Best in Show: Teaching Old Dogs to Use New Rubrics

Austin M. Hitt & Emory C. Helms
Coastal Carolina University

Abstract

This paper discusses an instructional approach designed to help preservice teachers understand how assessments can be influenced by personal biases. In order to achieve this objective, we developed an analogy-based activity called "The Dog Show Analogy." After participating in the activity, we have observed that the participating preservice teachers are more aware of how their personal biases can impact the way they assess students. We explain the activity in detail in order to stimulate further discussions and reflections among teacher educators. In addition, we discuss how the development of the activity and the analysis of the data changed our perspectives on student assessment and stimulated future research.

Introduction

There is a tense silence in the arena as the fans at the 2006 Westminster Dog Show impatiently wait to see which champion canine will win the coveted title of Best in Show. After closely examining each canine individually, the judge slowly walks in front of the line of canines for one last inspection before he makes his decision. Finally, as the audience holds its breath in anticipation, the judge stops pacing and confidently points to the Bull Terrier, Rocky Top's Sundance. The crowd erupts as the handler and new champion respond with excited gestures in the ring.

For the winners, runners-up, and the audience, the reasons for the judge's decision will remain a mystery because no explanation is required. Everyone must trust that the judge was fair and objective, and that he used the guidelines for breed standards established by the American Kennel Club (AKC). However, without an explanation, it is impossible to know how other factors such as the canine's grooming, behavior, handler, and past victories and pedigree influenced the judge's decision.

Most Americans would chafe at the thought of being assessed in a manner similar to what happens at a dog show. If they received a poor evaluation from their employer, they would want to know why they were marked down and how they could improve. It is part of the American way of thinking that evaluations in the public sector should be open and fair. This concept is so important to Americans that state and federal legislatures have passed disclosure laws to protect people from surreptitious and unfair judgments. In light of our strong American ideals of openness and fairness, it is surprising that these principles do not apply to one large group of U.S. citizens: our children and their schooling.

In their role as students, children are subject to a variety of decisions that are dictated from school boards, superintendents, principals, and teachers. The most significant influences are from the teachers who act as the primary evaluators of their performances. On a daily basis, assignments are assessed, returned to students, and marked with a numerical value or letter grade. From the students' point of view, the feedback they receive on their performance is extremely limited (Bardine, 1999). They may not know why points were deducted or how they can improve on future assignments. It is also unclear how external factors like a teacher's beliefs and perceptions influence the scores. One solution to this problem is to use rubrics because they are objective assessment tools that clearly communicate expectations, provide feedback, and check the gut feelings and preconceptions of the assessor (Gronlund, 2006). Essentially, rubrics clarify the process and make it more consistent.

In order to make our students more aware of potential sources of bias, and to demonstrate the efficacy of rubrics, we created The Dog Show Analogy. The central premise of the activity is the disconcerting parallels between the treatment of students in schools and canines at a dog show. Our

students are often shocked by how similar the two entities are, and they frequently comment that the activity changed their ideas about how to assess students. Over the past 4 years, we have presented the Dog Show Analogy to secondary preservice teachers and in-service teachers within early childhood, elementary, middle level, and secondary Master of Education, M.Ed., programs. The design and implementation of the instructional activity, and the perceived impact of the activity on our students, are discussed in the following sections.

Theoretical Framework

The Nature of Assessment Bias in Education Settings

Through teacher preparation programs and in-service workshops, teachers learn how to construct objective assessments. However, the ability to write quality assessment items does not guarantee that students will be fairly assessed. Teachers, just like everyone else, have their own subconscious biases that drastically influence their perceptions and behaviors (Wegner, 2002; Wilson, 2002).

Research in cognitive and social psychology reveals that education assessments are biased in several ways. First, humans have a "bias blind spot" when it comes to comparing their accomplishments to the accomplishments of others. Pronin, Lin, and Ross (2002) found that college students tend to rate themselves as less biased than their classmates and other citizens. The students could readily identify the self-serving motives of others as biased but classified their motives as more objective and fair. We assert that it is logical to infer that preservice and in-service teachers are susceptible to a similar bias where they can identify the flaws in their colleagues' assessments but view their own as fair and objective.

Second, when individuals assess the performances of others, they consider factors such as ability and effort (Weiner, 1994). For example, Struthers, Weiner, and Allred (1998) found that college students adjust their judgments of others based on the circumstances. The students were asked to read a vignette in which a fictional employee failed to meet a deadline. If the students read that the employee was a hard worker or lacked the ability to complete the task, their judgments were relatively lenient. However, if the students read that the employee was lazy or capable of completing the task, their judgments were harsher. In an analogous study, Sabini and Monterosso (2003) found that college students believe that instructors should consider effort and ability when assessing students' performances. Research specifically targeting college-level education majors reveals that they too believe effort should factor into a student's grades (Griswold, 1993). Teacher educators and in-service teachers also consider effort and ability when assessing students (Charles, 2007; Weinstein, 2003). We contend that it is not surprising or wrong for teachers to consider external factors such as effort when they assess students' work. However, a major problem with assessing effort and ability is that the scores are based on teachers' perceptions of students. Therefore, it is possible that a teacher's assessments can be skewed by personal biases. In their seminal study, Rosenthal and Jacobson (1968) discovered that if teachers believe their students are academically talented, they tend to interact positively with the students and teach a relatively challenging curriculum. Alternatively, when teachers believe their students are less capable, there are fewer positive interactions, and the teachers cover less content. Rosenthal and Jacobson also found that teachers are not aware of how their perceptions can influence their interactions with students.

