Annual Report of Indiana Charter Schools

Academic Year 2002-2003

Office of Charter School Research
Ball State University

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Executive Summary

The Inaugural Class of Charter Schools

The inaugural class of Indiana charter schools commenced operation in the 2002-2003 academic year. Three elementary schools in Marion County were chartered by the Mayor of Indianapolis: Flanner House Elementary School, 21st Century Community School and Christel House Academy. Six schools received charters from Ball State University: Campagna Academy (Schereville), Community Montessori, Inc. (Floyds Knobs), Irvington Community School (Indianapolis), New Community School (West Lafayette), Timothy L. Johnson Academy (Fort Wayne) and Veritas Academy (South Bend). Two "conversion" schools were also part of the inaugural class. The Signature Learning Center was authorized by the Evansville-Vanderburgh School Corporation. Options Charter School was authorized by Carmel-Clay School Corporation. These two schools, along with Campagna Academy, were the only charters to serve high-school populations.

The Hoosier Advantage

We are convinced that what makes the Indiana charters unique in the nation is the shared commitment among authorizers, organizers and charter school educators to systematic, comprehensive, longitudinal collection of achievement and non-achievement outcomes for *both* purposes of accountability *and* continuous improvement. Indeed, if the target is accountability, then the aim must be continuous improvement! It is our conviction that charter schools will best meet the exacting demands of accountability just when they focus on the conditions and factors that influence continuous improvement. The "Hoosier advantage" associated with successful Indiana charter schools will be found, then, in the rich culture of assessment and research in which teaching and learning take place.

Baseline Data and Systematic Assessment

It is critical for charter schools to establish adequate "baseline" data for students entering charter schools and then to follow students longitudinally in order to determine growth, change and development (or, alternatively, the "valued-added" elements of charter school education). Without adequate safeguards it would be problematic to look at one-shot test score data from charter schools, and even more problematic to compare these one-shot scores to a nearby public school – even one with similar demographics.

A Common Metric

Students in Indiana charter schools sit for the state-mandated test (ISTEP +) in third-, sixth-, eighth- and tenth-grade, as do students in all Indiana schools. Most charter schools also arranged for additional assessments of student achievement using a wide variety of standardized achievement tests. But the advantage of using a common metric was also supported. Using a common standard of academic achievement would allow the Indiana charters to "work from the same playbook" with respect to accountability, and to address the factors associated with charter school effectiveness in a unified way. To our knowledge there is no other state where all of the charter schools have agreed to sign on to a common assessment.

Assessment Criteria

A common statewide assessment should have certain requirements: First, the test should be aligned with Indiana proficiency standards. Second, the test should have a known and predictive relationship with the state-mandated test (ISTEP+). Third, the test could be administered multiple times within the academic year so that intra-individual growth in student learning could be determined. Fourth, test data should be useful both for purposes of accountability and for instructional planning. Fifth, the test data should be available for instructional purposes in a timely way. Sixth, the test data should permit comparisons not only to national norms, but to local Indiana norms as well, in order to gauge more precisely how charter school students are faring relative to these reference groups. Sixth, the testing regime must be cost effective.

Measures of Academic Progress (Northwest Evaluation Association)

These considerations led to the adoption of the Measures of Academic Progress (MAP) published by the Northwest Evaluation Association (NWEA) The MAP are a computer-adapted assessment that includes tests of reading, language arts and mathematics. In a student adapted test each student takes a unique test that is dynamically developed for the student as the test is being administered. MAP generates a "Rasch Unit score," or RIT score, to describe achievement and growth, where scores range from about150 (second and third-grade) to 300 (end of high school). It is an equal interval score so scores can be added to calculate classroom or school averages.

MAP Alignment

NWEA's extensive test bank includes items aligned with Indiana proficiencies. A recent study compared RIT scores and ISTEP+ test information of over 24,000 students enrolled in third-, sixth- and eighth-grade from 19 Indiana school corporations. Students sat for both assessments in the fall of 2002. The results showed that ISTEP+ and RIT scores were correlated in the range of .72 to .88, depending on grade and subject (with scores of 6^{th} and 8^{th}-graders generally higher than for 3^{rd}-graders). In addition, ISTEP+ cut scores can be predicted with 81% to 87% accuracy when both tests are administered in the same testing season. This study also includes helpful tables that allow one to align RIT scores with performance levels on ISTEP+.

RIT Scores and Accountability

RIT scores are a stable direct indicator of student performance, and, therefore, can be interpreted as norm-referenced scores (with an appropriate reference group) and as standards-referenced scores (with an appropriate external standards). NWEA has recently published the "RIT Scale Norms for Indiana" (similar norms are also available based on a national reference sample). It includes fall and spring test data of more than 100,000 Indiana students from 89 school districts. Moreover, in addition to grade level indices of central tendency for each test (reading, language arts, mathematics), it also reports observed growth means (fall-to-spring, fall-to-fall, and spring-to-spring) in each goal area. These data provide potential benchmarks to gauge continuous improvement from year to year. For example, a charter school might be said to meet minimum standards of accountability if average improvement of student RIT scores is comparable to the average growth norms of Indiana school children.

Overview of the Annual Report

The first annual report of Indiana's charter schools is an attempt to summarize key features of charter school functioning among the inaugural group of charter schools. In Chapter 2 we present charter school profiles that describe the mission and vision of each charter school, along with descriptive information regarding enrollment and student and teacher characteristics. In Chapter 3 we report NWEA achievement data for charter school students in all grades except kindergarten and first-grade. This includes a comparison of charter school student achievement with national and Indiana norms. In Chapter 4 we report summaries of ISTEP + performance for charter school third- sixth- and tenth-grade students, who sat for the state-mandated test in September, 2002. In Chapter 5 we summarize the main patterns in the data, review interpretive cautions, outline a research agenda and make a suggestion regarding a suitable standard of accountability. The appendices report school contact information along with national and Indiana RIT norms.

Student Demographic Characteristics

1. Charter elementary schools in urban areas (Indianapolis, Fort Wayne) tend to be considerably larger than charter elementary schools in other parts of the state. The average enrollment of the Mayor's charters, for example, is 160 pupils, compared to 74 pupils in the Ball State charters (excluding the urban Timothy L. Johnson Academy).
2. The urban elementary charter schools not only have larger enrollments, they also have a larger percentage of students who qualify for free and reduced lunch, and a higher percentage of African-American pupils.
3. On average nearly 3 out of 4 elementary school children who attend a charter school in Indianapolis are African-American. Fifty percent of these students qualify for free lunch. This "urban pattern" is also evident in Timothy L. Johnson Academy of Fort Wayne, where over 90% of the pupils are African American and 60% qualify for free lunch.
4. It is clear that the availability of charter schools in urban settings gives poor and minority families an element of choice that is otherwise a prerogative only of families with greater financial means.
5. The remaining Ball State elementary charter schools are predominantly white, ranging from 54% (Veritas Academy in South Bend) to 98.7% (Community Montessori in Floyds Knobs), with relatively fewer students qualifying for free or reduced lunch.
6. The charter high schools vary greatly in enrollment and mission. Campagna Academy, in its first year of operation, had just 13 pupils all of whom had significant child-care responsibilities. In contrast, Options and Signature School had much higher enrollments (N = 104 and 207, respectively).

Teacher Characteristics

7. The typical charter school teacher in Indiana is 36 years old, has 7 years teaching experience, and is paid $34,000 a year.
8. On average the salaries of charter high school teachers (M = $40,748) are larger than the salaries of charter elementary teachers (M = $31, 475), and teachers in the Mayor's charter elementary schools (M = $35, 827) are paid more than are teachers in Ball State University's charter schools (M = $28, 864).
9. There is significant variation across charter schools in the number of pupils assigned to a teacher, ranging from 7.6 (New Community) to 33 (Flanner House). In general, the number of students per teacher is larger in the Mayor's charter elementary schools (M = 23) than in the Ball State charter elementary schools (M = 13), and higher in the four urban elementary schools (M = 23) than in the other elementary schools (M = 16).
10. The actual pupil-teacher ratio is undoubtedly more favorable than these numbers indicate. For example, even in charters with large class size (e.g., Flanner House), there are often other adults in the classrooms functioning as teacher aides.

Language Usage Achievement (MAP) in the Elementary Charter Schools

The main findings with respect to language usage achievement in the elementary charter schools, based on the NWEA's Measures of Academic Achievement (MAP), are the following:

11. Among the Ball State charters, Veritas Academy exceeds national and Indiana norms for each grade. Irvington exceeds national and Indiana norms at Grade 3 and Grade 4 and is within a single RIT point of matching national norms at Grade 2. Similarly, Community Montessori matches or exceeds at least one of the norms at Grade 2 and Grade 3, and is within 2 and 5 RIT scores of these norms at Grade 4. Timothy L. Johnson is 4 RIT points off the national mark and 7 points off the Indiana mark at Grade 2, although the disparity widens at subsequent grades.
12. Among the Mayor's charters, 21st-Century approximates the national and Indiana norms at Grade 3 and Grade 5, but is 11 to 14 RIT points off the mark at Grade 2 and 12 to 15 RIT points off the mark at Grade 4. Christel House is 7 to 10 RIT points off the national norms across grades 2 to 4, and 10 to 13 points off the Indiana norms. Finally, Flanner House approximates the national and Indiana norms at each grade.

Mathematics Achievement (MAP) in the Elementary Charter Schools

13. Each of the Ball State charters matches or exceeds national and state standards for at least one grade, with the exception of Timothy L. Johnson Academy, where students are 6-20 points off the national norms in mathematics and 6-22 points off the Indiana norms across grades 2 to 5
14. Among the Mayor's charters, 21st Century is 4-17 points off the national norms in mathematics, and 6-19 points off state norms across grades 2 to 5. Christel House Academy is 11-12 points below the national norms across grade in mathematics, and 13 points below state norms across grade. Finally, Flanner House approximates national and

state norms at Grade 3, and is 6-9 points off the national norms and 7-11 points below Indiana norms at the other grades.

Reading Achievement (MAP) in the Elementary Charter Schools

15. Each of the Ball State charter elementary schools matches or exceeds national or state norms for at least one grade, with the exception of Timothy L. Johnson Academy, where students are 10-31 points below national norms and 12-32 points below Indiana norms across grade.
16. With respect to the Mayor's charters, 21st Century Academy falls 3-12 points below the national means in reading, and 5-14 points below Indiana norms. Christel House Academy fall 9-14 points below the national means in reading, and 12-16 points below state norms. Finally, Flanner House falls 5-7 points below both the national and state norms.

Interpretive Caution

The NWEA assessment is baseline data for gauging intra-individual growth in learning as children matriculate through the charter schools. It is premature to draw any conclusion with respect to school accountability or "charter school effectiveness." Moreover, selection effects will confound any interpretation of achievement patterns necessarily.

Indeed, it is interesting to note that, with some exceptions, the disparity between actual achievement in any goal area (language usage, mathematics, reading) and the national and state norms increases, sometimes dramatically, as one moves to the higher grades. Clearly, these students in the higher elementary grades have come to the charters, in their first year of operation, with a long history of cumulative failure that will be a challenge to surmount.

Cause for Optimism

Average observed growth in RIT scores from fall-to-spring, as indicated in the *RIT Scale Norms for Indiana,* is well within the reach of many charters, particularly at the earliest grades, providing significant opportunities for closing the gap between actual achievement in these goal areas and national and Indiana grade level norms.

Achievement (MAP) in the Charter High Schools

17. Students at the Signature School exceeded national and state grade level norms in all grades in all three achievement goal areas (reading, language usage, and mathematics).
18. The pattern was more variable at Options. Students in Grade 12 approximated national and state norms in reading and language usage; students in Grade 11 approximated national and state norms in language usage; students in Grade 10 approximated state and national norms in language and reading.

General Summary of ISTEP+ Achievement

19. Only two schools, Community Montessori at Grade 3, and Signature School at Grade 10, match or exceed the state average for these grades.
20. Two schools, Veritas Academy and Flanner Elementary, approximate the state average at Grade 3. The remaining schools fall considerably below the state average
21. Of particular notice is the third-grade performance of the urban charters, with Timothy L. Johnson reporting only 9% of its pupils meeting the state standard, and both Christel House and 21st Century reporting less than 20% and Irvington less than a third meeting the standard.
22. Students in Community Montessori performed as well or better than other third-graders in Indiana public schools in both English/Language Arts and in Mathematics
23. On the other extreme it is clear that some of the urban charters are facing a tall challenge. For example, 90% of third-graders did not pass English/Language Arts at Timothy L. Johnson and 59% did not pass at Christel House. Similarly, with respect to Math, 86% of third-graders did not pass at Timothy L. Johnson and 78% did not pass at Christel House
24. It is worth noting that third-graders at two other urban schools, Flanner House and 21st Century, exceeded the state third-grade pass rate for English/Language Arts. Flanner House also exceeds the state pass rate for Math.
25. Half of the sixth-graders at 21st Century Charter School passed the ISTEP assessment in English/Language Arts. Less than a quarter of the sixth-graders passed the ISTEP math test.
26. All of the tenth-graders at Signature School passed ISTEP and exceeded English and math standards. However, less than half of the tenth-graders at Options passed ISTEP, and a majority scored below standards in English and math.

Comparative Summary of ISTEP+ Achievement in Charter and Other Public Schools

27. One evident pattern is that the urban schools, with the exception of Flanner House, report pass rates significantly lower than pass rates in comparative public schools. The data for Timothy L. Johnson Academy and Christel House Academy are particularly worrisome.
28. These data certainly do not support any presupposition that charter schools "cream off" the best students from regular public schools
29. The data for Flanner House is quite encouraging given the presumptive risk profile of students who attend this school
30. The pass rates for Veritas Academy and for Community Montessori compare favorably with local regular public schools.
31. The sixth-graders at 21st-Century Charter School are highly similar to their sixth-grade counterparts in IPS
32. The tenth-graders at Options are considerably off the mark with respect to other tenth-graders in the Carmel Clay Schools, while Signature tenth-graders outperform their classmates in the Evansville-Vanderburgh School Corporation.

Retrospect and Prospect

The most daunting challenge is the fact that many youngsters, particularly at the higher elementary grades, join a charter school already well-behind in basic academic skills. This particular "selection effect" is most acute in the urban charters.

Clearly the effect of charter schools is not to cream off the best students from the regular public schools systems, as some critics of charter schools have alleged (although this is probably the case for Signature School in Evansville).

The availability of charter schools has given urban poor and minority parents an important educational option for improving the prospects of their children, an option that was previously available only to parents of more affluent means.

This report also reveals certain reasons for optimism.

It does show, for example, that the prospect for demonstrating significant growth in student learning is certainly evident, particularly in the early elementary grades.

It does show that a number of charter schools are certainly competitive with regular public schools at some grades and approximate state and national academic standards.

The achievement profile of Flanner House is of particular interest. Here is an urban school with the highest poverty index of any charter elementary school in Indiana, a school with a 100% African-American student population, located in a distressed area of Indianapolis, which nonetheless reports a profile of MAP and ISTEP achievement that otherwise belies its presumptive risk status.

No conclusions can be drawn about charter school accountability from the data presented in this report. Student achievement data, even of MAP data collected later in the school year, is compromised by selection effects.

For this reason there is no real value in comparing mean achievement scores of one school with another. The real test of how well charter schools advance the cause of student learning will be met when they are able to show pervasive and significant intra-individual growth in student learning over time.

To this end the commitment of Indiana charter schools to a systematic data collection regime whereby students are assessed at least twice a year, and over the course of a student's career in a charter school, on a common metric, is most encouraging.

