

---

# RUBRICS-SHARING THE RULES OF THE GAME

David Balch, Grand Canyon University  
 Robert Blanck, University of the Redlands  
 David Howard Balch, Southern California University

---

## ABSTRACT

*The topic and purpose of this paper is to explore within the literature the theoretical foundations and applications of rubrics in the process of evaluation of retained learning and mastery of knowledge within the educational environment. The first step of the research was to assemble a definition of the term rubric from a historical perspective. From the literature, a summary of the process of creating rubrics and a listing of the types or variations of rubric formats is presented. The general types of rubrics include Holistic, Analytic, Developmental (which is considered a subset of the Analytic Rubric) and Single-Point Rubrics are described. A checklist for measuring qualities of a good rubric is provided. A discussion of the incorporation of the educational goals, objectives and learning outcomes of rubrics is reviewed. Over time, recommendations for modification and adapting to different instructional approaches has emerged within the literature and are proposed as the theoretical foundations. The theoretical foundations included in the rubric styles were: Bloom's Taxonomy, Costa's Three Levels (which are based upon the foundation of Bloom's Taxonomy) and a modification of Kirkpatrick's Four Levels. The Developmental Rubric is presented with several theories from authors in the field of human development, including; Jean Piaget, Lawrence Kohlberg, Erik Erikson, Lev Vygotsky and John Dewey. The outcome of this literature research for the educator is a set of working examples illustrating the variations or adaptations of rubric styles. In the final analysis, the simplicity and complexity of the rubric design and its application is dependent upon the educator and the learning environment.*

*Keywords: Rubric, Holistic, Analytic, Developmental, Single-Point, Kirkpatrick's Four Levels, Costa's Three Levels, Bloom's Taxonomy*

Both students and instructors have expressed concern with providing timely, objective and constructive feedback. One study (Gallien & Oomen-Early, 2008) found that students who received personalized feedback were more satisfied and performed academically better than students who received only collective feedback. An earlier study (Harvey, 2001) found that while students rated their teachers and support highly, they were less than satisfied with the assessment and feedback. In the September issue of the Chronicle of Higher Education (2015), Dan Berrett (2016) proposed that

faculty can make assignments more transparent by asking themselves several questions: What exactly do they want students to do? Task - Why are they asking students to do it? Purpose - How will they evaluate the work? Criteria (p. A27). This concept of "transparency" was also discussed by Church (n.d.) as "...absolutely vital that the students know what they are being assessed on and what their learning outcomes and goals are. It is not acceptable to hand back an assessment with pass or fail and not explain why they achieved that particular result or outcome (p. 11)." Praslova, (2010), wrote that

selecting institutional effectiveness is a difficult task, particularly when it is not well defined. The same would hold true for assessing student effectiveness or grade.

### WHAT IS A RUBRIC?

One method that can provide this feedback or criteria, and make it more objective, reducing conflict, is the use of rubrics. Not only can they meet the need for personalized feedback, they can facilitate a pre-assessment narrative between faculty and learners. Again, Churchs (n.d.) suggested that, "One of the tools we can use for providing effective feedback and, hence, formative assessment, is suitable rubrics (p. 14)."

A rubric is a visual narrative of the criteria that defines and describes the important components of an assignment. The criteria are stated in several levels of competence; from not meeting the requirement to mastering it. As one author (Andrade, 2005) reported, a rubric provides feedback which in turn provides clear and individually focused diagnostic feedback. This assessment tool meets the requirements for reliability (stating explicit criteria and performance indicators), validity (linkage with stated learning outcomes), and effectiveness (transparent; consistent; and detailed feedback), (Rubrics for Assessment, n.d.). Shipman, et al., (2012, p.1) stated "...a rubric that consistently assesses student performance and provides meaningful feedback is essential in today's learning environment. If students are not given feedback that is consistent or meaningful, then they may feel their grades are not valid, thus sending mixed messages to the student. When expectations are not clear, the unacceptable performance may transfer into the work environment." A fairly comprehensive definition of a rubric is that the rubric must "... simply lists a set of criteria, which defines and describes the important components of the work being planned or evaluated" (Rubric for Rubrics, n.d.). In the Preface to Introduction to Rubrics, the authors reported that rubrics are one of the "handiest" tools for educators since the invention of the blackboard (Stevens & Levi, 2005).

The term "rubric" is not new nor is it restricted to education. The term actually comes from the Latin "rubrica" or red ochre. Red indicates the importance of the item or area and then is followed by an explanation. The term has long been used as

medical labels for diseases and procedures (rubric, n.d). In education, the rubric is often confused with "checklist" (Hudson, 2014). While both methods are useful tools that can guide students who are working on school assignments, they are different systems for providing feedback. A checklist is not a rubric, it is simply a set of criteria teachers provide to ensure students understand how to fulfill an assignment. However, the criteria or checklist may be the first step in developing a rubric.

In 1996, the National Research Council described what might be considered a format for a rubric. When they describe "...the essential characteristics of exemplary assessment practices..." (p. 75) and they proposed that the standards could be applied equally to the assessment of students, teachers and programs. This evaluation may be accomplished by what is now known as a rubric (Wolf & Stevens, 2007).

While the use of rubrics would seem to a natural occurrence, it seems that people either love rubrics or hate them. Some appreciate the time that rubrics can save; others find them too restrictive, time-consuming to develop, and too generic to be of any value.

### CREATING RUBRICS

**General format for developing a rubric.** There are several formats for developing rubrics. Churchs (n.d.) proposed 5 stages in rubric development: Stage 1-Task Development (learning outcomes, key elements, clarity, design, outcomes and fit); Stage 2-Assessment Mode; formative or summative, when used, aspects of feedback, who is assessed (self, peer or combinations); Stage 3-Design; style, terms; Stage 4-Rubric Development; criteria for excellence, transition from lower to higher; Stage 5-Use and Evaluate (pp 19-25).

The steps suggested by Mertler, (2001) include: 1. Examine and list the criteria and learning objectives. 2. Determine the specific, observable attributes and their performance levels. Even with descriptive and numeric criterion in the rubric, there needs to be narrative feedback to clarify low performance. 3. Use brainstorming techniques, then write a description of the evidence for each performance level (good assignments good and the poor assignments poor). 4. Determine which rubric will best meet the goal; analytic, holistic, or single-point. 5. Develop the format or grid to be used. 6.

Field test the rubric, collect examples of work before implementation and make any necessary revisions. 7. Share with the learner prior to the assignment. And 8. After use, evaluate and revise the rubric as needed.

Identifying and making a list of the criteria usually results in several different levels of completion or competence, with a weighted score assigned to each level. While this seems like a simple task, this approach has enlisted controversy among those using them since the technique requires value judgement. Rubrics should be given to students before the assignment is undertaken. It also needs to clearly show how their work will be evaluated with a detailed explanation of what constitutes acceptable and well as unacceptable completion. The rubric should be focused on the desired learning outcomes, measurable, and use language that is descriptive and action-oriented (Grading Rubrics: Set Expectations, Make Feedback Delivery More Efficient, n.d.).

There are a number of web sites that will help create a rubric. One, Utah Education Network (Rubric Tutorial - UEN. (n.d.), which not only answers the question “What is a rubric?” but also has examples and a tool to create them. Rcampus, a website, also free, provides tools to “Build from Scratch,” “Revise my existing rubric,” and “Duplicate and re-purpose an existing rubric,” (IRubric: Rubric Studio, n.d.). Both sites require registration, which is free.

The faculty member will need to create their own rubric when it is not possible to find an appropriate existing rubric to use or modify. According to Mertler, (2001), Allen & Tanner, (2006), and Reedy, (2007) developing rubrics follows several steps: 1. Defining the learning objectives of the course, 2. Deciding upon the assessment methods that would be employed to assess the achievement of the learning goals of the course. 3. Describing the criteria and the levels of performance for the assessment method as would be applicable in the course. Anglin, et al., (2008) stated that the rubric is an attempt to quantify qualitative judgment. This occurs when going through the process of documenting observable and measurable aspects of student performance. Further, the rubric should be shared with students in advance of the assignment and assessment. Even with descriptive and numeric criterion in the rubric, there needs to

be narrative feedback from the students to clarify low performance.

