
Study of Mixed-Level Classes:

Biology 2/H, and Humanities 2/H, U.S. History, American Studies, and Selected Global Studies Courses

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**Research, Evaluation & Assessment
Evanston Township High School**

Executive Summary

Background

This evaluation of mixed-level (M-L) classes was carried out to meet one of the board goals for 2004-05. The impetus for this study was an interest on the part of administrators, department chairs and teachers in whether this model is effective in meeting its intended purposes. Since there is very little written documentation of the mixed-level model, the study set out to identify purposes and then determine if we are meeting these purposes. Overall, interviews and surveys revealed two underlying premises of the mixed-level model: 1) to provide a means to prepare more students, particularly students of color, to take honors levels courses; and 2) to provide a means for all students to have some of the same intellectual experiences. As the study progressed, five purposes were identified and are delineated in the body of this report.

Study Design

We began this study by gathering background information via interviews from key administrators and department chairs. These interviews served to focus the study by helping us gain insight into the understandings of and beliefs about M-L classes as they are implemented at Evanston Township High School (ETHS). Interview results were used to help guide data collection and analysis including the development of student, teacher, and counselor surveys. Interviews included eight open-ended questions focusing on questions about the history of

Purpose #1: Expose regular students to honors/prepare them for honors.

- þ After exposure to honors in mixed-level 1 Humanities 2/H or Biology 2/H classes, students want to take an honors course because they feel they can handle it. Generally, half or more of students subsequently opt for honors level courses and do well in these courses after experiencing M-L classes.
- þ There does not seem to be agreement as to how teaching practices and course expectations differ between M-L and level-2 classes. For example, some teachers report that M-L classes move at a faster pace

- p All but one teacher respondent and two-thirds of counselors indicated that M-L classes were a good option for ETHS students.

Academic Achievement

- p Overall, students in M-L classes show strong gains from the EXPLORE test administered in eighth grade to the PLAN test administered in tenth grade. Students in the regular level portion of M-L Biology classes show more gains in science than regular level students; students in the honors portion of M-L Biology classes show strong gains. African-American students in the honors component of M-L Biology classes show stronger gains in M-L classes than African-American students in honors courses. Generally, students in the regular or honors portion of the 1 Humanities 2/H classes make similar or greater gains to students in regular-only or honors-only classes. Data fluctuated over the two years that were analyzed.
- p In general, students in the regular portion of M-L classes receive more A and B grades and fewer D and F grades than students in regular level classes. Students in the honors portion of M-L classes receive fewer A grades and more B grades than students in the honors level classes.

Summary of Findings

In summary, the M-L model was implemented in small steps, first informally, and then expanding more rapidly in the early 1990's in Humanities and U.S. History and more recently in Biology. There is no written documentation of the model for these courses, and courses were not all developed on the same premise. For some teachers and administrators, the intent was for all students to have the same intellectual experiences, while for others, it was a means of encouraging more students to take honors level courses. And some teachers believe the M-L model is based on both these premises. Although teachers and administrators seem to agree on some general purposes, there is some variation in implementation from department to department and within department. Survey responses from teachers indicate that course expectations, instructional strategies and grading systems vary within department and between departments.

After exposure to honors work in M-L classes, students want to take honors courses, and generally, half or more subsequently opt for honors level courses. The ratio of honors students to regular students varies across courses.

Analysis of test data indicates that the M-L class provides an additional level between level-2 and honors. In other words, in Biology, Humanities and History courses, there are essentially four or five levels: level 1, level 2, mixed level, honors, and for some AP. Minority students are less clear about the distinctions between levels than White students. As for allowing students to assess their level and easily switch levels, on average, teachers report that 15 percent of students request a level change; teachers report that they recommend about 16 percent of the students for a level change.

An analysis of the racial demographics of M-L classes indicates that M-L classes provide a more diverse setting for students than level-1, level-2, or honors classes. Classes are generally two-thirds White students and one-third Black/Hispanic/Multiracial students.

Overall, students and teachers are satisfied with M-L classes, and teachers/counselors believe it to be a good option for ETHS students. Students in M-L classes show good gains from the EXPLORE test to the PLAN test. The percentage of "A" and "B" grades for students in M-L classes is lower than honors-only classes but better than level 2 classes.

Conclusions

Several conclusions may be drawn from these findings:

- Ã The study raises questions of purpose about the M-L classes and thus, about the meaning of different levels of instruction. Departments need to revisit the original purposes to determine if they are still the purposes that are held today. Dialogue about these issues should lead us to writing guidelines and determining course content and expectations.
- Ã The majority of students in M-L classes go on to take subsequent honors classes and do well in them. Students in M-L classes show gains from EXPLORE to PLAN. Although there are gains for students in M-L Humanities classes, White students show greater gains than students of color in the honors portion of M-L classes. We need to look carefully at instruction and content to ensure that all students make comparable academic gains.
- Ã M-L classes are an additional level between regular and honors. Placement criteria designate students for this level when they have test scores between level 2 and honors. We need to be honest with our students, parents and teachers and provide a complete explanation of M-L classes.
- Ã We need to offer professional development to help teachers differentiate instruction in these classes and ensure comparable rigor to honors-only classes. Professional development is also needed for counselors to help them better understand M-L classes so they can assist students in placement decisions.
- Ã One of the reported purposes of M-L classes is to allow students to change levels. We need to provide more direction to students so they can more easily switch between levels. Both teachers and counselors need to be more vigilant in letting students know that they can switch levels, and how they do so.
- Ã M-L classes provide a more racially diverse setting for students than in regular or honors classes.