The Standard of Accountability

By what standard of accountability should charter schools be held? On what basis can an authorizer make a determination that a client school has met the burden of its charter? We caution against making too much of inter-school comparisons of achievement data, which is a crude and misleading index of accountability. It is crude and misleading to gauge the success of a school by charting patterns of inter-individual change over time. What is required is *not* the study of inter-individual or inter-school variability, but intra-individual growth over time. What is required is the documentation of individual change, not individual differences.

A Recommendation

It would seem to be a reasonable benchmark of accountability if a school could show that its students match or approximate average fall-to-spring growth norms in RIT scores.

Alternatively, a school could make the case that it is meeting standards of accountability if it could show that a significant majority of its pupils show improvement beyond the boundary of measurement error with each subsequent administration of MAP. The benchmark, then, is *growth*. The benchmark is *beating measurement error*.

Of course, the selection of reasonable standards of accountability is ultimately a matter for charter school educators and authorizers to decide, although it is our hope that the rich, multi-faceted research agenda of the Indiana charters schools, and its systematic data-collection strategy, will be found useful for this purpose.

About the Office of Charter School Research

Ball State University established the Office of Charter School Research in 2002 in order to advance the University's research mission with respect to its role as an authorizer of charter schools. In collaboration with charter school stakeholders, and with researchers across the state, the Office will publish annual reports of student achievement in Indiana charter schools, and occasional reports of research topics of interest, including both achievement and non-achievement variables. The new charter school law in Indiana provides an unparalleled opportunity to study charter school effectiveness, and to provide evidence on critical educational policy questions. The work of the Office of Charter School Research will be published by the Ball State University Virtual Press, and made available on the world wide web at: http://www.bsu.edu/libraries/virtualpress.html

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CHAPTER 1

Introduction to the Report

The Charter School Concept

The charter school movement is the centerpiece of contemporary efforts to reform public education. Although charter schools are public, nonsectarian schools of choice, they are exempt from certain state regulations in exchange for accepting greater responsibility for student outcomes. A charter school is held more accountable in the sense that the authorization to operate, that is, its charter, can be revoked by its authorizing agency if the school does not meet prerequisite standards of excellence, or otherwise live up to its charter obligations. To put it starkly, if students do not perform to acceptable standards, then the school's authorization to operate can be withdrawn.

Hence, charter schools take on the challenge of meeting exacting standards of educational excellence, and accept performance-based accountability, in exchange for greater autonomy over its operation, and more freedom from state rules and regulations. Presumably, this relative freedom from regulative oversight allows charter school educators to implement innovative curricula, pedagogical approaches and teaching practices. Indeed, charter schools ideally function as laboratories of educational innovation. The freedom to innovate and to experiment with instructional practices is derived from the exemption of charter schools from certain restrictive rules and regulations. If charter schools are willing to be held accountable for student outcomes, and willing to put their authorization at risk, then they should be give maximum discretion to pursue their educational objectives without undue restrictions or burdensome regulations.

Charters are accountable not only to authorizing agencies, but also to parents and students through the mechanism of school choice. Indeed, it is the availability of options within the public school sector that is said to be the catalyst of school reform. School choice should, for example, induce more competition for students and resources, forcing all public schools to be more responsive to the demands of parents and communities.

The charter school movement, then, attempts to initiate productive change in public education through the mechanisms of innovation, accountability and choice. As a result the charter school concept enjoys broad support from a diverse group of stakeholders from across the political spectrum, although it has engendered significant opposition as well.

Indiana's Charter School Law

The first charter school law was enacted by Minnesota in 1991. Since then nearly 40 states have passed charter school legislation. In 2001 Indiana became the 38th state to do so. The Indiana Code (IC 20-5.5-2) specifies the purpose of charter schools. Charter schools are to provide innovative and autonomous programs that (1) serve the different learning styles and needs of public school students; (2) offer public school students appropriate and innovative choices; (3) afford varied opportunities for professional educators; (4) allow public schools freedom and flexibility in exchange for exceptional levels of accountability; and (5) provide parents, students, community members and local entities with an expanded opportunity for involvement in the public school system.

According to the Center for Educational Reform, the Indiana charter school law is ranked 6th strongest of the nation's 40 charter laws (receiving the CER's grade of "A"). What the CER finds attractive about the Indiana law is that it allows for multiple authorizers; it allows alternative routes ("transition to teaching") for professional certification; and it provides charter schools significant fiscal and legal autonomy. The Indiana law also meets four recommendations of the American Federation of Teachers (2002), which insists that charter schools (1) be held to high academic standards; (2) require students to sit for the state-mandated test as required of other public school students; (3) hire only certified teachers; and (4) publish annual reports to the public as is required of other public schools.

The Inaugural Class of Charter Schools

In the Fall of 2002, three schools in Marion County chartered by the Mayor of Indianapolis commenced operations: Flanner House Elementary School, 21st Century Community School, and Christel House Academy.

Six additional schools across the state were granted charters by Ball State University, the first (and only) institution of higher education to issue such charters. These schools include Campagna Academy Charter School (Schereville), Community Montessori, Inc. (Floyds Knobs), Irvington Community School (Indianapolis), New Community School (West Lafayette), Timothy L. Johnson Academy (Fort Wayne), and Veritas Academy (South Bend). All six also commenced operations in the Fall of 2002.

The state charter school law provides for the conversion of an existing public school to a charter school if at least 67% of the teachers and 51% of the parents approve of the conversion. Two such "conversion schools" were part of the inaugural class of 2002, Signature Learning Center, authorized by the Evansville-Vanderburgh School Corporation, and Options Charter School, authorized by Carmel-Clay School Corporation. The two conversion schools, along with Campagna Academy Charter School, were the only charters to serve high school populations.

Stakeholder Support for Baseline Assessment

The inaugural class, then, consisted of 11 charter schools. Although the charter schools were under accountability and reporting requirements as specified by their respective charters (and state law), there was broad consultation among charter school stakeholders, including representatives of Ball State University and the Mayor's Office, concerning the desirability of establishing baseline student achievement data among charter schools as a whole. There was agreement that the inaugural year of charter school operation offered an unparalleled opportunity to establish a common metric for gauging charter school effectiveness, and for tracking student progress over time. Moreover, it allows the Indiana charters to "work from the same play book" with respect to accountability, and to address the factors associated with charter school effectiveness in a unified way

Systematic Assessment Strategy. A systematic assessment strategy for the all of the charter schools in the state of Indiana. calls for 1) all charter schools to assess the academic achievement of every child, in every grade, at least twice a year; and 2) a commitment by Indiana charter schools to other forms of research that might inform educational practice, continuous improvement, student non-achievement outcomes and teacher professional development, among other goals.

Clearly an assessment strategy must provide important evidence regarding charter school effectiveness for purposes of *accountability*. But it is imperative, too, that a scientific research base be established for purpose *of continuous improvement* as well. Indeed, if the target is accountability, then the aim must be continuous improvement! Indeed, it is our conviction that charter schools will best meet the exacting demands of accountability just when they focus on the conditions and factors that influence continuous improvement.

The Hoosier Advantage. We are convinced, too, that what makes the Indiana charters unique in the nation is 1) the shared commitment to systematic, comprehensive, longitudinal collection of achievement and non-achievement outcomes for *both* purposes of accountability *and* continuous improvement; and 2) the tight connection between the work of the charters and educational research more generally. It is our vision, it is our hope, that the "Hoosier advantage" associated with successful Indiana charter schools will be found in the rich culture of assessment and research in which teaching and learning take place.

Advantages of Systematic Assessment. With few exceptions most research on charter schools is plagued by methodological defects that do not permit unambiguous inferences about charter school effectiveness or the conditions of continuous improvement. It is critical for charter schools to establish adequate "baseline" data for students entering charter schools in order to rule out selection effects, and to follow students longitudinally in order to determine growth, change and development (or, alternatively, the "valued-added" elements of charter school education). Without adequate safeguards it would be problematic to look at one-shot test score data from charter schools, and even more problematic to compare these one-shot scores to a nearby public school – even one with similar demographics. Hence, it is imperative that research on charter schools be comprehensive and sustained.

By *comprehensive* we mean that the evaluation should not simply focus on performance on (one-shot) standardized tests, which is the usual yardstick of accountability, but should also include an analysis of factors not traditionally associated with accountability, but are critical for academic success nonetheless (e.g., student "affective" variables, school climate, teacher efficacy, student motivational orientations and attitudes towards learning, teacher instructional practices, etc.).

By *sustained* we mean that research should not only establish a comparative baseline for students entering charter and regular schools, but also track students over time, using longitudinal methodologies, in order to better gauge the "value-added" components of attending a charter school, and to more accurately locate the sources of variation in student outcomes.

Assessment Criteria. Of course, there was no initial consensus as to what the common metric would look like. Indeed, most of the charter schools had made plans to use the whole gamut of standardized achievement tests currently available, in addition to the state-mandated test (ISTEP +). Still, a consensus emerged that a common statewide assessment should have certain requirements: First, the test should be aligned with Indiana standards. Second, the test should have a known and predictive relationship with the state-mandated test. Third, test data should be useful both for purposes of accountability and for instructional planning. Fourth, the test data should be available for instructional purposes in a timely way. Fifth, the test data should permit comparisons not only to national norms, but to local Indiana norms as well, in order to gauge more precisely how charter school students are faring relative to Hoosier school children in general. Sixth, the testing regime must be cost effective

NWEA's Measures of Academic Progress

These considerations led to the adoption of the Measures of Academic Progress (MAP) published by the Northwest Evaluation Association (NWEA). The MAP is a computer-adapted assessment that includes tests of reading, language arts and mathematics. For purposes of pricing, and given the large disparity in school enrollments among the various charter schools, NWEA agreed to treat the 11 charter schools as a single school "district" with a single MAP coordinator. The first-year license agreement was contracted with the Charter School Association of Indiana, with funding generously provided by Project E. The Charter School Association becomes one of nearly 155 school corporations across Indiana that has adopted MAP as an off-year assessment.

How MAP Works MAP is a computerized "student adapted" assessment in mathematics, reading or language, developed using Item-Response Theory. In a student adapted test each student takes a unique test that is dynamically developed for the student as the test is being administered. "The program instantly analyzes the student's response to each test item and determines the appropriate difficulty level to present during the remainder of the test. It also remembers which items a student has seen in previous sessions and doesn't display them again." (NWEA, "Measures of Academic Progress: Assessments That Make a Difference").

Hence the difficulty of the test is adjusted to the student's performance. As the student answers correctly, the questions become more difficult. If the student answers incorrectly, the questions become easier. Each student receives a personalized test every time the student takes the test. In addition, a test is not timed, and can be administered in about an hour. Typically students sit for the MAP over the course of three days, with one test administered each day.

MAP Scores and Results. MAP generates a "Rasch Unit score," or RIT score, to describe achievement and growth, where scores range from about150 (second and third-grade) to 300 (end of high school). It is an equal interval score so scores can be added to calculate classroom or school averages. Upon completion of a test the child's score appears immediately on the screen.

Teachers can access class-level reports 24 hours after the data has been uploaded to NWEA. Hence student results are known immediately (in contrast one must wait months for student results using other standardized assessments). The RIT score shows the student's current level of achievement in a subject area. Unlike other standardized assessments, MAP can be taken up to four times a year. Of course, a student's score should show growth across testings (e.g., September to May) and from year-to-year. Moreover the MAP system keeps track of the testings done on site, and can generate historical reports showing student's scores over time.

MAP Alignment Issues. Each MAP test draws from extensive NWEA test banks (over 15,000 items) that have been developed by trained teachers to cover a wide range of achievement goals in each subject. These items have also been field tested and calibrated for difficulty. NWEA's extensive test bank includes items aligned with Indiana proficiencies.

One way to examine alignment is to look at empirical relationships between NWEA assessments and Indiana's state-mandated test. A recent study (Cronin, 2003) compared RIT scores and ISTEP+ test information of over 24,000 students enrolled in third-, sixth- and eighth-grade from 19 Indiana school corporations. Students sat for both assessments in the fall of 2002. The results showed that ISTEP+ and RIT scores were correlated in the range of .72 to .88, depending on grade and subject (with scores of 6th and 8th-graders generally higher than for 3rd-graders). In addition, ISTEP+ cut scores can be predicted with 81% to 87% accuracy when both tests are administered in the same testing season. This study also includes helpful tables that allow one to align RIT scores with performance levels on ISTEP+.

RIT Scores and Accountability. RIT scores are tied directly to the standards. Because RIT scores are anchored to standards, it is possible to track student progress accurately from year to year. Hence, RIT scores are a stable direct indicator of student performance, and, therefore, can be interpreted as norm-referenced scores (with an appropriate reference group) and as standards-referenced scores (with an appropriate external standards).

NWEA has recently published the "RIT Scale Norms for Indiana"(similar norms are also available based on a national reference sample). It includes fall and spring test data of more than 100,000 Indiana students from 89 school districts. Moreover, in addition to grade level indices of central tendency for each test (reading, language arts, mathematics), it also reports observed growth means (fall-to-spring, fall-to-fall, and spring-to-spring) in each goal area. These data provide potential benchmarks to gauge continuous improvement from year to year. For example, a charter school might be said to meet minimum standards of accountability if average improvement of student RIT scores is comparable to the average growth norms of Indiana school children.

This Report

The Office of Charter School Research at Ball State University intends to publish various studies of charter school functioning as key data is collected or becomes available. It will also publish an annual report to charter school stakeholders and to the general public.

This first annual report of Indiana's charter schools is an attempt to summarize key features of charter school functioning among the inaugural group of charter schools. Of particular interest is how students fared with respect to academic achievement, with the NWEA assessment used as the common metric in all grades excepting first-grade and Kindergarten. Most students sat for the NWEA-MAP assessment in the spring term, 2003. The "district summary" of RIT scores by grade and by school is reported in Chapter 3.

Charter school elementary students in grade 3 and grade 6 also sat for the ISTEP+ assessment in September, 2002, as did charter school tenth-graders. Although these data have been published previously in local outlets, and are available on the Indiana Department of Education website, they are presented here in Chapter 4 in a format that permits comparisons among charter schools, and with relevant comparison data.

It should be noted that students sat for MAP and ISTEP in different testing "seasons." ISTEP was administered in September (2002) of the new academic year, while MAP was administered later in the spring (2003). Hence, ISTEP data tell us only about the abilities of students as they begin their charter school careers.

In Chapter 2 we present charter school profiles that describe the mission and vision of each charter school, along with descriptive information regarding enrollment and student and teacher characteristics.

CHAPTER 2

Charter School Profiles

The objectives of this chapter are twofold. First, to give the reader a sense of the mission and purpose of each charter school. As noted earlier, critical to the charter school concept is the notion that charter schools are engines of educational innovation. Consequently, it is necessary to understand the orienting vision that motivates charter school organizers in order to place in context what they are trying to accomplish. No attempt is made here to appraise the extent to which the various charters are realizing their educational ambitions. Second, to provide a descriptive summary of what charter schools look like in terms of the demographics of student enrollment and teacher characteristics. Student achievement outcomes on the NWEA and ISTEP+ assessments will be detailed in subsequent chapters.

Mission and Curriculum: *The Mayor's Charters*

The following schools operated under a charter granted by the Mayor of Indianapolis. Additional information about these charter schools can be found at this website: http://www.indygov.org/mayor/charter/2001/index.htm.

21st Century Charter School. This charter is patterned after the one-room schoolhouse that brings together cross-age instructional opportunities with information technology. The goal is to make available a laptop computer for each pupil in order to facilitate learning (rather than to learn how to use technology for its own sake). Teachers are considered facilitators and guides who model commitment to lifelong learning through 21st century technology. The school has a strong sense of educational "efficacy" in the sense that it makes "no excuses" for its student population. All students are considered gifted. It asserts that "No grade level or age roadblocks will exist." Each student will develop an educational portfolio, and have an individual learning plan. As it is put in their application, "The School, showcasing 21st century technology and individualized learning, will provide a model that can be replicated in a variety of other settings–expanding the educational options available in the community" (p. 10).