Conceptual Development of the Dog Show Activity

The Dog Show Analogy is based on our experiences as teachers, college-level teacher educators, and, for one of us (Helms), over 25 years of experience breeding, training, and showing dogs for obedience and confirmation. Combined, we have over 24 years of experience teaching in public middle schools and high schools. It was during our discussions about how we assessed our former middle school and high school students that we realized we were overconfident in our ability to be objective assessors. After reviewing the psychology literature and reflecting on the nature of student assessment, it was evident that in our roles as high school teachers and teacher educators we are also susceptible to personal biases that can influence the way we assess students.

At the college level, we have over 20 combined years of experience and have taught nearly 400 preservice and in-service teachers within a Secondary Masters in the Art of Teaching (M.A.T.) program and in diverse Masters in Education (M.Ed.) programs. In addition, one of us served as the lead instructor for the state of South Carolina's alternative certification program and has taught over 3,000 teachers.

Based on our experiences, we concluded that many of our preservice teachers are also over-confident in their ability to objectively assess students. In addition, field observations of our preservice teachers convinced us that their assessment of students' work was susceptible to personal biases.

After nearly 2 years of conversations about assessment biases and the need for improving student assessments, we started brainstorming about an approach or activity that would heighten our preservice and in-service teachers' awareness of potential biases and motivate them to use rubrics and other assessment tools. As stated above, one of us (Helms) has trained, bred, and shown Old English Sheep Dogs for over 25 years. Helms's dogs have won three Best of Breed awards at regional shows, and, at one point, Helms owned and trained the second-ranked Old English Sheep Dog Obedience Champion in the United States. It was these experiences that guided the development of the Dog Show Analogy.

Instructional Format

We selected an analogy-based activity for three reasons. First, research in cognition and linguistics indicates that humans think, integrate, and learn new information through the creation of analogies and metaphors (Lakoff, 2002; Lakoff & Johnson, 1980). Therefore an analogy-based approach is compatible with the way people think and learn. Second, research on using analogies for instruction reveals that analogies can help students understand and internalize relatively complex scientific phenomena (Duit, Roth, Komorek, & Wilbers, 2001). We contend that a similar analogy-based approach can help individuals better conceptualize the assessment process. Finally, psychological research reveals that when individuals can reflect on their beliefs and develop "attitude accessibility," they can change their behaviors and attitudes (Hodges & Wilson, 1993; Wilson, 2002). By comparing and contrasting the target phenomenon with the analog, our students can become more aware of their perceptions and can start modifying their views and behaviors.

Our analogy approach is also based on the principles of cognitive therapy, which is used to address emotionally based thought disorders (Beck; 1976; Haidt, 2006). In cognitive therapy, the patient (1) learns to capture his or her thoughts, (2) records those thoughts, (3) identifies potential distortions, and (4) identifies more accurate and productive ways of responding to problematic situations (Haidt, 2006). During the Dog Show Analogy, the preservice and in-service teachers identify and record their preconceptions about students. Next, they reflect on the putative similarities between the assessment of students and canines and identify their own biases or distortions. Finally, the preservice and in-service teachers learn about rubrics and other assessment tools that can mitigate assessment biases.

Methodology

Sample Population

Over the past 4 years, we have presented the Dog Show Analogy to over 120 preservice teachers in a Secondary Masters in the Arts of Teaching program, M.A.T. The program uses a cohort model in which preservice teachers in art, English, mathematics, music, science, and social studies are admitted to the program in early summer. The preservice teachers take courses in the summer and fall semesters, intern in the winter semester, and, after taking additional content courses during the following summer semesters, the preservice teachers complete the degree. Preservice teachers in all of the disciplines take general education courses such as Foundations of Education and Assessment and Action Research, and they attend discipline-specific content and methods courses. We introduced the Dog Show Analogy in the Assessment and Action Research course during the fall semester.

In addition, we have presented the Dog Show Analogy to approximately 60 in-service early childhood, elementary, middle level, and secondary teachers in different Masters in Education, M.Ed., programs.

Procedures

Presenting the Dog Show Analogy is relatively simple, and we have found that it works well with groups of 30 or more students and relatively small groups consisting of 10 students or less. Prior to presenting the Dog Show Analogy, the students complete an in-class assignment requiring them to fill out a blank table and list what they believe are the characteristics of "good" students. We keep the students' responses and return them during the Dog Show Analogy.

On the day of the Dog Show Analogy, we show the students a video clip of a Best in Show judging at a major dog show. Before the judge makes his or her decision, we stop the video and ask the students to choose a winner and provide reasons for their choices. The students then share their responses with the whole class. Finally, the winner of the dog show is announced, and the class members share their views on the judge's decision. The students are then asked to infer what type of criteria the judge used to make his or her decision.

Next, we divide the students into small groups to discuss their views on the judging of a dog show. Each group is provided a blank table for listing the characteristics of championship dogs, and the students record their ideas. Afterward, we return the tables listing the characteristics of "good" students. The students then compare the attributes of good students to their lists for the qualities of champion canines.

Finally, we present some analogies between dog shows and give the students an assignment requiring them to write a reflective essay on the parallels between the judging of dog shows and the evaluation of students' work. On the reflections, the students are prompted to (1) discuss any insights they gained from the analogy, (2) explain how well the analogy parallels the assessment of students in schools, and (3) suggest steps or methods to help teachers avoid dog-show-like assessments. The students bring their reflections to the next class meeting and share their views with their groups and the entire class.