## TYPES OF RUBRICS.

Three main types of rubrics exist – Holistic, Analytical, and Single-Point. A subset of the Analytic Rubric is titled the Developmental Rubric. The Analytic Rubric will be discussed later in the paper. The key difference between the various types are the purpose, number of discrete criteria addressed in the rubric, and the use of narrative descriptions of performance. Table 1, *Holistic, Analytic, Developmental, and Single-Point: Advantages and Disadvantages*, shows the relationships and their relative advantages and disadvantages.

In the following discussion, the rubrics will be shown in the List of Tables. The various styles will also be illustrated, in general, as the rubrics are made up of columns (2-5) and rows (2-5) with the scoring and descriptions provided in alternating columns and rows.

**Holistic Rubrics.** A Holistic Rubric is the most general kind and lists three to five levels of performance, along with a broad description (holistic) of the characteristics that define each level. In Table 2, *Holistic Rubric Template using Bloom’s Taxonomy*, the general format is displayed; scores for each description can range from not attempted (0 points) to exceptional understanding (4 points) which is shown in the first column and descriptions in the corresponding columns.

*Holistic Rubric Advantages:* Creating a Holistic Rubric takes less time than the others, and grading with one is also faster. The teacher can look over an assignment and give one holistic score. They are quick to score and this approach provides an overview of the student’s achievement.

*Holistic Rubric Disadvantages:* The main disadvantage of a Holistic Rubric is that it does not provide targeted and specific feedback to students nor does it give very detailed information (Gonzalez, p.1, 2014).

**Analytic rubrics.** An Analytic Rubric breaks down the characteristics of an assignment into parts. This allows the scorer to itemize and define exactly what aspects are strong, and which ones need improvement (Gonzalez, p.2, 2014). Again, as in the Holistic Rubric, the Analytic rubric can contain three to five areas of performance. Table 3, *Template for Analytic Rubric*, displays the categories in the

vertical column and scoring in the horizontal rows. In this example, there are four vertical cells for the category number and five cells for the narrative. The fifth column is used to record the score.

*Analytical Rubric Advantages:* The rubric gives students a clearer view of the evaluation and provides meaningful and specific feedback. Scoring tends to be more consistent across students and grades, and helps students understand the nature of quality work (Rubrics, 2012).

*Analytical Rubric Disadvantages:* There are two significant disadvantages: 1. The time necessary to create them. 2. The students may not read them.

**Developmental Rubrics.** A Developmental Rubric is considered a subset of the Analytic Rubrics. According to an article at DePaul University (Types of Rubrics, p. 2. 2015), "...the purpose of Developmental Rubrics is not to evaluate an end product or performance. Instead, developmental rubrics are designed to answer the question, to what extent are students who engage in our programs/services developing this skill/ability/value/etc.?" Developmental Rubrics define strategies, and the criterion contains a small set of competing strategies unique to it (Changing Wisdoms, n.d.). Developmental Rubrics can be based on relevant developmental theory and requires a close tie between assessment criteria and the theory of development. An example of the Developmental Rubric is shown in Table 9 *Template Developmental Rubric, using Learning Theory.*

*Developmental Rubric Advantages:* Useful when the goal of evaluation is to determine the level of development rather than the quality of a final product and to monitor student progress. There may also be no expectation that students should or could fully develop a skill or ability during their education. An example would be "Maslow's Hierarchy of Needs," there is no expectation that students can or will become self-actualized (Maslow, 1958).

*Developmental Rubric Disadvantages:* Conceptually, this type of rubric is difficult to design. Creating a Developmental Rubric requires a close tie between assessment criteria and the theories of development.

**Single-Point Rubrics.** A Single-Point Rubric main characteristic in common with the Analytic Rubric breaks down the components of an

assignment into different criteria. What makes the rubric different and only describes the criteria for proficiency. The Analytic Rubric does not attempt to list all the ways a student could fall short, nor specifies how a student could exceed expectations (Gonzalez, p. 3, 2014). While the rubric can contain three or more areas of performance, as a Single-Point, one or two areas are probably more appropriate. In Table 4, *Template #1 for Single-Point Rubric*, the Rubric has three columns, and six rows. The titles of the columns indicate the evaluation and feedback (from Concerns to Advance) while the columns represent each Criteria description for achieving "mastery" or competence. The faculty member provides narrative feedback in the open cells. Along the bottom cells there are a range of points, depending on the level of mastery of the criteria.

A second example of the Single-Point Rubric is displayed below. This format is similar to Table 4, but shows the Criteria in the first column with cells for evaluation and feedback in the corresponding and adjacent columns.

*Single-Point Rubric Advantages:* The Single-Point Rubric has several advantages. 1. Contains far less language, 2. Takes less time to create while still providing rich detail about expectations. And, 3. Provides location to record areas of concern and excellence which are open-ended (Gonzalez, p. 3, 2014).

*Single-Point Rubric Disadvantage:* The main disadvantage of Single-Point Rubrics is that using them requires more writing on the teacher's part (Gonzalez, p. 3, 2014). The strength of providing detailed feedback is also a weakness; the task is time-consuming.

#### DESCRIPTION OF PERFORMANCE: GENERAL OR TASK-SPECIFIC.

Each of these rubric types can be categorized as being either "General" or "Specific." In Table 6, *Two Major Sub Divisions of Rubrics: General and Task-Specific*, each is described with the respective strength and weakness. Use a general rubric in order to assess levels of reasoning, skills and products when students are not doing the same task. Use a specific rubric when assessing knowledge and consistency of scoring is desired and is important (Brookhart 2008, and Gonzales, 2014).

## WHAT ARE THE QUALITIES OF A “GOOD” RUBRIC?

No rubric is better than the others. According to Custer (1996), all have a place in authentic assessment. They should correspond as closely as possible to real world experience and go beyond the typical pencil and paper activity (Montgomery, 2002). Each form of rubric calls for greater accountability and transparency, especially in the assessment of what students have been taught (Diller & Phelps, 2008).

In the *Fundamentals of Rubrics*, Bargainnier (2003) discusses the attributes of a quality rubric. Regarding the criteria, the rubric must be clear; define a comprehensive set of behaviors that make up the performance, and describe each level of performance.

When examining the language, the rubric needs to be rich and descriptive. Then the rubric provides the definitions, indicators, illustrates the different levels of required performance using tangible and qualitative terms in each descriptor.

The focus of the rubric needs to be positive attainment; each level should help both learner and faculty member distinguish the differences in levels of performance. As with any instrument, the rubric must be valid; accurately measuring key aspects central to the quality of performance. Thus producing reliable and consistent results for different users.

Stevens & Levi (2004) proposed a Metarubric or rubric to evaluate rubrics, Table 19, *A Rubric for Judging Your Rubric* and Table 20 *Metarubric Checklist*. Table 19 is the Checklist in Rubric format. Rather than a rubric, this instrument looks more like a checklist, but still offers several useful observations. This approach is divided into several sections; the dimensions, the descriptions, the scale, the overall rubric, and fairness and sensibility.

The dimensions: provides important parts of the final student performance, capture some key themes, is clear, distinctly different, and identifies skills.

The descriptions: matches the dimensions, a clear basis for assigning points, the descriptions are appropriately and equally weighted.

The scale: represents that level of performance, encouraging and informative, and has a reasonable number of levels.

Fairness and sensibility: provides measurement

that are fair to all students and free of bias, useful as performance feedback, practical, and makes sense to the reader.

The overall rubric has to clearly connect to the outcomes, should be easily understood, should reflect teachable skills, and should reward or penalize students on unrelated outcomes. Further, all students have an equal opportunity to learn from the rubric. Designed to be appropriate for the conditions in that it 1. Includes a description or title, 2. Measures performance as a developmental task, 3. Informs the student about the evaluation procedures, and 4. Is an appraisal of individual or group performance and describes ways to improve. In the final analysis, a rubric should also be fair to all students in regards to reading level, language, examples. Criterion should not be a surprise for the student (Custer, 1996, Diller & Phelps, 2008, and Montgomery, 2002, Stevens & Levi). The one rubric that should be avoided is the “Surprise Rubric,” one that appears after the assignment has been submitted (Stevens & Levi, 2005). Rubrics should always be shared with the students prior to the submission of the assignment.

