Study of Regular Level Courses: Biology, Algebra and Humanities

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Research, Evaluation & Assessment
Evanston Township High School

Executive Summary

Purpose

One of the district goals for 2004-05 was to conduct a study of regular level classes. The impetus for this study was in part from feedback from the Critical Friends' Visit of 2004. Their report indicated a concern about the rigor of regular level classes. Based on the Critical Friends' recommendations and our own concerns that regular level classes offer a challenging learning experience, there has been much discussion this year focused on courses at the regular level. These discussions have occurred at Curriculum Council and at department meetings led by standards leaders and staff developers. As a result of these discussions, chairs, standards leaders and staff developers will be focusing their attention on regular level courses next year.

Method

Many courses are offered at two, three, or four levels of instruction. These levels are designated 1, 2, honors and advanced placement. For this study, regular level courses were defined as those that are at the 2 level. We focused on three major subject courses: Biology (level 2); 1 Humanities 2; and 1 Algebra . These courses were selected because they are core courses that all students take. In each of these subject areas, we identified students taking these courses in 2001-02 and followed them through the 2003-04 school year. Along the way, we looked at the demographic characteristics of these students and analyzed course grades, EXPLORE, PLAN, and ACT scores, PSAE results, and the courses and levels students were placed in as of 2003-04. We looked at longitudinal growth from EXPLORE to PLAN, and from PLAN to ACT for students for whom we had all three scores. As a result, for some subject areas, our sample of students for the longitudinal analysis decreased by 40 students because the students had not taken all three tests. In addition, we conducted a content analysis of a sampling of documents describing the course expectations of these courses.

Key Highlights

- Students in these regular courses are generally minority. (70% or higher)
- Approximately 29 percent of the students come from low-income families in 1 Algebra and almost half of students in 1 Humanities 2 come from low-income families.
- More students in 1 Algebra received A and B grades in 2001-02 than two years later in their mathematics courses. The distribution of A's and B's remained about the same for students in Biology level 2 and 1 Humanities 2 from 2001-02 to 2003-04.
- In 2003-04, two years after having taken these math, biology and humanities courses at the regular level…
    - A little over 20 percent of the original students in 1 Humanities 2 were in honors level courses in history and English.
    - 11 percent of original students in Biology were in honors science courses.
    - 2 percent of original students in 1 Algebra were in honors math courses.
- In 2003-04, two years after having taken these math, biology and humanities courses at the regular level, about half of the Biology and Algebra students were enrolled in a third year physics or advanced math course such as 2 Algebra.
- Criteria for placement at the regular level varies by subject area. Generally, the students placed in Biology or 1 Algebra courses at the regular level score in the 13 to 19 range on EXPLORE. It should be noted that the EXPLORE test is not the only criteria for placement. Humanities students at the regular level have somewhat lower EXPLORE scores with between 30 and 40

percent falling in the 1 to 12 range.[1] This is in part due to the fact that Humanities uses a combined score of EXPLORE English and Reading subtests ranging from 23 to 32.

- Students at the regular level in Biology, 1 Algebra and 1 Humanities 2 show gains as they move through the grades: English performance showed a gain of 3.6 points from EXPLORE to ACT; mathematics performance showed a gain of 3.2 points; reading performance showed a gain of 3.3 points; and science performance showed a gain of 2.6 points.
- Of the students who took the PSAE, about half of the 1 Algebra and 1 Humanities 2 students met or exceeded standards on the mathematics or social science test, respectively; for Biology and Humanities students, only about one-third met/exceeded standards on the science or reading portions of the PSAE.
- There is variation from teacher to teacher within 1 Algebra, Biology and 1 Humanities 2 at the regular level with respect to the grading scale and weighting of quizzes, tests, homework, lab work and projects.

Overall, the data suggest that achievement for students in regular level courses varies widely. Many students are doing well in these regular level courses and beyond, as confirmed by their grades, test scores, and the fact that some move into honors level coursework. Although some students do well, there are significant numbers of students who get D and F grades in courses, do not show longitudinal gains from EXPLORE, PLAN to ACT, and do not pass the Prairie State Achievement Examination.

Information gleaned in this study reveals variation of regular level practice in placement, grading and course expectations. For example, the criteria for placement into regular level courses varies from subject to subject with 1 Humanities 2 taking more students with lower scores than science or mathematics. Even so, about half of the students taking the PSAE in social science in their junior year meet or exceed standards. The preliminary data from a review of sample course overviews from teachers also indicate that there is variation from teacher to teacher with respect to grading scales and course expectations.

Next Steps

Given these findings, we need to share these findings with department chairs and teacher leaders and from these discussions, develop recommendations around content and placement criteria to ensure consistency and alignment with ETHS and PSAE standards. A second step will be to study classroom practices at the regular level. Results from the current study and surveys will help provide direction for making curricular and instructional change.

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[1] Students in double period 1 Algebra were not included in the present study. Students in double period 1 Algebra have lower EXPLORE scores similar to 1 Humanities 2.

Purpose

One of the district goals for 2004-05 was to conduct a study of regular level classes. The impetus for this study was in part from feedback from the Critical Friends' Visit of 2004. Their report indicated a concern about the rigor of regular level classes. Based on the Critical Friends' recommendations and our own concerns that regular level classes offer a challenging learning experience, the district included in its 2004-05 goals an exploratory study to review performance and expectations in these classes.