21st Century Charter School uses the A+ Learning System (ALS) to provide students with individualized computer-based instruction. The school's entire K-12 curriculum is on the computer to allow students to move through subject matter at any grade level throughout the school year. Teachers support what the student is learning on the computer, instead of the computer supporting what the teachers are teaching. Teachers monitor student progress on a daily basis and identify areas that need additional reinforcement. Students are promoted only after they have achieved mastery in the subject matter.

Student report cards are based on the Indiana Standards and the mastery of those standards. Data is represented as a percentage of completed skills for each grade level in the subject areas of Math, Language Arts, Reading, Vocabulary, Science, Social Studies and Spanish. Physical Education is based on the Indiana Standards and scored by the teacher using specific approved rubrics. There is also a program of music education and character education.

21st Century School also offers a variety of clubs throughout that meet during the school day. These clubs include cheerleading, step team, chess, jump rope, intramural sports, creative writing and a "boys-to-men" mentorship program. In the fall of 2003 the school will have a formal program that includes mentors from the Indianapolis business community. There is also a "before-school" and "after-school" program that offers recreational activities and help with homework. School begins at 8:15am and ends at 3:50pm, so this program extends the school day from 7:00am to 6:00pm.

Christel House Academy. The mission of Christel House Academy is to provide "outstanding education to an underserved, inner-city population." It seeks to provide the academic skills necessary for higher education. It aims to equip students for life-long learning. It seeks to encourage civic, ethical and moral values, and to prepare students for becoming self-sufficient and productive members of society. Christel House Academy also addresses the need in Indianapolis for a "rigorous, high quality, college-preparatory charter" whose aim is to outperform the Indianapolis Public Schools (IPS) on key indicators of educational excellence, such as ISTEP pass rates, graduation and college attendance rates, and the like. Christel House Academy also provides a public school option for the several thousand students currently enrolled in private or home schools, "bringing many of these families back to public education."

Christel House Academy uses Plato Learning, a comprehensive web-based educational program in Reading and Mathematics. Incorporated within Plato are instructional strategies and unit assessments to insure students receive intensive remediation in areas of weakness. Plato is aligned with Indiana Standards, and helps teachers to develop integrated lessons and individualized student lesson plans. A primary characteristic of the CHA educational program is continuous assessment. In 2002-2003, students participated weekly in Plato's computerized assessments; in 2003-2004, CHA will administer the Plato assessments an additional two to three times each week to identify gaps in their learning.

Christel House Academy also runs a three week long, full day summer school program for remediation and acceleration. Students in second- through fifth-grade who are below grade-level are required to attend, but the program is open to all students who wish to participate.

Christel House also encourages student volunteerism. Students participated in several volunteer activities throughout the school such as; food donations to a local pantry and collecting teddy bears to give to nursing home residents. Those students then continued their relationship by exchanging letters with those nursing home residents.

Flanner House Elementary School. Flanner House Elementary School is the product of two related community institutions, Flanner House and Flanner House Academy. Flanner House is the oldest social service agency serving African-Americans in Indiana. It originated over 100 year ago to serve African-American families who migrated to Indianapolis from the South. Its largest program was Flanner House Academy, which was a private school serving over 90 pre-school to

Grade 3 students. Insofar as Flanner House and its Academy operate in one of the poorest areas of Indianapolis (Wadkins Park, Near Northwest), there was a determination to change the focus in order to permit a larger enrollment, including students whose families could not otherwise afford private tuition. Hence Flanner House sought a public school charter from the Mayor of Indianapolis, and the Academy became Flanner House Elementary School.

Flanner House Elementary School adopts a holistic approach to education. It aims to educate the "whole person," but also to provide educational and non-educational services that strengthen partnerships with families, services that "the traditional public school has not had the ability or capacity to offer" (p. 4). It aims to provide small classes and individualized attention. It mandates parental involvement. It provides family services on-site. It draws upon the leadership and experience of Flanner House entities, with the intention of creating "a replicable model that will create the highest standards for minority students, and hold them to consistently achieve these standards—something now sorely lacking in our city's public school system" (p. 1).

Flanner House has adopted the research-based Open Court Reading program for English Language Arts and the Everyday Mathematics program developed by the University of Chicago as their curriculum. Project-based learning is a central component in the school's educational program. Students in all grades are required to complete four projects each school year that involve research and oral and visual presentations.

In partnership with Clarian Health and the Indiana Black Expo, third graders were trained as peer leaders for smoking cessation. Flanner House offers before and after school programs that involve tutoring, homework help, and a "Drop Everything and Read" program, as well as structured recreational activities including sports and group games.

Mission and Curriculum: Ball State University's Charters

The following schools operate under a charter issued by Ball State University. Additional information about these charter schools can be found at this website: http://www.bsu.edu/teachers/charter/currentschs.html

Campagna Academy Charter School Campagna Academy, located in Schererville, includes grades 10 to 12. It is designed to serve youth who are at-risk for dropping out of high school. This includes youth who have been suspended or expelled; youth who are dependent upon substances or who are pregnant, or teen mothers who are solely responsible for their dependent child, or teens who have dropped so far behind as to lose hope. The Core Forty curriculum designed to meet state standards is supplemented with various support services. Students also earn credits for life skills, vocational training and work-study programs.

Community Montessori, Inc. The purpose of this school is to provide an education choice that is positive and child-centered. It is founded on the educational philosophy of Maria Montessori, and on constructivist approaches to schema development and education more generally. As such the school attempts to create an environment where learning happens naturally based on the learning styles of individual children. By the use of many tools, including technology, the child will be nurtured through eight constructs: social, emotional, physical, moral, intellectual, aesthetic, creative and school success.

The Montessori environment contains specifically designed manipulative materials for development that invite children to engage in learning activities of their own devising. With adult guidance, children make discoveries which promote self-discipline, concentration, motivation and love of life-long learning. Community Montessori, Inc. is located in Floyds Knobs.

Irvington Community School. The purpose of Irvington Community School is to educate children in kindergarten through grade 12 by providing a proven academic curriculum paired with an arts and music component, all within a safe environment that emphasizes achievement and character. It also aims to be a resource center for the Irvington area, bringing together diverse community groups and strengthening the Irvington community.

The school is premised on the claim that a well-conceived Internet-based educational program can boost student achievement and offer a new model for effective public education. It features extensive use of technology, a comprehensive instructional support system and strong commitment from teachers and parents.

It has also adopted a new curriculum delivery system ("K12") that has previously been used in home schools and virtual charter schools, making Irvington Community School the first brick-and-mortar school to pilot the K12 system in the United States. In its first year of operation Irvington Community School included kindergarten students through grade 5. Irvington also uses phonics for reading, basic math facts, and "read aloud" and written work for younger children. The K12 curriculum is standards-based and was designed to meet or exceed Indiana Standards.

The instructional portion of the school day begins at 8:00 a.m. and ends at 4:00 p.m. Additionally, independent study and enrichment is available between the hours of 7:00 a.m. and 8:00 a.m. After school, enrichment programs are available between 4:00 p.m. and 6:00 p.m.

New Community School. The New Community School provides a progressive educational alternative for students in the greater Lafayette area, including strong art and music programs. The curriculum is based on Indiana standards and additional standards adopted by the school. There is particular emphasis on language arts, math, science (including critical thinking and technology), social studies (including culture and community involvement), physical development, foreign languages, the arts (including arts and crafts, music, drama) and socio-emotional development. The curriculum for each classroom centers on themes, preferably generated by students, parents and teachers in the classroom. Classrooms are structured into multi-age groupings with heterogeneous abilities and developmental levels.

Timothy L. Johnson Academy. Located in Fort Wayne, the Timothy L. Johnson Academy serves students who are at-risk because of economic, educational or social disadvantage. The curriculum is designed to encourage teachers to work in those subject areas in which they are particularly well-qualified. Teachers are encouraged to work collaboratively to design and map a sequence of instruction that emphasizes four core content areas throughout the academic year. Moreover, the educational program emphasizes the performing arts as a way of addressing the needs of the whole child. It does this by providing music, art and drama as part of the regular curriculum. Timothy L. Johnson Academy also envisions grouping students into mixed-age classrooms to make allowances for different ability levels, and to have students move between classrooms to receive instruction in the various subjects. By mixing the grades, students will be able, it is thought, to retain a sense of age and grade identity, while profiting from instruction that is geared towards their deficiencies.

Veritas Academy. The educational curriculum at Veritas Academy closely follows the Core Knowledge Sequence developed by E.D. Hirsch, a national leader in educational reform. It involves teaching core knowledge in highly specified yearly sequences so that children have a coherent, cumulative foundation of knowledge and competencies. The core knowledge sequence consists of seven core subjects: language arts, American and world history, geography, mathematics, science and visual arts. These areas are supplemented with instruction in music, Latin, foreign language, character education and technology. A central focus of Veritas Academy is the creation of an inclusive community where students, parents, staff and the community are partners in the educational process and the achievement of all children. Veritas Academy is located in South Bend, and included students in kindergarten through grade 5 in its inaugural year.

Mission and Curriculum: Conversion Charter Schools

Two schools previously aligned with regular school corporations were "converted" to charter schools in accordance with provisions of Indiana's charter school legislation.

Options Charter School. Options Charter School is organized by Central Indiana Options in Education, Inc., and is sponsored by Carmel Clay Schools. It serves grades 9 - 12. According to its mission statement, Options Charter School "will provide a caring community to those students who are seeking an alternative to a traditional high school program. Our focus will be on educational success and health and wellness of each student. Our goal will be to develop responsible individuals who are skilled problem solvers and caring, productive citizens."

The educational program has three core components: (1) Students are expected to further their understanding of the Search Institute's "developmental assets." (2) Students are expected to demonstrate core academic proficiencies. (3) Students are expected to extend their knowledge and skills beyond the classroom. The coursework adheres to state academic standards, although teaching and assessment is non-traditional. Students are instrumental in designing and implementing the strategies that drive their own learning. They are exposed to laboratory assignments, experiential and project based learning, technology portfolios and practical demonstrations. Options Charter School's annual report can be accessed at this web address: http://www.optionsined.org/annual_report.pdf.

Signature School. The Signature School is the high school component of the Signature Learning Center in Evansville. It is sponsored by the Evansville-Vanderburgh School Corporation, and is the first conversion high school in Indiana. Signature originated as a shared time, half-day magnet school offering specialty classes to self-directed high school juniors and seniors that were unavailable in students' home schools. The passage of Indiana's charter school law facilitated the transition to full time status. The school features four separate programs designed for high achieving, self-motivated learners. These programs include Fine and Performing Arts, Liberal Arts, Science-Math, and Health Careers. All four programs have an international focus. All four programs emphasize rigorous standards and integrated technologies. Students learn accountability by assuming an active role in their education. They learn responsibility through community service. Additional information about Signature School can be found at this web address: http://www.signature.edu/index.html

Student Demographics and Teacher Characteristics

Table 1 presents information regarding school enrollment, student eligibility for free and reduced lunch, and student ethno-racial background among the various charter schools. As can be seen in Table 1, charter elementary schools in urban areas (Indianapolis, Fort Wayne) tend to be considerably larger than charter elementary schools in other parts of the state. The average enrollment of the Mayor's charters, for example, is 160 pupils, compared to 74 pupils in the Ball State charters (excluding the urban Timothy L. Johnson Academy).

The urban elementary charter schools not only have larger enrollments, they also have a larger percentage of students who qualify for free and reduced lunch, and a higher percentage of African-American pupils. On average nearly 3 out of 4 elementary school children who attend a charter school in Indianapolis are African-American. Fifty percent of these students qualify for free lunch. This "urban pattern" is also evident in Timothy L. Johnson Academy of Fort Wayne, where over 90% of the pupils are African American and 60% qualify for free lunch. It is clear that the availability of charter schools in urban settings gives poor and minority families an element of choice that is otherwise a prerogative only of families with greater financial means.

Table 1
Student Demographic Characteristics, by Charter School

			Free and Reduced Lunch			Ethnic Background					
	Grade	Total Enrollment	# Free	% Free	# Reduced	White	Black	Hispanic	Asian	Native	Multiracial
Mayor's Elementary Charters											
21st Century Charter School	K-7	117	34	29%	13	23.9%	61.5%	1.7%	0.9%	7.7%	4.3%
Christel House Academy	K-5	230	107	47%	34	24.3%	62.6%	9.6%	0.4%	--	3.0%
Flanner House Elementary	K-5	132	98	74%	9	0	100%	0	0	0	0
Ball State's Elementary Charters											
Community Montessori	PK-5	75	0	0	0	98.7%	1.3%	0	0	0	0
Irvington Community	K-6	118	14	12%	11	78.8%	15.3%	0	0	0	5.9%
New Community	K-6	38	0	0	0	81.6%	0	0	0	5.3%	13.2%
Timothy L. Johnson	K-6	174	105	60%	17	6.3%	92.5%	0	0.6%	0.6%	0
Veritas Academy	K-5	63	0	0	0	54%	25.4%	0	0	1.6%	19%
Charter High Schools											
Campagna Academy (BSU)	9-12	13	0	0	0	15.4%	76.9%	0	0	0	7.7%
Options Charter School	9-12	104	0	0	0	94.2%	4.8%	0	0	0	1.0%
Signature School	9-12	207	0	0	0	93.2%	2.9%	0	3.9%	0	0

The remaining Ball State elementary charter schools are predominantly white, ranging from 54% (Veritas Academy in South Bend) to 98.7% (Community Montessori in Floyds Knobs), with relatively few students qualifying for free or reduced lunch.

The charter high schools vary greatly in enrollment and mission. Campagna Academy, in its first year of operation, had just 13 mostly African-American pupils all of whom had significant child-care responsibilities. In contrast, Options and Signature School had much higher enrollments (N = 104 and 207, respectively) of mostly White pupils.

Table 2 reports teacher characteristics by charter school. The typical charter school teacher in Indiana is 36 years old, has 7 years teaching experience, and is paid $34,000 a year. Of course, these means mask important sources of variation. As one can see in Table 2, average teacher salary is commensurate with average years of teaching experience, with the possible exception of New Community School. Moreover, on average the salaries of charter high school teachers (M = $40,748) are larger than the salaries of charter elementary teachers (M = $31, 475), and teachers in the Mayor's charter elementary schools (M = $35, 827) are paid more than are teachers in Ball State University's charter schools (M = $28, 864).

Table 2 also reports average students per teacher. Once more there is significant variation, ranging from 7.6 (New Community) to 33 (Flanner House) students per teacher. In general, the number of students per teacher is larger in the Mayor's charter elementary schools (M = 23) than in the Ball State charter elementary schools (M = 13), and higher in the four urban elementary schools (M = 23) than in the other elementary schools (M = 16).

It should be kept in mind, however, that these data do not tell the whole story about class size and pupil-teacher ratio. For example, even in charters with large class size (e.g., Flanner House), there are often other adults in the classrooms functioning as teacher aides. Hence the actual pupil-teacher ratio is undoubtedly more favorable than these numbers indicate. Of course, having an additional adult in a classroom does little to advance the cause of learning unless his or her principal duties are directly related to the instructional agenda of the classroom. Future research will systematically explore whether charter schools use other adults in the classroom, and how these aides are utilized (e.g., as tutors or for instructional purposes vs. non-instructional purposes), in order to gauge class size and pupil-teacher ratio effects more accurately.

School Governance and Contact Information.

Appendix A contains information regarding the location of schools, school leadership and contact information.

