Developing a Statewide, Standards-Based Student Report Card: A Review of the Kentucky Initiative

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Abstract

This paper describes a major initiative in the Commonwealth of Kentucky to develop a statewide, standards-based, student report card for reporting the learning progress of individual students at all grade levels (K-12). Led by a team of researchers with expertise in grading and reporting, 36 educators from three diverse school districts created two reporting forms: one for elementary and another for secondary level. These reporting forms were piloted by 41 teachers who distributed both the new form and the traditional report card to parents/guardians during the school year. Information gathered through surveys administered to teachers, parents/guardians, and students was used to determine satisfaction with the new forms and to guide revisions. Plans are currently in place to expand applications and professional development, enhance technical support, and establish a basis for statewide implementation.

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Nearly all states and Canadian provinces today have established specific standards for student learning. Developed by educational leaders and subject area experts, these standards describe what students are expected to learn and be able to do as a result of their experiences in school. Largely as a result of the No Child Left Behind legislation (2001), all states today also have developed large-scale accountably assessment programs to measure students' levels of proficiency based on those standards. Comparisons of the results from state assessments with those from the National Assessment of Educational Progress show that the rigor of these state standards and assessments varies widely *between* states (Ho, 2007). Despite this variation, however, all students *within* a state are expected to meet the same standards.

Accompanying their assessment programs, nearly all states have developed common *school* report cards, based on state standards, for disseminating information to the public about school quality (Deslandes, Rivard, Joyal, Trudeau, & Laurencelle, 2009; Dingerson, 2001). Yet in every state, schools have been left on their own to develop standards-based *student* report cards to communicate information about the achievement and performance of individual students to parents, guardians, and others.

The paper describes a major initiative in the Commonwealth of Kentucky to develop a common, statewide, standards-based *student* report card for reporting the learning progress of

individual students at all grade levels (K-12). Although the use of common, provincial standards-based report cards has been popular in Canadian schools for many years, especially in the province of Ontario (see: http://www.edu.gov.on.ca/eng/document/forms/report/1998/report98.html), Kentucky is the first state to attempt such a statewide initiative.

Theoretical Framework

Grades have long been identified by those in the measurement community as prime examples of unreliable measurement (Brookhart, 1993; Stiggins, Frisbie, & Griswold, 1989). What one teacher considers in determining students' grades may differ greatly from the criteria used by other teachers (Cizek, Fitzgerald, & Rachor, 1996; McMillan, Workman, & Myran, 1999). Even in schools where established grading policies offer guidelines for assigning grades, significant variation remains in individual teachers' grading practices. (Brookhart, 1994, McMillan, 2001). Because of individual grading adaptations made by nearly every teacher (Polloway et al., 1994) this variation in grading is even wider for students with disabilities and English language learners (ELLs).

Some researchers suggest that the variation in grading practices results from the lack of formal training teachers receive on grading and reporting (Stiggins, 2002). Most teachers have scant knowledge of the various grading methods, the advantages and disadvantages of each, or the effects of different grading policies (Brookhart & Nitko, 2008; Stiggins, 1993, 1999, 2008). As a result, the majority of teachers rely on traditional grading practices, often replicating what they experienced as students (Frary, Cross, & Weber, 1993; Guskey & Bailey, 2001; Truog &

Friedman, 1996). Because recollections and the quality of these experiences vary among teachers, so do the grading practices and policies they employ (Guskey, 2006a).

This variation in grading has been brought to light in investigations of the discrepancy between students' grades and their performance on state accountability assessments (see Brennan, Kim, Wenz-Gross, & Siperstein, 2001; Conley, 2000). Setting aside issues related to the arguable inadequacy and invalidity of state assessment results, such measures generally focus exclusively on academic or cognitive skills. When teachers assign report card grades to students, however, they generally combine achievement evidence with other sources of information related to students' behaviors, attitudes, work habits, attitudes, study skills, and effort. The result is a "hodgepodge grade" (Brookhart, 1991; Cross & Frary, 1996) that is impossible to interpret accurately and rarely presents a true picture of students' academic proficiency (Guskey, 2002).