Method

Many courses are offered at two, three, or four levels of instruction. These levels are designated 1, 2, honors and advanced placement. For this study, regular level courses were defined as those that are at the 2 level. We focused on three major subject courses: Biology (level 2); 1 Humanities 2; and 1 Algebra . These courses were selected because they are core courses that all students take. In each of these subject areas, we identified students taking these courses in 2001-02 and followed them through the 2003-04 school year. Along the way, we looked at the demographic characteristics of these students and analyzed course grades, EXPLORE, PLAN, and ACT scores, PSAE results, and the courses and levels students were placed in as of 2003-04. We looked at longitudinal growth from EXPLORE to PLAN, and from PLAN to ACT for students for whom we had all three scores. As a result, for some subject areas, our sample of students for the longitudinal analysis decreased by 40 students because the students had not taken all three tests. In addition, we conducted a content analysis of a sampling of documents describing the course expectations of these courses.

Biology

Data for Biology regular students are shown as Attachments 1 and 2. Attachment 1 includes information about student characteristics, grades, and GPA. Attachment 2 includes information about student test outcomes: EXPLORE, PLAN, ACT and PSAE results. Key points from these data along with information about subsequent course patterns and course expectations are summarized below.

Who are the students taking Biology Level 2? *(Table 1)*

- There were 115 students enrolled in Biology Level 2 in 2001-02 of whom the majority of enrollees were students of color (70%).
- More females (56%) than males (43%) were in these classes.
- Based on free/reduced lunch information, 38 percent of the students were from low-income families.

What grades do students receive in Biology Level 2 and in subsequent science courses two years later?

- Grades *(Figures 1 & 2)*
  - In 2001-02, about 37 percent of students received A and B grades; 34 percent received a C grade; 23 percent received D and F grades; and 5 percent did not receive credit due to attendance problems.
  - In 2003-04, as juniors or seniors, 77 of the original 115 students were enrolled in geology, chemistry, physics, astronomy or anatomy and physiology courses. Of these original students, 13 students or 11 percent were in honors level courses (either physics,

astronomy or anatomy/physiology). Approximately 47 percent of the 115 students were in physics. Twenty-two students or 19 percent were not enrolled in any science courses and 16 students or 14 percent had withdrawn from the high school. About 2 percent were retaking biology and about 3 percent were in Evening Academy.
    - Grades for the science courses taken in 2003-04 were distributed as follows: about 49 percent of the 77 students received an A or B grade; 26 percent received a C grade; 17 percent received D and F grades; and 8 percent did not receive credit due to attendance problems.
- Cumulative Grade Point Average *(Tables 2 & 3)*
    - In 2001-02, 70 percent of the 115 students had a cumulative GPA of 2.00 or higher (C average or higher).
    - In 2003-04, 84 percent of the 99 students still enrolled at ETHS had a cumulative GPA of 2.00 or higher.

How do students perform on standardized tests as they progress through the high school?

- EXPLORE Test Results *(Table 4)*
    - Students in Biology Level 2 classes for the most part scored in the range of 13 to 19 on the EXPLORE science subtest as eighth graders prior to high school. (Placement criteria targets students with scale scores from 15 to 17.) About 41 percent of the students scored in the 13 to 15 range and 55 percent scored in the 16 to 19 range.

- Longitudinal Analysis: EXPLORE to PLAN Test Results by Score Range *(Table 5)*
    - The PLAN test is administered sophomore year. Of the 115 students, 79 students had both EXPLORE and PLAN scores. About 79 percent of the students originally scoring in the 13 to 15 range on the EXPLORE improved --- 67 percent achieved in the range of 16 to 19, and 12 percent achieved a score in the range of 20 to 23. For the students originally scoring in the 16 to 19 range, two-thirds remained in that range on the PLAN, 23 percent improved their score range and 12 percent dropped down to the 13 to 15 range. Students' scores may drop for a variety of reasons including forgetting material, not trying on a test, or not generalizing skills and concepts well enough to answer correctly similar questions from test to test.

- Longitudinal Analysis: PLAN to ACT Test Results by Score Range *(Table 6)*
    - The ACT test in these analyses is the one administered as part of the PSAE in students' junior year. Of the 115 students, 79 students had EXPLORE, PLAN and ACT scores, For the students scoring in the 16 to 19 range on the PLAN, 43 percent remained in this range, 37 percent improved their score range and 20 percent dropped down to lower ranges.

- Longitudinal Analysis: EXPLORE to PLAN to ACT by Scale Score Change *(Table 7)*
    - For science, students showed an average scale score gain of 2.0 points from EXPLORE to PLAN and .6 points from PLAN to ACT for a total of 2.6 points. To put this in context, we report this type of analysis for ETHS students compared to a national sample in the school's Report on Student Achievement. For this same time period, ETHS students showed a gain of 1.9 points from EXPLORE to PLAN (Nat'l = 1.4 points) and 2.1 points from PLAN to ACT (Nat'l = 2.2 points).

- PSAE Test Results *(Table 8 & Figure 3)*
  - Of the original 115 students in Biology Level 2, 98 students took the PSAE science test in 2003-04. Only about one-third of these students met standards on the PSAE; 63 percent fell in the below standards or warning performance category.

What are the Course Expectations of Biology Level 2 Courses?

- The grading scale for Biology level 2 varies from teacher to teacher. An A may start at 90 percent or 93 percent, a B may start from 80 to 83 percent, and a C may start from 70 to 73 percent.

- The weighting for quarter grades varies from teacher to teacher. For example, based on a sample of course expectations, lab work may account for between 15 percent to 30 percent; homework may account for between 10 and 20 percent; and quizzes and tests may account for between 40 and 50 percent.

1 Algebra

Data for 1 Algebra students are shown as Attachments 3 and 4. Attachment 3 includes information about student characteristics, grades, and GPA. Attachment 4 includes information about student test outcomes: EXPLORE, PLAN, ACT, ACT WorkKeys, and PSAE results. Key points from these data along with information about subsequent course patterns and course expectations are summarized below.