The next step is to share the findings from this study with teachers, counselors and administrators. The intent is to have in-depth discussions about purpose, course expectations, instructional strategies and grading schemas, and out of these discussions should emerge more concrete recommendations. Some key questions arising from this study that should be considered in these discussions are:

1. **Results:** Does the M-L model challenge students to do honors work so they can continue in honors level courses?
2. **Number of Levels:** There is evidence that we have created an additional level. Do we need this many levels? Does the creation of an additional level serve to sort students even more?
3. **Guidelines:** What written documentation is needed? (e.g., ratio of honors to level 2 students, purpose)
4. **Meaning of Levels:** In M-L classes, what is the difference in expectations and instruction between honors and regular level?
5. **Supports:** What professional development or other supports do teachers need for this unique model?
6. **Counselor Role:** What information should counselors provide to students and parents to assist in course selection?

Study of Mixed-Level Classes

Background

One of the board goals for 2004-05 was to evaluate mixed-level (M-L) classes. The impetus for this study was an interest in the effectiveness and purpose of this model on the part of administrators, department chairs and teachers. The model is in place for the most part in Biology, Humanities, Global, American Studies, and History classes. The implementation of M-L classes has occurred in small steps. Generally, several sections were first offered with this model, and then the number of sections expanded in ensuing years. The U.S. History team experimented with this model beginning in the 1970's. Initially, there was an Honors, level 2 and level 1 class that met separately on some days and together with three teachers in the room less frequently. Students were often grouped differently by the quarter and students could

Study Design

We began this study by gathering background information via interviews from key administrators and department chairs. These interviews served to focus the study by helping us gain insight into the understandings of and beliefs about M-L classes as they are implemented at Evanston Township High School (ETHS). Interview results were used to help guide data collection and analysis including the development of student, teacher, and counselor surveys. Interviews included eight open-ended questions focusing on questions about the history of these classes, their purpose and student placement in them.

Following these interviews, we met with Curriculum Council to identify questions that Council members believed were important to answer about M-L classes. The group indicated that they were interested in demographic characteristics of these classes, grades that students achieve in these classes, the ratio of honors to regular level students, levels of courses students take after their experience in M-L classes, test scores and longitudinal gains. Council members also suggested that we develop and administer surveys for students, teachers and counselors to gather their feedback about purpose, instruction and satisfaction with M-L classes. . Surveys would serve to gather information about faculty and student perceptions regarding the academic and intellectual challenge of M-L classes compared to honors and Level 2 classes.

Based on these meetings with administrators and Curriculum Council, we focused on the following major subject areas that offered the majority of M-L classes: Biology 2/H; Humanities 2/H; U.S. History, American Studies, and selected Global Studies courses. In each of these subject areas, we identified students taking these courses in 2002-03 and followed them through the 2004-05 school year. To develop surveys, we set up a focus group with a representative set of teachers, department chairs and counselors. The feedback gathered from these focus groups and administrator interviews helped us develop the final questions in the surveys (See Appendix A). Additional information about grades, test performance, demographics and subsequent course level choices was gathered using the school's test score database and student information system.

Administrator Interviews

Six individuals were interviewed including the Superintendent, 9/10 Principal, the Director of Student Services, and the Department Chairs for History, English and Science. These individuals had been identified as people who had been around since the inception of M-L classes and involved in implementation. They were asked eight questions:

- Ã How are students placed in M-L classes?
- Ã What is the history of M-L classes?
- Ã How does honors differ from regular within a M-L class? How does the teacher differentiate instruction?
- Ã How do students switch from honors to regular?
- Ã What is the purpose of M-L classes?
- Ã When and why did M-L classes at ETHS start?
- Ã How do these classes differ from honors classes? Regular classes?
- Ã What do you think should be considered by the evaluation?

Responses indicated the following:

- Ã Freshman placement in M-L classes (1 Humanities 2/H and Biology 2/H) is based on EXPLORE scores, eighth grade teacher recommendations, and parental requests. There are four separate ranges of EXPLORE scores used to place freshmen in courses, and the ranges increase progressively: level 1, level 2, M-L, and honors.
- Ã In the History Department, all classes, with the exception of freshman and sophomore Humanities Enriched and History AP courses, are M-L classes.
- Ã According to the interviewees, when first implemented, M-L classes in Humanities were to be comprised of approximately two-thirds honors students and the total number of students was planned to be about 21. This ratio was intended to assure teaching to the honors level. For U.S History, the intent was to have half of the class at the honors level, a third at the level-2 level, and about 17 percent at the level-1 level. For Biology, the intent was to have 75 percent at the honors level.
- Ã M-L classes were founded on several beliefs: 1) with a “push”, many level-2 students could become honors students and that as long as “pure level-2” classes exist, no model exists so no “push” will occur for these students; and 2) classes should be diverse and representative of the student population.
- Ã Differentiation of instruction for regular and honors students within M-L classes varies between departments and in some cases between teachers within departments.

Survey Feedback

Surveys were distributed to students, teachers and counselors in late March/early April. Of the 1200 surveys distributed to students in M-L Biology, Humanities, Global Studies, American Studies, and U.S. History courses, 967 surveys were returned representing a response rate of 81 percent. The teacher response was rather low. Of the 35 surveys distributed to teachers in these courses, 21 surveys or 60 percent were returned (Surveys from all biology teachers teaching M-L classes were returned.) The response rate for counselors was 75 percent (9 of 12 surveys returned). The feedback from these surveys relating to purpose of M-L courses along with the feedback gathered from administrator interviews clustered around the following:

- Ã Purpose #1: Expose regular students to honors/prepare them for honors.
- Ã Purpose #2: Combine honors and regular students so they will have the same learning experiences and can learn from each other.
- Ã Purpose #3: Provide an additional level between level-2 and honors.
- Ã Purpose #4: Allow students to assess their level and easily switch levels.
- Ã Purpose #5: Increase racial diversity of students in classes and/or increase diversity of student views.