Standards-based approaches to grading and reporting help remedy this problem for two reasons. First, they require teachers to base grades or marks on explicit learning criteria derived from the articulated standards. The resulting "standards-based grades" are considered fairer and more equitable by students and teachers alike (Kovas, 1993). Second, they compel teachers to distinguish *product*, *process*, and *progress* criteria (Guskey, 2006b). Product criteria reflect students' academic achievement and performance (Friedman, 1998; O'Conner, 2002). They focus on what students know and are able to do at a particular point in time. Process criteria reflect how students reached their level of achievement or proficiency. They typically relate to students' work habits, study skills, class behaviors, or effort. Progress criteria are based on how much students gain from their learning experiences or how much improvement has been made. Other names for progress criteria include "learning gain," "value-added learning," and "educational growth." By providing separate grades or marks for product, process, and progress

criteria, standards-based reporting clarifies the meaning of grades and offers a more accurate and informative depiction of students' performance in school (Guskey & Bailey, 2010).

Methods

All K-12 educators in Kentucky focus instruction on the same standards for student learning, referred to as the Core Content Elements and Academic Expectations (Kentucky Department of Education, 2007). These elements represent the content and behaviors that have been identified as essential for all students in Kentucky and also will be included on state assessments. In addition, all Kentucky students take part in the same Commonwealth Accountability Testing System (CATS). This system includes the Kentucky Core Content Test, writing portfolios and prompts, alternate assessments for students with multiple, severe disabilities, the ACT, PLAN, and nonacademic components. All Kentucky educators receive the same reports of CATS results and are expected to use those results in similar ways to improve student achievement.

Despite these many common requirements, each school in Kentucky must develop its own student report card for communicating students' learning progress to parents, guardians, and others, based on those shared standards for student learning. This places a tremendous burden on school personnel responsible for reporting and report cards. Educators who would like to align their reporting procedures with the standards and assessments that guide instructional programs often lack the time and resources to do so. As a result, most persist in using reporting forms that are poorly aligned, inadequate, and sometimes ineffective. Those few who take up the task of revising their report card generally lack expertise in the development of effective and efficient

standards-based reporting forms (see Stiggins, 1993, 2008; Brookhart & Nitko, 2008). As a result, they inevitably encounter significant content, design, and implementation problems.

To help educators address this reporting dilemma, a major initiative was launched in Kentucky to develop a common, statewide, standards-based student report card for reporting on the learning progress of individual students at all grade levels (K-12) in all schools. The project brought together 36 educators from three diverse school districts in the state who had been working independently to develop an effective and efficient standards-based report card. Through an extended summer workshop led by researchers with expertise in grading and reporting practices, these educators learned about current recommended practices in grading and reporting and methods of applying these practices to students with disabilities and English language learners. During the second half of the workshop, the participating teachers worked together to create two standards-based reporting forms: one for the elementary level, grades K-5; and another for the middle and high school levels, grades 6-12. Both report cards included a framework (Jung & Guskey, 2010) for reporting on the achievement of students with disabilities and English language learners. This framework is illustrated in Figure 1.