Results

When the students compare their lists of attributes of good students and winning canines, we have observed that they are frequently surprised and concerned by the parallels between their descriptions of quality students and winning canines. For example, the students use terms and phrases such as *pays attention*, *well behaved*, *respectful*, *follows directions*, *goal-oriented*, and *disciplined* to describe both groups. Table 1 includes the most frequent responses made by at least 50% of the participating subjects about the attributes of winning canines and good students.

A consistent difference between the two lists is that our students identify physical attractiveness as a key attribute of winning canines but not students. This difference is significant because preservice and in-service teachers frequently do not consider how a student's appearance can positively or negatively impact how they are assessed. However, educational research reveals that teachers tend to view more attractive students as being more academically talented, and they tend to award these students higher grades (Ritts, Patterson, & Tubbs, 1992). Researchers have also found that the "expense" and "style" of students' clothes and their "grooming habits" can influence teachers' expectations (Cotton, 2001). Because a student's appearance is rarely considered a significant influence on his or her grades, we emphasize it during class discussions.

Table 1

Most Frequent (50% of all responses) Terms Used to Describe Winning Canines and Good Students

Characteristics of Winning Show Dogs	Characteristics of Good Students
attentive, pays attention	attentive, pays attention
follows directions, obeys commands, disciplined	follows directions, cooperative, pays attention, disciplined
respectful	respectful, polite, courteous
well behaved, performs well	well behaved, considerate
good demeanor, good personality	friendly personality, good disposition, well organized
goal-oriented, driven	goal-oriented, organized, driven
beautiful hair, beautiful face, good looking, good proportion, nice body movement, nice teeth, well groomed	NONE

Analysis of the reflections reveals that students find the analogy useful because it reveals latent sources of bias. One common theme is the realization that seemingly innocuous factors like a student's dress and behavior can influence his or her grades. Below are some examples of comments we have collected from our students.

> After watching this video and learning the Dog Show Analogy, I have changed my thinking…. I now believe it's possible for teachers to prefer certain characteristics including appearances…. They may also have better relationships with students who are like themselves. This seems very biased, but it's true.

> I never really thought that such things as the way the child dressed, how well they carried themselves, and how well they were groomed had any influence on their grades. This experiment really changed my thoughts about how teachers look at their students. I don't feel that it's fair, but it happens all the time.

> I had never realized that a student's outward appearance could in some way affect the student's grade. Because this seems like such a blatantly ridiculous factor in the grading process, I was at first shocked at this possibility. However, the more we talked about this in class, and after seeing the Dog Show Analogy, it began to make sense.

A second theme is students' heightened awareness of their personal biases. Most of our students write they are concerned that they will unfairly judge students based on superficial factors such as their shabby clothing and poor grooming habits. One student even noted the reverse situation can be problematic. In her reflection, she wrote that after attending the Dog Show presentation she realized she treated the "popular" and "attractive" female students in a summer camp program more harshly because of clashes she had with such girls when she was in high school. Comments like these are important because they are indicative of a growing awareness of personal biases. Psychological research reveals that this kind of self-recognition is essential in order for individuals to change their attitudes and behaviors (Wilson, 2002). Below are examples of students' statements.

> When I was teaching at the Outdoor School, one week I got a cabin full of all the popular, attractive girls in the school. I actually was harder on them than any other cabin before because I saw them as the kind of people who picked on me when I was in school. The Dog Show Analogy helped me

realize that I shouldn't be this way with my future students because they really don't know any better. I was doing this subconsciously, and now I am aware.

I would have never thought that this would even be close to working. Yet, when we filled out the papers, I found that a lot of the same qualities I found in a "good" student were the same as those I found in a champion dog. This is a sad fact that I did that, and now I will have to rethink my thought process.

When we first started the Best in Show assignment in class, we were unaware of exactly what we were doing; this allowed me to watch the dog show objectively, or at least I thought I was watching it objectively. After we watched the dog show and discussed the analogy between students in school and dogs competing in a dog show, I realized that I had been judging those dogs due to my personal opinion and preferences, just as students would be judged by their teachers.

We also find that our students have relatively few suggestions concerning how teachers can minimize the impact of bias when assessing students (Table 2). A common statement is that teachers can become more aware of their biases through journaling and reflection. Another common solution is that schools should require students to wear uniforms, which would limit discrimination based on a student's appearance. Because we present the Dog Show Analogy at a relatively early point in the teacher education program, most students do not have well-formed ideas about teaching and assessment. This is advantageous because the students are relatively open to new ideas, and it is easier to make the case for using rubrics to assess students.

Table 2

Students' Suggestions for Making Student Assessment More Objective

Suggested Methods/Approaches for Limiting Teacher Bias (50% or higher response frequency)
Familiarity with Students and Parents—Teacher researches the background and experiences of parents in order to create more positive relationships.
School Uniforms—Require all students to wear a standard school uniform, which will reduce assessment bias based on a student's appearance.
Student Anonymity—Students use codes or write their names on the back of assignments in order to prevent teacher bias.
Student Surveys—Students provide anonymous feedback on the teacher's performance. The teacher uses this information to promote equity in the classroom.
Teacher Journals—A teacher records his or her positive and negative interactions with students and uses this information to create a fairer and more objective classroom environment.

In the next section, we present events at a dog show that we interpret to be analogous to the way students are assessed. The examples are identical to the analogies we share with our students and represent only a few of the possible parallels between dog shows and student assessments. Our students have identified other parallels, which has led to productive discussions and has influenced the way the Dog Show Analogy is presented.

