# Report on Student Achievement 2010-2011

ACT Assessment System, Advanced Placement,

College Board SAT, Prairie State Achievement Examination,

and Key Academic Indicators

Research, Evaluation & Assessment

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#### **Executive Summary**

#### The attached report provides analyses of test results including:

- f Results of the ACT Assessment System, which includes three tests: EXPLORE, PLAN and ACT. The three instruments are administered at different points in a student's secondary educational experience:
  - o EXPLORE is administered in grade 8 (December) before students enter high school.
  - o PLAN is administered to sophomores (October) and serves as a midpoint review of student progress.
  - o ACT is a college admissions and placement test and is administered to students in their junior or senior year.
- f Longitudinal analyses of students on EXPLORE, PLAN and PSAE/ACT to assess students' progress as they move through the grades from grade 8 to 11. These scores are the only standardized measure that enables the district to measure the same cohort through their high school experience.
- f Results of the Advanced Placement Examination (AP) administered to students enrolled as sophomores, juniors or seniors in AP courses.
- f Results of the SAT, a college admissions test, taken by students in their junior or senior year.
- f Results of the Prairie State Achievement Examination (PSAE) taken by students in their junior year.
- f Other academic indicators including graduation rate, suspension rate, dropout rate, and chronic truancy rate.

#### Key points include:

- x ETHS seniors continue to register a high composite score on the ACT.
  - o Illinois is one of only nine states requiring students to take the ACT. With nearly all seniors taking the ACT college entrance exam in Illinois (including struggling students who would not be taking the exam in other states because they are not intending to apply to a competitive college or university), ETHS results are still higher than the national average.
  - o Black, White, and Hispanic students outscore their state and national counterparts on the ACT composite score.
  - o The average score on the English ACT subtest has shown so

average.

- x The overall composite score for the PLAN test is higher than the last four years.
  - o Composite scores for Black and White students are higher than in 2009-2010.
- f The gap in achievement in reading and math between White students and Black/Hispanic students exists when students enter ETHS as freshmen. While approximately 96 percent of White incoming freshmen are at or above the national average, between 65 and 71 percent of Black and Hispanic students enter ETHS at or above the national average. The percentage of Black students above the 50th percentile has improved markedly since 2007-08 in reading (from 49% to 67%) and math (from 53% to 65%).
- x Longitudinal analyses of student performance over time indicate students make good gains as they progress through high school. Particularly noteworthy for 2010-11 are the gains in reading for Black and White students from EXPLORE to PSAE/ACT. Although students make gains from EXPLORE to PSAE/ACT, the gains fluctuate from year to year, particularly for Black and Hispanic students. We recognize subgroups taking ETHS coursework can consistently gain eight or more scale points of growth. The challenge is to have all subgroups benefit from ETHS coursework so all subgroups will consistently gain eight or more points.
- x The percentage of students participating in AP exams is at an all-time high of 23.6 percent as a result of a concerted effort to increase the numbers of students taking AP courses. However, the percentage of students achieving a score of "3" or higher decreased from 74 percent to 65 percent. Although the percentage decreased, the raw number of students achieving a "3" or higher has remained the same.
  - o Departments need to review AP score patterns and identify necessary changes to the curriculum.
- x Performance on the PSAE has remained relatively static the last couple of years. Overall, students do well on the ACT portion of the test but need to improve on the WorkKeys portion.
- x The dropout rate continues to be small at 1.9 percent and well below the state average.

### REPORT ON STUDENT ACHIEVEMENT: ACT ASSESSMENT SYSTEM, ADVANCED PLACEMENT, AND SAT EXAMINATIONS

The purpose of this report is to provide an overview of student test performance at Evanston Township High School (ETHS) in 2010-2011. This report includes test data from several sources:

- x Results of the ACT assessment are provided for the graduating Class of 2011.
- x PLAN test data are provided for the 2009-2010 sophomore class (Class of 2013).
- x EXPLORE scores are reported for the 2010-2011 incoming freshman class (Class of 2015).
- x Test results from the Advanced Placement (AP) examinations are provided for all ETHS high school students enrolled in AP