Who are the students taking 1 Algebra? *(Table 9)*

- There were 102 students enrolled in 1 Algebra in 2001-02 of whom the majority of enrollees were students of color (70%).
- More males (54%) than females (46%)were in these classes.
- Based on free/reduced lunch information, 29 percent of the students were from low-income families.

What grades do students receive in 1 Algebra and in subsequent mathematics courses two years later?

- **Grades** *(Figures 4 & 5)*
  - In 2001-02, 44 percent of students received A and B grades; 28 percent received a C grade; 26 percent received D and F grades; and 2 percent did not receive credit due to attendance problems.
  - In 2003-04, as juniors or seniors, 72 of the original 102 students were enrolled in mathematics courses. Of these students, 11 students were enrolled in trigonometry, 2 students were in honors 2 Algebra, 42 students were in 2 Algebra, and 2 students were in 2 Algebra double period. Thirteen students (13%) were in semester 1 of 2 Algebra or Empirical Geometry. Nine students or 9 percent were not enrolled in any math courses and 21 students or 21 percent had withdrawn from the high school. About 2 percent were in Evening Academy or the SIT program.

- Grades for these math courses taken in 2003-04 were distributed as follows: about 21 percent of the 72 students received an A or B grade; 36 percent received a C grade; 36 percent received D and F grades; and 6 percent did not receive credit due to attendance problems.

- Cumulative Grade Point Average *(Tables 10 & 11)*
  - In 2001-02, 73 percent of the 102 students had a cumulative GPA of 2.00 or higher (C average or higher).
  - In 2003-04, 83 percent of the 81 students still enrolled at ETHS had a cumulative GPA of 2.00 or higher.

How do students perform on standardized tests as they progress through the high school?

- EXPLORE Test Results *(Table 12)*
  - Students in 1 Algebra classes for the most part scored in the range of 13 to 19 on the EXPLORE mathematics subtest as eighth graders prior to high school. (Placement criteria targets students with scale scores ranging from 15 to 20.) About 37 percent of the students scored in the 13 to 15 range, and 54 percent scored in the 16 to 19 range.

- Longitudinal Analysis: EXPLORE to PLAN Test Results by Score Range *(Table 13)*
  - The PLAN test is administered during sophomore year. Of the 102 students, 62 students had both EXPLORE and PLAN scores. Six students moved out of the 1 to 12 range --- half scored in the 13 to 15 range and half scored in the 16 to 19 range. About 54 percent of the students originally scoring in the 13 to 15 range on the EXPLORE improved and moved into the 16 to 19 range. For the students originally scoring in the 16 to 19 range, two-thirds remained in that range on the PLAN, 21 percent improved their score range and 12 percent dropped down to the 13 to 15 range.

- Longitudinal Analysis: PLAN to ACT Test Results by Score Range *(Table 14)*
  - The ACT test in these analyses is the one administered as part of the PSAE in students' junior year. Of the 102 students, 62 students had EXPLORE, PLAN and ACT scores. For the students scoring in the 13 to 15 range on the PLAN, 19 percent remained in this range, 69 percent moved into the 16 to 19 range, and 12 percent moved into the 20 to 23 range. For the students in the 16 to 19 range on the PLAN, 42 percent remained in this range, 46 percent improved their score range and 12 percent dropped down to lower ranges.

- Longitudinal Analysis: EXPLORE to PLAN to ACT by Scale Score Change *(Table 15)*
  - For mathematics, students showed a scale score gain of 1.2 points from EXPLORE to PLAN and 2.0 points from PLAN to ACT for a total of 3.2 points. For this same time period, ETHS students showed a gain of 3.3 points from EXPLORE to PLAN (Nat'l = 2.2 points) and 2.4 points from PLAN to ACT (Nat'l = 2.2 points).

- PSAE Test Results *(Table 16 & 17, Figure 6)*
  - Of the original 102 students in 1 Algebra, 77 students took the PSAE mathematics test. About half of the students met standards on the PSAE; 49 percent fell in the below standards category; only 1 percent scored in the warning category.
  - PSAE Math WorkKeys: the majority (76%) of students received a score of "4" or "5" on a scale ranging from 3 to 7. Students generally need a 5 or 6 to meet standards on this portion of the PSAE.

What are the course expectations of 1 Algebra courses?

- The grading scale is generally similar but varies from teacher to teacher. For example, one teacher may require 50 percent for a D, and another teacher may require 62 percent.
- The weighting for quarter grades also varies slightly from teacher to teacher. For example, homework may account for between 20 and 25 percent; and quizzes and tests may account for between 75 and 80 percent;

1 Humanities 2

Data for 1 Humanities 2 students are shown as Attachments 5, 6, and 7. Attachment 5 includes information about student characteristics, grades, and GPA. Attachments 6 and 7 include information about student test outcomes: Attachment 6 shows test data for English on EXPLORE, PLAN and ACT; Attachment 7 shows test data for reading on EXPLORE, PLAN, ACT and PSAE. Key points from these data along with information about subsequent course patterns and course expectations are summarized below.

Who are the students taking 1 Humanities Level 2? *(Table 18)*

- There were 124 students enrolled in 1 Humanities 2 in 2001-02 of whom the majority of enrollees were students of color (79%).
- There were equal numbers of males and females in these classes.
- Based on free/reduced lunch information, 46 percent of the students were from low-income families.

What grades do students receive in 1 Humanities Level 2 and in subsequent history/English courses two years later?