Parallels Between Dog Shows and Student Assessments

Grooming and Obedience

An adept groomer can accentuate a canine's strengths and hide weaknesses, which can make the difference between winning and losing. Top groomers know how to highlight appropriate qualities

through crimping, curling, teasing, and conditioning. In fact, groomers are so important to winning that they become part of the canine's extended family and often travel with the canine. In addition to grooming, judges consider the canine's behavior in the ring. A championship canine must remain alert and in control while being scrutinized by the judge. A canine that is not under control will not impress the judge and may be dismissed from the show ring.

Much like judges of dog shows, teachers also can make judgments about students based on their appearance and behaviors (Good & Brophy, 2003; Neal, McCray, Webb-Johnson, & Bridgest, 2003). A meta-analysis of the research on attractiveness and success reveals that teachers tend to view more attractive students as being more intelligent and academically talented; as a result, attractive students may receive higher grades (Ritts, Patterson, & Tubbs, 1992).

Additionally, those students who challenge a school's or teacher's dress code by wearing unacceptable clothing or by having exposed tattoos or body piercings can be viewed by teachers as being weaker academically and as having behavioral issues (Good & Brophy, 2003; Neal, McCray, Webb-Johnson, & Bridgest, 2003). In comparison, those students who are aligned with the dress codes may be seen as better students. The idea that a student's dress is directly connected to his or her academic performance is underscored by the popularity of the school uniform movement. Research on school uniforms reveals that, in general, teachers support the use of school uniforms because they believe that a student's clothing impacts his or her academic performance and demeanor (Wade & Stafford, 2003).

Finally, research reveals that race can factor into how teachers perceive their students (Banks et al., 2005; Persell, 2007). For example, education research reveals that teachers can maintain more negative attitudes toward African American students' academic abilities and behaviors relative to Caucasian students (Ainsworth-Darnell, James, & Downey, 1998; Downey & Pribesh, 2004; Irvine, 1990; Murray, Waas, & Murray, 2008; Yair, 2000). Other studies on race indicate that children of color are more frequently and severely punished for misbehaviors than their white classmates (Carter & Goodwin, 1994; Downey & Pribesh, 2004; Fine, 1991).

Familiar Faces

In the judging for Best in Show, not all canine breeds are equal in the eyes of the judges. In the 100-year history of the Westminster Dog Show, 44 of the Best in Show winners have come from the Terrier Group. In a distant second and third place are the Sporting Dog Group and the Working Dog Group which have 17 and 15 wins, respectively. The disparity between the numbers of winners in the Terrier Group and the other canine groups is too great to occur by chance alone. Based on these results, it can be inferred that not all canine breeds are equally appreciated by the judges.

This phenomenon can be explained by examining the backgrounds and experiences of the judges. Those breeds that are most popular will have more owners, breeders, and, proportionately, more individuals who are eligible to become judges. Every judge has his or her favorite breed that he or she is most familiar with, and it is reasonable to infer that the judge's affinity for some breeds influences his or her decision.

Familiarity and shared experiences can also influence the dynamics of the teacher–student relationship (Good, 1987; Meyer, Bevan-Brown, Harry, & Sapon-Shevin, 2006; Newberry & Davis, 2008; Parker, 1995). If a teacher and student come from similar backgrounds, they tend to more readily understand and empathize with each other. In contrast, when the teacher and student have different backgrounds, they are more likely to clash. Differences such as ethnicity, race, and gender can subconsciously influence how a teacher interacts with a student (Neal, McCray, Webb-Johnson, & Bridgest, 2003). For example, Downey and Pribesh (2004) discovered that a teacher's race can influence his or her perceptions of students. They found that African American teachers tend to rate African American students as being less disruptive than their non-African American colleagues.

Guides in the Arena

A top handler is like a litmus test for the quality of the canine he or she leads into the ring. Canines entering the ring with an unknown handler, or a handler with a meager reputation, will be considered suspect by the judge. A judge's past experiences inform him or her that championship canines usually come into the ring with championship quality handlers.

Students who come from a higher socioeconomic status (SES) and, generally, more-educated families tend to be viewed by teachers as being better students, and teachers tend to interact with them in a positive manner (Alvidrez & Weinstein, 1999; Auwarter & Aruguete, 2008; Childs & McKay, 2001; Johnson & Stevens, 2006; Warren, 2002). In addition, higher SES parents are generally more actively engaged in their children's schooling (Baker & Stevenson, 1986; Pong, Hao, & Gardner, 2005).

Constructive and frequent interactions between teachers, students, and parents can increase the teacher's empathy toward the students and can create a warmer teacher–student relationship. In contrast, students from lower SES families tend to have less-educated parents, they may be viewed less positively by teachers and school administrators, and their parents are less likely to be involved in their schools (Alvidrez & Weinstein, 1999; Warren, 2002). As a result, there may be minimal mitigating factors when the teacher assesses these students. Their grades are based solely on the teachers' perceptions of the students' academic work and behavior in the classroom.

History's Winners, Losers, and the Value of Pedigree

Every breed group maintains a yearbook that ranks the top canines in terms of show victories. Those canines at the top of the rankings are perceived by the experts as being more outstanding than their lower-ranking competitors. Dog show judges are very familiar with the rankings, and they use this information to determine if a canine is deserving of winning Best in Show.