Table 1. Average ACT Composite Scores<sup>a</sup>

		•		
	Senior Class Year	ETHS Avg. Composite ACT Score	IL Avg. Composite ACT Score	US Avg. Composite ACT Score
П	1993	21.7	21.0	20.7
	1994	22.3	21.1	20.8
	1995	21.6	21.1	20.8
	1996	21.9	21.2	20.9
	1997	22.1	21.2	21.0
	1998	23.3	21.4	21.0
	1999	22.1	21.4	21.0
	2000	22.4	21.5	21.0
	2001	22.9	21.6	21.0
	<b>2002</b> <sup>b</sup>	21.9	20.1	20.8
	2003	22.0	20.2	20.8
	2004	22.0	20.3	20.9
	2005	21.9	20.3	20.9
	2006	22.3	20.5	21.1
	2007	22.6	20.5	21.2
	2008	23.1	20.7	21.1
	2009	23.5	20.8	21.1
	2010	23.5	20.7	21.0
	2011	23.0	20.9	21.1
2				

а

b New baseline due to change in testing procedure

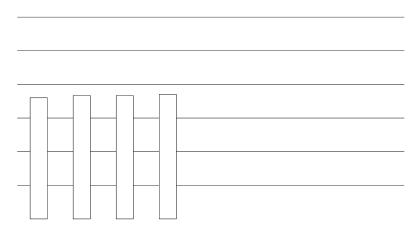
#### ACT Performance by Ethnicity

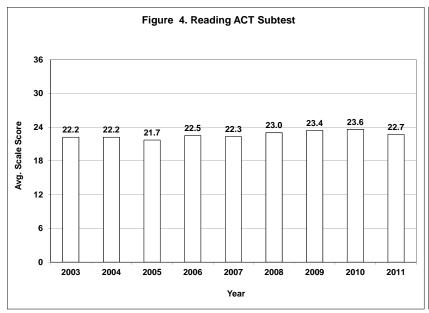
Table 2 shows ACT data by ethnicity. Students do not always report their race when taking the ACT. Therefore, the reports that we receive from ACT do not represent all of the students in each racial group. Since 2006-07, we have recalculated composite scores using the ETHS database so as to provide an accurate reflection of students' scores within each racial group.

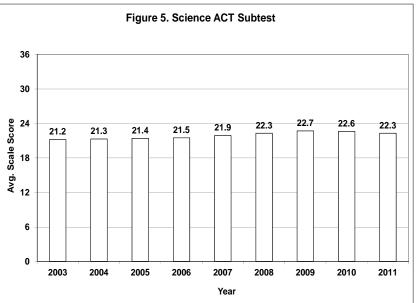
Table 2. ACT Scores by Ethnicity and Year

Table 2. ACT	ocores by	Elimicity and i	eai		
Ethnicity	Year	Seniors within Ethnic Group Taking ACT N	ETHS Avg	IL Avg	Nat'l Avg
African American/	2006-2007	228 <sup>a</sup>	17.2	16.9	17.0
Black	2007-2008	226	17.6	16.8	16.9
	2008-2009	212	19.2	16.8	16.9
	2009-2010	190	18.5	16.7	16.9
	2010-2011	195	18.6	17.0	17.0
Latino	2006-2007	47	19.0	17.9	18.7
	2007-2008	50	18.1	18.0	18.7
	2008-2009	56	19.0	18.2	18.7
	2009-2010	66	19.9	18.0	18.6
	2010-2011	83	19.6	18.3	18.7
White	2006-2007	311	27.0	22.0	22.1
	2007-2008	368	27.0	22.0	22.1
	2008-2009	307	27.2	22.4	22.2
	2009-2010	312	27.2	22.4	22.3
	2010-2011	253	27.3	22.6	22.4

Figures 2 to 5 show the ACT average scale scores for English, math, reading and science for 2003 to 2011.







f /TT2 1 Tf0 10.98 -10.98 0 308.46 72 Tm()Tj/TT18 1 Tf0 -2.8579 TD.007.24 I91.603521.9

Table 3 shows ACT performance for each subject area by gender.