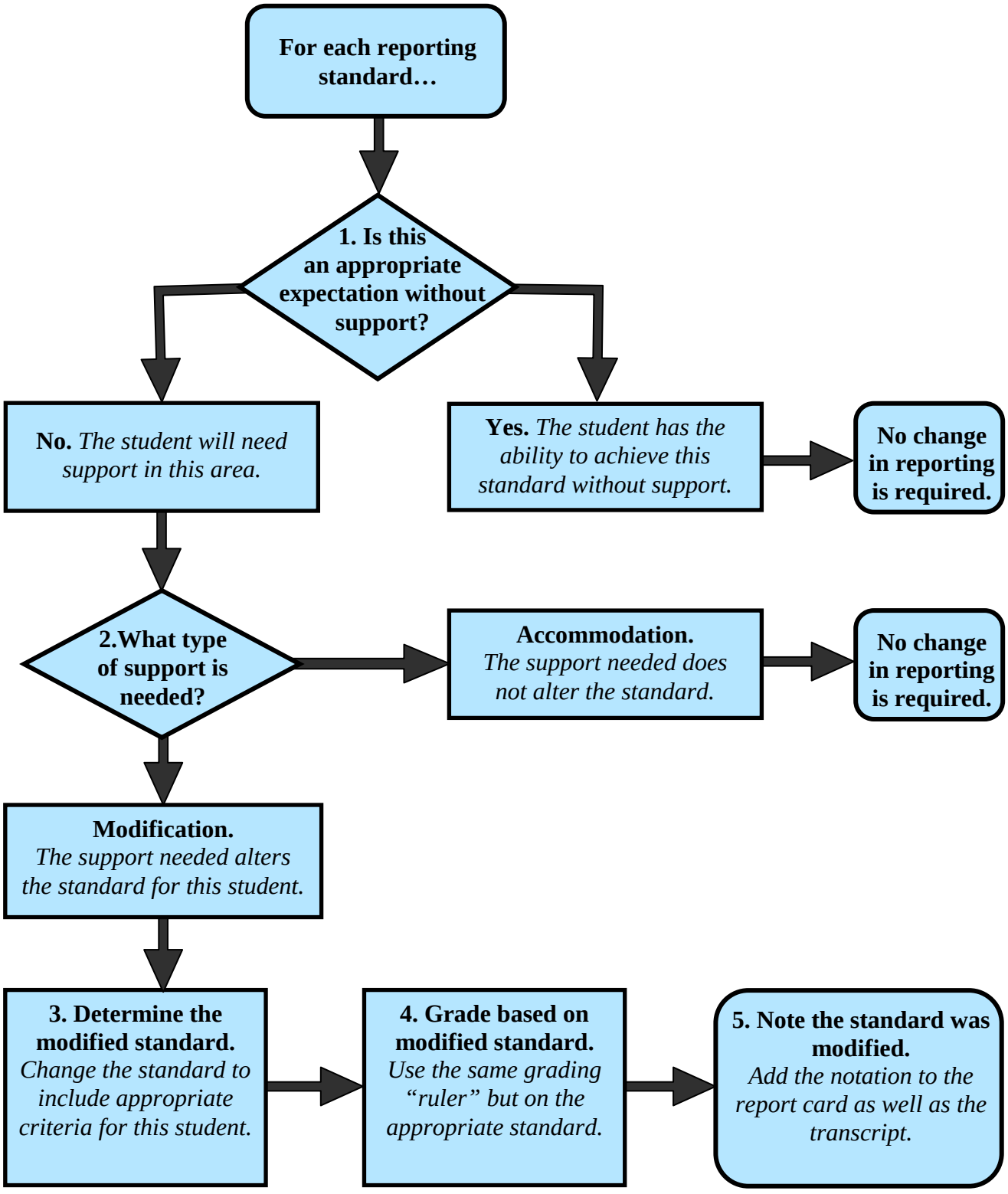


Figure 1. Inclusive Grading Model

From: Jung, L. A. & Guskey, T.R. (2010). Grading exceptional learners. *Educational Leadership, 67*(5), 31-35. *Available online at:* www.ascd.org/ASCD/pdf/journals/ed_lead/el201002_jung.pdf

The student report cards that were developed reduced the long lists of student learning standards outlined in the Core Content Elements and Academic Expectations to a much smaller number (4 to 6) of clear and precisely worded "reporting standards" expressed in parent-friendly language. The number of standards used in reporting was reduced because previously gathered interview data had shown that most parents could make sense of up to six standards within a subject area, but more than six tended to overwhelm them with too much information that they did not know how to use (see Guskey & Bailey, 2001). In most cases, these reporting standards were derived from the "strands" or "domains" under which curriculum standards are grouped by national organizations such as the National Council of Teachers of English and the National Council of Teachers of Mathematics. Basing the reporting standards on these broader strands also meant that revisions in particular curriculum standards would not necessitate significant change in the report cards.

In addition, the report cards included separate grades or marks for product (achievement), process, and progress learning criteria. In other words, grades reflecting students' academic performance were distinct from marks reflecting work habits, study skills, behavior, and learning gain. The report cards also included sections for teacher, parent, and student comments. An Internet-based application was developed to provide teachers with a computer platform for recording information on student performance, tallying that information in determining grades and marks, and printing and distributing report cards. Figure 2 illustrates this workflow for participating teachers.

