

A Study of the Basic Proficiency Model

A Modified Curriculum Experiment

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Introduction

In the fourth quarter 2010 I implemented a modified curriculum program. The program was called “basic proficiency” and it was open to any student in 7-8 Social Studies who chose it. The target student population was students failing because the amount of information to learn was too great (Jones, The Basic Proficiency Model, 2010). The program was based on these premises: 1) when students are faced with information overload, the overload contributes to actually *decreasing* the amount learned. Therefore, I can increase the amount students learn by decreasing the amount I teach them (Dempster, 1993). 2) The standard course textbook and the NYS curriculum represent more information than a student needs to know to pass the state standardized tests. This being the case, an analysis of the state test questions for a decade would reveal those items in the core curriculum students most need to know. It should be possible to reduce the students’ workload while still ensuring that they meet the state standards.

A large number of struggling students can achieve the lower end of the standards and derive greater benefit by retaining more of the material, expending a more normal level of effort to achieve, and perhaps experiencing a more positive school experience.

The most common recipe for helping struggling students is some combination of these actions: increased parental notification with a subtext that they should be making their child do homework, thirty to fifty minutes a week of academic intervention services, nearly two hundred minutes of resource room services, sometimes an increase in homework, exclusion from extracurricular activities. For some students, extra help interventions help sometimes. I find putting pressure on parents to be distasteful, among other things, and I will not do that. Exclusion from extracurricular activities and increasing homework (Cooper, 1989) are completely ineffective for the struggling student, in my opinion. When academic intervention such as AIS and resource room do not bring the student to passing, it is likely because the workload relative to the effort the student needs to apply is just too much even with outside help. I believe that it is really unfair that we ask everyone to climb the same mountain when everyone does not have the same climbing equipment. It is certain that the struggling student who sees his peers achieving with much less effort rightly questions why on earth he should have to mount such greater energy for something without even a prize he values. Sometimes we can sustain kids through this arduous process in childhood and early adolescence through sheer force of our will and influence on them or by inflating their grades before they hit state tests, but once they get old enough to tell us “no”, that’s what they do and I just cannot blame them. The outside-the-classroom support idea has success with a limited range of students and with the most extreme cases is simply unsustainable over the long term.

It also seems clear to me that outside support is just not going to cut it with a larger number of students than we might readily admit. Simply put, there are times when the outside-the-classroom service

providers cannot possibly keep up with five or six academic subjects along with giving the student lessons that address his disability directly. I, the regular educator, need to accept for myself the most important role in bringing the student in my subject to meet the standards and I need to do this in the time I have allotted to me. I hope to offer convincing argument that reducing the amount of material is the clear winner in this fight. *A large number of struggling students can achieve the lower end of the standards and derive greater benefit by retaining more of the material, expending a more normal level of effort to achieve, and perhaps experiencing a more positive school experience.*

In fact, although the basic proficiency quiz only counts for a grade of 67 on the class scale, a perfect score on that quiz means the student would get every question on that topic correct in the past ten years of state examinations.

Quick Overview of the Program and Classroom Grading Scheme

The reader is invited to read the detailed description of the plan in a separate work (Jones, The Basic Proficiency Model, 2010). However, here is a brief overview.

Students choosing basic proficiency study a set of basic statements developed from an analysis of all questions asked on standardized NYS for that topic over ten examinations. Once having learned these statements in their own words, they check in with me as I quiz them to be sure they're ready. The basic proficiency quiz consists of multiple-choice questions directly related to the statements. The maximum score on these quizzes is 67, since it represents only basic competence and roughly 67% of what the standard demands of the class are. Students study alone, in small groups and pairs, or sometimes with an aide or me.

The class grading scheme recognizes two types of tasks, labeled low order and high order. Low order tasks are quizzes (short term memory tasks) and simple practice exercises. Worksheets, questionnaires, and similar information transfer activities are never counted for credit¹. High order tasks correlate highly with performance on standardized tests and include such tasks as essays, exams, speeches, debates, and so forth. Low order tasks are 35% of the student's quarter mark and high order tasks account for the remaining 65%. The lowest low order task is dropped each quarter.

Students on basic proficiency are learning less than their peers on the standard curriculum. However, they are meeting the state standards because they are earning passing marks on assessments that measure the standards. The basic quizzes are composed of all questions on that topic from ten state tests. *In fact, although the basic proficiency quiz only counts for a grade of 67 on the class scale, a perfect score on that quiz means the student would get every question on that topic correct in the past ten years of state examinations.*

How They Fared

¹ NOTE: Each month there is a conference with each student during which we examine together their notebook and information processing method and scores. A rubric is used to assign a grade for this work. This is the only extent to which information processing influences the grade. This grade is a low order task grade.

Twelve students chose basic proficiency during the ten week period of the experiment. (A handful of other students chose basic proficiency only occasionally and are not included in this study.) The students all completed four basic proficiency quizzes and a surprise test of their long term memory that was given at least two weeks after their last basic proficiency test. This test consisted of multiple-choice items from old NYS tests, some of which appeared on the basic proficiency quizzes. Students do not receive their basic proficiency quizzes back because I reuse them, so they could not have studied from the old tests.