As we began to analyze the responses from the surveys and interviews about purpose for M-L courses, it became clear that responses from individuals and constituencies differed on some basic premises. In particular, some viewed the M-L experience as a means for all students to have some of the same intellectual experiences while others saw M-L classes as a tool primarily about moving students to the honors level. Their responses also raised questions about the meaning of different levels of instruction. Individuals were responding from different definitions of “honors” and “regular”. As a consequence, responses detailing “honors” work differed across individuals and respondent groups. After much analysis, feedback relating to purpose clustered around five purposes. However, some of the purposes overlap and some are at odds with each other representing some of the different underlying assumptions and definitions that teachers, administrators, counselors and students bring to the table.

For the next portion of this report, each of these purposes is addressed using teacher, counselor and student survey feedback, and data about course selection, grades, test performance, and student characteristics. For each articulated purpose, we reviewed the data to determine the extent to which each of them are being met.

Purpose #1: Expose regular students to honors/prepare them for honors.

Several sources of data were used to examine this purpose: student survey responses, teacher/counselor survey responses and subsequent course completion.

In the student survey, students were asked, “Now that you’ve tried honors in M-L, are you willing to take a “pure” honors class?” (See Appendix B for detailed tables of student survey responses.) The majority of students answered “yes” to this question. More students in Humanities classes (80% or higher) responded in the affirmative compared to biology (72%) or U. S. History (66%). More students taking M-L classes for Honors credit responded yes than those taking the class for regular credit (91% vs. 69%). Also, more White students gave “yes” answers than other racial groups (White: 82%; Black: 74%; Multiracial: 66%; and Hispanic: 60%). Students were then asked to explain their responses. Most often cited as an explanation for willingness to take an honors class was “I feel I can handle it now” (34%) followed by “Honors class is not that different than regular” (18%). For students who responded “no”, responses were evenly distributed across the following:

- ~ Too hard
- ~ Too much work
- ~ I am not ready/I am fine where I am

In the teacher survey, teachers were asked, “If you are currently teaching a level-2 class, how do the curriculum, teaching practices and/or course expectations of this mixed-level class differ from those of your level-2 classes?” Of the 21 responses, eight staff members responded that they were teaching a level-2 class. In general, teachers of M-L classes in Humanities, Global Studies, American Studies and U.S. History indicated that the class moves at a faster pace than level 2, and there are more activities requiring higher level thinking skills and individual motivation. One teacher referred to the reading being at the honors level and not using abridged texts. For Biology, responses were somewhat different. Teachers indicated that the curriculum and course expectations are essentially identical; the content is the same but students go into more detail. For lab work, there may be different analysis questions that are more difficult. Counselors were also asked about course expectations in level-2 and M-L classes. About a third responded that there were no differences, a third did not know, and a third replied that there were differences.

A related question asked teachers, “If you are currently teaching an honors class, how do the curriculum, teaching practices and/or course expectations of this mixed-level class differ from those of your honors classes?” Only one of 21 teachers responding to this question responded “yes”. That is, most teachers teaching a M-L class were not assigned honors classes at the time the survey was administered. The one teacher who responded in the affirmative indicated that the course operates under the assumption that the students can read and discuss at the honors level, though not as quickly and with more support. “We do not cover all of the texts, which are covered in a straight honors class.” The majority of counselors responded that M-L honors classes are different from honors-only classes. Honors-only courses are more rigorous.

for many of these classes was to have more honors students than regular students in M-L classes. This ratio was intended to assure teaching to the honors level and to provide an honors model for level-2 students to motivate them to work at that level. The following table shows the average percentages across individual sections for M-L classes in 2004-05 Semester 1.

Table 1. Average Percentage of Regular and Honors Level Students in M-L Classes

<i>Mixed-level course</i>	<i>Level-2%</i>	<i>Honors %</i>
1 Humanities 2/H	30%	69%
Biology	27%	73%
2 Humanities 2/H	56%	44%
African History and Culture	51%	49%
Asian Studies	19%	81%
Latin American Studies	47%	53%
Twentieth-Century Russia	17%	83%
Middle East	9%	91%
American Studies	47%	53%
U.S. History	16% (level 1) ¹ & 28% level 2	56%

The data indicate that the percentage of honors students is 69 percent in 1 Humanities 2/H, and 73 percent in Biology 2/H. The Global Studies courses vary widely and the American Studies and U.S. History classes have slightly more honors than regular level students. The percentages represent averages across sections; there is variation across sections within courses. For example, Biology sections vary from 87% percent of a class being honors to 55 percent.

The data suggest that there is a ratio of between a little over one-half to a little over two-thirds of students in mixed level classes opting for honors credit. **The question then is, “Do teachers have different course expectations or different instructional strategies for the different levels?”** In the teacher/counselor survey, respondents were asked two questions related to purpose #2, “*How do the course expectations differ for level-2 and honors students within this mixed-level class?*” and “*How do you differentiate instruction for level-2 and honors students within this mixed-level class?*”

- Ã Of the 21 teachers who responded to the first question relating to course expectations, most often cited for how course expectations differed was extra assignments (9 of 21) and the grading scale (13 of 21). Teachers also noted that there were additional test questions and different tests (6 of 21), and different expectations for skills/performance (6 of 21). Fewer teachers responded that there were additional readings (4 of 21) and different assignments (3 of 21). Two teachers reported that there was no difference in course expectations between level-2 and honors. Counselors’ responses varied and included extra work, grading scale and different curves on tests.
- Ã In response to the question about the differentiation of instruction between level-2 and honors students, 13 of 14 teachers in 1 Humanities 2/H, 2 Humanities 2/H, Middle East, American Studies, African Studies and Biology 2/H indicated that there was no differentiation within the class. For the six U.S. history teachers who completed surveys, three reported that they offered an honors seminar, and five reported that they offered different tasks and support for different levels. Counselors’ responses were mixed: a third responded that they were not sure; a third responded that there was no

¹ U.S. History is a mixed level-level class comprised of three levels: 1, 2 and H.

differentiation; and a third responded that there was differentiation but it did not happen uniformly.