Table 2
Teacher Characteristics by Charter School

	Full Time Equivalent	Mean Age	Mean Years Experience	Mean Salary	Mean Supplemental	Students per Teacher
Mayor's Charters						
21st Century	5.8	45.5	14.9	$44,991	0	20.3
Christel House	14.0	30.5	2.9	$29, 564	0	16.4
Flanner House	4.0	43.3	14.3	$32,925	0	33.0
Ball State Charters						
Community Montessori	5.0	25.2	2.0	$27,319	$400	15.0
Irvington	7.4	28.5	3.5	$34,111	$122	16.0
New Community	5.0	38.0	5.4	$18,160	0	7.6
Timothy L. Johnson	8.0	33.0	8.6	$31,000	0	21.7
Veritas Academy	7.2	30.9	3.2	$33,730	0	8.8
Charter High Schools						
Campagna Academy (BSU)	1.5	39	4.0	$39,000	0	8.7
Options	6.0	38	8.5	$41,675	$1,000	17.3
Signature School	21.0	44.5	14	$41,571	$420	9.9

Chapter 3

District Report of Measures of Academic Progress (MAP)

In the spring of the inaugural 2002-2003 academic year children sat for the Northwest Evaluation Association's computer-adapted assessment called Measures of Academic Progress (MAP). MAP was administered in grades 2-to-N in every charter school in Indiana with the exception of Campagna Academy. As noted previously there is a commitment to use MAP as the common metric among charter schools for purposes of accountability and continuous improvement, and to administer the assessment at least twice a year in order to measure intra-individual growth over the course of the school year.

The first three tables provide a broad overview of mean achievement (RIT) scores by grade in Language Usage (Table 3), Mathematics (Table 4) and Reading (Table 5) across the charter elementary schools Table 6 presents similar information for the charter high schools.

Three Ways to Evaluate Charter School Achievement Data

<u>Percentile Norms</u>. One way to evaluate these data is to compare charter school achievement against national Achievement Level Test percentile norms. Appendix B can be use for this purpose. Here one finds goal score translation charts that break down RIT goal scores into Hi, Lo and Av percentiles. Scores that fall into the Lo category are equal to percentile scores < 33; scores that fall into the Hi category are equal to percentile scores > 66; and scores that fall within the Av category are equal to percentile scores between 33 and 66. Table 6 is a summary of the charter elementary school data compared against Hi, Lo and Av spring norms. Table 7 reports charter high school data compared against spring norms.

<u>National Grade Level Means</u>. A second way to evaluate the data of Tables 3 to 5 is to compare them to grade level RIT scores of a recent NWEA national norming study. These norms are reported in Appendix C.

<u>Indiana Grade Level Means</u>. A third way to evaluate the data of Tables 3 to 5 is to compare them to grade level RIT scores of a recent norming study that includes only Indiana school children. The Indiana norms are reported in Appendix D.

Table 3: Language Usage
Means (M) and Standard Deviations (SD) of RIT Scores for Language Usage, by Elementary Grade and Charter School

Charter Elementary Schools	Grade 2		Grade 3		Grade 4		Grade 5		Grade 6		Grade 7	
Mayor's Charters	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
21st Century	178.4	14.7	197.3	10.9	193.1	14.0	209.1	9.0	212.2	14.4	--	--
Christel House	179.5	16.6	190.5	16.1	198.9	12.4	--	--	--	--	--	--
Flanner House	188.4	11.5	199.2	7.9	202.8	7.9	--	--	--	--	--	--
Ball State University Charters												
Community Montessori	189.2	18.6	204.6	17.5	203.0	10.5	--	--	--	--	--	--
Irvington	188.6	14.7	199.3	10.7	210.1	10.2	210.9	17.0	--	--	--	
New Community	185.0	17.0	203.0	8.5	200.8	15.2	204.0	12.7	--	--	221.5	12.0
Timothy L. Johnson	185.6	16.4	184.3	13.8	196.4	16.2	198.3	16.4	--	--	--	--
Veritas Academy	194.3	18.2	205.0	12.3	215.2	11.2	212.3	9.1	--	--	--	--

Table 4: Mathematics
Means (M) and Standard Deviations (SD) of RIT Scores for Mathematics, by Elementary Grade and Charter School

Charter Elementary Schools	Grade 2		Grade 3		Grade 4		Grade 5		Grade 6		Grade 7	
Mayor's Charters	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
21st Century	179.5	9.7	194.9	7.7	191.8	10.7	210.7	12.4	209.0	15.4	--	--
Christel House	176.5	11.6	188.8	13.6	197.4	12.4	--	--	--	--	--	--
Flanner House	182.4	13.0	199.8	6.2	199.3	9.4	--	--	--	--	--	--
Ball State University Charters												
Community Montessori	183.4	19.4	201.5	17.7	203.7	11.2	--	--	--	--	--	--
Irvington	184.8	13.2	193.5	11.8	211.5	11.9	208.6	16.1	--	--	--	--
New Community	184.5	20.5	202.5	3.5	200.7	13.9	208.5	10.6	--	--	230.5	10.6
Timothy L. Johnson	182.2	14.7	187.1	12.5	195.8	11.78	196.8	19.5	--	--	--	--
Veritas Academy	189.5	13.6	203.3	11.8	211.7	7.7	209.8	5.9	--	--	--	

Table 5: Reading

Means (M) and Standard Deviations (SD) of RIT Scores for Reading, by Elementary Grade and Charter School

Charter Elementary Schools	Grade 2		Grade 3		Grade 4		Grade 5		Grade 6		Grade 7	
Mayor's Charters	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
21st Century	174.1	17.0	194.9	10.8	194.3	13.0	203.7	10.9	210[a]	n/a	--	--
Christel House	177.2	14.9	183.8	16.4	193.2	13.2	--	--	--	--	--	--
Flanner House	181.2	11.9	194.6	7.6	199.2	9.7	--	--	--	--	--	--
Ball State University Charters												
Community Montessori	184.5	21.4	200.6	21.8	201.0	13.2	--	--	--	--	--	--
Irvington	182.6	15.4	196.2	10.3	204.7	11.6	204.1	16	--	--	--	--
New Community	186.5	27.6	192.0	7.1	191.6	23.6	201.5	7.8	--	--	--	--
Timothy L. Johnson	176.3	17.5	184.3	13.2	185.7	16.2	179.0	22.0	--	--	--	--
Veritas Academy	191.5	18.8	201.3	15.5	211.5	10.0	191.5	15.4	--	--	--	--

Table 6: Language Usage

Means (M) and Standard Deviations (SD) of RIT Scores for Language Usage, Mathematics and Reading, by Grade (N per grade) and Charter High School

	Charter High Schools[a]					
	Options			**Signature School**		
Language Usage	**Mean**	**SD**	**N**	**Mean**	**SD**	**N**
Grade 9	218.3	9.8	8	233.5	7.8	52
Grade 10	223.6	9.7	21	236.9	7.3	39
Grade 11	222.7	8.6	35	241.6	9.9	34
Grade 12	228.0	21.2	2	--	--	--
Mathematics						
Grade 9	227.1	24.4	9	247.6	12.9	41
Grade 10	225.6	18.3	20	256.0	9.3	30
Grade 11	231.4	15.3	35	256.8	13.9	32
Grade 12	237.0	24.0	2	--	--	--
Reading						
Grade 9	208.7	19.5	9	237.9	7.1	54
Grade 10	221.2	11.6	19	239.9	6.9	41
Grade 11	219.5	14.0	34	243.1	6.8	39
Grade 12	228.0	29.7	2	--	--	–

[a]These data should be interpreted in light of the mission of each school and the target population of students that each school serves. See School Profiles for a description of each school

Table 7

Charter Elementary School Achievement Scores Compared to Hi, Lo and Av Percentiles, by Grade and Goal Area

Charter Elementary Schools	**2nd-Grade**			**3rd-Grade**			**4th-Grade**			**5th-Grade**		
Mayor's Charters	**L**	**M**	**R**	**L**	**M**	**R**	**L**	**M**	**R**	**L**	**M**	**R**
21st Century	Lo	Lo	Lo	Av	Lo	Av	Lo	Lo	Lo	Av	Av	Lo
Christel House Academy	Lo	Lo	Lo	Lo	Lo	Lo	Lo	Lo	Lo	--	--	--
Flanner House Elementary	Av	Lo	Av	Av	Av	Av	Av	Lo	Lo	–	–	--
Ball State's Charters												
Community Montessori	Av	Av	Av	Av	Av	Av	Av	Av	Av	--	--	--
Irvington Community	Av	Av	Av	Av	Lo	Av	Av	Av	Av	Av	Lo	Lo
New Community	Av	Av	Av	Av	Av	Av	Av	Lo	Lo	Lo	Lo	Lo
Timothy L. Johnson	Av	Lo	Lo	Lo	Lo	Lo	Lo	Lo	Lo	Lo	Lo	Lo
Veritas Academy	Av	Av	Av	Av	Av	Av	Hi	Av	Av	Av	Lo	Lo

L = Language Usage, M = Mathematics, R = Reading

Table 8

Charter High School Achievement Scores Compared to Hi, Lo and Av Percentiles, By Grade and Goal Area

Charter High Schools	**9th-Grade**			**10th-Grade**			**11th-Grade**			**12th-Grade**		
	L	**M**	**R**	**L**	**M**	**R**	**L**	**M**	**R**	**L**	**M**	**R**
Signature School	Hi	Hi	Hi	Hi	Hi	Hi	Hi	Hi	Hi	--	--	--
Options	Av	Av	Lo	Av	Lo	Lo	Av	Lo	Lo	Av	Lo	Av

L = Language Usage, M = Mathematics, R = Reading

Note. 11th- and 12th-grade percentiles are based on 10th-grade norms

Comparison of Elementary Charters with RIT Norms.

By using the national (Appendix C) and Indiana (Appendix D) grade-level RIT norms, one can get a sense of how children in the Indiana charters are doing with respect to these reference groups. For example, consider the norms for Language Usage reported in Table 9.

Table 9: Language

A Comparison of Charter Elementary School Language Usage Achievement with National and Indiana Grade Level RIT Norms (Spring Norms)

	(Spring) Grade Level RIT Norms							
	Grade 2		**Grade 3**		**Grade 4**		**Grade 5**	
	National	**Indiana**	**National**	**Indiana**	**National**	**Indiana**	**National**	**Indiana**
Mayor's Charters	**189.0**	**192.4**	**199.0**	**202.7**	**205.5**	**208.8**	**211.5**	**214..3**
21st Century	178.4		197.3		193.1		209.1	
Christel House	179.5		190.5		198.9		--	
Flanner House	188.4		199.2		202.8		--	
BSU Charters								
Community Montessori	189.2		204.6		203.0		--	
Irvington	188.6		199.3		210.1		210.9	
New Community	185.0		203.0		200.8		204.0	
T.L. Johnson	185.6		184.3		196.4		198.3	
Veritas Academy	194.3		205.0		215.2		212.3	

As can be seen in Table 9, only one charter (Veritas Academy) exceeds grade level national and Indiana norms for Language Usage at each grade. Among the Ball State charters, Irvington exceeds national and Indiana norms at Grade 3, and approximates these norms at grades 2, 3 and 5. Similarly, Community Montessori matches or exceeds at least one of the norms at Grade 2 and Grade 3, and is within 2 and 5 RIT points of these norms at Grade 4. Timothy L. Johnson is 4 RIT points off the national mark and 7 points off the Indiana mark at Grade 2, although the disparity widens at subsequent grades.

Among the Mayor's charters, 21st-Century approximates the national and Indiana norms at Grade 3 and Grade 5, but is 11 to 14 RIT points off the mark at Grade 2 and 12 to 15 RIT points off the mark at Grade 4. Christel House is 7 to 10 RIT points off the national norms across grades 2 to 4, and 10 to 13 points off the Indiana norms. Finally, Flanner House approximates the national and Indiana norms at each grade.

Table 10

A Comparison of Charter Elementary School Mathematics Achievement with National and Indiana Grade Level RIT Norms (Spring Norms)

	(Spring) Grade Level RIT Norms							
	Grade 2		Grade 3		Grade 4		Grade 5	
	National	Indiana	National	Indiana	National	Indiana	National	Indiana
Mayor's Charters	**188.2**	**189.8**	**199.7**	**201.9**	**208.6**	**210.1**	**216.4**	**218.4**
21st Century	179.5		194.9		191.8		210.7	
Christel House	176.5		188.8		197.4		--	
Flanner House	182.4		199.8		199.3		--	
BSU Charters								
Community Montessori	183.4		201.5		203.7		--	
Irvington	184.8		193.5		211.5		208.6	
New Community	184.5		202.5		200.7		208.5	
T.L. Johnson	182.2		187.1		195.8		196.8	
Veritas Academy	189.5		203.3		211.7		209.8	

Table 10 reports similar data for Mathematics achievement. As can be seen, each of the Ball State charters matches or exceeds national and state standards for at least one grade, with the exception of Timothy L. Johnson Academy. Veritas Academy matches or exceeds national and Indiana norms for Mathematics at all grades except Grade 5. Among the remaining Ball State charters, Community Montessori matches or exceeds third-grade norms, and is 5-6 points off the national norms and 6-7 points off Indiana norms at the remaining grades. Irvington exceeds national and state norms at Grade 4, but is 4-8 points off the national norms and 5-10 points off the Indiana norms at the other grades. New Community exceeds national and state norms for Grade 3, but is 4-8 points off the national norms and 5-10 points off the state norms at the other grades. Finally, Timothy L. Johnson is 6-20 points off the national norms in mathematics and 6-22 points off the Indiana norms across grades 2 to 5.

Among the Mayor's charters, 21st Century is 4-17 points off the national norms in mathematics, and 7-19 points off state norms across grades 2 to 5. Christel House Academy is 11-12 points below the national norms across grades 2 to 4 in mathematics, and 13 points below state norms across these grades. Finally, Flanner House approximates national and state norms at Grade 3, and is 6-9 points off the national norms and 7-11 points below Indiana norms at the other grades.

Table 11
A Comparison of Charter Elementary School Reading Achievement with National and Indiana Grade Level RIT Norms (Spring Norms)

	(Spring) Grade Level RIT Norms							
	Grade 2		**Grade 3**		**Grade 4**		**Grade 5**	
	National	**Indiana**	**National**	**Indiana**	**National**	**Indiana**	**National**	**Indiana**
Mayor's Charters	**186.6**	**188.2**	**197.2**	**199.1**	**204.3**	**205.8**	**210.3**	**211.6**
21st Century	174.1		194.9		194.3		203.7	
Christel House	177.2		183.8		193.2		--	
Flanner House	181.2		194.6		199.2		--	
BSU Charters								
Community Montessori	184.5		200		201		--	
Irvington	182.6		196.2		204.7		204.1	
New Community	186.5		192.0		191.6		201.5	
T. L. Johnson	176.3		184.3		185.7		179.0	
Veritas Academy	191.5		201.3		211.5		191.5	

Table 11 compares charter elementary school achievement in Reading with national and Indiana RIT norms across grade. As with mathematics achievement, each of the Ball State charter elementary schools matches or exceeds national or state norms for at least one grade, with the exception of Timothy L. Johnson Academy. Veritas Academy exceeds national and Indiana norms for Reading at every grade except Grade 5. Community Montessori exceeds national and state reading norms at Grade 3, and falls 2-3 points off the national norms and 4 points off state norms at Grades 2 and 4, respectively. Irvington matches or approximates national and state reading norms at Grade 4, and is 1-6 points off the national mark and 3-7 points below the state norms at other grade levels. New Community School matches or approximates national and state norms at Grade 2, and is 5-13 points below national norms and 7-14 points below Indiana norms for the remaining grades. Finally, Timothy L. Johnson Academy is 10-31 points below national norms and 12-32 points below Indiana norms.