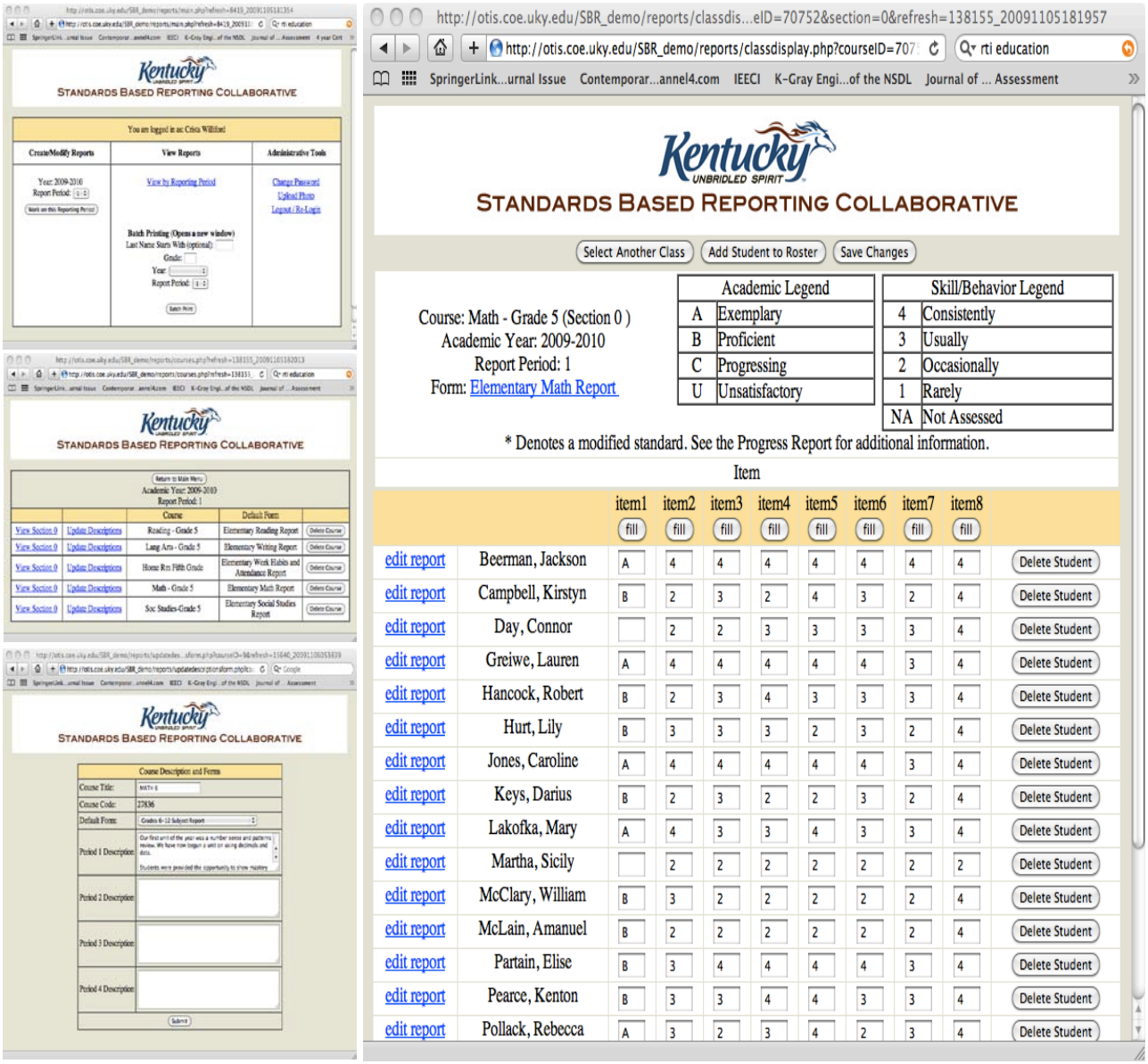
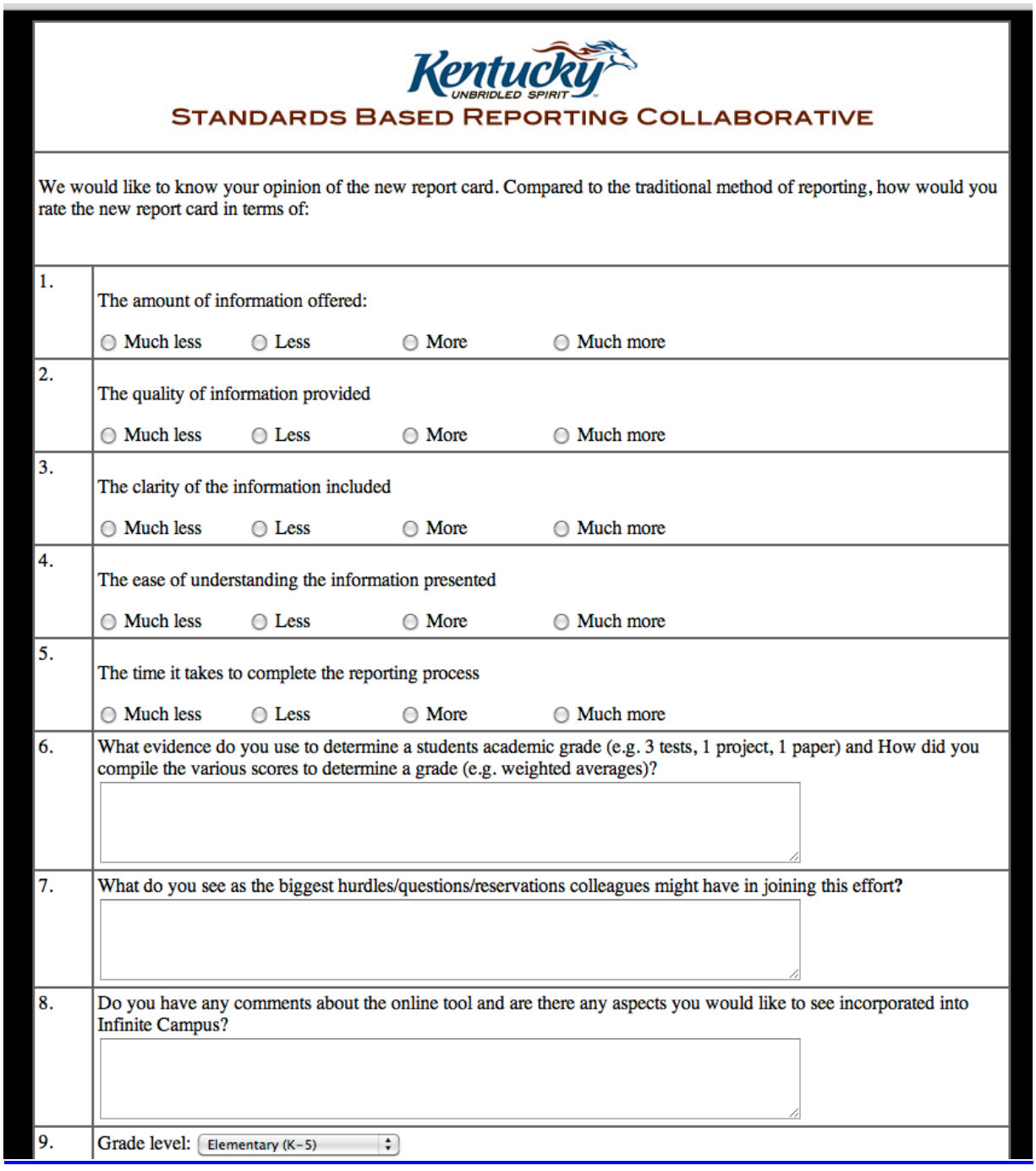