Purpose #3: Provide an additional level between level-2 and honors.

Sources of data used to examine this purpose included placement criteria, EXPLORE scores, student survey responses comparing M-L classes to level-2 and honors classes, and teacher survey responses comparing curriculum, teaching

distribution unless there are extremely low or high scores. (Extreme scores or outliers are denoted in the figures as circles or asterisks.) The graphics clearly show that there are five distinct levels based on test scores.

Figure 1. Box-and-Whiskers of Biology Courses

Figure 3. Box-and-Whiskers of 1 Humanities Courses: Reading Scores

Overall, the EXPLORE data suggest that M-L classes are an additional level between level-2 and honors classes. Thus, purpose #3 is being met if you look at test scores alone. We also looked at student and teacher survey responses to determine how these groups' views of M-L classes compared to level-2 and honors classes. In the student survey, students were asked to compare M-L classes with level-2 and honors cla

classes. Responses to this item are summarized under Purpose #1. Another item asked teachers how they differentiated instruction for level-2 and honors students. With the exception of U.S. History teachers, 13 of 14 teachers responded that they did not differentiate instruction within the class. For U.S. History teachers, five of six teachers indicated that they provided different tasks or support for level-2 and honors students in their classes; three of six teachers indicated they offered an honors seminar as a means of differentiating instruction. This differentiation may in part be due to teaming in these classes.

In summary, the test data and placement criteria indicate that relative to Purpose #3, M-L classes serve as an additional level between level-2 and honors. Although there are different student groups in mixed level classes as determined by test scores, teachers generally do not differentiate instruction for level-2 and honors students in these classes. The exception is U.S. History where, in part due to teaming, teachers provide different tasks, support or even an honors seminar. While teachers generally do not differentiate instruction, they do, however, pace the M-L courses differently, scaffold instruction, require more higher-level thinking skills and go into more detail. There is some confusion among minority students about the distinctions between levels.

Purpose #4: Allow students to assess their level and easily switch levels.

Sources of data used to examine this purpose included teacher survey items asking how many students request a level change and are recommended for a level change. Student survey responses were also examined to determine students' perceptions for why they are registered for level-2 or honors. (For detailed tables of survey responses, see Appendix D).

In response to the survey item, "How many students request a level change?" teachers on average indicated about 15 percent. About half of the counselors did not respond to this question; about half responded that 4 to 8 percent request a level change. It is not clear why half of the counselors did not respond to this question. Either students are not discussing this option with their counselors or counselors did not have records to respond to this question.

Teachers were also asked, "How many students are recommended for a level change?" Generally, their response (16%) indicated that the percent was about the same as the students requesting level changes.

Students in the regular level of a M-L class were asked, "Why don't you change to honors?" and "Why are you registered for the level you are?" Students responded with different individual reasons for why they do not change to honors. The few patterns were from U.S. History students who indicated that level-2 has less homework (26%) and from students in American Studies, Latin American Studies and U.S. History who responded that level-2 has shorter assignments. As to why they are registered for a particular level, the response pattern appears to relate to grade level; that is, for freshman courses like 1 Humanities 2/H and Biology 2/H, students generally responded that the school placed them in a particular level while for sophomore/junior courses like Global Studies, American Studies, or U.S History, students more often responded that they themselves requested a particular level. The most common responses were "The school placed me at this level" and "I requested this level."

Purpose #5: Increase racial diversity of students in classes and/or increase diversity of student views.

To address this purpose, we looked at the proportions of different ethnic groups in

1 Humanities 2/H and Biology M-L classes from semester 2 of 2001-02 through semester 1 of 2004-05. The proportions are consistent: generally two-thirds White students, one-third Black/Hispanic/Multiracial student; and a small percentage of Asian students. There was some variation from section to section. In contrast, in level-1 and 2 classes of Humanities and Biology, over 75 percent of the classes are comprised of Black, Hispanic, and Multiracial students; in honors classes of Humanities and Biology, about 85 percent or more of the students are White. The proportions of ethnic groups was somewhat different for 2 Humanities 2/H and Global Studies courses. For these courses, the proportion of White students was about half compared to Black, Hispanic and Multiracial students. The proportion of White to Black/Hispanic/Multiracial varied by Global Studies course with courses like Latin American studies comprised of more minority students and courses like Asian Studies, Twentieth-Century Russia and Middle East comprised of more White and Asian students.

Longitudinal Test Score Data

Biology M-L Students

Table 4 shows the average scale scores on EXPLORE and PLAN for matched student groups on the science subtest. Rather than looking at just one cohort, we analyzed students receiving credit for Biology in 2002-03 and 2003-04. For comparison purposes, test scores for a national sample are also provided.