The average percentage correct among all students on the four basic quizzes was 87. On only eight occasions did a student fail a basic proficiency quiz. The average score on the long term memory test was 77, with all but one student passing (only two scored below 76). I consider this to be a very strong showing.

The students' success on the long term memory test supports the hypothesis that long term memory is enhanced when the amount of material is moderated.

Performance Comparison: Standard Quizzes and Basic Quizzes

Back in the third quarter before basic proficiency, students in this group took between ten and twelve quizzes. This was before the basic proficiency program and these were the standard quizzes for the whole class. The average score of these students on all quizzes was 71% with nine of the twelve passing their quizzes on average. This is a stark contrast to the overall average on the basic quizzes, which is a not-too-surprising 87% with eleven of twelve having a "passing score" on all quizzes². The quizzes differ in the amount of material and in format (the standard quizzes are short paragraph response).

Overall

Three students experienced a significant improvement in their grades in the fourth quarter compared to the previous three quarters, having passed none of the previous three quarters but passing the fourth. When comparing the average of all three quarters for all twelve students (63) to the average of all of these students in quarter four (68), there is an improvement of five points. Since basic proficiency quizzes have a maximum score of 67 and since they would be weighted more heavily in the average of low order tasks (35% of the quarter mark) since students on basic proficiency have fewer scores, it is difficult to pinpoint the reason for the improvement in the overall performance of these students, let alone attribute it to the basic proficiency program.

Basic proficiency is the only major variable changed in classroom procedures in this quarter; however the flexibility of the fully differentiated method I apply in the class makes it complicated to assess cause-effect. The differentiated method may be the more influential factor in the improvement these students experienced. There is little evidence to suggest that improvements in their overall average are attributable to basic proficiency alone. However, the evidence is strong that these students did retain

² NOTE: The scores here are the percentage correct. The percentage score was multiplied by 67 because that was the maximum score for recording in the grade book.

more information than they usually do (scores on the quizzes, scores on the surprise long term memory test, scores these students usually earn on quizzes). I would predict with some confidence that they should perform better on standardized tests than they would have in a more information rich environment.

Standard Classroom Teacher-Made Assessments

In May there was an examination administered in grade seven. This is the standard monthly examination covering a month of material. (To save time while getting everything in for the final state test, I cancelled the May monthly examination in grade eight). The exam consists of six short response questions, answered in paragraph form, with questions distributed a week in advance and addressed by a whole class teacher review the day before the exam.

Prior to the exam, I estimated how well students choosing basic proficiency would perform by copy-pasting the basic proficiency statements for each answer and then scoring it using the standard rubric. I estimated a student knowing 100% of the basic proficiency statements would score 42 out of 100 on the exam. This was explained to students and lessons were given in class review and in the AIS class to support students by teaching them directly the things that were on the exam but which were not on basic proficiency. These treatments were ineffective for all but two students as evidenced by their scores. The six seventh graders on basic proficiency scored 31, 42, 43, 44, 90, and 92 on that exam. I regret that there happened to be no such similar examination in grade eight in the fourth quarter by which to have more data to draw more solid conclusions about the effects of basic proficiency on scores on the standard class assessments for students on basic proficiency. *Nonetheless, I conclude from this that students on basic proficiency will rarely adjust their study for assessments containing material not covered in basic proficiency and that standard assessments need to be designed such that students knowing 100% of basic proficiency material should be able to earn a score of at least 67, the score assigned to basic proficiency in general terms in this course.* I am determined nonetheless, however, that high order task assessments must continue to correlate highly with the state standards.

Final Examinations

If the basic proficiency model is successful, then students would achieve passing marks on a standardized test on the topics they learned through basic proficiency even after an extended period of time. The student for whom this scheme is developed does not typically study. My challenge is to create a program in which they can learn and not study outside of class. These students were very successful on the parts of their final exams that tested material taught on basic proficiency. The multiple-choice portion of the final exams was composed completely of questions from old state tests.

Grade	Number of Students on basic proficiency	Number of questions on the final that tested the material learned on basic proficiency	Average percent correct of final exam items <u>learned on basic proficiency</u>	Average Percent correct of final exam items <u>learned on the standard system</u> before basic proficiency
7	6	9	89%	58%
8	6	13	86%	67%

There are two aspects of the seventh and eighth grade statistics here that I offer as strong evidence in favor of the basic proficiency model. Firstly, the percentage correct of items from the final exam that tested material learned under basic proficiency is exceedingly high at 88%. This is a level four performance. Kids remembered more of what they learned on basic proficiency. Secondly, I note the stark contrast between percentage correct of items learned on the standard system and that of items learned on basic proficiency. Students obviously retain far more information when they are exposed to less of it, a notion that conforms to research findings (Dempster, 1993). *The reader is reminded that these students were not denied access to a level four score on the state and final examinations. They were taught less than the curriculum calls for but everything tested historically on standardized tests.*

An Interesting Anecdote

KL needed to take the essay portion of his exam orally due to handicapping condition. The exam was recorded and this digital recording remains on file as the other students' written versions. The topic was to relate the causes and effects of any three of four wars in US History. KL earned almost no credit on the exam, but it is interesting to note that he studied the Civil War, not part of this question, under the basic proficiency model. Almost all of his answers involved causes of the Civil War, which he studied three weeks ago. That the only information in long term memory that he called up pertaining to war involved this conflict I submit as supporting evidence for the basic proficiency model. This effect, however, was not seen quite so strongly in the other student whose handicapping condition required this adaptation.