Table 3. ACT Score by Gender and Year

I able 3	ACT SCOR	e by Gen	iuei anu	ı ı <del>c</del> aı										
Gender		ACT ported # of Seniors	English	Math Re	eading									
		N <sup>a,b,c</sup>				ETH	IS Avg	IL Avg	Nat'l Avg	1				
Males	2006-2007	299	22.1	23.7	22.1 2		22.6	20.5	21.2					
	2007-2008	352	22.4	23.6	22.4 2	2.2	22.8	20.7	21.2					
	2008-2009	291	23.0	24.1	22.9 2	2.8	23.4	21.0	21.3					
	2009-2010	307	23.0	24.3	23.7 2	3.1 2	23.7	20.8	21.2					
	2010-2011	297	23.1	24.3	22.5 2	2.7	23.3	21.0	21.2					
Females	2006-2007	284nior3	22.5	2161	22.6	2040	210	2						
	2007-2008007	238	4 2313	23.4	22.2	23.3	22.	6 2	2102					
	2008-2009017	24.4	2393	2385	22.7	2378	20.7	22.	.2009-201	0 299	23.4	23.3	2351	22.
	2010 <del>0</del> 230112 <b>020</b>	<b>9:2</b> 007 <b>2:2</b> 119	2 23.322.8	821.5 20	8 <b>©</b> 192 210	<b>2</b> 2.6	20.5	21.	2					
	2007	7-2008007	232	4 235	3 2301	223	1 23	318	20.7	2112				
	2008	8-200929	23.4	23.3	23.4	22.7	235	8 2	2086	2112				
	2009	9-2010												
	2010	0-2011 <b>2</b> n4	2353	23.7	2231	2308	2096	2	11g					

#### **EXPLORE** and PLAN Test Results

Table 5 shows	the sophomore results of	the PLAN test for the	last five years. PLAN	scores range from 1	to 32.

#### Longitudinal Analysis

One of the advantages of using ACT's assessment system is that it provides a means to monitor student progress from eighth grade through junior or senior year. EXPLORE was first implemented in 1998-1999.

ACT provides a report that matches EXPLORE and PLAN scores of the same students and summarizes their academic progress over time compared to a national group of matched students who took both tests. ACT also sends a report that matches PLAN with ACT scores of the same students. In addition to the report that ACT sends the school, we perform an additional analysis of academic progress for the total group and ethnic subgroups: Black; Latino and White students. In doing so, we also conduct a more comprehensive matching procedure than ACT because we are able to identify more students as well as provide ethnic information for students who do not report their ethnicity when they take the tests. Our analysis includes all students. The data that ACT provides excludes students who take these tests with accommodations.

#### **EXPLORE to PLAN**

The achievement of sophomores was analyzed from eighth grade to the fall of tenth grade. Table 6 shows the mean scale scores on EXPLORE and PLAN for matched student groups for the 2010-11 grade 10 cohort (Class of 2013) in English, mathematics, reading and science. Along with ETHS scores, scores for the nation are provided for comparison purposes. The right-hand column shows the gain for each grouping. Results are also provided for the gain from the 2009-10 grade 10 cohort (Class of 2011).

Table 6. Gain Between Grade 8 and Grade 10: EXPLORE (2008-2009) to PLAN (2010-2011)

4N (2010-2011)	1		
Grade 8 Av.	Grade 10 Av.	2010-11 Gr.10	2009-10 Gr.10
Scale Score	Scale Score	Gain	Gain
17.1	18.8	1.7	(2.0)
14.9	16.7	1.8	(2.1)
17.9	21.4	3.5	(3.5)
15.5	17.9	2.4	(2.1)
16.3	19.3	3.0	(2.6)
14.5	17.2	2.7	(2.2)
18.4	20.3	1.9	(1.4)
16.6	18.2	1.6	(1.6)
	Grade 8 Av. Scale Score 17.1 14.9 17.9 15.5 16.3 14.5	Grade 8 Av. Scale Score         Grade 10 Av. Scale Score           17.1         18.8           14.9         16.7           17.9         21.4           15.5         17.9           16.3         19.3           14.5         17.2           18.4         20.3	Grade 8 Av. Scale Score         Grade 10 Av. Scale Score         2010-11 Gr.10 Gain           17.1         18.8         1.7           14.9         16.7         1.8           17.9         21.4         3.5           15.5         17.9         2.4           16.3         19.3         3.0           14.5         17.2         2.7           18.4         20.3         1.9

<sup>&</sup>lt;sup>a</sup>Represents a matched cohort of 631 students who tested at grade 8 and grade 10.

