previous grades. As they encounter increasingly challenging content-area and literary texts, students may more consciously employ these strategies and benefit from teacher modeling of the reading process.					
Comprehension Strategies	-	X1 . 10 . 11		**	**
Apply reading comprehension strategies, including making pre-	e5	Identify, collect and/or select pertinent information while reading.	M	Y	Y
dictions, comparing and contrast- ing, recalling and summarizing and making inferences and drawing	e15	Discriminate important ideas from unimportant ideas while reading.			
conclusions.	e24	Summarize, synthesize and organize information while reading.			
	e44	Compare/contrast a reading selection with others.			
	e46	Apply, extend, and expand on information while reading.			
	e50	Understand and use a variety of organizational formats such as compare/contrast, cause/effect, inductive/deductive, most important to least important, and least important to most important.			
	e52	Preview textbooks for informational text to anticipate content.			
2. Answer literal, inferential, evaluative and synthesizing questions	e5	Identify, collect and/or select pertinent information while reading.	M	Y	Y
to demonstrate comprehension of grade-appropriate print texts and electronic and visual media.	e15	Discriminate important ideas from unimportant ideas while reading.			
	e24	Summarize, synthesize and organize information while reading.			
Self-Monitoring Strategies					
3. Monitor own comprehension by adjusting speed to fit the purpose, or by skimming, scanning, reading	e24	Summarize, synthesize and organize information while reading.	М		Y
on, looking back, note taking or summarizing what has been read	e52	Preview textbooks for informational text to anticipate content.			
so far in text.	s115 (not ranked)	Plan and apply real or hypothetical models and constructions to facilitate investigation and learning the solution to practical pr			
Independent Reading					
4. Use criteria to choose independent reading materials (e.g., personal interest, knowledge of authors and genres or recommendations from others).	e53	Apply personal of for evaluating suasive and			
5. Independently read books for various purposes (e.g., for enjoyment, for literary experience, to gain information or to perform a	e53	Appl			

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Sheila M. Markley Black

Day, Ketterer, Raley, Wright & Rybolt Ltd.

Richard S. Milligan

Buckingham, Doolittle & Burroughs, LLP

John O'Donnell, Ed.D.

Stark State College of Technology

Ward J. Timken Timken Foundation

Candy Wallace

Stark Community Foundation

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Vice President Joseph A. Rochford, Ph.D.

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Stark County Educational Service Center

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The direct costs of developing and administering the tests themselves make up a tiny fraction of the total costs of implementing an exit exam policy.... These (costs) include remedial services for students who fail, programs to prevent failure, and professional development to upgrade the skills of teachers who must prepare students for the exams...the true costs of an exit exam policy are often invisible to state policymakers, because the expenses are being borne mostly by local school districts—and often by shifting existing funds away from other educational priorities. (Gayler, Chudowsky et al. 2003)





220 Market Ave South, Suite 350 Canton, Ohio 44702-2181

330-452-0829 330-452-2009 fax www.edpartner.org