Likewise, before the first day of school, a teacher may have formed preconceptions about students and will treat students differently based on these preconceptions (Brophy & Good, 1970; Good & Brophy, 2003). If the information about a student's academics or behavior is "good," then the teacher may perceive the student as being academically strong and may respond to the student in a positive manner. In comparison, students who have a "bad" record may be perceived by the teacher as less motivated and weaker academically. Brophy and Good found that teachers may have lower expectations and have more negative interactions with these students.

The pedigree indicates that a canine is the offspring of champions and is reared by top breeders and kennels. Its quality is inextricably linked to its pedigree, which is reflected in its show name. The show name is not an endearing name like "Fluffy" or "Snowball" but, rather, an advertisement of the canine's pedigree. For example, the 2006 Westminster Dog Show Champion's name, Rocky Top's Sundance Kid, is an indicator of its mother, owners, and breeders. Before the canine enters the ring, the name precedes it, and the judge may know its pedigree and history. This information may influence the judge's decision about which canine will win Best in Show.

Teachers can also form preconceptions based on a student's family background (Brophy & Good, 1970; Good & Brophy, 2003; Persell, 2007). If a student has siblings who have performed well in the past, the teacher may have higher expectations for that student. Conversely, if a student comes from a family that has a weak academic history, the teacher might have lower expectations for that student.

Additional Parallels and Differences

First, dog shows are high-stakes competitions that lead to financial gains and increased social status for the owners, trainers, handlers, and groomers. The owners' reputations increase if their canines win Best in Show, and they gain financially through breeding. Handlers' and groomers' reputations are also enhanced, which results in more business and more prestigious clients.

In school, the stakes are even higher for students. If they are successful and obtain a high school diploma, they can get higher paying jobs and earn significantly more money. High school and college graduates also obtain a higher social status because their better-paying jobs allow them to purchase homes in more affluent neighborhoods and their children can attend better-performing schools.

Second, dog shows are entertaining and exciting events for the canine participants because of all the unique events, sounds, smells, and sites. Based on his years and experiences showing dogs, Helms can attest that his Old English Sheepdogs become very excited about an upcoming dog show. During the event, the dogs enthusiastically participate in the judging events, and they enjoy interacting with the humans and other canines attending the show.

In contrast, an increasing number of students may not find school engaging because there are not enough interesting classes or activities. Unfortunately, the siege of standardized testing does not improve students' interest levels, and budget cutbacks eliminate more interesting electives such as music, art, and auto body, which are enticing to some students (ABC News, 2003; Ickes-Dunbar, 2005; Landry, 2006; Tulenko, 1997).

Third, there are drastic differences between the way show canines and some students are prepared for competing in a dog show or attending school. Owners of show canines feed them the most nutritious meals, pay for the best health care, and provide a safe personal space in which to play and rest. When a canine arrives at a dog show, it is well fed and ready to go because it has received the best possible preparation.

However, an increasing number of students come to school unprepared to meet the academic challenges they will face in the classroom. They can arrive at school hungry, sleep-deprived, and lacking adequate school supplies. Some students may be left at home unsupervised for hours, or, in the most severe cases, they do not have a place to call home. Students who are not prepared for school, due to a variety of factors, tend to study infrequently, fail to complete homework assignments, and receive lower grades and even fail courses. As a result, these "at-risk" students rapidly fall behind in school and are more likely to drop out (Vaughn, Bos, & Schumm, 2006).

Learning From the Dog Show Analogy

Rubrics

After our students share their reflections on the Dog Show Analogy, we start making the case for rubrics as effective assessment tools. We emphasize the fact that rubrics provide valid and reliable assessments and can help increase student motivation (Arter & McTighe, 2001). Rubrics make assessments more reliable because they standardize the grading process. Every assignment is assessed using the same criteria, and the impact of bias is minimized if the rubric guidelines are earnestly followed.

Rubrics improve the validity of assessments by keeping the assessor's perceptions and biases in check. We tell our preservice and in-service teachers that rubrics can address the issue of bias in two ways. First, the reality is that all assessments are "biased" because the content ultimately reflects the designers' values. Items on assessments are also "guided" or "biased" by state and national standards or the views of content experts and educators. This bias is evident in the design of teacher-made assessments. For example, we are certain that the rubric included in this paper does not represent a consensus among science teachers (Figure 1). It is expected that the format and the assessment of a laboratory report would be modified in light of the students' developmental levels, the subject being taught (e.g., biology, chemistry), and the background and preferences of individual science teachers. In effect, rubrics positively impact student achievement because they explicitly communicate the specific expectations of different teachers.