Table 4. Gain/Loss Between Grade 8 and Grade 10: EXPLORE to PLAN, Science Subtest

	Biology 2002-03					Biology 2003-04		
	n	EXPLORE Avg.	PLAN Avg.	EXPLORE to PLAN Gain		EXPLORE Avg.	PLAN Avg.	EXPLORE to PLAN Gain
Biology	214	15.8	17.2	1.4	147	15.8	17.3	1.5
Black	132	15.4	16.6	1.2	70	15.6	16.5	0.9
Latino	22	15.7	17.6	1.9	25	15.3	17.4	2.1
White	50	16.8	18.3	1.5	46	16.4	18.5	2.1
Biology Honors	205	21.0	23.3	2.2	214	20.9	24.1	3.3
Black	11	19.6	20.5	0.9	16	19.9	21.3	1.4
Latino	N/A ^a				N/A			
White	170	21.2	23.5	2.3	180	21.0	24.5	3.5
M-L Biology 2/H								
-2	22	17.73	19.68	1.95	19	17.5	18.6	1.1
Black	N/A				N/A			
Latino	N/A				N/A			
White	12	17.8	20	2.2	12	17.8	18.8	1.0
-Honors	110	18.4	20.6	2.2	91	17.9	20.3	2.4
Black	25	18.3	19.4	1.1	17	17.1	19.4	2.3

Table 5. Gain/Loss Between Grade 8 & Grade10: EXPLORE to PLAN, English & Reading

		Humanities 2002-03				1 Humanities 2003-04		
	n	EXPLORE Avg.	PLAN Avg.	EXPLORE to PLAN Gain	n	EXPLORE Avg.	PLAN Avg.	EXPLORE to PLAN Gain

In general, students in 1 Humanities 2/H classes made good academic progress as represented by their test score gains. In reading, students in the regular portion of the M-L classes made greater gains than students in regular level classes; students in the honors portion of the M-L classes made similar or greater gains to students in honors-only classes depending on the school year. This pattern was also evident for Black and White students. The gains for English fluctuate over the two years. Where students in the regular and honors portions of the 1 Humanities 2/H classes showed similar or larger gains in 2002-03 compared to their regular-only or honors-only counterparts, this was not the case for all student groups in 2003-04.

Student Grades

Appendix E includes student grade information for students in M-L Biology and 1 Humanities 2/H classes along with comparison information for other course levels. Four data sets are shown:

- Ù 2001-02 Sem. 2
- Ù 2002-03 Sem. 2
- Ù 2003-04 Sem. 2
- Ù 2004-05 Sem. 1

In general, students in the regular portion of M-L classes received more A and B grades and fewer D and F grades than students in regular level classes. Students in the honors portion of M-L classes received fewer A grades and more

- þ Teachers and counselors were asked questions to find out if teachers have different expectations or instructional strategies for the different levels **within** M-L classes. With the exception of some U. S. History teachers, most teachers indicated that there was no differentiation of instructional strategies within the class. Most often cited for how course expectations differed was extra assignments (9 of 21) and the grading scale (13 of 21).

Purpose #3: Provide an additional level between level-2 and honors.

- þ While M-L classes are described as a combination of two levels, test data and placement criteria suggest we have created an additional level.
- þ Generally, the student survey responses indicate that minority groups are less clear about the distinctions between levels than White students. The results suggest that some students and parents have more access to resources that provide explanation about course levels, and therefore, understand and maneuver through the course selection process more easily.

Purpose #4: Allow students to assess their level and easily switch levels.

- þ Two teacher survey items related to this purpose. Teachers recommend 16 percent of students for a level change and report 15 percent of students request a change.

Purpose #5: Increase racial diversity of students in classes and/or increase diversity of student views.

- þ In M-L classes, the proportions are generally two-thirds White students, one-third Black/Hispanic/Multiracial students and a small percentage of Asian students. In contrast, in level-1 and 2 classes, over 75 percent of the classes are comprised of Black, Hispanic, and Multiracial students; in honors classes, about 85 percent or more of the students are White.

Satisfaction

- þ Both teachers and students are satisfied with M-L classes with 74 percent of students and 86 percent of teachers choosing “satisfied” or “very satisfied”.
- þ All but one teacher respondent and two-thirds of counselors indicated that M-L classes were a good option for ETHS students.

Academic Achievement

- þ Overall, students in M-L classes show strong gains from the EXPLORE test administered in eighth grade to the PLAN test administered in tenth grade. Students in the regular level portion of M-L Biology classes show more gains in science than regular level students; students in the honors portion of M-L Biology classes show strong gains. African-American students in the honors component of M-L Biology classes show stronger gains in M-L classes than African-American students in honors courses. Generally, students in the regular or honors portion of the 1 Humanities 2/H classes make similar or greater gains to students in regular-only or honors-only classes. Data fluctuated over the two years that were analyzed.
- þ In general, students in the regular portion of M-L classes receive more A and B grades and fewer D and F grades than students in regular level classes. Students in the honors portion of M-L classes receive fewer A grades and more B grades than students in the honors level classes.

Summary of Findings

In summary, the M-L model was implemented in small steps, first informally, and then expanding more rapidly in the early 1990's in Humanities and U.S. History and more recently in Biology. There is no written documentation of the model for these courses, and courses were not all developed on the same premise. For some teachers and administrators, the intent was for all students to have the same intellectual experiences, while for others, it was a means of encouraging more students to take honors level courses. And some teachers believe the M-L model is based on both these premises. Although teachers and administrators seem to agree on some general purposes, there is some variation in implementation from department to department and within department. Survey responses from teachers indicate that course expectations, instructional strategies and grading systems vary within department and between departments.

After exposure to honors work in M-L classes, students want to take honors courses, and generally, half or more subsequently opt for honors level courses. The ratio of honors students to regular students varies across courses.