## THEORETICAL FOUNDATIONS

The method for determining the evaluation criterion has several possibilities. Use the steps suggested by Mertler (2001). Use brainstorming and field testing interactively with the involved students (Grading Rubrics, n.d.). Set expectations, make feedback and delivery more efficient (Bloom, 1965).

Since both the formats both by Mertler (2001) and the IT Lab at the University of New Brunswick (Grading Rubrics, n.d.), suggest a theoretical foundation, this paper will use Bloom (1965), Costa Three Levels (1985), and Kirkpatrick’s Four Levels (1996) each with some revisions, as the criterion.

**Bloom’s Taxonomy.** In adopting Bloom’s taxonomy, use Bloom’s questions and key words in developing the categories for measurement. In 2000, the Taxonomy was revised (Airasian, Anderson, Cruikshank, Krathwohl, Mayer, Pintrich, ... & Wittrock) to move Synthesis to the first step of Creating. The second step became Evaluation.

The new terms are defined as:

*Remembering (Describe).* Retrieving, recognizing and recalling relevant knowledge from long-term memory,

*Understanding (Summarize).* Constructing meaning from oral, written, and graphic messages through interpreting, exemplifying, classifying, summarizing, inferring, comparing, and explaining,

*Applying (Construct a theory).* Carrying out or using a procedure through executing, or implementing), analyzing (Differentiate between). Break material into constituent parts, determine how the parts relate to one another.

*Analyze (Analyzing).* Breaking material into its constituent parts and detecting or perceiving how the parts relate to one another and the structure or purpose.

*Evaluating (Assess whether or not),* Making judgments based on criteria and standards through checking and critiquing.

*Creating (Compose or create).* Putting elements together to form a coherent or functional whole; reorganizing elements into a new pattern or structure through generating, planning, or producing (Anderson & Krathwohl, 2001, pp. 67-68).

**Costa Three Levels.** Since the main complaint about rubrics is the complexity and time to develop the evaluation criterion, Costa's (1985) three levels will also be used as examples. Each level, as in Bloom, has key words ("Signal Words") that can form the basis for the criterion.

*Level One (Define).* Focus on gathering and recalling information

Signal Words. Describe - to represent or give an account in words, Identify - to establish the identity of, List - a simple series of words or numbers, Name - to mention or identify by name, Observe - to see or sense esp. through careful attention, Recite - to repeat verbatim, and Scan - to examine closely.

*Level Two (Analyze).* Making sense of gathered information

Signal Words. Examine - a thing to know its parts, Compare - to examine for likenesses and differences, Contrast - to show differences when compared, Group - to cluster, Infer - to derive as a conclusion from facts or premises, Sequence - chronological order of events, or Synthesize - the combination of parts or elements into a whole.

*Level Three (Apply).* Applying and evaluating gathered information.

Signal Words. Evaluate - appraise, value, Hypothesize - to adopt as a hypothesis/assumption,

Imagine - to form a mental picture of something not present; guess, Judge - to form an estimate or evaluation about something. Deduce, Predict - to declare in advance, or speculate - to think or wonder about a subject.

**Kirkpatrick's Four Levels.** Originally developed as a model to evaluate presentations by the impact on the student. They are modified for use in this paper. There are four levels: 1. Reaction of student - what they thought and felt about the training; 2. Learning - the resulting increase in knowledge or capability; 3. Behavior - the extent of behavior and capability improvement and implementation/application; and 4. Results - the effects on the business or environment resulting from the trainee's performance.

**New World Model.** Kirkpatrick, J. D., & Kirkpatrick, W. K. (2010) proposed a modification which, while keeping the four levels, made some modifications. Level 1 "reaction" now includes the issues of customer satisfaction, engagement (active involvement) and relevance (will the participants be able to use or apply what they learned). Level 2 is still "learning" (knowledge, skill, and attitude) but is expanded to include two additional areas: confidence (thinking they can do it) and commitment (intention to do it on the job). Level 3 "behavior" (application of what they learned to the job) now is expanded to include "required drivers." Required drivers are those specific processes and systems that reinforce, encourage and reward performance of critical behaviors on the job (Kirkpatrick, J., & Kirkpatrick, W., 2011). The last level, Level 4, still measures results (degree that targeted outcomes occur as an outcome of the training) and now includes "leading indicators." Kirkpatrick, J., & Kirkpatrick, W., (p. 66 2011, November 1) define these as "short term observations and measurements that suggest that critical behaviors are on track." These levels could be modified to be used in a rubric for learner evaluation and feedback.

*Level one (Reaction).* To what degree participants react favorably to the training.

Indicators. *Customer Satisfaction.* An indication of satisfaction with the concepts addressed in the assignment, met their needs, and achieved a goal. *New World Additions: Engagement.* Indication of the student's active involvement in and contributing to the learning experience, mentally stimulated

attention, curiosity, interest, optimism, and passion. *Relevance.* Indication of an opportunity to use or apply what they learned from the assignment, application to the personal aspirations, interests, or cultural experiences of students (*personal relevance*) or are connected in some way to real-world issues, problems, and contexts (*life relevance*).

*Level two (Learning).* To what degree participants acquire the intended knowledge, skills, attitudes, confidence and commitment based on their participation in a training event

**Indicators.**

*Knowledge.* “Knowing” the material from the assignment; *Tell,* list, describe, name, repeat, remember, recall, identify, state, select, match, know, locate, report, recognize, observe, choose, who, what, where, when, cite, define, indicate, label, memorize, outline, record, relate, reproduce, underline.

*Skill.* Student’s confidence that they can now do what is included or required in the assignment.

*Attitude.* What is included in the assignment will be worthwhile or useful on the job.

**New World Additions:**

*Confidence.* Belief they can apply the content of the assignment.

*Commitment.* Intention to use the content of the assignment.

*Level three (Behavior).* To what degree participants apply what they learned during training when they are back on the job.

**Indicators.** Indicators (measured indirectly). The assignment includes an indication of intention to use what was include in the assignment, practical application, process to carry it out, skills, knowledge, or attitude.

**New World Addition:**

*Required Drivers.* The student includes a discussion of processes and systems that reinforce, encourage and reward performance of critical behaviors on their job.

*Level Four (Results).* To what degree targeted outcomes occur as a result of the training event and subsequent reinforcement.

Indicators. Indicators (measure indirectly). The assignment incorporates a plan of action which will apply the assignment and an analysis of the likelihood of success and resources needed.

**New World Addition:**

**Leading Indicators.** A plan for short-term observations and measurements suggesting that critical that would measure the behaviors and how to indicate if they are on track to create a positive impact on desired results.

**Developmental Theories.** These theories typically look at development or growth, as in an intellectual sense, as stages. These theorists included the following:

Sigmund Freud (Freud & Strachey, 1975) who looked at the Psychosexual Stages;

John Dewey (1922) who viewed knowledge as arising from adaptation or habit; and, Abraham Maslow (1954) who proposed that human needs formed a hierarchy from basic survival to more advanced needs to achieve their potential.

Gonzales (2014) proposes the theories that would most align with this rubric are those that explore changes as the person grows cognitively (in knowledge, different perspectives, world views), intrapersonal (awareness of their values, socially, culturally), and interpersonally (relationships with others, group norms, social systems).

A few of the theories that have application in the learning environment have notable proponents;

Jean Piaget (1997) is identified with Constructivism-learning is an active process; Lawrence Kohlberg (1984), building on the works of Piaget, wrote about Moral Development Stages of Pre-conventional, Conventional, and Post conventional;

Erik Erikson (1193), continued the work of Sigmund Freud (1975), and proposed the Psychosocial Development Stages One-Trust, through Eight-Integrity); and, Lev Vygotsky (1980) presented the Zone of Proximal Development (ZPD) progressed from “what is known” to “what is not known” or learning, with guidance that becomes less as the learner masters the topic.