- Grades
  - English *(Figures 7 & 8)*
    - In 2001-02, about 35 percent of students received A and B grades; 30 percent received a C grade; 34 percent received D and F grades; and only 1 percent received an NC due to attendance problems.
    - In 2003-04, as juniors and seniors, 99 of the original 124 students were enrolled in English classes and 25 students had withdrawn from the high school. Approximately 65 percent of the enrolled students were in some type of 3 English course (e.g., 3 English 1, 3 English 2, 3 English H, 3 English 2 Journalism, 3 English 2 Journalism H). About 6 percent were in American Studies, and 3 percent were in Academy courses. About 21 percent were enrolled at the honors level. Grades for these English courses were distributed as follows: 42 percent of the 99 students received an A or B grade; 26 percent received a C grade; 23 percent received D and F grades; and 5 percent received an NC for attendance issues.

- History *(Figures 9 & 10)*
  - In 2001-02, about 40 percent of students received A and B grades; 19 percent received a C grade; 39 percent received D and F grades; and 2 percent received an NC due to attendance problems.
  - In 2003-04, as juniors and seniors, 96 of the 124 students were enrolled in History classes and 25 had withdrawn from the high school. Approximately 64 percent were in some type of U.S. history course; 23 percent were enrolled at the honors level and 3 percent were enrolled at the Advanced Placement level. About 3 percent were in Evening Academy. Two percent were not enrolled in history courses. Grades for these history courses were distributed as follows: 40 percent received an A or B grade; 28 percent received a C grade; 21 percent received D and F grades; and 9 percent received an NC for attendance issues.

- Cumulative Grade Point Average *(Tables 19 & 20)*
  - In 2001-02, 59 percent of the 124 students had a cumulative GPA of 2.00 or higher (C average or higher).
  - In 2003-04, 70 percent of the 99 students still enrolled at ETHS had a cumulative GPA of 2.00 or higher.

How do students perform on standardized tests as they progress through the high school?

- EXPLORE Test Results
  - English *(Table 21)*
    - Students in 1 Humanities 2 classes for the most part (53%) scored in the 13 to 15 range on the EXPLORE English subtest as eighth graders prior to high school. An additional 34 percent scored in the 1 to 12 range. (Placement criteria targets students with combined scale scores ranging from 23 to 32.)
  - Reading *(Table 25)*
    - About 47 percent of students in 1 Humanities 2 classes scored in the 13 to 15 range on the EXPLORE reading subtest as eighth graders. An additional 41 percent scored in the 1 to 12 range. (Placement criteria targets students with combined scale scores ranging from 23 to 32.)

- Longitudinal Analysis: EXPLORE to PLAN Test Results by Score Range
  - English *(Table 22)*
    - The PLAN test is administered sophomore year. Of the 124 students, 74 students had both EXPLORE and PLAN scores. About 73 percent of the students originally scoring in the 1 to 12 range on the EXPLORE improved. For the students originally scoring in the 13 to 15 range, 58 percent improved their score range, and 10 percent dropped down to the 1 to 12 range.
  - Reading *(Table 26)*
    - Of the 124 students, 74 students had both EXPLORE and PLAN scores. About 71 percent of the students originally scoring in the 1 to 12 range on the EXPLORE reading subtest improved. For the students originally scoring in the 13 to 15 range, 56 percent improved their score range and 21 percent dropped down to the 1 to 12 range. In the 16 to 19 range, 44 percent improved their score range and 33 percent dropped down to a lower range.

- Longitudinal Analysis: PLAN to ACT Test Results by Score Range
  - English *(Table 23)*
    - The ACT test in these analyses is the one administered as part of the PSAE in students' junior year. Of the 124 students, 74 had EXPLORE, PLAN and ACT scores. For the students in the 1 to 12 range on the PLAN, 45 percent improved their score range; in the 13 to 15 range, 37 percent improved their score range and 18 percent dropped; in the 16 to 19 score range, 33 percent improved and 30 percent dropped.
  - Reading *(Table 27)*
    - Of the 124 students, 74 had EXPLORE, PLAN and ACT scores for reading. A little less than half of the students originally in the 1 to 12 range improved their score range; 58 percent of the students originally in the 13 to 15 range improved their score range.

- Longitudinal Analysis: EXPLORE to PLAN to ACT by Scale Score Change *(Tables 24 & 28)*
  - For English, students showed a scale score gain of 2.8 points from EXPLORE to PLAN and 0.8 points from PLAN to ACT for a total of 3.6 points. For this same time period, ETHS students showed a gain of 3.6 points from EXPLORE to PLAN (Nat'l = 2.2 points) and 3.0 points from PLAN to ACT (Nat'l = 2.5).
  - For reading students showed a scale score gain of 2.5 points from EXPLORE to PLAN and .8 points from PLAN to ACT for a total of 3.3 points. For this same time period, ETHS students showed a gain of 3.2 points from EXPLORE to PLAN (Nat'l = 2.1 points) and 3.8 points from PLAN to ACT (Nat'l = 3.5 points).

- PSAE Test Results *(Tables 29, 30, & 31, Figure 11 & 12)*
  - Of the original 124 students in 1 Humanities 2, 96 students took the PSAE reading test. Only about one-third of these students met standards on the PSAE; 65 percent fell in the below standards or warning category. For the PSAE social science test, about 52 percent met standards; 48 percent fell below standards or in the warning category.
  - PSAE Reading WorkKeys: the majority (76%) of students score a "4" or "5" on a scale from less than 3 through 5, 6 or 7.

What are the Course Expectations of 1 Humanities 2 Courses?

- Students in 1 Humanities 2 receive both an English and a history grade. The grading scale for these history and English courses varies slightly from teacher to teacher. For example, in history, one teacher might assign an A at 95 percent while another teacher might assign an A at 93 percent. In English, one teacher might assign an A at 91 percent and another at 94 percent, or a D might be 60 percent or 66 percent.
- For both English and history teachers, the weighting for course quarter grades varies from teacher to teacher. For example, homework may account for between 10 to 40 percent; tests and quizzes may account for 25 to 35 percent; and class participation generally account for 10 to 20 percent.