Analysis of test data indicates that the M-L class provides an additional level between level-2 and honors. In other words, in Biology, Humanities and History courses, there are essentially four or five levels: level 1, level 2, mixed level, honors, and for some AP. Minority students are less clear about the distinctions between levels than White students. As for allowing students to assess their level and easily switch levels, on average, teachers report that 15 percent of students request a level change; teachers report that they recommend about 16 percent of the students for a level change.

An analysis of the racial demographics of M-L classes indicates that M-L classes provide a more diverse setting for students than level-1, level-2, or honors classes. Classes are generally two-thirds White students and one-third Black/Hispanic/Multiracial students.

Overall, students and teachers are satisfied with M-L classes, and teachers/counselors believe it to be a good option for ETHS students. Students in M-L classes show good gains from the EXPLORE test to the PLAN test. The percentage of "A" and "B" grades for students in M-L classes is lower than honors-only classes but better than level 2 classes.

Conclusions

Several conclusions may be drawn from these findings:

• The study raises questions of purpose aboutwlp -0. Tt5 0 TD0.0 0 TD0.000-3cour-76 Tt5 0 TDan

- Ã M-L classes are an additional level between regular and honors. Placement criteria designate students for this level when they have test scores between level 2 and honors. We need to be honest with our students, parents and teachers and provide a complete explanation of M-L classes.
- Ã We need to offer professional development to help teachers differentiate instruction in these classes and ensure comparable rigor to honors-only classes. Professional development is also needed for counselors to help them better understand M-L classes so they can assist students in placement decisions.
- Ã One of the reported purposes of M-L classes is to allow students to change levels. We need to provide more direction to students so they can more easily switch between levels. Both teachers and counselors need to be more vigilant in letting students know that they can switch levels, and how they do so.
- Ã M-L classes provide a more racially diverse setting for students than in regular or honors classes.

The next step is to share the findings from this study with teachers, counselors and administrators. The intent is to have in-depth discussions about purpose, course expectations, instructional strategies and grading schemas, and out of these discussions should emerge more concrete recommendations. Some key questions arising from this study that should be considered in these discussions are:

- 1 **Results:** Does the M-L model challenge students to do honors work so they can continue in honors level courses?
- 2 **Number of Levels:** There is evidence that we have created an additional level. Do we need this many levels? Does the creation of an additional level serve to sort students even more?
- 3 **Guidelines:** What written documentation is needed? (e.g., ratio of honors to level 2 students, purpose)
- 4 **Meaning of Levels:** In M-L classes, what is the difference in expectations and instruction between honors and regular level?
- 5 **Supports:** What professional development or other supports do teachers need for this unique model?
- 6 **Counselor Role:** What information should counselors provide to students and parents to assist in course selection?

Appendix A

MIXED-LEVEL COURSE COUNSELOR SURVEY

Grade level(s) of student you counsel:

Number of counselees:

PURPOSE OF MIXED-LEVEL CLASSES

1. What do you think is the purpose of mixed-level classes?

2. Do you think the purpose of mixed-level classes has changed over time?

Yes ____ **No** ____ **I don't know** ____

2a. If yes, how has the purpose changed?

3. Do you think mixed-level classes fulfill the purpose you described above? **Yes** ____ **No**

3a. Why or why not?

7. Within mixed-level classes, do teachers differentiate instruction for level-2 and honors students? **Yes** ____ **No** ____

7a. If yes, how do teachers differentiate instruction?

8. In mixed-level classes, do level-2 students differ from honors students? **Yes** ____ **No** ____

8a. If yes, how do students differ?

9. In mixed-level classes, does the performance of level-2 students differ from that of honors students? **Yes** ____ **No** ____

9a. If yes, how does performance differ?

STUDENT PLACEMENT AND COURSE CREDIT

- 10.** Do you think students are appropriately placed in mixed-level classes?

Yes ____ **No** ____

10a. If no, why don't you think students are appropriately placed in mixed-level classes?

- 11.** In mixed-level classes, how many of your counselees request a level change per semester?

12. In mixed-level classes, how many of your counselees do you believe have the potential to switch to honors from level-2 but don't (per semester)?

13. What were you told about mixed-level classes, when you started working at ETHS?

14. Overall, I think mixed-level classes are a good option for ETHS students.

☐ **Strongly disagree**

☐ **Disagree**

☐ **Agree**

☐ **Strongly agree**

14a. Why?

MIXED-LEVEL COURSE TEACHER SURVEY

Please complete one survey for every mixed-level course you teach.

Name of mixed-level class this survey refers to:

Number of sections of this course you are currently teaching:

Number of students enrolled per section:

PURPOSE OF MIXED-LEVEL CLASSES

- What do you think is the purpose of this mixed-level class?
 - Do you think the purpose has changed over time? Yes___ No ___ I don't know ___
2a. If yes, how has the purpose changed?
- Do you think this mixed-level class fulfills the purpose you described above?
Yes ___ No ___
 - Why or why not?

COMPARING THIS MIXED-LEVEL CLASS TO A LEVEL-2 CLASS

4. Are you currently teaching any level-2 classes? **Yes** ____ **No** ____
- 4a. If yes, please list the course name(s) of those level-2 classes:

4b. If yes, how do the curriculum, teaching practices, and/or course expectations of this mixed-level class differ from those of your level-2 classes?

4c. If yes, how do the students in your level-2 class(es) differ from the level-2 students in this mixed-level class?

COMPARING THIS MIXED-LEVEL CLASS TO AN HONORS CLASS

5. Are you currently teaching any honors classes(es)? **Yes** ____ **No** ____

5a. If yes, please list the course name(s) of those honors classes:

5b. If yes, how do the curriculum, teaching practices, and/or course expectations of this mixed-level class differ from those of your honors classes?