Figure 2: Workflow for Completing a Standards-Based Report Using the Online Tool

All participating teachers were provided face-to-face, online and telephone support when questions, concerns, or difficulties arose. Follow-up sessions were tailored for each school based on the specific technical support that was requested. One common request was for information to present to Site Based Decision Making (SBDM) councils. These councils; established by state law and made up of the school principal, teachers and parents; are responsible for many school policy issues.

Data Sources and Evidence

Following the summer workshop, the 36 educators involved in development returned to their schools and encouraged other teachers to pilot the new report cards during the following school year. A total of 41 teachers volunteered to use the new report card, distributing both the new forms and the traditional report cards that were used at their schools to parents/guardians every 9 weeks. Report cards for 2093 students, including 7064 individual grades and comments were collected. Online surveys were conducted with all participating teachers. The surveys were distributed through email midway through the school year, after the new report card had been used for at least one marking period. A copy of this survey is shown in Figure 3. Additionally, parent surveys were sent for students in one district who received the new report card. The first four items on the parent and teacher survey were identical to allow for direct comparison of responses.



Kentucky
UNBRIDLED SPIRIT

STANDARDS BASED REPORTING COLLABORATIVE

We would like to know your opinion of the new report card. Compared to the traditional method of reporting, how would you rate the new report card in terms of:

1. The amount of information offered:
   ○ Much less ○ Less ○ More ○ Much more
2. The quality of information provided
   ○ Much less ○ Less ○ More ○ Much more
3. The clarity of the information included
   ○ Much less ○ Less ○ More ○ Much more
4. The ease of understanding the information presented
   ○ Much less ○ Less ○ More ○ Much more
5. The time it takes to complete the reporting process
   ○ Much less ○ Less ○ More ○ Much more
6. What evidence do you use to determine a students academic grade (e.g. 3 tests, 1 project, 1 paper) and How did you compile the various scores to determine a grade (e.g. weighted averages)?
7. What do you see as the biggest hurdles/questions/reservations colleagues might have in joining this effort?
8. Do you have any comments about the online tool and are there any aspects you would like to see incorporated into Infinite Campus?
9. Grade level: Elementary (K-5)