Summary

This study was conducted in response to a report from our Critical Friends and our own concerns over ensuring rigor in regular level courses, in particular Biology (level 2), 1 Algebra, and 1 Humanities 2. Key points are presented below:

- Students in these regular courses are generally minority. (70% or higher)
- Approximately 29 percent of the students come from low-income families in 1 Algebra and almost half of students in 1 Humanities 2 come from low-income families.
- More students in 1 Algebra received A and B grades in 2001-02 than two years later in their mathematics courses. The distribution of A's and B's remained about the same for students in Biology level 2 and 1 Humanities 2 from 2001-02 to 2003-04.
- In 2003-04, two years after having taken these math, biology and humanities courses at the regular level…
    - A little over 20 percent of the original students in 1 Humanities 2 were in honors level courses in history and English.
    - 11 percent of original students in Biology were in honors science courses.
    - 2 percent of original students in 1 Algebra were in honors math courses.
- In 2003-04, two years after having taken these math, biology and humanities courses at the regular level, about half of the Biology and Algebra students were enrolled in a third year physics or advanced math course such as 2 Algebra.
- Criteria for placement at the regular level varies by subject area. Generally, the students placed in Biology or 1 Algebra courses at the regular level score in the 13 to 19 range on EXPLORE. It should be noted that the EXPLORE test is not the only criteria for placement. Humanities students at the regular level have somewhat lower EXPLORE scores with between 30 and 40 percent falling in the 1 to 12 range.[2] This is in part due to the fact that Humanities uses a combined score of EXPLORE English and Reading subtests ranging from 23 to 32.
- Students at the regular level in Biology, 1 Algebra and 1 Humanities 2 show gains as they move through the grades: English performance showed a gain of 3.6 points from EXPLORE to ACT; mathematics performance showed a gain of 3.2 points; reading performance showed a gain of 3.3 points; and science performance showed a gain of 2.6 points.
- Of the students who took the PSAE, about half of the 1 Algebra and 1 Humanities 2 students met or exceeded standards on the mathematics or social science test, respectively; for Biology and Humanities students, only about one-third met/exceeded standards on the science or reading portions of the PSAE.
- There is variation from teacher to teacher within 1 Algebra, Biology and 1 Humanities 2 at the regular level with respect to the grading scale and weighting of quizzes, tests, homework, lab work and projects.

Overall, the data suggest that achievement for students in regular level courses varies widely. Many students are doing well in these regular level courses and beyond, as confirmed by their grades, test scores, and the fact that some move into honors level coursework. Although some students do well, there are significant numbers of students who get D and F grades in courses, do not show longitudinal gains from EXPLORE, PLAN to ACT, and do not pass the Prairie State Achievement Examination.

[2] Students in double period 1 Algebra were not included in the present study. Students in double period 1 Algebra have lower EXPLORE scores similar to 1 Humanities 2.

Information gleaned in this study reveals variation of regular level practice in placement, grading and course expectations. For example, the criteria for placement into regular level courses varies from subject to subject with 1 Humanities 2 taking more students with lower scores than science or mathematics. Even so, about half of the students taking the PSAE in social science in their junior year meet or exceed standards. The preliminary data from a review of sample course overviews from teachers also indicate that there is variation from teacher to teacher with respect to grading scales and course expectations.

Next Steps

Given these findings, we need to share these findings with department chairs and teacher leaders and from these discussions, develop recommendations around content and placement criteria to ensure consistency and alignment with ETHS and PSAE standards. A second step will be to study classroom practices at the regular level. Results from the current study and surveys will help provide direction for making curricular and instructional change.

Attachment 1: Biology Level 2 Demographics and Grade Information

Table 1. Demographic Characteristics of Biology Level 2 Students

(n=115)	n	%
Gender		
Female	65	56
Male	50	43
Ethnicity		
Asian	3	3
Black	63	55
Hispanic	13	11
Multiracial	1	1
White	35	30
Income		
Low Income	44	38
Mid/High Income	71	62
LEP		
LEP	4	96
Non-LEP	111	3

Table 2. Cumulative GPA: Semester 1 2001-02 (n=115)

	n	%
Less than 1.00	6	5
1.00 to 1.99	29	25
2.00 to 2.99	49	43
3.00 to 4.00	31	27

Table 3. Cumulative GPA: Semester 2 2003-04 (n=99)

	n	%
Less than 1.00	0	0
1.00 to 1.99	16	16
2.00 to 2.99	54	55
3.00 to 4.00	29	29

Figure 1. Percent Receiving Each Grade in Biology Level 2: Semester 1: 2001-02 (N= 115)

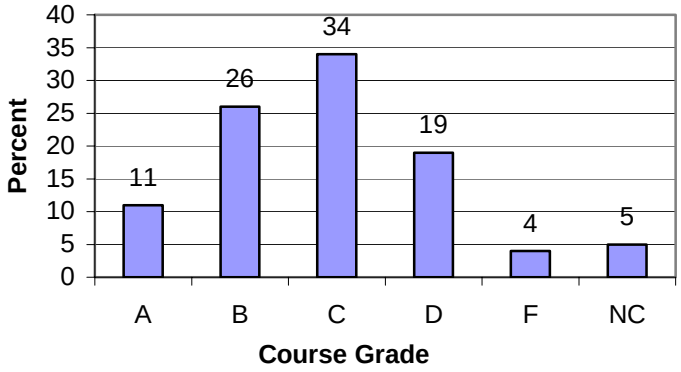
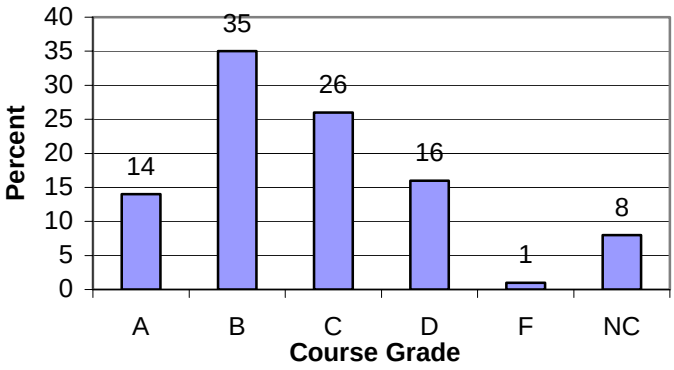