Category	1 Unacceptable	2 Developing	3 Proficient	4 Excellent
PRE-LAB				
Title	The title is an inaccurate description of the experiment, and/or the dependent or independent variables are not present.	The title is a partially accurate description of the experiment, and/or the dependent and independent variables are present but some are incorrect.	The title is an accurate description of the experiment, and the dependent and independent variables are present and correct.	All of the previous categories have been met, and the title is engaging to the reader and does not contain grammatical errors.
Materials	The materials list is mostly incomplete, and/or the list is inaccurate.	The materials list is nearly complete, and/or it is generally accurate in terms of the quantity of consumables and the sizes and types of equipment used in the experiment.	The materials list is complete, and it is accurate in terms of the quantity of consumables and the sizes and types of equipment used.	All of the previous categories have been met, and the materials section is legible, neat, and contains minimal grammatical errors.
Safety Protocols	Most of the biological/chemical safety issues are not identified, and/or most of the procedures, such as disposal and clean-up, are not addressed or they are inaccurate.	The majority of the biological/chemical safety issues are identified, and the majority of the procedures, such as disposal and clean-up, are addressed and accurate.	All of the biological/chemical safety issues are identified, and all of the procedures, such as disposal and clean-up, are present and accurate.	All of the previous categories have been met, the protocols are neatly organized in tables or lists, and there are minimal grammatical errors.
PRE-LAB/DURING LAB				
Procedures and Notes	Research procedures are missing, or they are incomplete and/or inaccurate.	All of the research procedures are present, accurate, and ordered in the correct sequence.	All of the research procedures are present, accurate, ordered in the correct sequence, and annotated with experimental observations.	All of the previous categories have been met, and the procedures and notes are legible and easy for a reviewer to follow.
Results/Data	The quantitative and qualitative data are present, but the data are incomplete or inaccurate, and/or the data are difficult to review because the data are not reported in tables and/or charts.	The quantitative or qualitative data are present, accurate, and reported in tables and/or charts.	The quantitative or qualitative data are present, accurate, reported in tables and/or charts, and the independent, dependent, and control variables are correctly identified in the tables/charts.	All of the previous categories have been met, and the tables and charts are set up correctly and are neat and legible.

Category	1 Unacceptable	2 Developing	3 Proficient	4 Excellent
POST-LAB				
Data Analysis and Conclusions*	The conclusions are not supported by a rationale that is based on the experimental data.	The majority of the conclusions are supported by a rationale that is based on the experimental data.	All of the conclusions are supported by a rationale that is based on the experimental data, and ideas for future experiments that can support or refute the current experimental results are discussed.	All of the previous categories have been met, and the conclusion section flows, is focused, and contains minimal grammatical errors.

Figure 1. Example of a rubric for a science laboratory report

Second, we point out that the assessment of students' work is a solitary endeavor. When a teacher is grading, there may be no other teachers, principals, parents, or students present. Since human biases and preconceptions can be subconscious and habitual, they must be explicitly monitored (Haidt, 2001; Pinker, 2002). For the lone teacher assessing students' work, rubrics may be the only check on his or her personal biases. For example, open-ended items like essay questions are designed to test students' knowledge of specific concepts. Research reveals that stronger writers have an advantage because they can write phrases and themes that read well and match the teacher's views (Gronlund, 2006; McMillan, 2007). The result is that these students may receive higher marks. In contrast, weaker students tend to be less skilled writers, and their succinct phrases and simple sentences may give the teacher the impression that the students do not understand the target concepts (Gronlund, 2006; McMillan, 2007). As a result, students who are less skilled writers may be penalized and receive lower grades even if they understand the construct.

We tell preservice and in-service teachers that when they start using rubrics they may be surprised by the performances of their "strong" and "weak" students. The reason is that rubrics force us as teachers to assess assignments using explicitly stated standards or guidelines. Rubrics also help teachers identify specific skills and understandings, which results in a more precise assessment of the student's strengths and weaknesses (Gronlund, 2006; McMillan, 2007). For example, teachers can create rubrics that include specific assessment categories such as content knowledge and writing ability.

Finally, we communicate to preservice and in-service students how rubrics make assessments and their results easier for students to understand. In our experiences as high school teachers, we have had students who believed their grades were determined by how much we liked them or because of good or bad luck. If we had used rubrics more often in our classes, those students would have known exactly how their grades were determined. Rubrics open up the assessment process and allow students to identify their strengths and weaknesses. Conversely, if mistakes are made by the teacher, the rubric provides a clear starting point for efficient and transparent dialogue between the teacher and student. The result is a win-win scenario for teachers and students: Teachers win because the rubrics help them create fair assessments that reinforce their instruction; students win because they receive clear criteria for completing an assignment and because they know how it will be assessed.

However, we also concede that rubrics cannot eradicate all sources of biases in teaching or schooling. The rules and regulations for school systems and individual schools can create favored or advantaged students. For example, some students may be identified as "gifted" or "advanced," and other students can be identified as "at-risk." Unfortunately, this labeling process can be susceptible to personal biases.

Conclusions

For teachers, it can be difficult to reflect on the nature of the assessment process because it has become just another part of the instructional routine. In fact, assessments are so ingrained in the minds of some educators that they are frequently used out of habit. For example, in our experiences as high school teachers, we knew colleagues who gave tests once a week, usually on Friday, based solely on the fact that it was part of their classroom routine.

In order to start breaking down this perfunctory cycle of assessing students, we devised the Dog Show Analogy. Our experience is that it heightens preservice teachers' awareness of their personal biases. However, it must be emphasized that the Dog Show Analogy is not a stand-alone activity; it is part of a larger theme. It is unrealistic to expect that a single activity focusing on the development and use of rubrics can change the perspectives and behaviors of future teachers. In order to initiate meaningful changes, the core concepts of the Dog Show Analogy are integrated in other assignments and courses in our teacher education program.

An investigation of the efficacy of a programmatic Dog Show approach is ongoing. To date, we have found that even though our preservice teachers are more aware of the need to utilize objective assessment instruments, they may not use them in practice. A major barrier to introducing rubrics into the classroom is the perceptions of classroom teachers. We have observed that when interns are placed with cooperating teachers who regularly uses rubrics, the interns tend to use them as well. In contrast, when the cooperating teachers do not use rubrics, and in some cases actively deter their use, the interns do not use rubrics.