Figure 3. Web Survey for Teacher Participants

Results

Of the 41 participating teachers, 24 completed the teacher survey. For the district that sent parent surveys, 117 of 258 (45%) parents/guardians responded. Figures 4 and 5 show report cards that are representative of what parents in the district surveyed received. Figure 4 shows the middle/secondary report card while Figure 5 offers an example of an elementary report. Table 1 shows the aggregate scores from the survey for each of the five forced response items. Participants were asked to compare the traditional reporting process to the standards-based reporting process being piloted. The participating teachers commented that standards-based reports provided more information and better quality information that was clearer and easy to understand. They also reported that the standards-based reporting process was more time consuming, but that the value added was worth the additional time. Parent perceptions of the new report card mirrored those of the teachers.

Table 1

Aggregate scores for items on teacher perception survey

	Teacher Mean & (Standard Deviation) (n=24)	Parent Mean & (Standard Deviation) (n=117)
The amount of information offered:	3.50 (.51)	3.42 (.60)
The quality of information provided	3.42 (.50)	3.33 (.56)
The clarity of the information included	3.33 (.48)	3.29 (.62)
The ease of understanding the information presented	3.25 (.53)	3.29 (.64)
The time it takes to complete the reporting process	3.08 (.65)	N/A

The parent surveys included 47 written comments, 32 of which made mention of specific characteristics of the report. The remaining 15 comments were general statements of approval. Of particular interest were the 13 parents who asked that the percentage grade be kept.

Example 1: "Not sure what term exemplary, etc. means in terms of where they should be and the rest of the class. I know what a 97 means."

Example 2: "Would still like to see a ## on grade (like 97,98) not just A, B, C, etc."

Example 3: "We must see the number beside the letter. If we only receive the letter grade, we will be calling the school to get the numbers every nine weeks."

These parents appear to have greater confidence numerical, percentages achieved from averaging scores across a wide array of achievement indicators than they do in letter grades. Interestingly, in every case where parents gave an example of the numerical grade, it was above 90. Other characteristics of the report on which parents offered specific written feedback were individual comments (n=18), class descriptions (n=11) and the ratings on the behavioral/non-academic performance (n=9).

Kentucky UNBRIDLED SPIRIT

STANDARDS BASED REPORT

Student: ****
Reporting Period: 3
Academic Year: 2009-2010

Academic Legend	
A	Exemplary
B	Proficient
C	Progressing
D or U	Unsatisfactory

Skill/Behavior Legend	
4	Consistently
3	Usually
2	Occasionally
1	Rarely
NA	Not Assessed

* Denotes a modified standard. See the Progress Report for additional information.

Course: SCIENCE 6 **Instructor: ******, ****

B	Achievement
3	Homework
3	Use of class time
3	Cooperation with peers and adults

Class Description: During this nine weeks students have learned about the forces that change the Earth. Students have completed experiments along with writing about science concepts to practice scientific skills.

Course: Social Studies 6 **Instructor: ******, ****

B	Achievement
3	Homework
3	Use of class time
3	Cooperation with peers and adults
	Comments : **** is respectful and well mannered during class. He also works hard to complete his work.

Class Description: This nine weeks we have been working on several concepts. Our focus has been the cultural region of Africa. We have learned to use a variety of geogrpahy tools to interpret patterns on the earth's surface, to analyze the physical and human characteristics of place, and the advantages and disadvantages that are created by those characteristics. We have also learned to analyze the aspects of culture and how they apply to the region of Africa. Not only have we studied the reasons why human populations change, but also looked at the basics of successful and non-successful economies. As we closely looked at Africa, we learned that the physical envorionment can promote and limit human activities (ex. the Nile River)

Course: MATH 6 **Instructor: ******, ****

A	Achievement
4	Homework
3	Use of class time
4	Cooperation with peers and adults
	Comments : Occasionally has difficulty staying on task.

Class Description: During the 3rd nine weeks, the students have been working a great deal with functions. By creating function tables and looking at patterns, students have been able to explore functions and how they are used in the real world. Geometry has also been a focus this nine weeks. Students have classified shapes, worked with angle measures, and spent a lot of time learning new vocabulary. The mastery of each of these standards will be reflected in each student's academic grade.