With respect to the Mayor's charters, 21st Century Academy falls 3-12 points below the national means in reading, and 5-14 points below Indiana norms. Christel House Academy falls 9-14 points below the national means in reading, and 12-16 points below state norms. Finally, Flanner House falls 5-7 points below both the national and state norms.

Interpretive Cautions. This is the first year of charter school operations in Indiana. Consequently, the NWEA assessment is baseline data for gauging intra-individual growth in learning as children matriculate through the charter schools. It is premature to draw any conclusion with respect to school accountability. It is premature to draw conclusions about "charter school effectiveness." Moreover, any interpretation of achievement patterns will be confounded necessarily by selection effects.

Indeed, one gets a sense of what some charter schools are up against when one considers a pattern that is evident in Tables 9-11. With some exceptions, the disparity between actual achievement in any goal area (language usage, mathematics, reading) and the national and state norms increases, sometimes dramatically, as one moves to the higher grades. Table 12 is illustrative.

Table 12

RIT Score Difference Between Actual Reading Achievement and National and Indiana Norms in Four Urban Charter Elementary Schools

	Grade 2		Grade 3		Grade 4		Grade 5	
Urban Charters	National	Indiana	National	Indiana	National	Indiana	National	Indiana
21st Century	-12	-14	-3	-5	-10	-11	-7	-8
Christel House	-9	-11	-14	-16	-11	-12	--	--
Flanner House	-5	-7	-3	-5	-5	-6	--	--
T.L. Johnson	-10	-12	-13	-15	-19	-20	-31	-32

The most striking pattern is in Timothy L. Johnson Academy, where the disparity between reading achievement and national and state norms at Grade 4 is nearly twice the disparity at Grade 2. The fifth-grade disparity is nearly three times what it is at second-grade. A somewhat similar pattern, although less dramatic, is evident for Christel House Academy. Clearly students in the later elementary grades come to the charters with a long history of cumulative failure in reading that will be a challenge to surmount.

Cause for Optimism. Two additional points should be made regarding the data reported in the preceding tables. According to the *RIT Scale Norms for Indiana,* from fall-to-spring one should expect average gains of 9 RIT points in reading, 8.5 points in language usage and 10 points in mathematics at the end of third grade. At the end of fourth-grade average growth is 6.8 RIT points in reading, 5.8 points in language usage and 8.8 points in mathematics. At the end of fifth-grade average observed growth is 5.9 points in reading, 5.2 points in language usage and 9 points in mathematics. These average growth indicators are well within the reach of many charters, particularly at the earliest grades, providing significant opportunities for closing the gap between actual achievement in these goal areas and national and Indiana grade level norms.

A second cause for optimism is evident in the pattern of test results for Flanner House. Students at Flanner House score closest to the national and state grade-level norms for all achievement areas than any urban charter elementary school in Indiana (Table 11). Flanner House students approximate state and national grade level norms in mathematics at Grade 3 (Table 10). They approximate state and national grade level norms in language usage at all grades (Table 9). They score at the Av percentile ranks in second-grade language and reading; in all goal areas at third-grade; and in fourth-grade language usage (Table 7). This pattern of achievement at Flanner House is particularly noteworthy in light of its demographic profile. Flanner House is located in one of the poorest (and most "crime-ridden") areas of Indianapolis, serving a student population that is 100% African-American with the largest percentage of students of any charter school qualifying for free or reduced lunch. Clearly the risk profile of these youngsters could not be more striking, and yet the pattern of achievement is most encouraging.

The Charter High Schools.

Grade-level achievement in the charter high schools is compared against national and Indiana norms for reading (Table 13), language usage (Table 14) and mathematics (Table 15). Students at the Signature School exceeded national and state grade level norms in all grades in all three achievement goal areas (reading, language usage, and mathematics). The pattern was more variable at Options. Students in Grade 12 approximated national and state norms in reading and language usage; students in Grade 11 approximated national and state norms in language usage; students in Grade 10 approximated state and national norms in language and reading.

Table 13: Reading A Comparison of Charter High School Reading Achievement with National and Indiana Grade Level RIT Norms (Spring Norms)								
	(Spring) Grade Level RIT Norms							
	Grade 9		**Grade 10**		**Grade 11[a]**		**Grade12[a]**	
Charter High Schools	**National**	**Indiana**	**National**	**Indiana**	**National**	**Indiana**	**National**	**Indiana**
	224.2	**223.8**	**224.3**	**225.8**				
Signature	237.9		239.9		243.1		--	
Options	208.7		221.2		219.5		228	

[a]NWEA does not norm MAP beyond 10th-grade

Table 14: Language A Comparison of Charter High School Language Usage Achievement with National and Indiana Grade Level RIT Norms (Spring Norms)								
	(Spring) Grade Level RIT Norms							
	Grade 9		**Grade 10**		**Grade 11[a]**		**Grade12[a]**	
Charter High Schools	**National**	**Indiana**	**National**	**Indiana**	**National**	**Indiana**	**National**	**Indiana**
	223.4	**223.4**	**222.5**	**225.2**				
Signature	233.5		236.9		241.6		--	
Options	218.3		223.6		222.7		228.0	

[a]NWEA does not norm MAP beyond 10th-grade

Table 15: Mathematics A Comparison of Charter High School Mathematics Achievement with National and Indiana Grade Level RIT Norms (Spring Norms)								
	(Spring) Grade Level RIT Norms							
	Grade 9		**Grade 10**		**Grade 11[a]**		**Grade12[a]**	
Charter High Schools	**National**	**Indiana**	**National**	**Indiana**	**National**	**Indiana**	**National**	**Indiana**
	240.9	**235.2**	**248.2**	**239.1**				
Signature	247.6		256.0		256.8			
Options	227.1		224		231.4		237.0	

Detailed Summary of Achievement in Specific Goal Areas

The following tables present a detailed breakdown of academic achievement in each charter school by grade, and by specific components of each achievement goal area. The advantage of breaking down the data in this way is that it allows one to discern specific areas of strength and weakness in component skill areas.

Note that some performance goal strands (subtests) in the tables that follow are highlighted as possible areas of concern (bold italics) or of relatively strong performance (bold underline). Goal strands that are an area of concern or strength are identified on the basis of the grade-level median. Performance that is three points below the median is flagged as a potential area of concern. Performance that is three points above the grade-level median is a area of relative strength. These data are presented for informational purposes without further commentary.

Language Usage Achievement. The following tables present language usage achievement for Grade 2 (Table 16), Grade 3 (Table 17), Grade 4 (Table 18), Grade 5 (Table 19) and Grade 6 (Table 20). These tables report language achievement for each charter elementary school by specific goal performance area. For the language arts assessment this includes Writing Strategies and Skills, Grammar and Usage and Mechanics of Writing.

As in the preceding tables, areas of concern (bold italics) or of relatively strong performance (bold underline) are indicated. Performance that is three RIT or more points below the grade-level median is flagged as a potential area of concern. Performance that is three RIT points or more above the grade-level median is a area of relative strength.

Table 16: Second-Grade Language
Second-Grade Language Usage Achievement by Specific Goal Area and Charter Elementary School

		Total Language Usage			**Specific Language Usage Goal Area**					
Charter Elementary Schools	**N**	**Mean RIT**	**SD**	**Median**	**Writing Strategies & Skills**		**Grammar & Usage**		**Mechanics of Writing**	
Mayor's Charters					M	SD	M	SD	M	SD
21st Century	15	178.4	14.7	176	175.9	16.1	179.9	14.7	178.9	16.0
Christel House	44	179.5	16.6	183	178.2	16.8	179.8	16.9	179.5	18.7
Flanner House	31	188.4	11.5	188	186.5	13.5	188.2	10.8	190.4	12.8
Ball State Charters										
Community Montessori	13	189.2	18.6	195	188.5	19.0	192.0	22.1	187.8	16.7
Irvington	18	188.6	14.7	192	188.3	15.6	190.8	14.6	187.1	16.1
New Community	2	185.0	17.0	185	***181.0***	28.3	<u>**194.0**</u>	9.9	180.0	11.3
Timothy L. Johnson	35	185.6	16.4	186	183.0	15.9	186.3	18.8	186.0	22.2
Veritas Academy	11	194.3	18.2	194	194.7	19.0	195.4	18.9	191.4	19.9

Bold Italics: Area of Concern (3 RIT points or more below grade-level median) <u>**Bold Underline**</u>: Area of Strength (3 RIT points or more above the grade-level median)

Table 17: Third-Grade Language

Third-Grade Language Usage Achievement by Specific Goal Area and Charter Elementary School

		Total Language Usage			**Specific Language Usage Goal Areas**					
Charter Elementary Schools	**N**	**Mean RIT**	**SD**	**Median**	**Writing Strategies & Skills**		**Grammar & Usage**		**Mechanics of Writing**	
Mayor's Charters					M	SD	M	SD	M	SD
21st Century	15	197.3	10.9	201	197.1	12.2	197.2	12.6	198.2	11.2
Christel House	38	190.5	16.1	195	188.6	17.1	191.4	18.0	191.2	15.4
Flanner House	17	199.2	7.9	203	198.7	8.5	198.9	10.9	199.9	7.0
Ball State Charters										
Community Montessori	9	204.6	17.5	205	206.8	16.9	205.4	19.1	202.1	17.8
Irvington	19	199.3	10.7	199	198.4	11.8	201.7	12.1	197.9	11.9
New Community	2	203.0	8.5	203	***198.0***	8.5	203.5	7.8	<u>**206.5**</u>	9.2
Timothy L. Johnson	19	184.3	13.8	189	182.4	14.4	184.5	16.3	185.6	14.3
Veritas Academy	12	205.0	12.3	203	206.3	13.0	205.3	11.5	203.8	13.6

Bold Italics: Area of Concern (3 RIT points or more below grade-level median

<u>**Bold Underline**</u>: Area of Strength (3 RIT points or more above the grade-level median)

Table 18: Fourth-Grade Language

Fourth-Grade Language Achievement by Specific Goal Area and Charter Elementary School

		Total Language Usage			**Specific Language Usage Goal Area**					
Charter Elementary Schools	**N**	**Mean RIT**	**SD**	**Median**	**Writing Strategies & Skills**		**Grammar & Usage**		**Mechanics of Writing**	
Mayor's Charters					M	SD	M	SD	M	SD
21st Century	14	193.1	14.0	197	192.9	14.9	193.1	16.6	194.1	13.9
Christel House	39	198.9	12.4	197	198.5	13.4	198.5	13.6	199.6	13.2
Flanner House	23	202.8	7.9	202	202.8	10.0	203.0	7.6	202.4	10.4
Ball State Charters										
Community Montessori	7	203.0	10.5	208	<u>**207.3**</u>	9.2	<u>**206.1**</u>	16.4	***195.9***	10.1
Irvington	19	210.1	10.2	210	208.3	11.7	212.8	11.4	209.0	11.4
New Community	6	200.8	15.2	202	199.8	17.3	200.0	12.0	202.2	17.3
Timothy L. Johnson	27	196.4	16.2	198	195.4	17.3	197.1	15.7	197.1	17.5
Veritas Academy	6	215.2	11.2	214	213.5	9.4	216.0	11.5	216.3	13.7

Bold Italics: Area of Concern (3 or more RIT points below grade-level median)

<u>**Bold Underline**</u>: Area of Strength (3 RIT points or more above the grade-level median)

Table 19: Fifth-Grade Language

Fifth-Grade Language Usage Achievement by Specific Goal Area and Charter Elementary School

		Total Language Usage			**Specific Language Usage Goal Area**					
Charter Elementary Schools	**N**	**Mean RIT**	**SD**	**Median**	**Writing Strategies & Skills**		**Grammar & Usage**		**Mechanics of Writing**	
Mayor's Charters					M	SD	M	SD	M	SD
21st Century	19	209.1	9.0	206	206.7	11.5	211.3	8.7	209.3	10.6
Christel House	0	--	--	--	--	--	--	--	--	--
Flanner House	0	--	--	--	--	--	--	--	--	--
Ball State Charters										
Community Montessori	0	--	--	--	--	--	--	--	--	
Irvington	17	210.9	17.0	214	211.8	16.1	210.6	18.7	210.4	18.6
New Community	2	204.0	12.7	204	***195.5***	4.9	**<u>211.5</u>**	24.7	205.0	9.9
Timothy L. Johnson	9	198.3	16.4	198	196.1	20.3	196.3	15.6	197.3	14.1
Veritas Academy	4	212.3	9.1	215	211.3	13.6	211.5	9.1	214.0	8.0

Bold Italics: Area of Concern (3 or more RIT points below grade-level median) **<u>Bold Underline</u>**: Area of Strength (3 RIT points or more above the grade-level median)

Table 20: Sixth-Grade Language Sixth-Grade Language Usage Achievement by Specific Goal Area and Charter Elementary School										
		Total Language Usage			Specific Language Usage Goal Area					
Charter Elementary Schools	**N**	**Mean RIT**	**SD**	**Median**	**Writing Strategies & Skills**		**Grammar & Usage**		**Mechanics of Writing**	
Mayor's Charters					M	SD	M	SD	M	SD
21st Century	17	212.2	14.4	217	212.6	15.9	213.1	16.3	211.4	13.0

Bold Italics: Area of Concern (3 or more RIT points below grade-level median)

<u>Bold Underline</u>: Area of Strength (3 RIT points or more above the grade-level median)

Mathematics Achievement. The following tables present mathematics achievement for Grade 2 (Table 21), Grade 3 (T able 22), Grade 4 (Table 23), Grade 5 (Table 24) and Grade 6 (Table 25).

These tables report achievement for each charter elementary school by specific goal performance area. For the mathematics assessment this includes Number Sense (Num Sense), Computation (Comput), Algebraic Functions (Algeb Func), Geometry (Geom), Measurement (Meas), Data Analysis, Statistics, Probability (Data Anal/Stat/Prob), and Problem-Solving (Prob Solv).

As in the preceding tables, areas of concern (bold italics) or of relatively strong performance (bold underline) are indicated. Performance that is three RIT or more points below the grade-level median is flagged as a potential area of concern. Performance that is three RIT points or more above the grade-level median is a area of relative strength.