Figure 2. Percent Receiving Each Grade in Science Courses : Semester 2, 2003-04 (N=77)



Attachment 2: Biology Level 2 Test Information

Table 4. EXPLORE Science Scale Score by Category (n=91)

Science Subtest Scale Score Range	n	%
1-12	1	1
13-15	38	41
16-19	51	55
20-23	1	1

Table 5. EXPLORE by PLAN: Science

EXPLORE (n=79)	PLAN						
Science Subtest Scale Score Range	1-12	13-15	16-19	20-23	24-27	28-32	33-36
1-12	0%	100%	0%	0%	0%	0%	NA
13-15	0%	21%	67%	12%	0%	0%	NA
16-19	0%	12%	65%	21%	2%	0%	NA
20-23	0%	0%	100%	0%	0%	0%	NA
24-27	0%	0%	0%	0%	0%	100%	NA

Table 6. PLAN by ACT: Science

PLAN (n=79)	ACT						
Science Subtest Scale Score Range	1-12	13-15	16-19	20-23	24-27	28-32	33-36
1-12	0%	0%	0%	0%	0%	0%	0%
13-15	0%	31%	54%	15%	0%	0%	0%
16-19	4%	16%	43%	35%	2%	0%	0%
20-23	0%	0%	54%	15%	31%	0%	0%
24-27	0%	0%	0%	100%	0%	0%	0%
28-32	0%	0%	0%	0%	100%	0%	0%

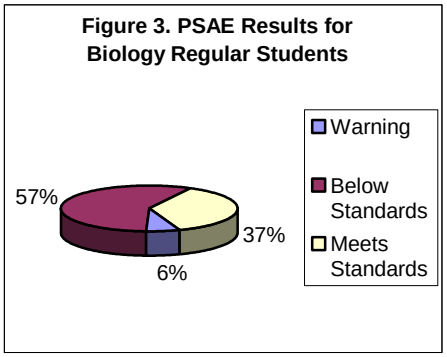
Table 7. EXPLORE to PLAN to ACT Gains: Science

Science Subtest (n=79)	EXPLORE	PLAN	Gain		PLAN	ACT	Gain
Biology Level 2	15.9	17.9	2		17.9	18.5	0.6
ETHS	17.8	19.7	1.9		19.6	21.7	2.1
Nat'l	16.8	18.2	1.4		19.3	21.5	2.2

Table 8. PSAE Test Results: Science

PSAE Science (n=98)	N	%
Warning	6	6
Below Standards	56	57
Meets Standards	36	37

Figure 3. PSAE Results for Biology Regular Students



Atachment 3: 1 Algebra Demographic and Grade Information

Table 9. Demographics for 1 Algebra Students

	N	%
Gender		
Female	47	46
Male	55	54
Ethnicity		
Asian	2	3
Black	53	55
Hispanic	5	11
Multiracial	1	1
White	41	30
Income		
Low Income	30	29
Mid/High Income	72	71
LEP		
LEP	2	2
Non-LEP	100	98

Table 10. Cumulative GPA: Semester 1 2001-02 (N=102)

	N	%
Less than 1.00	4	4
1.00 to 1.99	23	23
2.00 to 2.99	47	46
3.00 to 4.00	28	27

Table 11. Cumulative GPA: Semester 2 2003-04 (N=81)

	N	%
Less than 1.00	0	0
1.00 to 1.99	14	17
2.00 to 2.99	46	57
3.00 to 4.00	21	26

Figure 4. Percent Receiving Each Grade in 1 Algebra: Semester 1, 2001-02 (n=102)

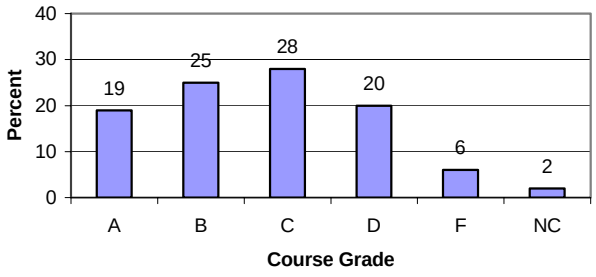
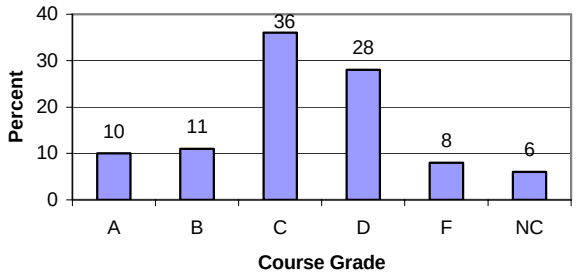


Figure 5. Percent Receiving Each Grade in Math Courses: Semester 2, 2003-04 (n=72)



Attachment 4: 1 Algebra Test Information

Table 12. EXPLORE Math Scale Score by Category

Math Score Range (n= 85)	n	%
1-12	5	6
13-15	31	37
16-19	45	54
20-23	2	2
24-27	0	0