Course: Read 180 6-8 **Instructor: ******, ****

B	Achievement
NA	Homework
2	Use of class time
4	Cooperation with peers and adults
	Comments : **** works hard to complete tasks. He can be easily distracted and causes him to lose his focus. He has shown much growth this year through his computer work. He does very well in the area of spelling. He needs to keep reading independently.

Class Description: This nine week period we have analyzed expository writing, and identified story elements. These include setting, characters, and plot. We also read and listened to poetry selections. We have written a literature review that included our reaction to what we read and written a summary of what we read. We read about the author, Edgar Allan Poe. We have also worked on these reading skills: synonyms, word families, using a dictionary, multiple meaning words, homophones, compound words, use of commas with introductory words, irregular verbs, present and past tense verbs, subject-verb agreement, and use of possessives. Our computer work included reading comprehension, vocabulary study, and spelling. Independent reading helps us build on our studied skills and practice improves our overall reading ability.

Figure 4: Example of the Secondary Report Generated During the Standards-Based Report Pilot

Kentucky UNBRIDLED SPIRIT

STANDARDS BASED REPORT

Student: ****
Reporting Period: 3
Academic Year: 2009-2010

Academic Legend	
A	Exemplary
B	Proficient
C	Progressing
D or U	Unsatisfactory

Skill/Behavior Legend	
4	Consistently
3	Usually
2	Occasionally
1	Rarely
NA	Not Assessed

* Denotes a modified standard. See the Progress Report for additional information.

Course: SOCIAL STUDIES P-5 **Instructor:** *******, ******

B	Social Studies Academic Achievement
3	Uses maps effectively
3	Demonstrates knowledge of geography and its effects on society
2	Demonstrates knowledge of basic civic responsibilities and values in a democracy
NA	Demonstrates knowledge of the functions of economic systems
3	Demonstrates knowledge of how different cultures influence our culture
2	Applies knowledge of historical perspective in relation to current events
4	Comes prepared to class with homework done
	Comments : **** is a very hard worker and I can always count on him to try his best. He sometimes struggles with the content but will keep working in small group until he understands.

Class Description: During this grading period, students have described the purpose of the U.S. government including levels and branches. Students have described how people have had to make economic choices based on the economy. They have also described production, distribution and consumption of goods and services over time. Students have described significant historical events in the broad historical periods of U.S. history. Students have explained reasons immigrants have been coming to America in the past and the present. Finally, students have compared change over time in communication, technology, transportation, and education.

Course: ELEM. SCIENCE P-5 **Instructor:** *******, ******

A	Achievement
4	Homework
4	Use of class time
4	Cooperation with peers and adults

Class Description: This nine weeks in Science, we have used different tools to measure weather. We have used graphs to measure the change in weather and practiced reading graphs. We've continued our work with the Kentucky Department of Fish and Wildlife, discussing marine life. We also worked with the Department of Agriculture, discussing chemical changes and conducted experiments.

Course: ELEMENTARY MATH P-5 **Instructor:** *******, ******

B	Math Academic Achievement
2	Understands number relationships, knows basic facts, and performs computations
2	Uses standard/non-standard measurement concepts
2	Uses patterns, functions, and variables to represent and solve problems
3	Collects, organizes, analyzes, and presents data
3	Uses geometric concepts
3	Uses appropriate strategies to solve problems
4	Comes prepared to class with homework done

Class Description: During this grading period, students have been applying standard units to measure and estimate length and to determine weight, perimeter, area, time and temperature. Students have also converted units within the same measurement system using U.S. customary and metric. Students have analyzed, made inferences, and constructed data displays. Students have used data to determine mean, median, mode, and range. In probability, students have determined possible outcome and the likelihood of events. In algebra, students have extended patterns, described functions and input/output values.

Continued on next page

Figure 5. Example of an Elementary Report from the Standards-Based Report Pilot

When asked about specific barriers they saw in bringing the pilot to scale in their schools, 13 teachers described issues related to time (e.g., time to add comments for each student, entering multiple scores). Comments provided by the teachers gave insight as to how much of a time commitment was required for this type of reporting.

> "Initially, I thought it would take a lot of time to fill out the report card, when actually it's not as time-consuming as I thought it would be. It's not that bad computing the averages and figuring out their standard-based report card grade when you've already separated it when entering grades into Infinite Campus (the computerized grading program used in the district). Since Infinite Campus computes the averages, I simply convert those averages to a 1-4 range."

> "It would be wonderful if Infinite Campus would download directly, but it does not take more than an hour or two to complete 3 classes. I do not feel this is unreasonable for the teacher."