Changes Made to the Original Plan

In the original scheme, I planned to test using short answer quizzes. Answers would be simple words, phrases, or sentences. However, this posed significant problems in assessing consistently from paper to paper. I moved to testing using multiple-choice questions. I restricted myself to only questions from old state tests in an effort to constantly ensure that I was having students meet the state standards as required by law.

The greatest weakness of the program as initially conceived was a lack of reading for students on basic proficiency. Besides reading the basic proficiency statements and the test itself, students would not be reading Social Studies. When this program is implemented in September, there will be a reading-writing component required of the student on basic proficiency geared toward his reading level. Students choosing basic proficiency are usually the poorest readers. They need to be supported as developing readers even as learning content enjoys a priority status in class activity. *It is hoped that this reading-writing task will help them develop to the point where they are choosing standard proficiency sometimes in years to come.*

Special Considerations

Students Choosing Basic Proficiency Who Should Not Have Done

Seven of the twelve were passing the course at the beginning of the fourth quarter when the experiment began. However, three had grades above 70 (71 and two 75s). These three, especially those at 75, do not represent the student profile targeted by this program. During the experiment, I left it up to students. None of these three students experienced any serious change in their overall marks as a result of doing basic proficiency for a quarter. Students on basic proficiency typically complete topics before the rest of the class. When finished, they choose from a variety of other assignments, usually of the high order task variety. Though my instinct is to not let these students choose this option and to view it as just an easy way out from the more difficult task of plowing through the standard fare, *I note that they completed as much work as the standard fare, just a wider variety of it. They were as busy on a daily basis as anyone else.* Further, being the fourth quarter, they had time to engage in a more thorough review for the final examination as a result of having finished the course topics early. I will continue to leave basic proficiency as an option for students while reserving the right for myself and for parents to refuse students access to this option should we see reason to do so.

It is hoped that this reading-writing task will help them develop to the point where they are choosing standard proficiency sometimes in years to come.

What Students Choosing Basic Proficiency Do When They Finish Ahead of Those on Standard

Students who choose basic proficiency finish the topic earlier than the rest of the class because they are learning less material and are not having to read and process the information. When they finish, they choose from a menu of high order tasks once they have finished the task they chose for that topic.

Only 57% of this group earned passing marks on the high order tasks they chose for two topics in the fourth quarter (counting the three incomplete tasks as zeros). 40% of the tasks chosen by these students were five minute presentations. The other tasks chosen varied evenly among the following: multiple-choice test, research paper, interview, document-based question, persuasive essay, listening task, and debate. There were only three incomplete tasks. The five minute presentation rubric was recently upgraded after a careful study to make it reflect the standards more carefully (Jones, On a Public Speaking Assessment for Middle School Social Studies, 2010). The scores vary wildly on these tasks. The fairly wide variety of tasks chosen supports a conclusion I reached in an earlier paper that the high order

tasks are perceived by students as being mostly of equal difficulty (Jones, Analysis of the Grade Eight Midterm in January 2010, a Commentary on the Positive Role of Differentiated Instruction Method, and an Examination of the Improvement of a Uniquely Low-performing Cohort over Seven Months, 2010).

The Immeasurable

All seventh and eighth graders on basic proficiency experienced an improvement in their grades from quarter 1-2-3 to quarter four. I suspect this modified curriculum is an important ingredient in that success, though it is cannot be proven to be a single causal factor. Other factors that I cannot really measure but which I perceive are a sense of relief on the part of the students when they are successful. For most, the 67 maximum score allowed on the basic quiz was still far better than they normally score. I also perceive a sense of increased success that improved some classroom attitudes and behaviors. Students and I became more like partners in the endeavor, a situation more similar to that of private tutor and student. It seemed more than ever like we were on the same side, working toward the same goal.

Conclusion

The evidence of the strong performance of these students on the surprise long-term-memory test and the scores on final examination items learned under basic proficiency I offer as support for my decision to continue this program in the fall and as added support for the idea already researched by others that students retain a large portion of a more modest amount of information (Dempster, 1993). *The reader is reminded that, although the basic proficiency quiz only counts for a grade of 67 on the class scale, a perfect score on that quiz means the student would get every question on that topic correct in the past ten years of state examinations.* The overall improvement of these students in my class, though not directly attributed to this program, is surely thanks in some part to it. A key ingredient lacking in the original design was a component to support reading for those choosing basic proficiency. Such a program is being devised for the fall. Another important improvement in the design will be to ensure that the standard monthly assessments are such that students on basic proficiency who know 100% of the material will earn at least 67 on that assessment, since 67 is the pre-defined benchmark in this scheme for being basically proficient.

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