Since these theories are somewhat diverse it is difficult to propose specific indicators beyond those of progression from a beginning point to the current status. As Gonzales (p. 1, 2013) observed in “Types of Rubrics,” they range from Levels of Initial, Intermediate, to Mature.

**RUBRIC TEMPLATES**

When deciding to develop and use rubrics, the

teacher progress to the step of finding an existing one, or create their own. Fortunately, as discussed earlier, there are web sites that provide sample rubrics. In addition, the steps of creating a rubric are provided. An example would be the web site in the Utah Education Network. UEN connects all Utah school districts, schools, and higher education institutions to a network of educational resources. UEN is one of the nation's premier education networks (Rubric Tutorial, n.d.). The site requires registration, but is free. On the "Personal page" at the bottom left corner there is a link "Rubric Creation" which takes one to the Rubric Tool page.

The rubrics follow the same structure; each uses columns and rows. The criteria are either in the column or row with the evaluation or feedback being in the other. The final product resembles a spreadsheet. The faculty member selects the type of rubric; Holistic, Analytic, Developmental, or Single-Point. Next the number of criteria for evaluation or feedback is selected, two to five. The faculty can create the rubric using a website or word processing program,

Most of the Course Management Systems (CMS) have a rubric template as part of the available resources. Microsoft has several templates within the Word program. A template is provided in this article. Table 1 *Microsoft Rubric Template*.

In the attachment to this paper, List of Tables, there are several example of the template forms for each type of rubric with their respective theory provided in this article. Each reference below is a link to the example found in the appendix. The links are for the convenience of the reader:

- Table 1 Microsoft Rubric Template
- Table 2 Holistic Rubric Template using Bloom's Taxonomy
- Table 3 Holistic Rubric Template using Costa Three Levels
- Table 4 Holistic Rubric Template using Kirkpatrick's Four Levels
- Table 5 Analytic Rubric Template using Bloom's Taxonomy
- Table 6 Analytic Rubric Template using Costa Three Levels

Table 7 Analytic Rubric Template using Kirkpatrick's Four Levels

Table 8 Single-Point Rubric Template using Bloom's Taxonomy

Table 9 Single-Point Rubric Template using Costa Three Levels

Table 10 Single-Point Rubric Template using Kirkpatrick's Four Levels

Table 11 Template Developmental Rubric.

Additionally, there are two tables that can be used by the instructor in obtaining and organizing solicited feedback regarding the newly created rubric: Table 21 *A Rubric for Judging Your Rubric* and Table 22 *Metarubric Checklist*.

Selecting to use a rubric brings a set of decisions: how to develop the criteria and obtain feedback regarding the rubric's quality and usefulness. The criteria must trace back to the course Purpose Statement and the overarching Goals of the class (likely a Holistic Rubric). A course's Learning Objectives or Outcomes probably would require an Analytic Rubric. A specific Student Learning Outcome could use a Single-Point Rubric. While these definitions may change from institution to institution they are similar (Definitions of Goals, Objectives, and Outcomes, 2015) and (Goals, Objectives and Learning Outcomes, n.d.).

#### APPLYING A STRATEGY FOR RUBRIC DEVELOPMENT

**Theoretical Foundations.** There is no lack of recommendations for how to write rubrics, the formatting, how to identify a quality rubric, and steps. In this paper, the authors will discuss and give examples using the theoretical foundations of Bloom's Six Level Taxonomy, Costa's Three Levels, a modification of Kirkpatrick's Four Levels, and Developmental Theory.

**Types of Rubrics.** The Rubrics; Holistic, Analytic, Developmental and Single-Point, will demonstrate methods involving integrating the course purpose and objectives, and learning outcomes. For purposes of brevity, the examples will only include two areas: highest, or mastery levels, and lowest, or beginning levels. The examples will also include an abbreviated version of the complete description of the criteria. For a complete example of each, and their respective rubrics will appear in



the List of Tables, at the end of the paper.

The Developmental Rubric, Table 11, and corresponding theory, will not be examined separately since the rubric and theory are so closely related. However, since the Developmental Rubric is a subset of the Analytic Rubric, it could be developed using the same techniques. As Gonzales (p. 2, 2015) noted “The main distinction between developmental rubrics and other analytic trait rubrics is that the purpose of developmental rubrics is not to evaluate an end product or performance. Instead, developmental rubrics are designed to answer the question, “...to what extent are students who engage in our programs or services developing this skill or ability or value?” The Developmental Rubric would have three areas: Initial Level of Development, Intermediate Level of Development, and Mature Level of Development.

Using the Holistic Rubric allows the student and instructor to focus on the “over-arching” goal or purpose of the class. The first example is of the course content, “This course is designed as a survey course that will address business terminology, concepts, and current business issues.” The second example is of the course style, “This course is an introduction to the effective use and application of APA style writing.” Using Table 1, Holistic Rubric Template using Bloom’s Taxonomy, insert the criteria as the outcome, “This course is designed as a survey course that will address business terminology, concepts, and current business issues” and “This course is an introduction to the effective use and application of APA style writing.”

The following table is an example of both using Bloom’s Taxonomy in a Holistic Rubric. Only the highest and lowest examples are shown. For a complete display of each level, go to Table 15 Analytic Rubric using Bloom’s Taxonomy for Course Content and Course Style Examples.

Table 12

*Holistic Rubric using the Bloom Taxonomy Criteria description for the two examples: Course Content and Course Style Examples.*

Score	Description
6	Demonstrates exceptional understanding by Creating, putting elements together to form a coherent or functional whole of the relationships between business terminology, concepts, and current business issues; putting elements together to form a coherent or functional whole; a new pattern or structure.
6	Demonstrates exceptional understanding by Creating or reorganizing elements into a new pattern or structure through generating, planning, or producing the effective use and application of APA style writing; applying, evaluate, and judge.
Score	Description
1	Demonstrates minimal understanding of the material Few requirements are met Remembering relevant knowledge of the relationships between business terminology, concepts, and current business issues; describing, recognizing, and recalling relevant knowledge.
1	Demonstrates minimal understanding of the material. Few requirements are met. Remembering the effective use and application of APA style writing

Using Costa’s Three Levels for these examples would produce the following example for the highest and lowest scores. For a complete display of each level, go to Table 16 Analytic Rubric using Costa Three Levels-Course Content and Course Style Examples.

Table 13

*Holistic Rubric using Costa’s Three Levels Criteria description for the two examples: Course Content and Course Style Examples.*

Score	Description
3	Demonstrates exceptional understanding of the material. All requirements are met and some are exceeded. Level Three (Apply); applying and evaluating gathered information about the business terminology, concepts, and current business issues; applying and evaluating gathered information.
3	Demonstrates exceptional understanding of the material. All requirements are met and some are exceeded. Level Three (Apply); applying and evaluating the effective use and application of APA style writing; applying, evaluate, and judge.
Score	Description
1	Demonstrates partial understanding of the material. Some requirements are met. Level One (Define); focus on recalling the business terminology, concepts, and current business issues; applying and evaluating gathered information.
1	Demonstrates partial understanding of the material. Some requirements are met. Level One (Define); focus on the effective use and application of APA style writing; describe, identify, list, name, and scan.

Using Kirkpatrick’s Four Levels for these same examples would produce the following for the highest and lowest scores. Table 17 Analytic Rubric using Kirkpatrick’s Four Levels-Course Content and Course Style Examples, shows the complete review for Course Content and Course Style Examples.