Several other teachers noted that having a direct download from the school's grading program (Infinite Campus) would streamline the process. This is significant because it illustrates how a school can engage in this process without adding to the reporting workload of instructional staff members. Additionally, many of the requests that teachers made to improve the process are all changes that can be addressed by changes in the software.

The Latin term *respice finem* means 'look to the end,' captures the intent of this pilot. Teachers are often asked to do things without any clear idea of the target they are shooting for. So even if willing, they must figure out not only how to get there, but where "there" is. Starting with the end product, in this case the standards-based reporting form, created a vision of what we hoped to achieve and also offered guidance on what had to be done to reach that goal.

Table 2 shows the grade distribution from the three reporting periods that have been completed. Of the 7064 grades that were assigned, only 14 reports indicated that a modified standard was used in determining the achievement grade. 12 of these reports were by the same instructor, while the remaining two reports were from two other instructors.

Table 2

Totals and percentages of assigned grades by reporting period for all participating teachers.

Period	A	B	B*	C	C*	I	U	U*	Total
1	1426 (64%)	626 (28%)	4 (,01%)	138 (6%)	5 (.01%)		23 (1%)	4 (.01%)	2226
2	1143 (58%)	598 (31%)		189 (10%)	1 (.01%)	1 (.01%)	27 (1%)		1959
3	1629 (57%)	901 (32%)		270 (9%)		1 (.01%)	78 (3%)		2879

Although it is not possible to determine how many grades should have been based on modified standards without careful examination of each student's IEP or ELL plan, we feel

certain that this number of grades is far below what it ought to be. Considering that students with disabilities and English language learners make up approximately 20% of the U.S student population (U.S.D.O.E., 2009), and the districts involved in this project serve rather typical student populations, it seems likely that every teacher should be assigning some modified grades. Certainly it is possible that teachers did not have a clear understanding of the grading practices to be used with these exceptional students. However, because teachers demonstrated the ability to apply the practice in the workshop, other factors should be considered.

The grading model for exceptional learners requires that teachers first modify general curriculum standards for the individual student using the appropriate accommodations and modifications. General education teachers are given little preparation for this task during their preservice education and likely need additional support. As one teacher astutely pointed out on the survey,

> "It takes more time to complete a standards-based report card, but I feel it is worth the time. The real question for me is 'Are you asking about the report card itself, or are you asking about standards-based grading only?' I feel these are two different questions."

Nine teachers also pointed out that a philosophical shift among their colleagues would be needed, especially when it comes to matching items on assessments to specific standards and understanding of the rationale for dividing the grades into 3 categories (i.e., product, process, and progress).

It is clear from such comments and from evidence on the infrequent use the grading model for exceptional learners that the nuances of the day-to-day practice of assessment need to be supported. One teacher reported that the academic grade was based on "equally weighting

summative and formative" assessments. Another teacher also mentioned factoring formative assessments into determining the academic grade. Because of this misunderstanding in the use of formative assessment, additional support is needed to help teachers understand the difference between assessments for learning and those used for assigning grades or marks to students summative performance.

Future Plans

At this time the reporting forms have been revised, technical support has been extensively enhanced, and plans are in place to expand implementation efforts significantly in the coming school year. This expansion will take place on three levels. First, several schools in the four pilot districts have decided to use the revised standards-based report cards school-wide during the coming school year, replacing the traditional forms used in the past. Both online support and follow-up sessions will be provided for the staffs of these schools. Second, other school staffs in these districts will take part in brief, three-hour training sessions on the new forms. These sessions will focus on how the new forms were developed, the rationale behind their structure and format, the record-keeping procedures involved, the technical support available, and the provisions for follow-up assistance. Those teachers who then volunteer to implement the new form will be given guidance on setting up pilot implementations. Third, the revised form will be presented to leadership teams from as many as twenty other school districts in the state to solicit their participation in a larger scale, piloting effort. It is hoped that this will provide the basis for state-wide implementation within three years.

Significance of the Work

Educators in schools throughout the U.S. and Canada struggle today in their efforts to align the procedures they use to report on the learning progress of individual students with the standards-based approaches already in place for planning instruction and assessing student learning. Given that all schools within a state or province are working with the same standards, it seems both inefficient and ineffective for each school to have to develop its own standards-based report card. It is believed that what we have learned through this initiative in Kentucky might help inform similar initiatives in other states and provinces, guiding all educators in their efforts to develop better and more useful reporting forms for students of differing abilities at all levels of education.

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