Based our experiences, we believe the interactions between interns and cooperating teachers have a long-term impact. Interns tend to view their cooperating teachers as experienced experts who know through practical experience what works and what does not work. In some cases, a cooperating teacher's views are in direct conflict with those of the university supervisor. Often, the cooperating teacher will couch his or her views using what we identify as the "wink-and-grin response." When an intern explains how he or she was trained to assess students, the cooperating teacher will respond with a sardonic wink or grin and suggest a more practical solution.

However, we also acknowledge that teacher educators can be just as guilty when it comes to unfairly assessing students. In our experiences as teacher educators, we have colleagues who assess students using a gut analysis. These individuals refuse to use rubrics and instead deduct, or give what they feel are fair and reasonable scores on assignments. They defend their approach as being based on professional knowledge, and they criticize rubrics as being too restrictive in terms of the points they assign students.

We assert that teacher educators can also benefit by reflecting on the parallels between dog shows and student assessments. In fact, through the development of the Dog Show Analogy, we identified several areas where we needed to improve; as a result, we changed our assessment methods. For example, we now use rubrics to assess nearly all assignments. We also require our students to assess their class assignments using rubrics provided by the instructor. Finally, we require preservice and in-service students to develop, test, and reflect on rubrics they use during their practicum and internship experiences.

The Dog Show Analogy has also stimulated us as educational researchers. Presently, we are investigating the putative relationship between preservice teachers' moral beliefs and their acceptance or rejection of specific pedagogical practices. A preliminary analysis reveals that our preservice teachers' subconscious moral beliefs do influence their views on what constitutes "best practices" in the areas of instruction, classroom management, and assessment. For example, the data indicate that our preservice teachers may reject or accept certain practices, such as mixed-ability cooperative learning groups, based on gut feelings rather than rational and critical thinking. These results suggest a need for future research projects focusing on instructional methods that will help preservice teachers become more aware of their beliefs, values, and biases.

In closing, we believe that with reflection and practice all educators can create and implement thoughtful assessments that are aligned with the ideals of openness and fairness. As with any new

instructional approach or philosophy, it must be presented and reinforced over an extended period of time. A thorough analysis of biases within schooling as a whole can also improve the presentation and retention of the concepts presented through the Dog Show Analogy. With patience and perseverance, it is possible to teach new and experienced teachers to develop and use assessment rubrics and, consequently, to create a more objective and equitable learning environment. We believe it is possible to teach young and old dogs new tricks.

References

ABC News (Producer). (2003, June 5). *Standardized tests: Assessing the price of failure. ABC News series, Nightline* [Television broadcast]. New York & Washington, DC: ABC News Productions.

Ainsworth-Darnell, James, W., & Downey, D. B. (1998). Assessing the oppositional culture explanation of racial/ethnic differences in school performances. *American Sociological Review, 63*(4), 536–553.

Alvidrez, J., & Weinstein, R. S. (1999). Early teacher perceptions and later student academic achievement. *Journal of Educational Psychology, 91*(4), 731–746.

Arter, J., & McTighe, J. (2001). *Scoring rubrics in the classroom: Using performance criteria for assessing and improving student performance.* Thousand Oaks, CA: Corwin Press.

Auwarter, A. E., & Aruguete, M. S. (2008). Effects of student gender and socioeconomic status on teacher perceptions. *Journal of Educational Research, 101*(4), 243–246.

Baker, D. P., & Stevenson, D. L. (1986). Mother's strategies for children's school achievement: Managing the transition to high school. *Sociology of Education, 59*(3), 156–166.

Banks, J., Cochran-Smith, M., Moll, L., Richert, A., Zeichner, K., Lepage, P., et al. (2005). Teaching diverse learners. In Darling-Hammond, L. & Bransford, J. (Eds.) *Preparing teachers for a changing world* (pp. 232–274). San Francisco: Jossey-Bass.

Bardine, B. (1999). Students' perceptions of written teacher comments: What do they say about how we respond to them? *High School Journal, 82*(4), 239–238.

Beck, A. T. (1976). *Cognitive therapy and the emotional disorders.* New York: International University Press.

Brophy, J., & Good, T. (1970). Teachers' communication of differential expectations for children's classroom performance: Some behavioral data. *Journal of Educational Psychology, 61*(2), 365–374.

Cater, R. T., & Goodwin, A. L. (1994). Racial identity and education. *Review of Research in Education, 20, 291–336.*

Charles, C. M. (2007). *Building classroom discipline* (9th ed.). Boston: Pearson.

Childs, G., & McKay, M. (2001). Boys starting school disadvantaged: Implications from teachers' ratings and behavior and achievement in the first two years. *British Journal of Educational Psychology, 71*(2), 303–314.

Cotton, K. (2001). Expectations and student outcomes. Retrieved September 19, 2008, from the Northwest Regional Educational Laboratory website: http://www.nwrel.org/scpd/sirs/4/cu7.html

Downey, D. B., & Pribesh, S. (2004). When race matters: Teachers' evaluations of students' classroom behavior. *Sociology of Education, 77*(4), 267–282.

Duit, R., Roth, W., Komorek, M., & Wilbers, J. (2001). Fostering conceptual change by analogies between Scylla and Charybdis. *Learning and Instruction, 11*(4), 283–303.

Fine, M. (1991). *Framing dropouts: Notes on the politics of an urban public school.* Albany: State University of New York Press.

Good, T. L. (1987). Two decades of research on teacher expectations: Findings and future directions. *Journal of Teacher Education, 38(4),* 32–47.