Table 14

*Holistic Rubric using Kirkpatrick’s Four Levels Criteria description for the two examples: Course Content and Course Style Examples.*

Score	Description
4	Demonstrates exceptional understanding of the material. All requirements are met and some are exceeded and included a plan for the application of the business terminology, concepts, and current business issues; results-a plan for action which will apply the assignment, a plan to measure the behaviors and how to indicate if they are on track to create a positive impact on desired results.
4	Demonstrates exceptional understanding of the material. All requirements are met and some are exceeded and included a plan for the application of the effective use and application of APA style writing; results-assignment incorporates a plan of action indicate if they are on track to create a positive impact on desired results.
Score	Description
1	Demonstrates the minimal understanding of the material. Few requirements are met. A lack of personal or life relevance of the business terminology, concepts, and current business issues; results-a plan of action which will apply the assignment, a plan to measure the behaviors and how to indicate if they are on track to create a positive impact on desired results.
1	Demonstrates minimal understanding of the material. Few requirements are met. A lack of personal or life relevance of the effective use and application of APA style writing; reaction-indications of the student’s active involved in and contributing to the learning experience, mentally stimulated, attention, curiosity, interest, optimism, and passion, connected in some way to real-world issues, problems, and contexts

**COURSE OBJECTIVE(S).**

Using the Analytic Rubric allows a more specific analysis of each objective. Course content example “The student will identify and analyze business cycles.” Course style example “The student will correctly list the five levels of APA style headings.”

Using Bloom’s Taxonomy for these examples would produce the following for the different scores. The display shows each if the six areas: Knowing, Comprehension, Application, Analysis, Synthesis, and Evaluation.

Table 15

*Analytic Rubric using Bloom’s Taxonomy for Course Content and Course Style Examples*

Analytic	Knowing 1	Comprehension 2	Application 3	Analysis 4	Synthesis 5	Evaluation 6	Score
<b>Category #1 Course Content</b>	Description reflecting beginning level of performance; by describing specific facts, ideas, vocabulary in identifying and analyzing business cycles.	Description reflecting movement toward a level of performance; by identifying and analyzing business cycles.	Description reflecting achievement of a higher level of performance; identifying and analyzing business cycles.	Description reflecting highest level of performance; in identifying and analyzing business cycles.	Description reflecting achievement of mastery level of performance; in identifying and analyzing business cycles.	Description reflecting highest level of mastery; by identifying and analyzing business cycles.	
<b>Category #2 Course Style</b>	Description reflecting beginning level of performance; by remembering (listing) the specific facts related to listing the five levels of APA style headings.	Description reflecting movement toward a level of performance; by showing the value (in order) related to the five levels of APA style headings.	Description reflecting achievement of a higher level of performance; by synthesizing (relationship to subject sentences) the relationship by listing the five levels of APA style headings.	Description reflecting highest level of performance; by listing the five levels of APA style headings.	Description reflecting achievement of mastery level of performance; by applying the five levels of APA style headings.	Description reflecting achievement of mastery level of performance; by applying the five levels of APA style headings.	

Using Costa's Three Levels, for these examples, would produce the following for the different scores. In Costa's display all three evaluation area are listed: Developing, Accomplished, and Exemplary.

Table 16

*Analytic Rubric using Costa's Three Levels-Course Content and Course Style Examples*

	<b>Developing 1</b>	<b>Accomplished 2</b>	<b>Exemplary 3</b>	<b>Score</b>
<b>Category #1 Course Content</b>	Description reflecting movement toward mastery level of performance by defining, describing, identifying and analyze business cycles.	Description reflecting achievement of mastery level of performance. The student will identify, compare, contrast, synthesize and analyze business cycles.	Description reflecting highest level of performance The student will identify, analyze, and evaluate the business cycles.	
<b>Category #2 Course Style</b>	Description reflecting movement toward mastery level of performance by defining, describing, and examine factors related to listing the five levels of APA style headings.	Description reflecting achievement of mastery level of performance by analyzing, examining, comparing, contrasting, synthesize factors related to listing the five levels of APA style headings.	Description reflecting highest level of performance by applying, and evaluating the five levels of APA style headings.	

The following table displays the results for Kirkpatrick's Four Levels: Beginning, Developing, Accomplished, and Exemplary.

Table 17

*Analytic Rubric using Kirkpatrick's Four Levels-Course Content and Course Style Examples*

	<b>Beginning 1</b>	<b>Developing 2</b>	<b>Accomplished 3</b>	<b>Exemplary 4</b>	<b>Score</b>
<b>Category #1 Course Content</b>	Description reflecting beginning level of performance The student will apply, identify, and analyze business cycles.	Description reflecting movement toward mastery level of performance. The student will apply with confidence, identify, and analyze business cycles.	Description reflecting achievement of mastery level of performance The student will show an application, identify, and analyze business cycles.	Description reflecting highest level of performance The student will plan for short-term observations and measurements, identify, and analyze business cycles.	
<b>Category #2 Course Style</b>	Description reflecting beginning level of performance. The student will list the five levels of APA style headings and connected in some way to real-world issues, problems, and contexts.	Description reflecting movement toward mastery level of performance. The student will list the five levels of APA style headings and acquire the intended knowledge, skills.	Description reflecting achievement of mastery level of performance. The student will list the five levels of APA style headings and participants apply what they learned.	Description reflecting highest level of performance The student will list the five levels of APA style headings and proposed measures to evaluate, and get feedback.	

## SPECIFIC LEARNING OUTCOME.

The Single-Point Rubric can focus on a specific and detailed learning point.

Course content example “The student will correctly define GDP as the output in dollars (or another currency) of final goods and services produced in a country in a given year.”

Course style example “The student will correctly list and apply the five levels of APA style headings.”

In the following tables, Table 18, 19, and 20, the display is for Single-Point Rubrics. The Course content and Course style are shown in only the Meets Criteria, “Standards for This Performance,” and space left for narrative in “Areas that Need Work” and “Evidence of Exceeding Standards.”

Table 18

### *Single-Point Rubric using Bloom’s Taxonomy-Course Content and Course Style Examples*

<b>Concerns</b> <i>Areas that Need Work</i>	<b>Meets Criteria</b> <i>Standards for This Performance</i>	<b>Advanced</b> <i>Evidence of Exceeding Standards</i>
	<b>Criteria #1:</b> Description reflecting achievement of mastery level of performance. The student will correctly define GDP as the output in dollars (or another currency) of final goods and services produced in a country in a given year.	
	<b>Criteria #2:</b> Description reflecting achievement of mastery level of performance. The student will correctly list and apply the five levels of APA style headings.	

Table 19

### *Single-Point Rubric using Costa’s Three Levels Course Content and Course Style Examples*

<b>Concerns</b> <i>Areas that Need Work</i>	<b>Meets Criteria</b> <i>Standards for This Performance</i>	<b>Advanced</b> <i>Evidence of Exceeding Standards</i>
	Criteria #1: Course Content. Description reflecting achievement of mastery level of performance the student will define GDP as the output in dollars (or another currency) of final goods and services produced in a country in a given year with an application of what they learned.	
	Criteria #2: Course Style. Description reflecting achievement of mastery level of performance. The student will correctly list and apply the five levels of APA style headings with an application of what they learned.	

Table 20

*Single-Point Rubric using Kirkpatrick's Four Levels Course Content and Course Style Examples*

<b>Concerns</b> <i>Areas that Need Work</i>	<b>Criteria</b> <i>Standards for This Performance</i>	<b>Advanced</b> <i>Evidence of Exceeding Standards</i>
	Criteria #1: Course Content. Description reflecting achievement of mastery level of performance. The student will define GDP as the output in dollars (or another currency) of final goods and services produced in a country in a given year with an application of what they learned.	
	Criteria #2: Course Style. Description reflecting achievement of mastery level of performance. The student will correctly list and apply the five levels of APA style headings with an application of what they learned.	

**CONCLUSION**

Teaching is the most noble of professions. Young minds are shaped, mature minds can be redirected, and in the end, a small piece of society can be enhanced from the efforts of a single instructor. History is filled with examples of the effects of changes made brought about from the efforts and inspiration that resulted from an hour of instruction. However, hidden under the obvious outer shell of the student instruction, the eternal question remains: "How does an instructor actually assess the amount of learning and newly acquired skills acquired that resulted from their efforts working with students?" Is it possible that an instructor with a curriculum that satisfies the required number of contact hours, goals for outside research, and report-writing actually produces an instructional period where no learning takes place? Has the instructor left the students unchallenged, confused, frustrated and disappointed with an obviously capricious system of final evaluation and grading of performance?