- x In math, reading, and science, ETHS students made greater gains compared to the national group and equal or greater gains than the prior cohort.
- x In English, the gain of 1.7 points for ETHS students was similar to the gain at the national level; however, gains in English have declined in recent years. For example, in 2004, students showed a 3.6 point gain which was well above the gain shown nationally.
- x The largest gain was for math (3.5 points).

Table 7 shows the same information for ethnic subgroups by each subject area. In addition, information for special education and income groups is also provided because these groups are the focus of NCLB and of our district goals.

Table 7. Gain Between Grade 8 and Grade 10: EXPLORE (2008-2009) to PLAN (2010-2011) By Ethnicity

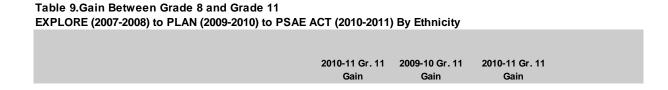
· ·	Ì	Grade 8	Grade 10		
		Av. Scale	Av. Scale	2010-11 Gr.10	2009-10 Gr.10
Ethnicity	Subject	Score	Score	Gain	Gain
African	English	13.7	14.8	1.1	(1.3)
American/Black	Math	14.9	16.9	2.0	(2.2)
(N=176)	Reading	13.2	15.5	2.3	(2.0)
	Science	16.1	17.0	0.9	(0.9)
Hispanic/Latino	English	14.5	15.2	0.7	(1.8)
(N=85)	Math	16.0	18.0	2.0	(2.8)
	Reading	13.9	15.6	1.7	(2.0)
	Science	16.8	17.0	0.2	(1.4)
White	English	19.7	21.8	2.1	(2.4)
(N=303)	Math	19.9	24.6	4.7	(4.3)
	Reading	18.6	22.3	3.7	(3.2)
	Science	20.1	22.9	2.8	(1.5)
Special Ed (IEP)	English	11.9	13.8	1.9	(2.0)
(N=56)	Math	12.8	15.6	2.8	(2.3)
	Reading	12.4	16.3	3.9	(3.0)
	Science	14.5	16.6	2.1	(1.4)
Low-Income	English	13.6	14.6	1.0	(1.3)
(N=229)	Math	15.2	17.0	1.8	(2.3)
	Reading	13.1	15.3	2.2	(1.7)
	Science	16.0	17.0	1.0	(1.0)
Non Low-Income					
(N=402)	English	19.1	21.1	2.0	(2.3)
	Math	19.4	23.8	4.4	(4.2)
	Reading	18.0	21.5	3.5	(3.1)
	Science	19.8	22.2	2.4	(1.5)

- f All subgroups made progress from eighth grade to their sophomore year.
- f Gains in reading were higher for Black, White, special education, and low-income students compared to the previous cohort.
- f White and special education students made greater gains in math and science than the previous cohort.
- f Gains in English for all subgroups were weak compared to other subject areas and to the previous year.
- f Gains for Hispanic students were lower than the previous cohort, and dramatically lower in science.

EXPLORE to PSAE/ACT

- x ETHS students made greater gains from PLAN to PSAE/ACT than students in the state.
- x From EXPLORE to PSAE/ACT, grade 11 students in 2010-11 made approximately the same gains as the preceding cohort in math and reading.
- x In reading and English, students made greater gains between the PLAN test and the PSAE/ACT (beginning of sophomore year to end of junior year) than they did between the EXPLORE test and the PLAN test (middle of eighth grade to beginning of sophomore year).