Table 21: Second-Grade Mathematics

Second-Grade Mathematics Achievement by Specific Goal Areas and Charter Elementary School

		Total Mathematics			**Specific Mathematics Goal Area**													
	N	**Mean RIT**	**SD**	**Med.**	**Num Sense**		**Comput**		**Algeb Func**		**Geom**		**Meas**		**Data Anal / Stat/Prob**		**Prob.Solv**	
Mayor's Charters					**M**	**SD**	**M**	**SD**	**M**	**SD**	**M**	**SD**	**M**	**SD**	**M**	**SD**	**M**	**SD**
21st Century	15	179.5	9.7	181	175.7	8.7	179.0	12.1	181.8	12.8	186.4	14.3	180.5	10.1	177.9	14.9	173.9	17.7
Christel House	44	176.5	11.6	176	175.7	14.5	***172.0***	12.2	176.1	18.4	<u>**185.1**</u>	18.5	177.0	15.4	175.7	18.1	***171.3***	17.6
Flanner House	32	182.4	13.0	183	182.2	17.9	***177.8***	17.7	182.0	15.4	<u>**188.5**</u>	15.5	<u>**185.5**</u>	14.4	181.0	13.3	***177.9***	17.6
Ball State Charters																		
Community Montessori	12	183.4	19.4	186	***176.5***	23.7	***174.8***	16.0	184.3	21.9	<u>**188.8**</u>	20.3	<u>**188.4**</u>	21.8	185.4	25.1	182.6	21.7
Irvington	18	184.8	13.2	188	187.6	13.2	***176.7***	15.4	***181.4***	21.5	<u>**190.2**</u>	15.5	184.3	16.4	185.6	19.3	184.4	13.7
New Community	2	184.5	20.5	184	183.0	18.4	<u>**188.0**</u>	11.3	184.5	14.8	<u>**195.5**</u>	48.8	<u>**187.5**</u>	26.2	185.5	16.3	183.5	30.4
TL Johnson	38	182.2	14.7	184	181.8	18.4	***177.9***	17.6	182.1	18.0	<u>**185.4**</u>	17.2	184.7	15.4	182.4	15.9	***179.1***	17.0
Veritas	11	189.6	13.6	194	189.1	16.3	***183.7***	13.2	189.2	19.2	<u>**193.8**</u>	14.0	192.1	15.4	189.5	16.5	187.3	20.4

Bold Italics: Area of Concern <u>**Bold Underline**</u>: Area of Strength (3 RIT points or more above the grade-level median)

Table 22: Third-Grade Mathematics

Third-Grade Mathematics Achievement by Specific Goal Areas and Charter Elementary School

		Total Mathematics			**Specific Mathematics Goal Area**													
	N	**Mean RIT**	**SD**	**Med.**	**Num Sense**		**Comput**		**Algeb Func**		**Geom**		**Meas**		**Data Anal / Stat/Prob**		**Prob.Solv**	
Mayor's Charters					**M**	**SD**	**M**	**SD**	**M**	**SD**	**M**	**SD**	**M**	**SD**	**M**	**SD**	**M**	**SD**
21st Century	15	194.9	7.7	197	195.5	10.8	***189.3***	11.8	**198.3**	18.4	197.9	9.5	193.6	11.4	195.3	15.9	192.5	14.0
Christel House	38	188.8	13.6	188	188.4	18.0	***184.2***	15.2	189.4	17.8	**192.3**	13.7	**193.3**	16.1	188.4	18.3	***183.1***	16.9
Flanner House	18	199.8	6.2	200	199.2	10.5	199.6	17.1	**205.5**	11.5	200.6	12.2	***196.4***	15.5	199.4	6.6	198.3	11.5
Ball State Charters																		
Community Montessori	10	201.5	17.7	201	201.6	23.4	***189.9***	16.7	200.3	19.4	**212.6**	21.4	204.2	21.8	202.0	20.7	201.6	23.9
Irvington	19	193.5	11.8	193	***188.8***	14.2	***189.8***	19.1	192.0	18.8	195.7	16.9	193.2	13.7	195.9	17.7	192.5	16.1
New Community	2	202.5	3.5	202	**205.5**	7.8	204.0	8.5	***191.0***	4.2	204.0	17.0	**208.5**	4.9	***195.0***	2.8	**207.0**	1.4
TL Johnson	19	187.1	12.5	191	186.8	14.8	185.9	14.9	188.9	18.3	188.2	15.1	188.2	11.0	187.9	20.8	***180.1***	17.2
Veritas	12	203.3	11.8	205	204.9	15.3	***197.9***	15.2	**207.9**	14.2	***199.3***	17.8	**208.2**	12.3	202.5	15.1	***198.2***	15.0

Bold Italics: Area of Concern (3 or more RIT points below grade-level median) **Bold Underline**: Area of Strength (3 RIT points or more above the grade-level median

Table 23: Fourth-Grade Mathematics

Fourth-Grade Mathematics Achievement by Specific Goal Areas and Charter Elementary School

		Total Mathematics			**Specific Mathematics Goal Area**													
	N	**Mean RIT**	**SD**	**Med.**	**Num Sense**		**Comput**		**Algeb Func**		**Geom**		**Meas**		**Data Anal / Stat/Prob**		**Prob.Solv**	
Mayor's Charters					**M**	**SD**	**M**	**SD**	**M**	**SD**	**M**	**SD**	**M**	**SD**	**M**	**SD**	**M**	**SD**
21st Century	14	191.8	10.7	196	190.2	19.0	190.1	19.6	191.4	12.9	**196.1**	13.1	189.6	10.3	192.0	15.5	190.9	14.6
Christel House	40	197.4	12.4	197	198.4	15.8	197.0	17.4	**201.9**	17.5	198.6	15.5	194.8	14.9	198.1	13.5	***191.9***	17.3
Flanner House	23	199.3	9.4	200	196.6	12.9	200.5	115.3	**203.0**	14.3	201.5	12.8	197.9	13.9	199.7	10.7	***195.3***	10.0
Ball State Charters																		
Community Montessori	6	203.7	11.2	204	**208.8**	10.7	***192.3***	22.1	204.2	13.8	206.3	15.2	***199.0***	16.3	**207.3**	11.8	201.8	9.7
Irvington	19	211.5	11.9	214	210.1	18.5	209.9	14.1	212.9	16.0	213.4	13.8	213.3	20.6	**215.4**	13.7	209.5	16.4
New Community	6	200.7	13.9	197	***194.7***	15.5	***189.2***	19.6	**206.7**	14.4	**210.2**	16.9	**206.0**	15.7	**206.8**	19.8	***192.3***	14.1
TL Johnson	25	195.8	11.7	198	196.1	15.2	196.3	15.4	**199.0**	17.1	**200.5**	13.4	197.2	12.8	***192.0***	15.3	***191.6***	16.5
Veritas	6	211.7	7.7	213	209.2	7.7	212.7	10.4	211.7	15.2	211.0	13.9	**218.0**	11.9	214.0	11.7	***207.5***	10.1

Bold Italics: Area of Concern (3 or more RIT points below grade-level median) **Bold Underline**: Area of Strength (3 or more RIT points above grade-level median).

Table 24: Fifth-Grade Mathematics

Fifth-Grade Mathematics Achievement by Specific Goal Areas and Charter Elementary School

		Total Mathematics			**Specific Mathematics Goal Area**														
	N	**Mean RIT**	**SD**	**Med.**	**Num Sense**		**Comput**		**Algeb Func**		**Geom**		**Meas**		**Data Anal / Stat/Prob**		**Prob.Solv**	
Mayor's Charters					**M**	**SD**	**M**	**SD**	**M**	**SD**	**M**	**SD**	**M**	**SD**	**M**	**SD**	**M**	**SD**
21st Century	19	210.7	12.4	211	208.5	15.9	**217.8**	11.1	212.8	12.2	209.3	16.5	***204.9***	16.8	**214.1**	15.2	***207.4***	17.7
Christel House	0																	
Flanner House	0																	
Ball State Charters																		
Community Montessori	0																	
Irvington	16	208.6	16.1	210	**213.4**	19.1	**213.8**	18.5	**212.1**	23.8	210.4	23.3	***203.8***	22.8	207.0	20.7	206.9	25.3
New Community	2	208.5	10.6	208	***204.5***	10.6	210.5	2.1	209.5	24.7	**216.5**	12.0	209.5	24.7	**228.0**	31.1	**212.0**	26.9
TL Johnson	9	196.8	19.5	195	197.9	30.0	197.7	19.7	**200.3**	18.1	**201.4**	23.3	195.6	19.7	***193.3***	23.4	***188.7***	26.9
Veritas	4	209.8	5.9	212	208.0	3.2	210.5	13.7	208.0	14.0	***205.3***	4.6	210.3	10.8	**219.3**	4.1	***204.8***	9.9

Table 25: Sixth-Grade Mathematics

Sixth-Grade Mathematics Achievement by Specific Goal Areas and Charter Elementary School

		Total Mathematics			**Specific Mathematics Goal Area**													
	N	**Mean RIT**	**SD**	**Med.**	**Num Sense**		**Comput**		**Algeb Func**		**Geom**		**Meas**		**Data Anal / Stat/Prob**		**Prob.Solv**	
Mayor's Charters					**M**	**SD**	**M**	**SD**	**M**	**SD**	**M**	**SD**	**M**	**SD**	**M**	**SD**	**M**	**SD**
21st Century	17	209.0	15.4	210	208.5	17.8	207.8	17.0	210.1	12.8	**<u>212.6</u>**	17.6	207.2	17.0	208.6	17.5	206.8	20.1

<u>Bold Underline</u>: Area of Strength (3 RIT points or more above the grade-level median)

Reading Achievement. The following tables present mathematics achievement for Grade 2 (Table 26), Grade 3 (T able 27), Grade 4 (Table 28), Grade 5 (Table 29) and Grade 6 (Table 30).

These tables report achievement for each charter elementary school by specific goal performance area. For the reading assessment this includes Word Recognition/Fluency/Vocabulary, Reading Comprehension and Literary Response and Analysis.

As in the preceding tables, areas of concern (bold italics) or of relatively strong performance (bold underline) are indicated. Performance that is three RIT or more points below the grade-level median is flagged as a potential area of concern. Performance that is three RIT points or more above the grade-level median is a area of relative strength.

Table 26: Second-Grade Reading

Second-Grade Reading Achievement by Specific Goal Area and Charter Elementary School

		Total Reading			**Specific Reading Goal Area**					
Charter Elementary Schools	**N**	**Mean RIT**	**SD**	**Median**	**Word Recognition/ Fluency/Vocab**		**Reading Comprehension**		**Literary Response & Analysis**	
Mayor's Charters					M	SD	M	SD	M	SD
21st Century	15	174.1	17.0	175	175.9	16.6	170.9	21.4	174.1	17.6
Christel House	42	177.2	14.9	181	177.1	14.5	175.3	18.4	178.1	16.5
Flanner House	31	181.2	11.9	180	181.1	12.5	180.8	13.8	181.5	12.1
Ball State Charters										
Community Montessori	13	184.5	21.4	187	184.4	20.2	185.3	24.2	184.0	22.7
Irvington	18	182.6	15.4	188	184.4	18.3	181.7	17.2	183.7	14.5
New Community	2	186.5	27.6	186	186.0	28.3	186.0	31.1	187.5	23.3
Timothy L. Johnson	39	176.3	17.5	175	176.2	17.6	176.8	18.6	175.5	19.6
Veritas Academy	11	191.5	18.8	195	193.4	19.1	191.2	21.1	189.7	19.5

Table 27: Third-Grade Reading

Third-Grade Reading Achievement by Specific Goal Area and Charter Elementary School

		Total Reading			**Specific Reading Goal Area**					
Charter Elementary Schools	**N**	**Mean RIT**	**SD**	**Median**	**Word Recognition/ Fluency/Vocab**		**Reading Comprehension**		**Literary Response & Analysis**	
Mayor's Charters					M	SD	M	SD	M	SD
21st Century	15	194.9	10.8	200	197.1	11.9	195.1	13.1	192.6	11.0
Christel House	32	183.8	16.4	184	183.2	18.7	183.8	16.1	183.4	18.9
Flanner House	18	194.6	7.6	193	194.2	8.3	193.9	8.1	195.2	12.6
Ball State Charters										
Community Montessori	10	200.6	21.8	208	***194.4***	22.3	197.8	22.3	199.7	24.8
Irvington	18	196.2	10.3	197	196.9	8.7	194.4	13.2	197.4	13.0
New Community	2	192.0	7.1	192	***187.0***	8.5	194.5	6.4	194.5	6.4
Timothy L. Johnson	19	184.3	13.2	185	183.8	14.6	183.1	14.3	185.4	13.6
Veritas Academy	12	201.3	15.5	200	202.6	18.5	201.1	17.3	200.7	14.3

Table 28: Fourth-Grade Reading

Fourth-Grade Reading Achievement by Specific Goal Area and Charter Elementary School

		Total Reading			Specific Reading Goal Area					
Charter Elementary Schools	**N**	**Mean RIT**	**SD**	**Median**	**Word Recognition/ Fluency/Vocab**		**Reading Comprehension**		**Literary Response & Analysis**	
Mayor's Charters					M	SD	M	SD	M	SD
21st Century	14	194.3	13.0	195	192.8	13.3	195.9	13.4	164.1	14.7
Christel House	36	193.2	13.2	193	191.5	12.7	194.8	12.9	192.5	17.5
Flanner House	23	199.2	9.7	201	198.7	12.6	200.1	11.1	199.0	9.7
Ball State Charters										
Community Montessori	7	201.0	13.2	206	200.1	11.4	199.9	15.5	202.9	14.5
Irvington	19	204.7	11.6	205	203.9	11.9	205.1	12.3	205.6	13.8
New Community	5	191.6	23.6	185	***186.6***	23.5	191.8	31.5	190.4	24.5
Timothy L. Johnson	25	185.7	16.2	183	187.6	19.1	183.8	18.1	186.2	16.7
Veritas Academy	6	211.5	10.0	211	213.7	12.2	209.2	12.9	212.0	13

Bold Italics: Area of Concern **Bold Underline**: Area of Strength

Table 29: Fifth-Grade Reading

Fifth-Grade Reading Achievement by Specific Goal Area and Charter Elementary School

		Total Reading			**Specific Reading Goal Area**					
Charter Elementary Schools	**N**	**Mean RIT**	**SD**	**Median**	**Word Recognition/ Fluency/Vocab**		**Reading Comprehension**		**Literary Response & Analysis**	
Mayor's Charters					M	SD	M	SD	M	SD
21st Century	19	203.7	10.9	203	202.7	11.9	204.8	11.3	203.4	12.6
Christel House	0									
Flanner House	0									
Ball State Charters										
Community Montessori	0									
Irvington	16	204.1	16.0	207	203.1	15.5	203.3	21.5	205.8	15.9
New Community	2	201.5	7.8	201	***196.0***	9.9	**<u>209.0</u>**	9.9	203.5	2.1
Timothy L. Johnson	8	179.0	22.0	177	183.1	24.6	173.9	20.0	180.9	23.9
Veritas Academy	4	191.5	15.4	192	192.5	12.8	191.0	19.0	191.5	15

Bold Italics: Area of Concern **<u>Bold Underline</u>**: Area of Strength

Table 30: Sixth-Grade Reading

Sixth-Grade Reading Achievement by Specific Goal Area and Charter Elementary School

		Total Reading			Specific Reading Goal Area					
Charter Elementary Schools	**N**	**Mean RIT**	**SD**	**Median**	**Word Recognition/ Fluency/Vocab**		**Reading Comprehension**		**Literary Response & Analysis**	
Mayor's Charters					M	SD	M	SD	M	SD
21st Century	16	210.9	13.4	212	211.5	14.4	210.7	15.0	210.4	14.3

<u>Charter High Schools</u>. The following tables report detailed achievement data by specific goal areas for Signature School (Table 31) and for Options Charter School (Table 32).

As in the preceding tables, areas of concern (bold italics) or of relatively strong performance (bold underline) are indicated. Performance that is three RIT or more points below the grade-level median is flagged as a potential area of concern. Performance that is three RIT points or more above the grade-level median is a area of relative strength.