The questions raised above have been addressed over the past century by theoreticians, academia, educators, and general researchers. Those writers have provided their perceptions of the measurement of actual learning and mastery of theories and skills. They have broken the learning process into a series of measurable steps. Writers and their research were presented within the article. Here the various approaches to answering the eternal question, "Did learning take place and to what degree were presented and discussed?"

The birth of the rubric a "learning measurement tool" and its evolutionary process has been presented. The contributors to rubric building and the refinement process are provided and examples of the application of rubrics are illustrated for the reader of this article. The refinement of the rubric building process of including the students in creating the grading/evaluation process may seem to some as being revolutionary. The student and the instructor can become partners in the learning experience. From this partnership, a learning experience can be designed using the rubric as the foundation with which to bolt the curriculum and its myriad of learning objectives.

The evolution of the rubric will never be finished. The article provides the argument that learning and student performance can be accurately measured. The learning experience can be dramatically enhanced when a partnership is established between the instructor and students where realistic, meaningful and attainable evaluation procedures are presented.

Where education will progress in the future is unknown. But as long as tools such as rubrics are incorporated, the student and the teacher will produce the optimum learning experience. The reward will be mutual.

## Reference

- Airasian, P. W., Anderson, L. W., Cruikshank, K. A., Krathwohl, D. R., Mayer, R. E., Pintrich, P. R., & Wittrock, M. C. (2000). *Taxonomy for Learning, Teaching, and Assessing. A: A Revision of Bloom's Taxonomy of Educational Objectives*.
- Allen, D., & Tanner, K. (2006). Rubrics: tools for making learning goals and evaluation criteria explicit for both teachers and learners. *CBE-Life Sciences Education*, 5(3), 197-203.
- Anderson, L. W., Krathwohl, D. R., & Bloom, B. S. (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. Allyn & Bacon.
- Andrade, H. G. (2005). Teaching with rubrics: The good, the bad, and the ugly. *College teaching*, 53(1), 27-31.
- Anglin, L., Anglin, K., Schumann, P. L., & Kaliski, J. A., (2008). Improving the Efficiency and Effectiveness of Grading Through the Use of Computer-Assisted Grading Rubrics. *Decision Sciences Journal of Innovative Education*, 6(1).
- Bargainnier, S. (2003). *Fundamentals of rubrics*. Pacific Crest, 1-4.
- Berrett, D. (2016). The Unwritten Rules of College. *Chronicle of Higher Education*. Retrieved September 22, 2015, from [http://chronicle.com/article/The-Unwritten-Rules-of/233245/?cid=at&utm\\_source=at&utm\\_medium=en](http://chronicle.com/article/The-Unwritten-Rules-of/233245/?cid=at&utm_source=at&utm_medium=en)
- Birnbaum, J. (n.d.). Three-Story House (Costa's Levels of Questioning). Retrieved October 19, 2015, from <http://blog.adambabcock.com/wp-content/uploads/2013/03/Costa-House-Levels-of-Questions.pdf>
- Bloom's, T. M. E. (1965). Bloom's taxonomy of educational objectives.
- Brookhart, S. M. (2013). How to create and use rubrics for formative assessment and grading. p 1, Asc d
- Center for Innovation in Research and Teaching. (n.d.). Retrieved November 30, 2015, from <https://cirt.gcu.edu/teaching3/tips/rubris>
- Changing Wisdoms. (2015). Developmental Rubrics. Retrieved November 24, 2015, from <http://changingwisdoms.org/?s=Developmental%20Rubrics&sid=2>
- Churches, A. (n.d.). A Guide to Formative and Summative Assessment and Rubric Development. Retrieved November 17, 2015, from <https://edorigami.wikispaces.com/file/view/Assessment.pdf/555452441/Assessment.pdf>
- Costa, A. (Ed.). (1985). *Developing Minds: A Resource book for Teaching Thinking*. (pp. 20-23). Alexandria, Virginia: Association for Supervision and Curriculum Development.
- Crockett, L., Jukes, I., & Church, A. (2011). *Literacy Is NOT Enough: 21st Century Fluencies for the Digital Age*. Thousand Oaks, California: Corwin, A sage Company.
- Custer, R. L. (1996). Rubrics: An Authentic Assessment Tool for Technology Education. *Technology Teacher*, 55(4), 27-37.
- Definitions of Goals, Objectives and Outcomes. (2015). Retrieved October 18, 2015, from <http://www.schreyerstitute.psu.edu/assessment/definition>
- Dewey, J. (1922). *Human nature and conduct*. Courier Corporation.
- Diller, K. R., & Phelps, S. F. (2008). Learning outcomes, portfolios, and rubrics, oh my! Authentic assessment of an information literacy program. *portal: Libraries and the Academy*, 8(1), 75-89.
- Erikson, E. H. (1993). *Childhood and society*. WW Norton & Company.
- Freud, S., & Strachey, J. (1975). *Three essays on the theory of sexuality*. New York: Basic Books.
- Gallien, T. & Oomen-Early, J. (2008). Personalized Versus Collective Instructor Feedback in the Online Course room: Does Type of Feedback Affect Student Satisfaction, Academic Performance and Perceived Connectedness With the Instructor? *International Journal on E-Learning*, 7(3), 463-476. Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).
- Goals, Objectives and Learning Outcomes. (n.d.). Retrieved from <http://schools.aucegypt.edu/academics/eli/IEG/Pages/Goals,%20Objectives,%20and%20Learning%20Outcomes.aspx>
- Gonzalez, J. (2014, May 1). Know Your Terms: Holistic, Analytic, and Single-Point Rubrics. Retrieved September 19, 2015. <http://www.cultofpedagogy.com/holistic-analytic-single-point-rubrics/>
- Grading Rubrics: Set Expectations, Make Feedback Delivery More Efficient. (n.d.). Retrieved October 2, 2015, from <http://www.unbtl.ca/teachingtips/gradingrubrics.htm>
- Grand Canyon University Center for Innovation in Research and Teaching (CIRT). (n.d.). *The Use of Rubrics in Grading [Teaching TIPS]*. Retrieved from <https://cirt.gcu.edu/teaching3/tips/rubris>
- Harvey, L. (2001). *Student feedback: a report to the higher education funding council for England*. Birmingham: University of Central England, Centre for Research into Quality.