Table 13. EXPLORE by PLAN: Mathematics

EXPLORE (n=62)	PLAN						
Math Subtest Scale Score Range	1-12	13-15	16-19	20-23	24-27	28-32	33-36
1-12	0%	50%	50%	0%	0%	0%	NA
13-15	0%	46%	54%	0%	0%	0%	NA
16-19	0%	12%	65%	21%	2%	0%	NA
20-23	0%	0%	100%	0%	0%	0%	NA
24-27	0%	0%	0%	0%	0%	0%	NA

Table 14. PLAN by ACT: Mathematics

PLAN (n=62)	ACT						
Math Subtest Scale Score Range	1-12	13-15	16-19	20-23	24-27	28-32	33-36
1-12	0%	0%	0%	0%	0%	0%	0%
13-15	0%	19%	69%	12%	0%	0%	0%
16-19	0%	12%	42%	39%	5%	2%	0%
20-23	0%	0%	40%	40%	20%	0%	0%
24-27	0%	0%	0%	100%	0%	0%	0%
28-32	0%	0%	0%	0%	0%	0%	0%

Table 15. EXPLORE to PLAN to ACT Gains: Mathematics

Math Subtest (n=62)	EXPLORE	PLAN	Gain		PLAN	ACT	Gain
1 Algebra	15.7	16.9	2.2		16.9	18.9	2.0
ETHS	17.2	20.5	3.3		20.7	23.1	2.4
Nat'l	15.4	17.6	2.2		19.0	21.2	2.2

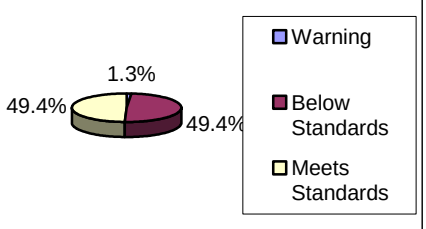
Table 16. PSAE Test Results: Mathematics

PSAE Math (n= 77)	N	%
Warning	1	1
Below Standards	38	49
Meets Standards	38	49

Table 17. ACT Math WorkKeys

ACT Math WorkKeys (n=79)	N	%
0	1	1
3	7	9
4	23	29
5	37	47
6	10	13
7	1	1

Figure 6. PSAE Math Results



Attachment 5: 1 Humanities 2 Demographic and Grade Information

Table 18. Demographics for 1 Humanities 2 Students

(n= 124)	n	%
Gender		
Female	62	50
Male	62	50
Ethnicity		
Asian	3	2
Black	82	66
Hispanic	14	11
Multiracial	0	0
White	25	20
Income		
Low Income	57	46
Mid/High Income	67	54
LEP		
LEP	6	5
Non-LEP	118	95

Table 19. Cumulative GPA: Semester 1 2001-02 (N=124)

	n	%
Less than 1.00	7	6
1.00 to 1.99	43	35
2.00 to 2.99	49	39
3.00 to 4.00	25	20

Table 20. Cumulative GPA: Semester 2 2003-04 (N=99)

	n	%
Less than 1.00	1	1
1.00 to 1.99	29	29
2.00 to 2.99	49	50
3.00 to 4.00	20	20

Figure 7. Percent Receiving Each Grade in 1 Hum 2 English: Semester 1, 2001-02 (n=124)

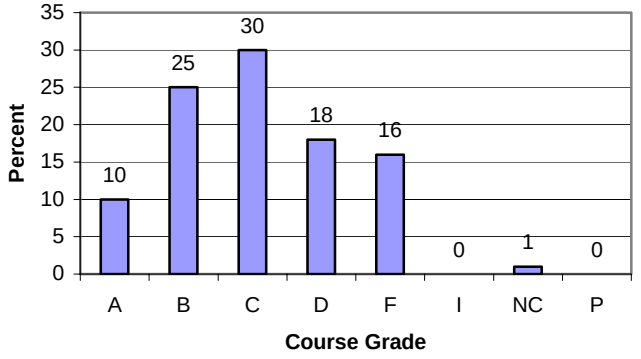


Figure 8. Percent Receiving Each Grade in English Courses: Semester 1, 2003-04 (n=99)

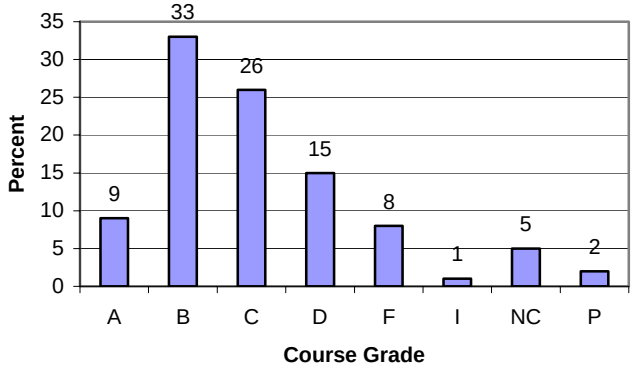


Figure 9. Percent Receiving Each Grade in 1 Hum 2 History: Semester 1, 2001-02 (n=124)

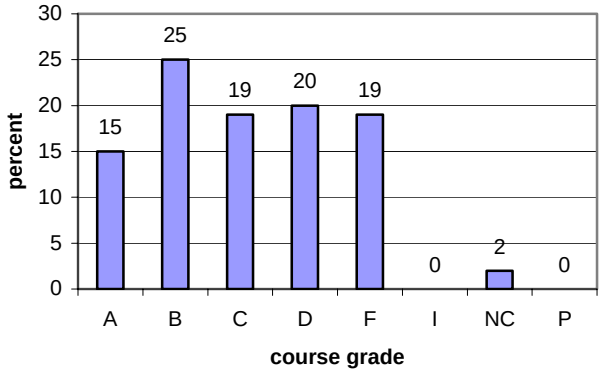
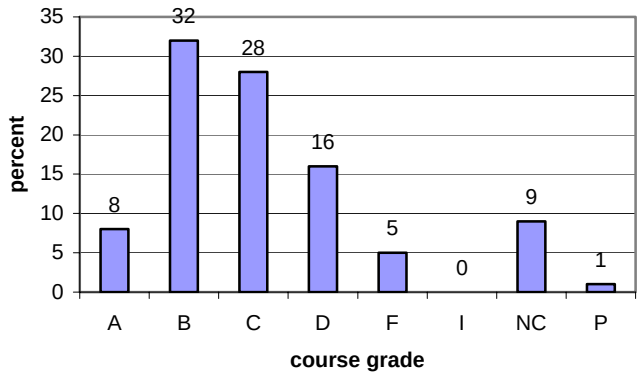