Table 31: Signature School Achievement in Language Usage, Mathematics and Reading by Goal Area and Grade												
	9th-Grade			10th-Grade			11th-Grade			12th-Grade		
	M	SD	N	M	SD	N	M	SD	N	M	SD	N
Language Usage	233.5	7.8	52	236.9	7.3	39	241.6	9.9.	34	--	--	0
Word Strategies & Skills	234.6	9.1		237.2	7.0		242.3	9.6				
Grammar & Usage	231.5	9.5		235.4	9.7		239.9	11.6				
Mechanics of Writing	235.6	11.1		**239.9**	10.5		**244.7**	13.4				
Mathematics	247.6	12.9	41	256.0	9.3	30	256.8	13.9	32	--	--	0
Number Sense	245.5	16.8		257.4	15.4		255.7	18.5				
Computation	245.2	15.1		254.1	14.8		255.7	21.1				
Algebraic Functions	249.7	16.2		**259.8**	11.1		**263.7**	19.1				
Geometry	**252.0**	151.5		258.7	15.2		256.3	13.1				
Measurement	***243.8***	15.2		253.3	19		254.8	20.5				
Data Analysis/Stat/Probability	247.9	17.0		**259.7**	15.6		**262.3**	15.0				
Problem-Solving	248.7	15.9		255.1	13.7		254.8	17.7				
Reading	237.9	7.1	54	239.9	6.9	41	243.1	6.8	39			
Word Recognition	2327.6	9.8		238.9	7.7		242.6	9.4				
Reading Comprehension	236.9	9.4		239.2	8.2		243.4	7.6				
Literary Response & Analysis	240.9	10.0		242.3	9.2		245.8	12.4				

Table 32
Options Charter School Achievement in Language Usage, Mathematics and Reading by Goal Areas and Grade

	9th-Grade			10th-Grade			11th-Grade			12th Grade		
	M	SD	N	M	SD	N	M	SD	N	M	SD	N
Language Usage:	218.3	9.8	8	223.6	9.7	21	222.7	8.6	35	228.0	21.2	2
Writing Strategies & Skills	220.4	12.6		224.9	10.1		224.5	9.9		228.5	21.9	
Grammar & Usage	219.1	9.4		222.2	9.4		221.0	9.0		221.0	25.5	
Mechanics of Writing	215.6	11.7		224.0	12.5		222.7	10.9		234.5	16.3	
Mathematics	227.1	24.4	9	225.6	18.3	20	231.4	15.3	35	237.0	24.0	
Number Sense	228.6	18.8		225.9	21.4		229.7	16.1		233.5	26.2	
Computation	224.7	27.2		225.8	18.8		227.0	18.7		233.0	14.1	
Algebraic Functions	232.0	27.5		226.8	22.4		231.6	19.5		240.0	25.5	
Geometry	231.9	27.5		223.0	27.1		236.4	19.6		242.0	25.5	
Measurement	225.8	25.3		223.5	17.1		230.6	14.8		234.5	31.8	
Data Analysis/Stat/Probability	227.4	226.8		226.8	23.7		234.7	17.0		242.0	25.5	
Problem-Solving	220.7	30.2		226.7	22.4		230.5	21.5		235.0	22.6	
Reading	208.7	19.5	9	221.2	11.6	19	219.5	14.0	34	228.0	29.7	2
Word Recognition	212.4	23.5		223.6	13.5		221.1	15.1		227.0	24.0	
Reading Comprehension	206.2	16.4		220.4	14.1		217.6	14.0		227.5	24.7	
Literary Response & Analysis	208.1	23.6		220.1	11.1		220.0	15.9		230.5	41.7	

Chapter 4

Summary of ISTEP+ Results

Charter school students, like students in all Indiana schools, sat for the state-mandated test, ISTEP+, in September, 2002. This test is required of students in third-grade, sixth-grade, eighth-grade and tenth-grade. State law requires schools to publish results in local outlets, and school data is also reported on the website of the Indiana Department of Education, at this address:

http://ideanet.doe.state.in.us/istep/welcome.html

The data reported in this chapter has been culled from these sources, and is presented here in a way that permits efficient comparison among charter schools and with comparable data from local school corporations, and with schools similar in demographic characteristics.

Interpretive Caution.

In many ways the data reported here is not nearly as useful or as informative as the NWEA-MAP data reported in the previous chapter. Unlike the MAP assessment, which took place in the spring of the academic year, the ISTEP+ is administered in the first weeks of school in September. Given the fact that 2002-2003 was the first academic year of operation of Indiana charter schools, the ISTEP results from a September administration reflects performance of students who are new to the charter school. It reflects the degree to which students have mastered Kindergarten to Grade 2 proficiencies taught elsewhere. Hence, unlike the MAP assessment, the ISTEP+ data does not, and cannot, reflect the influence of charter schools on student learning. For this reason these results are properly considered a baseline “input” by which to gauge subsequent intra-individual progress in student learning.

General Comparative Summary.

Table 33 reports a general summary of the percentage of charter school students at each grade who meet the ISTEP+ performance standards, compared with the relevant state average. As one can see only two schools, Community Montessori at Grade 3, and Signature School at Grade 10, match or exceed the state average for those grades. Two schools, Veritas Academy and Flanner Elementary, approximate the state average at Grade 3. The remaining schools fall considerably below the state average. Of particular notice is the third-grade performance of the urban charters, with Timothy L. Johnson reporting only 9% of its pupils meeting the state standard, and both Christel House and 21st Century reporting less than 20% and Irvington approximately a third meeting the standard. Keep in mind that the third-grade ISTEP+, assessed in early September, measures how well students have mastered K-2 academic proficiencies just at the point when these students have entered a charter school.

Table 33

General Summary of 2002-2003 ISTEP+ Results Among Charter Schools

Charter Schools	Pupils Tested	% Meeting State Standard	State Avg Meeting Standard
Third-Grade			
Mayor's Charters			
21st Century Academy	16	18.8	59.7
Christel House Academy	51	17.6	59.7
Flanner House	21	52.4	59.7
Ball State Charters			
Community Montessori	11	72	59.7
Irvington	20	35	59.7
New Community	–[a]	–[a]	
T.L. Johnson	21	9.5	59.7
Veritas Academy	12	58.3	59.7
Sixth Grade			
21st Century	18	22.2	60.1
Charter High Schools			
Tenth-Grade			
Options	26	23.1	60.7
Signature	44	100	60.7
Campagna	–[a]	–[a]	

[a]ISTEP+ scores are not reported if N < 10

Third-Grade ISTEP English and Math Scores. Table 34 reports the percentage of charter schools students who scored at each of the three categories of achievement (Pass, Pass+ and Not Pass) established by the Indiana Department of Education. These data are compared against the average of third-graders Indiana public schools.

Table 34 Third-Grade ISTEP
Percentage Pass, Pass+ and Not Passing Third Grade ISTEP English/Language Art and Math, by Charter School and State Comparison

		English/Language Arts			**Math**			**State Comparisons**[2]	
	N	% Pass+	% Pass	% Not Pass	% Pass+	% Pass	% Not Pass	% above both	Av. % Passing ISTEP
Indiana Public Schools	**74945**	**10**	**62**	**27**	**9**	**57**	**33**	**58.7**	**69.4**
Mayor's Charters									
21st Century	16	0	63	38	0	31	69	18.8	46.9
Christel House	51	2	35	59	0	20	78	17.6	28.4
Flanner House	21	0	67	33	5	62	33	52.4	66.7
Ball State Charters									
Community Montessori	11	18	64	18	9	73	18	72.7	81.8
Irvington	20	5	55	40	0	35	65	35.0	47.5
New Community	--[1]	--	--	--	--	--	-	--	--
T. L. Johnson	21	0	10	90	0	14	86	9.5	11.9
Veritas Academy	12	17	42	42	8	58	33	58.3	62.5

[1]ISTEP data is not reported if N < 10
[2]These comparisons are based on pass rates reported under the "old" format that preceded the current categories of pass+, pass and not pass.

Students in Community Montessori performed as well or better than other third-graders in Indiana public schools in both English/Language Arts and in Mathematics. On the other extreme it is clear that some of the urban charters are facing a tall challenge. For example, 90% of third-graders did not pass English/Language Arts at Timothy L. Johnson and 59% did not pass at Christel House. Similarly, with respect to Math, 86% of third-graders did not pass at Timothy L. Johnson and 78% did not pass at Christel House. It is worth noting, though, that third-graders at two other urban schools, Flanner House and 21st Century, exceeded the state third-grade pass rate for English/Language Arts. Flanner House also exceeds the state pass rate for Math.

Sixth-and Tenth-Grade ISTEP English and Math. ISTEP pass rates for sixth- and tenth-grade are presented in Table 35 and Table 36, respectively.

Table 35 Sixth-Grade ISTEP
Percentage Pass, Pass+ and Not Passing Sixth-Grade ISTEP English/Language Art and Math, by Charter School and State Comparison

		English/Language Arts			**Math**			**State Comparisons[1]**	
	N	% Pass+	% Pass	% Not Pass	% Pass+	% Pass	% Not Pass	% above both	Av. % Passing ISTEP
Indiana Public Schools	**80407**	**7**	**61**	**30**	**11**	**57**	**31**	**58.8**	**68.0**
21st-Century	18	0	50	50	0	22	78	22.2	36.1

[1]These comparisons are based on pass rates reported under the "old" format that preceded the current categories of pass+, pass and not pass.

Table 36 Tenth Grade ISTEP
Tenth-Grade Pass Rates in English/Language Arts and Math, by Charter School[1]

		English/Language Arts		**Math**		**State Comparisons**	
	N	% above	% below	% above	% below	% above both	Av. % Passing ISTEP
Indiana Public Schools	**70973**	**69**	**28**	**68**	**29**	**59.9**	**68.2**
Campagna Academy	--[2]	--	----	--	--	--	--
Options	26	46	54	38	54	23.1	42.3
Signature School	44	100	0	100	0	100	100

[1]High school pass rates are reported under the old format that does not include pass+
[2]ISTEP data is not reported if N < 10

As Table 35 illustrates, half of the sixth-graders at 21st Century Charter School passed the ISTEP assessment in English/Language Arts. Less than a quarter of the sixth-graders passed the ISTEP math test.

In contrast, all of the tenth-graders at Signature School passed ISTEP and exceeded English and math standards. However, less than half of the tenth-graders at Options passed ISTEP, and a majority scored below standards in English and math.

Comparison with Other Public Schools. The final set of tables compares ISTEP+ achievement of students in the various charter schools with students of the same grade in other public schools. In most cases charters were compared against the mean performance of students of the local school corporation. For example, elementary schools with charters granted by the Mayor of Indianapolis (21st Century, Christel House, and Flanner House) or else located in Indianapolis (Irvington) were compared with the Indianapolis Public School (IPS) corporation. IPS was chosen as the comparison because the Indianapolis-based charters attract students from across Indianapolis and Marion County. Timothy L. Johnson in Fort Wayne, and Veritas Academy in South Bend, was compared with the average performance of students in the Fort Wayne School Corporation and the South Bend School Corporation, respectively, for the same reason. Similarly, the charter high schools were compared with school corporations that authorize them (Options with Carmel Clay Schools; Signature School with Evansville-Vanderburgh School Corporation). The only exception to this general strategy concerned Community Montessori in Floyds Knobs. Here we selected Floyds Knobs Elementary School as the most reasonable comparison school in this small rural community near New Albany.

Table 37 presents third-grade percentage pass rates for English/Language Arts and Math for Timothy L. Johnson Academy, Veritas Academy and Community Montessori, and their respective comparison schools (Fort Wayne Community Schools, South Bend Community Schools, and Floyds Knobs Elementary School, respectively). It also presents pass rates for four Indianapolis-based charter schools, and comparison data of the Indianapolis Public Schools. Data for all Indiana third-grade pupils is also indicated.

One evident pattern is that the urban schools, with the exception of Flanner House, report pass rates significantly lower than pass rates in comparative public schools. The data for Timothy L. Johnson Academy and Christel House Academy are particularly worrisome. These data certainly do not support any presupposition that charter schools “cream off” the best students from regular public schools. It bears repeating that the data for Flanner House is quite encouraging given the presumptive risk profile of students who attend this school. Finally, the pass rates for Veritas Academy and for Community Montessori compare favorably with local regular public schools.

Table 37 Third Grade Comparison with Other Public Schools
Third-Grade Pass Rates in ISTEP English/Language Arts and Math, for Seven Charter Schools and Public School Comparison Data

		English/Language Arts		Math		State Comparisons	
	N	% above	% below	% above	% below	% above both	Av. % Passing ISTEP
Indiana Public Schools	**74945**	**75**	**27**	**67**	**33**	**58.7**	**69.4**
Fort Wayne Community Schools	**2286**	**65**	**34**	**75**	**25**	**59.6**	**69.9**
Timothy L. Johnson	21	10	90	14	86	9.5	11.9
South Bend Community Schools	**1480**	**55**	**44**	**53**	**47**	**41.0**	**53.8**
Veritas Academy	12	58	42	67	33	58.3	62.5
Floyds Knobs Elementary School	**88**	**86**	**14**	**84**	**16**	**77.3**	**85.2**
Community Montessori	11	82	18	82	18	72.7	81.8
Indianapolis Public Schools	**3158**	**58**	**39**	**57**	**42**	**44.1**	**57.7**
21st Century	16	63	38	31	69	18.8	46.9
Christel House	51	37	59	20	78	17.6	28.4
Flanner House	21	67	33	67	33	52.4	66.7
Irvington	20	60	40	35	65	35	47.5

Note. Some percentages do not add to 100% because of undetermined scores.

Table 38 presents sixth- and tenth-grade pass rates for English/Language Arts and Math by charter school and by regular public school comparison data. As this table illustrates, the sixth-graders at 21st-Century Charter School are highly similar to their sixth-grade counterparts in IPS. The tenth-graders at Options are considerably off the mark with respect to other tenth-graders in the Carmel Clay Schools, while Signature tenth-graders outperform their classmates in the Evansville-Vanderburgh School Corporation.

Table 38 Sixth- and Tenth-Grade Comparison with Other Public Schools Sixth-Grade and Tenth-Grade ISTEP English/Language Arts and Math Pass Rates by Charter School and Regular Public School Comparison Data							
		English/Language Arts		**Math**		**State Comparisons**	
	N	% above	% below	% above	% below	% above both	Av. % Passing ISTEP
Indianapolis Public Schools 6th-Grade	**3485**	**40**	**53**	**32**	**61**	**24.7**	**35.9**
21st-Century Academy 6th-Grade	18	50	50	22	78	22.2	36.1
Carmel Clay Schools 10th-Grade	**829**	**46**	**54**	**38**	**54**		**92.5**
Options Charter School	28	46	54	38	54	23.1	42.3
Evansville-Vanderburgh School Corporation 10th-Grade	**1723**	**64**	**32**	**62**	**35**	**55.3**	**63**
Signature School	44	100	0	100	0		100
Note. Some percentages do not add to 100% because of undetermined scores.							

Chapter 5

Retrospect and Prospect

The 2002-2003 academic year was the first year of operation of Indiana charter schools. The "transition stress" that accompanies the start-up of charter schools is well-documented. This first annual report provides a rich profile of the starting point of each school, and the challenges and prospects that each faces as it attempts to improve student learning.

The most daunting challenge is the fact that many youngsters, particularly at the higher elementary grades, join a charter school already well-behind in basic academic skills. This particular "selection effect" is most acute in the urban charters. Clearly this shows that the effect of charter schools is not to cream off the best students from the regular public schools systems, as some critics of charter schools have alleged (although this is probably the case for Signature School in Evansville). Indeed, the availability of charter schools has given urban poor and minority parents an important educational option for improving the prospects of their children, an option that was previously available only to parents of more affluent means.

This report also reveals certain reasons for optimism, too. It does show, for example, that the prospect for demonstrating significant growth in student learning is certainly evident, particularly in the early elementary grades. It does show that a number of charter schools are certainly competitive with regular public schools at some grades and approximate state and national academic standards. The achievement profile of Flanner House is of particular interest. Here is an urban school with the highest poverty index of any charter elementary school in Indiana, a school with a 100% African-American student population, located in a distressed area of Indianapolis, which nonetheless reports a profile of MAP and ISTEP achievement that otherwise belies its presumptive risk status.

The Research Agenda

It has been noted previously that no conclusions can be drawn about charter school accountability from the data presented in this report. Student achievement data, even of MAP data collected later in the school year, is compromised by selection effects. For this reason there is no real value in comparing mean achievement scores of one school with another. The real test of how well charter schools advance the cause of student learning will be met when they are able to show pervasive and significant intra-individual growth in student learning over time. For this reason the commitment of Indiana charter schools to a systematic data collection regime whereby students are assessed at least twice a year, and over the course of a student's career in a charter school, on a common metric, is most encouraging.