Good, T. L., & Brophy, J. E. (2003*). Looking in classrooms* (9th ed.). New York: Allyn & Bacon.

Griswold, P. A. (1993). Beliefs and inferences about grading elicited from student performance sketches. *Educational Assessment, 1*(4), 311–328.

Gronlund, N. E. (2006). *Assessment of student achievement* (8th ed.). Boston: Allyn & Bacon.

Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review, 108*(4), 814–834.

Haidt, J. (2006). *The happiness hypothesis: Finding modern truths in ancient wisdom.* New York: Basic Books.

Hodges, S. D., & Wilson, T. D. (1993). Effects of analyzing reasons on attitude change: The moderating role of attitude accessibility. *Social Cognition, 11*(4), 353–366.

Ickes-Dunbar, A. (2005). Testing, testing. *Phi Kappa Phi Forum, 85*(2), 3–9.

Irvine, J. J. (1990). *Black students and school failure: Policies, practices, and prescriptions.* New York: Basic Books.

Johnson, B., & Stevens, J. J. (2006). Student achievement and elementary teachers' perceptions of school climate. *Learning Environment Research, 9*(2), 111–122.

Lakoff, G. (2002). *Moral politics: How liberals and conservatives think* (2nd ed.). Chicago: University of Chicago Press.

Lakoff, G., & Johnson, M. (1980). *Metaphors we live by.* Chicago: University of Chicago Press.

Landry, D. (2006). Teachers' (K–5) perceptions of student behaviors during standardized testing. *Curriculum & Teaching Dialogue, 8*(1/2), 29–40.

McMillan, J. H. (2007). *Classroom assessment: Principles and practice for effective standards-based instruction.* Boston: Pearson.

Meyer, L. H., Bevan-Brown, Harry, B., & Sapon-Shevin. (2006). School inclusion and multicultural issues in special education. In J. Banks & C. A. M. Banks (Eds.), *Multicultural education: Issues and perspectives* (pp. 369–392). New York: Wiley.

Murray, C., Waas, G. A., & Murray, K. M. (2008). Child race and gender as moderators of the association between teacher–child relationships and school adjustments. *Psychology in the Schools, 45*(6), 562–578.

Neal, L. V., McCray, A. D., Webb-Johnson, G., & Bridgest, S. T. (2003). The effects of African American movement styles on teachers' perceptions and reactions. *The Journal of Special Education, 37*(1), 49–57.

Newberry, M., & Davis, H. A. (2008). The role of elementary teachers' conceptions of closeness to students on their differential behavior in the classroom. *Teaching and Teacher Education, 24*(8), 1965–1985.

Parker, L. (1995). Culture, class, and race: Three variables of decision making in schools. In S.W. Rothstein (Ed.), *Class, culture and race in American schools: A handbook.* Westport, CT: Greenwood Press.

Persell, C. H. (2007). Social class and equity. In J. A. Banks & C. A. Banks (Eds.), *Multicultural education* (6th ed.). Hoboken, NJ: Wiley & Sons.

Pinker, S. (2002). *The blank slate: The modern denial of human nature.* New York: Penguin Books.

Pong, S., Hao, L., & Gardner, E. (2005). The roles of parenting styles and social capital in the school performance of immigrant Asian and Hispanic adolescents. *Social Science Quarterly, 86*(4), 928–950.

Pronin, E., Lin, D. Y., & Ross, L. (2002). The bias blind spot: Perceptions of bias is self versus others. *Personality and Social Psychology Bulletin, 28*(3), 369–381.

Ritts, V., Patterson, M. L., & Tubbs, M. E. (1992). Expectations and judgments of physically attractive students: A review. *Review of Educational Research, 62*(4), 413–426.

Rosenthal, R., & Jacobson, L. (1968). *Pygmalion in the classroom: Teacher expectation and pupil's intellectual development.* New York: Holt, Rinehart, & Winston.

Sabini, J., & Monterosso, J. (2003). Moralization of college grading: Performance, effort, and moral worth. *Basic and Applied Social Psychology, 25*(3), 189–203.

Struthers, C. W., Weiner, B., & Allred, K. (1998). Effects of causal attributions of personnel decisions: A social motivation perspective. *Basic and Applied Social Psychology, 20*(2), 155–166.

Tulenko, J. D. (1997). *The Merrow report: Testing, testing, testing* [Television series]. New York: The Merrow Report: Learning Matters, Inc.

Vaughn, S., Bos, C. S., & Schumm, J. S. (2006). *Teaching exceptional, diverse, and at-risk students in the general education classroom.* New York: Allyn & Bacon.

Wade, K., & Stafford, M. (2003). Public school uniforms. *Education & Urban Society, 35*(4), 399–419.

Warren, S. (2002). Stories from classrooms: How expectations and efficacy of diverse teachers affect the academic performance of children in poor urban schools. *Educational Horizons, 80*(3), 109–116.

Wegner, D. M. (2002). *The illusion of conscious will*. Cambridge: MIT Press.

Weiner, B. (1994). Ability versus effort revisited: The moral determinants of achievement evaluation and achievement as a moral system. *Educational Psychologist, 29*(3), 163–172.

Weinstein, C. S. (2003). *Middle and secondary classroom management: Lesson from research and practice.* Boston: McGraw-Hill.

Wilson, T. D. (2002). *Strangers to ourselves: Discovering the adaptive unconscious.* Cambridge: Belknap Press.

Yair, G. (2000). Educational battlefields in America: The tug-of-war over students' engagement with instruction. *Sociology of Education 73(4):* 247–269.