Table 9 shows the same information for ethnic, special education, and low-income subgroups by each subject area.



f Gains in reading were higher compared to the prior cohort for Black students from EXPLORE to PSAE/ACT.
 f Latino students demonstrated greater gains in math from EXPLORE to PSAE/ACT than the previous cohort.
 f Special education students made greater gains in English, math and reading compared to the prior cohort.

Table 10. ETHS Advanced Placement Exam

	Total ETHS Enrollment	Pct. of ETHS Students Taking AP	Pct. of AP Exam Grades	No. of AP Exams Taken	No. of Students Tested	Avg. No. of AP Exams per
Year		Exams	3 or Higher			Student
1996	2624 <sup>a</sup>	11.6%	80%	591	305	1.9
1997	2703	11.8%	82%	636	348	1.8
1998	2764	12.8%	75%	893	381	2.3
1999	2815	13.1%	73%	754	382	2.0
2000	2967	14.8%	74%	914	440	2.1
2001	3033	15.4%	74%	945	466	2.0
2002	3048	17.9%	77%	1092	545	2.0
2003	3098	17.3%	76%	1207	537	2.2
2004	3058	18.1%	76%	1100	553	2.0
2005	3032 (3103) <sup>b</sup>	18.1% (17.7%)	77%	1157	551	2.1
2006	3164 <sup>c</sup>	16.9%	79%	1142	537	2.1
2007	3041	17.3%	82%	1059	526	2.1
2008	2970	21.2%	78%	1312	630	2.1
2009	2942	21.2%	72%	1311	623	2.1
2010	2891	21.4%	74%	1382	618	2.2
2011	2890	23.6%	65%	1551	681	2.3

Day School, Oct. 1 Official Enrollments

- f The percentage (23.6%) of students participating in AP exams increased by 2.2 percentage points from 2010 to 2011 and marks the highest percentage of students participating in AP exams at ETHS in documented history.
- f However, the percentage of students scoring a "3" or higher decreased from 74 percent to 65 percent. Since we have not seen a decline like this in the past, we delved deeper into the data to understand this change. Table 11 shows a comparison of raw numbers of students achieving each of the point values of the AP scoring scale for 2009-10 and 2010-11. In raw numbers, the number of students achieving a "3" or higher is the same as in 2009-10. This pattern is encouraging; it suggests that the decline in high scores may have to do with the additional students taking AP courses. Notably, more students are taking AP classes than ever before. Although we would like to see these students scoring a "3" or higher, national research shows that students who take AP courses benefit in subsequent college coursework even when they score below a "3".

<sup>&</sup>lt;sup>b</sup>Total enrollment including Academy

<sup>&</sup>lt;sup>c</sup>Total enrollment including Academy

(Hargrove, Godin & Dodd, 2007<sup>2</sup>) We are now conducting additional analyses to identify student populations and specific subject areas that require attention.

Table 11. Number and Percent of Students at Each AP Score Value: 2007-2011

								Total#	Total#
Year	5	4	3	2	1			Tests	Students
								Taken	Tested
	n	n	n	n	n	n*	%	n	n

Figure 8 shows AP results in graphic form. The graph shows a positive trend in the percentage taking the exam from 1995 to 2010.

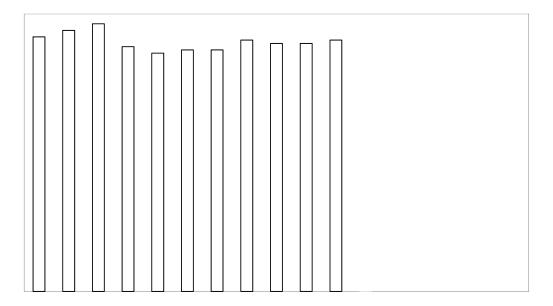
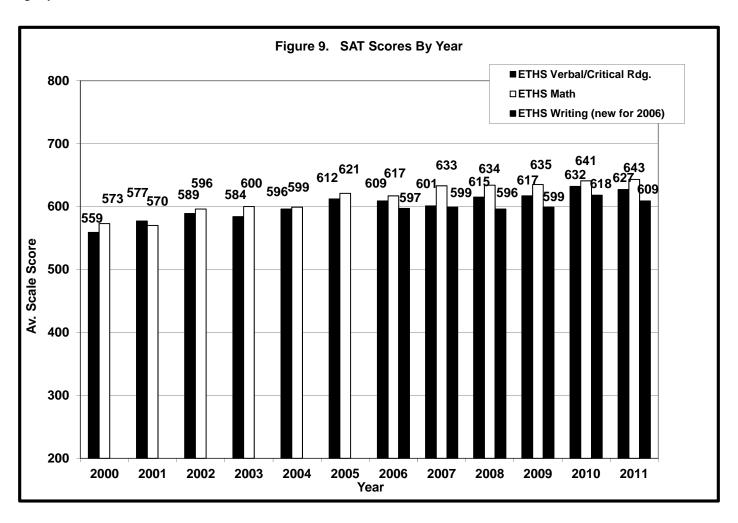