Figure 10. Percent Receiving Each Grade in History Courses: Semester 2, 2003-04 (n=96)



Attachment 6: 1 Humanities 2 Test Information, English

Table 21. EXPLORE Scale Score by Category (n=100)

English Score Range	n	%
1-12	34	34
13-15	53	53
16-19	9	9
20-23	3	3
24-27	1	1

Table 22. EXPLORE by PLAN: English

EXPLORE (n=74)	PLAN						
English Subtest Scale Score Range	1-12	13-15	16-19	20-23	24-27	28-32	33-36
1-12	27%	38%	35%	0%	0%	0%	NA
13-15	10%	32%	50%	8%	0%	0%	NA
16-19	0%	0%	71%	14%	14%	0%	NA
20-23	0%	0%	0%	0%	50%	50%	NA
24-27	0%	0%	0%	0%	0%	100%	NA

Table 23. PLAN by ACT: English

PLAN (n=74)	ACT						
English Subtest Scale Score Range	1-12	13-15	16-19	20-23	24-27	28-32	33-36
1-12	55%	27%	18%	0%	0%	0%	0%
13-15	18%	45%	32%	5%	0%	0%	0%
16-19	6%	24%	37%	30%	3%	0%	0%
20-23	0%	0%	0%	100%	0%	0%	0%
24-27	0%	0%	50%	0%	50%	0%	0%
28-32	0%	0%	0%	0%	0%	50%	50%

Table 24. EXPLORE to PLAN to ACT Gains: English

English Subtest (n=74)	EXPLORE	PLAN	Gain		PLAN	ACT	Gain
1 Humanities 2	13.2	16.0	2.8		16.0	16.8	0.8
ETHS	16.2	19.8	3.6		19.3	22.3	3.0
Nat'l	15.2	17.4	2.2		18.8	21.3	2.5

Attachment 7: 1 Humanities 2 Test Information, Reading and Social Science

Table 25. EXPLORE Scale Score by Category (n=100)

Reading Score Range	n	%
1-12	41	41
13-15	47	47
16-19	12	12
20-23	0	0
24-27	0	0

Table 26. EXPLORE by PLAN: Reading

EXPLORE (n=74)	PLAN						
Reading Subtest Scale Score Range	1-12	13-15	16-19	20-23	24-27	28-32	33-36
1-12	26%	42%	29%	0%	3%	0%	NA
13-15	21%	24%	35%	18%	3%	0%	NA
16-19	0%	33%	11%	33%	11%	11%	NA
20-23	0%	0%	0%	0%	0%	0%	NA
24-27	0%	0%	0%	0%	0%	0%	NA

Table 27. PLAN by ACT: Reading

PLAN (n=74)	ACT						
Reading Subtest Scale Score Range	1-12	13-15	16-19	20-23	24-27	28-32	33-36
1-12	53%	33%	13%	0%	0%	0%	0%
13-15	17%	25%	46%	8%	4%	0%	0%
16-19	4%	32%	41%	18%	4%	0%	0%
20-23	0%	0%	22%	44%	33%	0%	0%
24-27	33%	0%	33%	0%	0%	33%	0%
28-32	0%	0%	0%	0%	0%	100%	0%

Table 28. EXPLORE to PLAN to ACT Gains: Reading

Reading Subtest (n=74)	EXPLORE	PLAN	Gain		PLAN	ACT	Gain
1 Humanities 2	13.5	16.0	2.5		16.0	16.8	0.8
ETHS	15.9	19.1	3.2		18.9	22.7	3.8
Nat'l	15.0	17.1	2.1		18.4	21.9	3.5

Table 29. PSAE Test Results: Reading

PSAE Reading (n= 96)	n	%
Warning	4	4
Below Standards	58	61
Meets Standards	33	34
Exceeds Standards	1	1

Figure 11. PSAE Reading Results

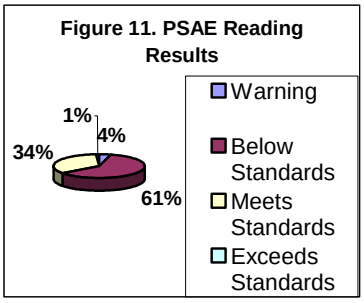


Table 30. PSAE Test Results: Social Science

PSAE Social Science (n= 96)	n	%
Warning	6	6
Below Standards	40	42
Meets Standards	47	49
Exceeds Standards	3	3

Figure 12. PSAE Social Science Results

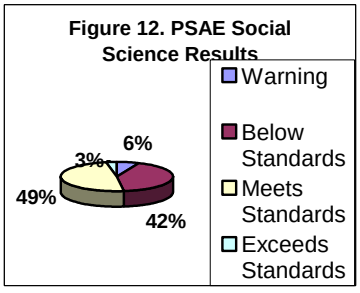


Table 31. ACT Reading WorkKeys

ACT Reading WorkKeys (n=96)	n	%
0	2	2
3	9	9
4	51	53
5	22	23
6	12	13
7	0	0