- Hudson, R. L. (2014). *Competencies supporting instructional designers working with faculty-designers* (Doctoral dissertation, Capella University).
- IRubric: Rubric studio. (n.d.). Retrieved September 24, 2015, from <http://www.rcampus.com/rubricshellc.cfm?mode=studio&sms=build&#;REQUEST.rsUrlToken#>
- Judging the Quality of Your Rubric. (n.d.). Retrieved November 11, 2015, from [http://www.ucdenver.edu/faculty\\_staff/faculty/center-for-faculty-development/Documents/Tutorials/Rubrics/4\\_quality/5\\_rubric\\_rubric.htm](http://www.ucdenver.edu/faculty_staff/faculty/center-for-faculty-development/Documents/Tutorials/Rubrics/4_quality/5_rubric_rubric.htm)
- King, P.M. & Baxter Magolda, M.B. (2005). A developmental model of intercultural maturity, *Journal of College Student Development*, 46(2), 571-592.
- Kirkpatrick, D. (1996). Great ideas revisited. *Training and Development*, 50(1), 54-59.
- Kirkpatrick, J. D., & Kirkpatrick, W. K. (2010). *Training on trial: How workplace learning must reinvent itself to remain relevant*. AMACOM Div American Mgmt Assn.
- Kohlberg, L. (1984). *The psychology of moral development: The nature and validity of moral stages* (Vol. 2). HarperCollins College Div.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological review*, 50(4), 370.
- McLeod, S. A. (2008). Psychosexual Stages. Retrieved from [www.simplypsychology.org/psychosexual.html](http://www.simplypsychology.org/psychosexual.html)
- Mertler, Craig A. (2001). Designing scoring rubrics for your classroom. *Practical Assessment, Research & Evaluation*, 7(25). Retrieved March 3, 2004 from <http://PAREonline.net/getvn.asp?v=7&n=25>
- Montgomery, K. (2002). Authentic tasks and rubrics: Going beyond traditional assessments in college teaching. *College teaching*, 50(1), 34-40.
- National Research Council (Ed.). (1996). *National science education standards*. National Academy Press.
- National Science Education Standards observe, interact, change, learn. (1996). Washington, D.C.: National Academy Press.
- Piaget, J. (1997). *The moral judgement of the child*. Simon and Schuster.
- Praslova, L. (2010). Adaptation of Kirkpatrick's four level model of training criteria to assessment of learning outcomes and program evaluation in higher education. *Educational Assessment, Evaluation and Accountability*, 22(3), 215-225.
- Reddy, Y. M., & Andrade, H. (2010). A review of rubric use in higher education. *Assessment & Evaluation in Higher Education*, 35(4), 435-448.
- Rubrics. (2012, February 2). Retrieved September 19, 2015, from <https://engage.intel.com/thread/11468>
- Rubrics for Assessment. (n.d.). Retrieved September 24, 2015, from [http://www.niu.edu/facdev/resources/guide/assessment/rubrics\\_for\\_assessment.pdf](http://www.niu.edu/facdev/resources/guide/assessment/rubrics_for_assessment.pdf)
- Rubric for Rubrics | Project Based Learning | BIE. (n.d.). Retrieved September 23, 2015, from [http://bie.org/object/document/rubric\\_for\\_rubrics](http://bie.org/object/document/rubric_for_rubrics)
- Rubric Tutorial - UEN. (n.d.). Retrieved September 24, 2015, from [http://www.uen.org/tutorial/rubric/tutorial\\_index.shtml](http://www.uen.org/tutorial/rubric/tutorial_index.shtml)
- rRubric. (n.d.) Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health, Seventh Edition. (2003). Retrieved September 19 2015 from <http://medical-dictionary.thefreedictionary.com/rubric>.
- Shipman, D., Roa, M., Hooten, J., & Wang, Z. J. (2012). Using the analytic rubric as an evaluation tool in nursing education: the positive and the negative. *Nurse Education Today*, 32(3), 246-249.
- Stevens, D.D. & Levi, A.J. (2005). *Introduction to Rubrics: An Assessment Tool to Save Grading Time, Convey Effective Feedback and Promote Student Learning*. Sterling, VA: Stylus.
- Types of Rubrics. (2015). Retrieved November 16, 2015, from <http://resources.depaul.edu/teaching-commons/teaching-guides/feedback-grading/rubrics/pages/types-of-rubrics.aspx#developmental>
- Virgil, V. (2010). Illinois Online Network: Instructional Resources: Pointers and Clickers: Rubrics. Retrieved September 20, 2015, from [http://www.ion.uillinois.edu/resources/pointersclickers/2004\\_03/creating.asp](http://www.ion.uillinois.edu/resources/pointersclickers/2004_03/creating.asp)
- Vygotsky, L. S. (1980). *Mind in society: The development of higher psychological processes*. Harvard university press.
- Wolf, K., & Stevens, E. (2007). The role of rubrics in advancing and assessing student learning. *The Journal of Effective Teaching*, 7(1), 3-14.
- Yildirim, S. G., Baur, S. W., & LaBoube, R. A. (2014, September). Fundamentals of Framing Construction in Architectural Engineering: A Hands-on Learning Experience. In *2014 Midwest Section Conference of the American Society for Engineering Education, Sept* (pp. 24-26)



## Author Biographies

**Dave Balch** has his Ph.D. in Human Behavior and is a professor at Rio Hondo College. He teaches online at Grand Canyon University in the Doctoral Program in Higher Education and serves on Dissertation Committees as Methodologist and Content Expert. He is an evaluator for the Academic Senate for California Community Colleges, Course Outline of Record Evaluator (CORE) and Course Identification Numbering System (C-ID).” His other publications have included articles on Performance Appraisal, Humor and Creativity in the Classroom, Ethics and Decision Making, Teaching in the Online Environment, and Scholarship.

**Robert Blanck** has master’s degrees from California State Polytechnic University, Pomona and University of Redlands. He is an adjunct professor within the School of Education at the University of Redlands teaching graduate courses in research methodology and statistics. He also teaches for University of California Extension online education program. His other publications have included Technology in the Classroom and Changes in Online Education

**David Howard Balch** has his Masters in Psychology from California Southern University where he is currently completing his PsyD.

## List of Tables

- Table 1 Microsoft Rubric Template
- Table 2 Holistic Rubric Template using Bloom's Taxonomy
- Table 3 Holistic Rubric Template using Costa Three Levels
- Table 4 Holistic Rubric Template using Kirkpatrick's Four Levels
- Table 5 Analytic Rubric Template using Bloom's Taxonomy
- Table 6 Analytic Rubric Template using Costa Three Levels
- Table 7 Analytic Rubric Template using Kirkpatrick's Four Levels
- Table 8 Single-Point Rubric Template using Bloom's Taxonomy
- Table 9 Single-Point Rubric Template using Costa Three Levels
- Table 10 Single-Point Rubric Template using Kirkpatrick's Four Levels
- Table 11 Template Developmental Rubric
- Table 12 Holistic Rubric using the Bloom Taxonomy Criteria description for the two examples: Course Content and Course Style Examples.
- Table 14 Holistic Rubric using Kirkpatrick's Four Levels Criteria description for the two examples: Course Content and Course Style Examples.
- Table 15 Analytic Rubric using Bloom's Taxonomy for Course Content and Course Style Examples
- Table 16 Analytic Rubric using Costa Three Levels-Course Content and Course Style Examples
- Table 17 Analytic Rubric using Kirkpatrick's Four Levels-Course Content and Course Style Examples
- Table 18 Single-Point Rubric using Bloom's Taxonomy-Course Content and Course Style Examples
- Table 19 Single-Point Rubric using Costa Three Levels Course Content and Course Style Examples
- Table 20 Single-Point Rubric using Kirkpatrick's Four Levels Course Content and Course Style Examples
- Table 21 A Rubric for Judging Your Rubric
- Table 22 Metarubric Checklist.

## TABLES

Table 1

### *Microsoft Rubric Template*

	<b>Beginner 1</b>	<b>Developing 2</b>	<b>Accomplished 3</b>	<b>Advanced 4</b>
Dimension 1				
Dimension 2				

Table 2

### *Holistic Rubric Template using Bloom's Taxonomy*

<b>Score</b>	<b>Description</b>
6	Demonstrates exceptional understanding of the material. All requirements are met and some are exceeded. <i>Creating</i> (Compose or create): Putting elements together to form a coherent or functional whole; reorganizing elements into a new pattern or structure through generating, planning, or producing
5	Demonstrates exceptional understanding of the material. All requirements are met and some are exceeded. <i>Evaluating</i> (Assess whether or not): Making judgments based on criteria and standards through checking and critiquing.
4	Demonstrates exceptional understanding of the material. All requirements are met and some are exceeded. <i>Analyze</i> (Analyzing): - Breaking material into its constituent parts and detecting or perceiving how the parts relate to one another and to an overall structure or purpose
3	Demonstrates consistent understanding of the material. All requirements are met. <i>Applying</i> (Construct a theory): Carrying out or using a procedure through executing, or implementing), <i>Analyzing</i> (Differentiate between...): Breaking material into constituent parts, determining how the parts relate to one another and to an overall structure or purpose through differentiating, organizing, and attributing,
2	Demonstrates partial understanding of the material. Some requirements are met. <i>Understanding</i> (Summarize): Constructing meaning from oral, written, and graphic messages through interpreting, exemplifying, classifying, summarizing, inferring, comparing, and explaining,
1	Demonstrates minimal understanding of the material. Few requirements are met. <i>Remembering</i> (Describe): Retrieving, recognizing, and recalling relevant knowledge.
0	No response; Task not attempted.