5c. If yes, how do students in your honors class(es) differ from honors students in this mixed-level class?

THIS MIXED-LEVEL CLASS

6. Within this mixed-level class, do the course expectations differ for level-2 and honors students? **Yes** ____ **No** ____

6a. If yes, how do course expectations differ?

7. Within this mixed-level class, do you differentiate instruction for level-2 and honors students? **Yes** ____ **No** ____

7a. If yes, how do you differentiate instruction?

8. In this mixed-level class, do level-2 students differ from honors students? **Yes** ____ **No** ____

8a. If yes, how do they differ?

9. In this mixed-level class, does the performance of level-2 students differ from that of honors students? **Yes** ____ **No** ____

9a. If yes, *specifically* how does student performance differ?

STUDENT PLACEMENT AND COURSE CREDIT

10. Do you think students are appropriately placed in this mixed-level class? **Yes** ____ **No** ____

10a. If no, why don't you think students are appropriately placed in this mixed-level class?

11. In this mixed-level class, how many students (for each section in a semester) request a level change?
12. In this mixed-level class, how many students (for each section in a semester) do you recommend for level changes?
- 12a. What, generally, is the impetus for such a recommendation?
13. In this mixed-level class, how many students (for each section in a semester) do you believe have the potential to switch to honors from level-2 but don't?
14. In this mixed-level class, when students change levels within a semester, how do you grade them?

TEACHER PROFESSIONAL DEVELOPMENT

15. What were you told about mixed-level classes, when you started teaching one?
16. What professional development have you received on how to teach mixed-level classes?
17. Would you find more professional development helpful in teaching mixed-level classes?
Yes ____ No ____
- 17a. If yes, what type of professional development?

18. How satisfied are you with teaching this mixed-level class? Please check one:

- ☐ **Not very satisfied**
- ☐ **Somewhat satisfied**
- ☐ **Satisfied**
- ☐ **Very satisfied**

19. Overall, I feel mixed-level classes are a good option for ETHS students.

- ☐ **Strongly agree**
- ☐ **Agree**
- ☐ **Disagree**
- ☐ **Strongly disagree**

19a. Why?

Appendix B

Mixed-Level Course Study
Purpose #1: Expose regular students to honors/prepare them for honors
Student Survey: Now that you've tried honors in mixed-level, are you willing to take a 'pure' honors class?

Gender			Race				Mixed-Level Course Student Enrolled In	Course Credit
All	Female	Male	African-American	White	Hispanic	Multiracial		

Appendix C

Mixed-Level Course Study

Purpose #3: Provide an additional level between level-2 and honors

Student Survey: Comparing mixed-level with level-2 and honors

		Gender		Race				Mixed-Level Course Student Enrolled In						Course Credit			
		All	Female	Male	African-American	White	Hispanic	Multiracial	1 Humanities 2/H	2 Humanities 2/H	African -same difficulty as honors classes	level-2 classes and same difficulty as	level-2 classes and easier than	21	121		
											-harder than level-2 classes and same difficulty as			129	66	114	6
											honors classes					61	
											-same difficulty as level-2 classes and same as						
											honors classes			221	101	117	
											-harder than honors classes			26	8	17	
											-easier than level-2 classes			90	45	44	
											Total			917	444	454	
											Mixed-level classes are...						
											-harder than level-2 classes and easier than honors						
											classes			23%	23%	22%	
											-same difficulty as level-2 classes and easier than						
											honors classes			26%	27%	25%	
											-harder than level-2 classes and same difficulty as						
											honors classes			14%	15%	13%	
											-same difficulty as level-2 classes and same as						
											honors classes			24%	23%	26%	
											-harder than honors classes			3%	2%	4%	
											-easier than level-2 classes			10%	10%	10%	
											Total			100%	100%	100%	

Appendix D

Mixed-Level Course Study

Purpose #4: Allow students to assess their level and easily switch levels

Student Survey: Why don't you change to honors? Why are you registered for the level you are?

If you are registered for regular credit, why don't you change to honors?	Gender			Race				Mixed-Level Course Student Enrolled In								Course Credit	
	All	Female	Male	African-American	White	Hispanic	Multiracial	1	2	African	American	Biology	Latin	U.S. History	Regular	Honors	
								Humanities 2/H	Humanities 2/H	History & Culture	Studies	2/H	American Studies				
-level-2 has less homework	52	12	39	22	7	13	9	2	4	5	1	1	12	27	50		
-level-2 has shorter assignments	28	13	14	11	7	4	5	3	2	4	5	0	3	11	27		
-level-2 has less difficult assignments	46	22	24	24	9	7	5	3	6	5	3	3	9	17	45		
-level-2 has fewer test questions	14	6	8	7	2	0	4	1	3	1	0	2	1	6	13		
-level-2 has fewer projects	17	7	10	4	5	2	5	4	3	3	0	3	2	2	17		
-all of the above	13	3	9	4	5	2	2	0	2	1	0	1	1	8	13		
-there is no difference between level-2 and honors	63	30	33	26	13	7	15	10	13	12	3	14	4	7	63		
-other	114	60	53	49	23	15	22	17	19	15	5	19	13	26	111		
Total	347	153	190	147	71	50	67	40	52	46	17	43	45	104	339	0	

If you are registered for regular credit, why don't you change to honors?