Figure 9 summarizes the average scores for seniors who took the SAT at any time during their high school years. (See Appendix A for a more detailed chart.) If a student took a test more than once, the most recent score is used. The percent of the senior class taking the SAT has been decreasing steadily since 1993-1994. Only 16.8 percent of the 2010 senior class took the SAT. This decrease is due to the fact that all colleges and universities now accept the ACT in their college admission process. Similar to the trend at the national level, there was a slight decline in the average score for Verbal/Critical Reading and Writing for the ETHS students taking the SAT in 2010-11. However, ETHS students' average score in math improved slightly while the national average decreased slightly.



Students continue to register some of the highest scores on the verbal and math subtests since 1980-81 (See Appendix A).

- f The average score for verbal/critical reasoning was 627 (130 points higher than the national group).
- f The average score for math was 643 (129 points above the national group).
- f The average score for writing was 609 (120 points above the national group).

#### PRAIRIE STATE ACHIEVEMENT EXAMINATION

School year 2010-2011 was the tenth year that the Prairie State Achievement Test was administered to all junior students. The PSAE is administered over two days. On the first day of testing, students take an ACT in the areas of reading, mathematics, English, science reasoning, and writing. On the second day, they complete a reading and a math WorkKeys test --- tests of workplace readiness --- as well as a state-developed component in science.

Tables 12 and 13 show PSAE results in reading and math from 2004 through spring of 2011. Table 14 shows PSAE results in science for the same time span. The year 2004 is used as an anchor year because it was the first year where all subgroup data were available and comprehensive.

Table 12. Percentage of Students Meeting/Exceeding Standards in Reading on PSAE: 2004-2011

		Reading									
	2004	2005	2006	2007	2008	2009	2010	2011			
All	62.0	66.5	66.6	67.3	69.9	69.5	63.2	61.0			
White	89.3	91.1	89.3	90.4	90.4	92.6	90.7	87.8			
Black	29.6	34.8	35.4	36.0	46.2	38.8	36.6	33.9			
Hispanic	30.9	49.2	52.8	35.2	38.2	50.0	43.0	38.6			
Special Ed.	21.2	32.9	32.6	38.8	37.9	41.5	26.3	26.9			
Low-income	23.2	32.1	38.0	36.8	36.5	40.4	39.3	32.6			

Table 13. Percentage of Students Meeting/Exceeding Standards in Math on PSAE: 2004-2011

	Math								
	2004 2005		2006 2007		2008	2009	2010	2011	
All	61.3	61.7	67.0	67.1	73.1	69.3	66.2	64.5	
White	89.6	87.1	89.9	90.7	91.6	92.6	93.7	90.9	
Black	25.9	28.7	36.2	35.6	50.7	36.7	39.3	34.9	
Hispanic	34.5	36.9	49.1	35.8	47.3	60.0	44.3	46.6	
Special Ed.	20.9	25.9	27.9	28.4	34.5	38.3	31.7	28.7	
Low-income	20.5	22.8	36.4	31.7	43.4	41.8	38.8	37.5	

Table 14. Percentage of Students Meeting/Exceeding Standards in Science on PSAE: 2004-2011