Yet the research agenda should not be restricted solely to an examination of longitudinal change in patterns of academic achievement. The goal of a robust research agenda should clearly focus on whether students are learning, of course, but it should also examine those questions that address the mechanisms and conditions of learning. If the goal is accountability, then the means must be continuous improvement, and this is possible only if there is also a commitment by schools, administrators, teachers and parents to explore critical "non-achievement" variables as well. These would include teaching and instructional practices, student motivational and affective variables, teacher variables (including patterns of training and licensure issues, along with teacher attitudinal variables, such as teacher efficacy), identifying early predictors of student success, ways of engaging parents and communities, cultivating effective school climate, and the like.

These questions will constitute a continuously evolving research agenda that we hope will engage statewide educational researchers and charter school stakeholders in productive collaboration. Indeed, if charter schools are to live up to the promise of becoming "laboratories" of educational innovation, they must first be open to functioning as a laboratory where questions of educational policy and practice are addressed systematically in programs of collaborative research.

The Accountability Standard

It was noted above that comparing achievement scores of one school against another holds little interest for its own sake, and that the real test of how well charter schools advance the cause of student learning is whether they are able to show pervasive and significant intra-individual growth in student learning over time. In our view charting inter-school variability in student achievement is a crude and misleading index of accountability. It is crude and misleading to gauge the success of a school by charting patterns of inter-individual change over time. What is required is *not* the study of inter-individual or inter-school variability, but intra-individual growth over time. What is required is the documentation of individual change, not individual differences.

This is where the NWEA's Measures of Academic Progress (MAP) holds real promise. It permits the administration of a systematic assessment of student achievement up to four times a year, making it possible to chart longitudinal change over the course of a school year and over the course of student's career in a charter school. Moreover, it provides a ready benchmark for establishing acceptable yearly progress for any student, irrespective of where that student stands with respect to classmates or reference groups.

For example, it would seem to be a reasonable benchmark of accountability if a school could show that its students match or approximate average fall-to-spring growth norms in RIT scores. Alternatively, a school could make the case that it is meeting standards of accountability if it could show that a significant majority of its pupils show improvement beyond the boundary of measurement error with each subsequent administration of MAP. The benchmark, then, is *growth*. The benchmark is *beating measurement error*.

Of course, the selection of reasonable standards of accountability is ultimately a matter for charter school educators and authorizers to decide, although it is our hope that the rich, multi-faceted research agenda of the Indiana charter schools, and its systematic data-collection strategy, will be found useful for this purpose.

Appendix A

School Governance and Contact Information

Table 39

School Governance and Contact Information for Schools Chartered by the Mayor of Indianapolis (2002-2003)

School Location	Organizer	EMO	Administrative Contacts	Board Leadership
21st Century Charter School 302 South Meridian Street Suite 200 Indianapolis IN 46225 Ph. 317.524.3750 Fax 317.524.3758:	Greater Educational Opportunities Foundation Kevin Teasley, CEO teasleygeo@aol.com	N/A	John Hayden. Chief Academic Officer 317.524.3751 www.21cchart.org Dante Brown, Principal 317.524.3755	Joyce Johnson 317.524.3770 Don Laskowski Rollin Dick Kevin Teasley
Christel House Academy 2717 South East Street Indianapolis, IN 46225 Ph. 317.783.4690 Ph. 317.783.4693	Christel House Academies 10 West Market Street Suite 1990 Indianapolis, IN 46204 Ph. 317.464.2695 Ph. 317.464.2039	N/A	Michelle Thompson Director of Education mthompson@christelhouse.org Barbara Lucas, Principal blucas@cha.christelhouse.org	Sandi Bittner Christel DeHaan Murve Enders Everette Freeman Bob Hasty Carol Israel Alan Levin
Flanner House Elementary 2424 Dr. Martin Luther King Jr. Street Indianapolis, IN 46208 Ph. 317.925.4231 Ph. 317.923.9632	Flanner House Cynthia Diamond cdiamond@imcpl.lib.in.us	N/A	Frances Malone, Director of Education flamone@imcpl.lib.in.us DeNeen Owens, Business Manager dowens@imcpl.lib.in.us	Sandy Green Pat Chastain Robert Shula Seema Parikshak Brian Buchanan

Table 40a

School Governance and Contact Information for Schools Chartered by Ball State University (2002-2003)

School Location	Organizer	EMO	Administrative Contacts	Board Leadership
Campagna Academy 7403 Cline Avenue Schererville, IN 46375-2645 Ph. 219.322.8614		N/a	Anita Dygert-Gearheart, CEO anita@campagnaacademy.org Jean Wease, School Leader jwease@campagnaacademy.org	Russ Derdelan
Community Montessori, Inc. 581 Highlander Point Drive Floyds Knobs, IN 47119 Ph. 812.923.2000			Barbara Burke Fondren, Director bfondren@cmsind.com	Will Dierking
Irvington, Community School 345 N. Kitley Ave. Indianapolis, IN 46219 Ph. 317.357.5359			Timothy Ehrgott, Director president@ics-charter.org	Leslie Hiner
New Community School 620 Cumberland Ave. West Lafayette, IN Ph. 765.464.8999			Anne Murphy ncs.directored@verizon.net	Jeff Smith

Table 40b
School Governance and Contact Information for Schools Chartered by Ball State University (2002-2003)

School Location	Organizer	EMO	Administrative Contacts	Board Leadership
Timothy L. Johnson Academy 7908 S. Anthony Blvd. Fort Wayne, IN 46816 Ph. 260.441.8727		Leona Group 4660 South Hagadorn Suite 500 East Lansing, MI 48823-5353 Ph. 517.333.0225	Steve Bollier, Principal steve_bollier@leonagroup.com	Mike Nicholson
Veritas Academy 814 E. LaSalle Avenue South Bend, IN 46617 Ph. 574.287.3230		n/a	Dr. Richard Wells veritas8@earthlink.net	Beth O'Conner

Table 41

School Governance and Contact Information for Conversion Charter Schools: Signature School and Options Charter School

School Location	Organizer	EMO	Administrative Contacts	Board Leadership
Signature School 610 Main Street Evansville, IN 47708 Ph. 812.421.1820	Authorizer: Evansville-Vanderburgh School Corporation		Vicky Snyder vsnyder@sso.aol.com	
Options Charter School 340 Ridgepoint Drive Carmel, IN 46032 Ph. 317.8152098 Fax: 317.846.3806 http://www.optionsined.org	Central Indiana Options in Education, Inc Authorizer: Carmel Clay Schools	n/a	Kevin Davis, Director kdavis@optionsined.org Barbara Maschino, Principal	Bruce Clayton Debra Schmidt Karen Finney Robert Smith Judy Zimmerman

Appendix B

Northwest Evaluation Association

Goal Score Translation Charts

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Goal Score Translation Chart: Mathematics

This chart is built from the Achievement Level Test with the traditional breakdown of Lo equal to percentile scores <33, the Hi equal to percentile scores >66, and AV equal to scores between 33 and 66.

Mathematics									
	Fall			Winter			Spring		
Grade Level	**Lo**	**Av**	**Hi**	**Lo**	**Av**	**Hi**	**Lo**	**Av**	**Hi**
2	<173	173-182	>182	<178	178-188	>188	<183	183-193	>193
3	<185	185-196	>196	<190	190-200	>200	<195	195-205	>205
4	<196	196-206	>206	<200	200-210	>210	<203	203-214	>214
5	<204	204-215	>215	<207	207-219	>219	<2 10	210-223	>223
6	<209	209-222	>222	<212	212-225	>225	<215	215-229	>229
7	<241	214-228	>228	<217	217-232	>232	<220	220-236	>236
8	<220	220-235	>235	<223	223-239	>239	<226	226-243	>243
9	<223	223-238	>238	<230	230-244	>2 44	<236	236-250	>250
10	<226	226-241	>241	<236	236-248	>248	<245	245-255	>255

Goal Score Translation Chart: Reading

This chart is built from the Achievement Level Test with the traditional breakdown of Lo equal to percentile scores <33, the Hi equal to percentile scores >66, and AV equal to scores between 33 and 66.

Reading									
	Fall			Winter			Spring		
Grade Level	**Lo**	**Av**	**Hi**	**Lo**	**Av**	**Hi**	**Lo**	**Av**	**Hi**
2	<170	170-186	>186	<176	176-191	>191	<181	181-195	>195
3	<183	183-197	>197	<188	188-201	>201	<192	192-205	>205
4	<194	194-206	>206	<197	197-209	>209	<200	200-212	>212
5	<201	201-213	>213	<203	203-215	>215	<206	206-218	>218
6	<206	206-218	>218	<208	208-220	>220	<211	211-222	>222
7	<210	210-222	>222	<212	212-224	>224	<214	214-226	>226
8	<214	214-226	>226	<216	216-228	>228	<219	219-230	>230
9	<217	217-228	>228	<218	218-230	>230	<220	220-231	>231
10	<219	219-231	>231	<220	220-231	>231	<220	220-232	>232

Goal Score Translation Chart: Language Usage

This chart is built from the Achievement Level Test with the traditional breakdown of Lo equal to percentile scores < 33, Hi equal to percentile scores > 66, and AV equal to scores between 33 and 66.

Language Usage									
	Fall			Winter			Spring		
Grade Level	Lo	Av	Hi	Lo	Av	Hi	Lo	Av	Hi
2	< 172	172-187	> 187	< 177	177-192	> 195	< 183	183-196	> 196
3	< 187	187-199	> 199	< 191	191-203	> 203	< 194	194-206	> 206
4	< 197	197-208	> 208	< 199	199-210	> 210	< 202	202-213	> 213
5	< 204	204-214	> 214	< 205	205-216	> 216	< 207	207-218	> 218
6	< 208	208-219	> 219	< 210	210-221	> 221	< 211	211-222	> 222
7	< 211	211-222	> 222	< 213	213-224	> 224	< 214	214-225	> 225
8	< 215	215-22	> 225	< 216	216-226	> 226	< 217	217-227	> 227
9	< 217	217-226	> 226	< 217	217-228	> 228	< 218	218-229	> 229
10	< 218	218-228	> 228	< 2 19	219-229	> 229	< 219	219-229	> 229

Appendix C

Northwest Evaluation Association

RIT Scale Norms

These norms are derived from a national norming study that is reported in this publication: *Northwest Evaluation Association: RIT Scale Norms, 2002* and in the NWEA publication *RIT Scale Norms for Indiana* (August, 2002).

Language Usage

Grade Level Means, Medians, Standard Deviations and Number of Students for NWEA Language Usage, for Fall and Spring								
	Fall				Spring			
Grade	Median	Mean	SD	N	Median	Mean	SD	N
2	180	180.0	14.36	8018	190	189.0	15.17	29017
3	194	191.63	14.73	55482	201	199.0	15.01	49406
4	203	200.9	14.41	60103	207	205.5	14.47	52969
5	209	207.3	13.95	61916	213	211.5	13.83	56725
6	214	212.2	13.77	56370	217	215.3	13.69	53556
7	217	215.2	13.58	56977	220	218.4	13.57	55176
8	220	218.7	13.55	49690	223	221.3	13.49	48018
9	222	220.4	13.16	27469	224	223.4	12.70	23932
10	224	222.2	13.98	10916	224	222.5	14.40	5528

Mathematics

Grade Level Means, Medians, Standard Deviations and Number of Students for NWEA Mathematics, for Fall and Spring								
	Fall				Spring			
Grade	**Median**	**Mean**	**SD**	**N**	**Median**	**Mean**	**SD**	**N**
2	178	177.6	10.76	16002	189	188.2	12.52	39840
3	191	189.7	12.48	78918	201	199.7	13.09	74862
4	201	200.4	12.67	81715	209	208.6	14.23	86210
5	209	208.9	13.69	83791	217	216.4	15.57	86888
6	216	215.2	15.23	75490	222	221.9	17.09	88109
7	222	220.9	16.57	75986	228	227.5	18.56	89137
8	228	227.2	17.85	66968	235	234.0	19.58	70777
9	231	229.8	17.80	30582	244	240.9	18.02	30015
10	235	232.7	18.57	9921	2551	248.2	15.94	9179

Reading

Grade Level Means, Medians, Standard Deviations and Number of Students for NWEA Reading, for Fall and Spring								
	Fall				Spring			
Grade	Median	Mean	SD	N	Median	Mean	SD	N
2	179	177.7	15.72	13621	188	186.6	16.24	43068
3	191	188.7	15.94	73474	199	197.2	15.73	74254
4	200	198.0	15.64	79055	206	204.3	15.52	84731
5	207	205.2	15.33	80611	212	210.3	15.37	84751
6	212	210.5	15.29	73339	217	215.2	15.05	86517
7	216	214.4	15.22	73290	221	218.9	15.01	87454
8	220	218.3	15.34	65837	225	222.8	14.73	71027
9	223	221.0	14.93	33298	226	224.2	14.36	31209
10	225	223.1	15.85	12930	226	224.3	16.19	5757

Appendix D

Northwest Evaluation Association

RIT Scale Norms for Indiana

These norms are reported in the NWEA publication *RIT Scale Norms for Indiana* (August, 2002).

Language Usage

Indiana Norms

Grade Level Means, Medians, Standard Deviations and Number of Students for NWEA Language Usage, for Fall and Spring: Indiana Norms								
	Fall				**Spring**			
Grade	**Median**	**Mean**	**SD**	**N**	**Median**	**Mean**	**SD**	**N**
2	181	180.5	14.39	5934	194	192.4	14.31	10665
3	196	194.3	13.65	14869	205	202.7	13.34	8098
4	204	202.3	13.233	18454	210	208.8	12.91	9098
5	210	208.8	12.80	19916	216	214.3	12.23	11068
6	215	213.36	12.88	15063	219	218.0	12.04	8928
7	218	216.35	12.87	19616	221	220.3	12.48	10831
8	222	220.45	12.81	14035	224	223.4	12.52	7018
9	222.8	221.23	12.83	12634	226	225.2	12.16	5631
10	226	224.7	13.72	2212	n/a			

Reading

Indiana Norms

Grade Level Means, Medians, Standard Deviations and Number of Students for NWEA Reading, for Fall and Spring: Indiana Norms								
	Fall				Spring			
Grade	Median	Mean	SD	N	Median	Mean	SD	N
2	179	177.8	15.35	6047	190	188.2	15.27	10967
3	193	190.7	14.85	14754	201	199.1	14.68	8806
4	201	198.9	14.77	18512	207	205.8	14.37	10026
5	208	206.3	14.34	19845	213	211.6	14.12	11835
6	213	211.4	14.07	14991	218	216.4	13.63	10250
7	217	215.3	14.31	19704	221	219.3	13.90	11750
8	221	219.7	14.47	14401	225	223.8	13.62	7417
9	223	221.6	14.48	12706	227	225.8	121.88	5874
10	228	225.8	15.12	2182				

Mathematics

Indiana Norms

Grade Level Means, Medians, Standard Deviations and Number of Students for NWEA Mathematics for Fall and Spring: Indiana Norms								
	Fall				Spring			
Grade	Median	Mean	SD	N	Median	Mean	SD	N
2	178	177.88	10.52	6428	191	189.8	11.35	10871
3	193	191.58	11.61	15051	203	201.9	11.04	8339
4	202	201.40	11.47	18790	210	210.1	12.59	10248
5	210	210.04	12.7	20131	219	218.4	14.35	12251
6	218	217.18	14.41	15147	225	224.3	15.28	9922
7	223	222.53	16.0	19831	229	228.3	17.32	12277
8	232	230.32	17.06	13941	236	235.2	17.43	7658
9	232	230.59	17.76	12144	241	239.1	16.93	6009
10	240	239.19	17.61	1366	n /a			