-level-2 has less homework	15%	8%	21%	15%	10%	26%	13%	5%	8%	11%	6%	2%	27%	26%	15%	#DIV/0!
-level-2 has shorter assignments	8%	8%	7%	7%	10%	8%	7%	8%	4%	9%	29%	0%	7%	11%	8%	#DIV/0!
-level-2 has less difficult assignments	13%	14%	13%	16%	13%	14%	7%	8%	12%	11%	18%	7%	20%	16%	13%	#DIV/0!
-level-2 has fewer test questions	4%	4%	4%	5%	3%	0%	6%	3%	6%	2%	0%	5%	2%	6%	4%	#DIV/0!
-level-2 has fewer projects	5%	5%	5%	3%	7%	4%	7%	10%	6%	7%	0%	7%	4%	2%	5%	#DIV/0!
-all of the above	4%	2%	5%	3%	7%	4%	3%	0%	4%	2%	0%	2%	2%	8%	4%	#DIV/0!
-there is no difference between level-2 and honors	18%	20%	17%	18%	18%	14%	22%	25%	25%	26%	18%	33%	9%	7%	19%	#DIV/0!
-other	33%	39%	28%	33%	32%	30%	33%	43%	37%	33%	29%	44%	29%	25%	33%	#DIV/0!
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	#DIV/0!

Why are you registered for the level you are?

-The school placed me at this level	258	116	135	74	110	27	29	72	23	19	4	52	19	69	128	125
-My parent(s) requested this level	78	34	42	21	43	1	9	18	7	6	2	22	7	16	19	57
-I requested this level	238	124	110	53	115	21	39	12	23	30	16	14	33	110	65	169
-My counselor suggested this level	122	66	55	40	53	6	17	15	14	20	8	11	12	42	51	69
-My teacher suggested this level	112	61	49	31	53	12	14	25	18	7	4	16	14	28	21	87
-All of the above	13	9	4	0	11	2	0	3	1	3	0	2	3	1	2	11
-I don't know	95	33	58	33	28	8	21	20	10	10	2	28	11	14	58	31
Other	23	11	10	4	11	1	6	2	5	3	0	4	2	7	4	18
Total	939	454	463	256	424	78	135	167	101	98	36	149	101	287	348	567

Why are you registered for the level you are?

Appendix E

Mixed Level Class Study
Course Grades by Course
Biology

		Biology (SC0202)		Biology Honors (SC0203)		Biology 2/H (2) (SC0222)		Biology 2/H (H) (SC0223)		Biology 2/H (SC0222/3)		Total Biology	
		# of students	% of total	# of students	% of total	# of students	% of total	# of students	% of total	# of students	% of total	# of students	% of total
<u>2001-2 Semester 2</u>													
A		18	7.9%	103	36.4%	0	0.0%	25	28.7%	25	26.9%	146	24.1%
B		53	23.1%	115	40.6%	0	0.0%	37	42.5%	37	39.8%	205	33.9%
C		61	26.6%	47	16.6%	3	50.0%	18	20.7%	21	22.6%	129	21.3%
D		49	21.4%	11	3.9%	2	33.3%	5	5.7%	7	7.5%	67	11.1%
F		21	9.2%	5	1.8%	1	16.7%	1	1.1%	2	2.2%	28	4.6%
NC		27	11.8%	2	0.7%	0	0.0%	1	1.1%	1	1.1%	30	5.0%
Total		229	100.0%	283	100.0%	6	100.0%	87	100.0%	93	100.0%	605	100.0%
<u>2002-3 Semester 2</u>													
A		23	7.9%	69	32.2%	1	4.0%	29	24.8%	30	21.1%	122	18.9%
B		75	25.8%	96	44.9%	7	28.0%	62	53.0%	69	48.6%	240	37.1%
C		95	32.6%	39	18.2%	13	52.0%	18	15.4%	31	21.8%	165	25.5%
D		50	17.2%	8	3.7%	1	4.0%	6	5.1%	7	4.9%	65	10.0%
F		27	9.3%	2	0.9%	2	8.0%	0	0.0%	2	1.4%	31	4.8%
NC/I		21	7.2%	0	0.0%	1	4.0%	2	1.7%	3	2.1%	24	3.7%
Total		291	100.0%	214	100.0%	25	100.0%	117	100.0%	142	100.0%	647	100.0%
<u>2003-4 Semester 2</u>													
A		17	8.1%	109	48.2%	4	18.2%	19	17.6%	23	17.7%	149	26.3%
B		49	23.3%	86	38.1%	8	36.4%	56	51.9%	64	49.2%	199	35.2%
C		73	34.8%	24	10.6%	6	27.3%	23	21.3%	29	22.3%	126	22.3%
D		41	19.5%	4	1.8%	2	9.1%	9	8.3%	11	8.5%	56	9.9%
F		19	9.0%	1	0.4%	1	4.5%	0	0.0%	1	0.8%	21	3.7%
NC/I		11	5.2%	2	0.9%	1	4.5%	1	0.9%	2	1.5%	15	2.7%
Total		210	100.0%	226	100.0%	22	100.0%	108	100.0%	130	100.0%	566	100.0%
<u>2004-5 Semester 1</u>													
A		19	7.3%	114	41.5%	3	6.5%	29	23.0%	32	18.6%	165	23.3%
B		62	23.8%	100	36.4%	7	15.2%	65	51.6%	72	41.9%	234	33.1%
C		69	26.4%	51	18.5%	23	50.0%	25	19.8%	48	27.9%	168	23.7%
D		59	22.6%	5	1.8%	9	19.6%	3	2.4%	12	7.0%	76	10.7%
F		34	13.0%	4	1.5%	3	6.5%	2	1.6%	5	2.9%	43	6.1%
NC/I		18	6.9%	1	0.4%	1	2.2%	2	1.6%	3	1.7%	22	3.1%
Total		261	100.0%	275	100.0%	46	100.0%	126	100.0%	172	100.0%	708	100.0%

Mixed Level Class Study
Course Grades by Course