	Science								
	2004	2005	5 2006 2007 2008		2008	2009	2010	2011	
All	58.1	59.5	55.5	64.1	65.9	60.8	57.6	59.7	
White	88.1	86.4	84.2	89.0	88.1	85.0	88.0	88.0	
Black	19.0	22.9	21.1	27.3	38.6	28.4	28.5	31.8	
Hispanic	42.0	39.4	24.5	29.2	43.8	44.3	38.1	38.4	
Special Ed.	25.4	16.9	14.3	22.2	18.8	27.2	22.8	22.9	
Low-income	16.5	19.7	20.8	27.2	36.0	29.5	31.0	32.3	

- f PSAE scores fluctuate from year to year but progress seems to be static. PSAE data was disaggregated to look at score patterns.
  - o The analysis indicates that 2011 student performance on the ACT in reading and math was comparable to the 2010 cohort. Student performance on the WorkKeys portion appears to be the problem.
    - f In reading, students who achieve an ACT score of 20 or higher and a "5" on the WorkKeys generally meet standards. In 2011, there was a higher percentage of students with scores of 20 or greater on the ACT than in 2010 (60% vs. 54%). However, there was an increase in the percent of WorkKeys scores below "5" in 2011

Figures 11 and 12 show the truancy and dropout rates for school year 2010-11 compared to 2009-10.

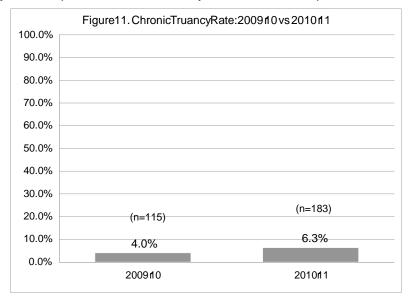
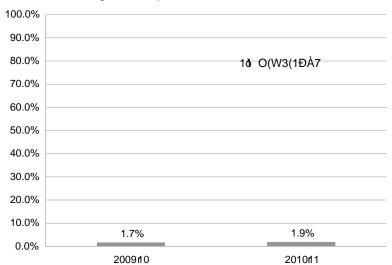
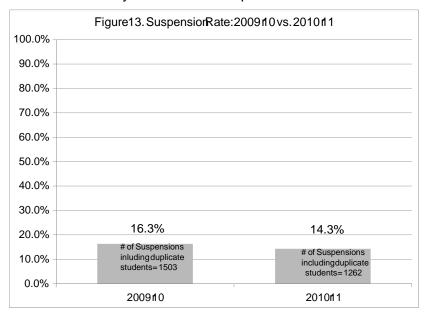


Figure12. Dropout Rate: 2009 r



Finally, Figure 13 shows suspension data for school year 2010-11 compared to 2009-10.



#### Highlights and Trends:

- f Even with the new graduation rate formula, the ETHS graduation rate remains high at 90.5 percent. All subgroups made the 82 percent target with the exception of students with disabilities (77.4%). Although not yet officially released, the state office informs us the overall state graduation rate is 83.8 percent, which is down from the previous year (2009-10 = 87.8%).
- f The dropout rate for the school continues to remain low at just under two percent.
- f The total percent of suspensions decreased from 16.3 percent in 2009-10 to 14.3 percent in 2010-11.
- f The chronic truancy rate increased by 2.3 percentage points.

#### **IMPLICATIONS**

The average ACT composite score of the 2011 graduation class continues to be among the highest scores since 1972. The EXPLORE to PSAE/ACT data analysis indicates that all ethnic groups make progress as they move upward from grades 9 through 12 although some subgroups continue to make more progress than others. The graduation rate of 90.5 percent is well-above the state's target of 82 percent.

Based on this analysis of student performance in 2010-11, some of the areas we need to focus on are:

- x The average score on the English ACT subtest has shown some decline over the last several years. The English department has started making curricular changes beginning with the ninth grade curriculum.
- x Performance on the Prairie State Achievement Examination was lower than t

## Appendix A

Year	Nat'l	ETHS	Points Above Nat'l	Nat'l	ETHS	Points Above Nat'l	Nat'l	ETHS	Points Above Nat'l	Number of Graduating Seniors	Number Taking SAT	NuS