Table 3

*Holistic Rubric Template using Costa Three Levels*

Score	Description
3	<p>Demonstrates exceptional understanding of the material. All requirements are met and some are exceeded.</p> <p><i>Level Three (Apply)</i>; applying and evaluating gathered information.</p> <p>Signal Words. Evaluate - appraise, value, Hypothesize - to adopt as a hypothesis/assumption, Imagine - to form a mental picture of something not present; guess, Judge - to form an estimate or evaluation about something. Deduce, Predict - to declare in advance, or speculate - to think or wonder about a subject.</p>
2	<p>Demonstrates consistent understanding of the material. All requirements are met.</p> <p><i>Level Two (Analyze)</i>; making sense of gathered information.</p> <p>Signal Words. Examine - a thing to know its parts, Compare - to examine for likenesses and differences, Contrast - to show differences when compared, Group - to cluster, Infer - to derive as a conclusion from facts or premises, Sequence - chronological order of events, or Synthesize - the combination of parts or elements into a whole.</p>
1	<p>Demonstrates partial understanding of the material. Some requirements are met.</p> <p><i>Level One (Define)</i>; focus on gathering and recalling gathered information.</p> <p>Signal Words. Describe - to represent or give an account in words, Identify - to establish the identity of, List - a simple series of words or numbers, Name - to mention or identify by name, Observe - to see or sense esp. through careful attention, Recite - to repeat verbatim, and Scan - to examine closely.</p>
0	No response; Task not attempted.

Table 4

*Holistic Rubric Template using Kirkpatrick's Four Levels*

Score	Description
4	<p>Demonstrates exceptional understanding of the material. All requirements are met and some are exceeded.</p> <p><i>Level Four (Results).</i> To what degree targeted outcomes occur as a result of the training event and subsequent reinforcement.</p> <p><b>Indicators.</b> Indicators (measure indirectly). The assignment incorporates a plan of action which will apply the assignment and an analysis of the likely of success and resources needed. <i>New World Addition: <b>Leading Indicators.</b></i> A plan for short-term observations and measurements suggesting that critical that would measure the behaviors and how to indicate if they are on track to create a positive impact on desired results.</p>
3	<p>Demonstrates consistent understanding of the material. All requirements are met.</p> <p><i>Level Three (Behavior).</i> To what degree participants apply what they learned during training when they are back on the job.</p> <p><b>Indicators.</b> Indicators (measured indirectly). The assignment includes an indication of intention to use what was include in the assignment, practical application, process to carry it out, skills, knowledge, or attitude. <i>New World Addition: <b>Required Drivers.</b></i> The student includes a discussion of processes and systems that reinforce, encourage and reward performance of critical behaviors on their job.</p>
2	<p>Demonstrates partial understanding of the material. Some requirements are met.</p> <p><i>Level two (Learning).</i> To what degree participants acquire the intended knowledge, skills, attitudes, confidence and commitment based on their participation in a training event</p> <p><b>Indicators. Knowledge.</b> Indications of "knowing" the material from the assignment. Tell, list, describe, name, repeat, remember, recall, identify, state, select, match, know, locate, report, recognize, observe, choose, who, what, where, when, cite, define, indicate, label, memorize, outline, record, relate, reproduce, underline. <b>Skill.</b> Indication of the student's confidence that they can now do what is include or required in the assignment. <b>Attitude.</b> Indication that what is include in the assignment will be worthwhile or useful on the job. <i>New World Additions: <b>Confidence.</b></i> Indication that they believe they can apply the content of the assignment. <b>Commitment.</b> Indication of the intention to use the content of the assignment.</p>
1	<p>Demonstrates minimal understanding of the material. Few requirements are met.</p> <p><i>Level one (Reaction).</i> To what degree participants react favorably to the training.</p> <p>Indicators. <b>Customer Satisfaction.</b> Indications of satisfaction with the concepts addressed in the assignment, met their needs, and achieved a goal. <i>New World Additions: <b>Engagement.</b></i> Indications of the student's active involved in and contributing to the learning experience, mentally stimulated, attention, curiosity, interest, optimism, and passion. <b>Relevance.</b> Indication of an opportunity to use or apply what they learned from the assignment, application to the personal aspirations, interests, or cultural experiences of students (<i>personal relevance</i>) or that are connected in some way to real-world issues, problems, and contexts (<i>life relevance</i>).</p>
0	No response; Task not attempted.

Table 5

*Analytic Rubric Template using Bloom's Taxonomy*

	<b>Beginning 1</b>	<b>Developing 2</b>	<b>Accomplished 3</b>	<b>Exemplary 4</b>	<b>Accomplished 3</b>	<b>Exemplary 4</b>	<b>Score</b>
<b>Category #1</b>	Description reflecting beginning level of performance. Knowledge (Remembering) Learn specific facts, ideas, vocabulary; remembering recalling information or specific facts.	Description reflecting movement toward mastery level of performance. Evaluation (Evaluating) Ability to judge the value of material (statement, novel, poem, report, etc.) for a given purpose; judgment is based on given criteria.	Description reflecting achievement of mastery level of performance. Synthesis (Creating) Ability to put parts together to form a new whole; use elements in new patterns and relationships.	Description reflecting highest level of performance. Analysis (Analyzing) Ability to break down material into its component parts and perceive inter-relationships.	Description reflecting achievement of mastery level of performance. <b>Application</b> (Applying) Ability to use learned material in new and concrete situations; use learned knowledge and interpret previous situations	Description reflecting highest level of performance. Comprehension (Understanding) Ability to grasp the meaning of material; communicate knowledge; understanding information without relating it to other material	

Table 6

*Analytic Rubric Template using Costa Three Levels*

	<b>Developing 1</b>	<b>Accomplished 2</b>	<b>Exemplary 3</b>	<b>Score</b>
<b>Category #1</b>	Description reflecting movement toward mastery level of performance. <i>Level One</i> (Define); focus on gathering and recalling gathered information. Signal Words. Describe - to represent or give an account in words, Identify - to establish the identity of, List - a simple series of words or numbers, Name - to mention or identify by name, Observe - to see or sense esp. through careful attention, Recite - to repeat verbatim, and Scan - to examine closely.	Description reflecting achievement of mastery level of performance. <i>Level Two</i> (Analyze); making sense of gathered information. Signal Words. Examine - a thing to know its parts, Compare - to examine for likenesses and differences, Contrast - to show differences when compared, Group - to cluster, Infer - to derive as a conclusion from facts or premises, Sequence - chronological order of events, or Synthesize - the combination of parts or elements into a whole.	Description reflecting highest level of performance <i>Level Three</i> (Apply); applying and evaluating gathered information. Signal Words. Evaluate - appraise, value, Hypothesize - to adopt as a hypothesis/assumption, Imagine - to form a mental picture of something not present; guess, Judge - to form an estimate or evaluation about something. Deduce, Predict - to declare in advance, or speculate - to think or wonder about a subject.	

Table 7

*Analytic Rubric Template using Kirkpatrick's Four Levels*

	<b>Beginning 1</b>	<b>Developing 2</b>	<b>Accomplished 3</b>	<b>Exemplary 4</b>	<b>Score</b>
<b>Category #1</b>	<p>Description reflecting beginning level of performance.</p> <p><i>Level one (Reaction).</i> To what degree participants react favorably to the training.</p> <p><b>Indicators. Customer Satisfaction.</b> Indications of satisfaction with the concepts addressed in the assignment, met their needs, and achieved a goal. <i>New World Additions:</i></p> <p><b>Engagement.</b> Indications of the student's active involved in and contributing to the learning experience, mentally stimulated, attention, curiosity, interest, optimism, and passion.</p> <p><b>Relevance.</b> Indication of an opportunity to use or apply what they learned from the assignment, application to the personal aspirations, interests, or cultural experiences of students (<i>personal relevance</i>) or that are connected in some way to real-world issues, problems, and contexts (<i>life relevance</i>).</p>	<p>Description reflecting movement toward mastery level of performance.</p> <p><i>Level two (Learning).</i> To what degree participants acquire the intended knowledge, skills, attitudes, confidence and commitment based on their participation in a training event</p> <p><b>Indicators. Knowledge.</b> Indications of "knowing" the material from the assignment. Tell, list, describe, name, repeat, remember, recall, identify, state, select, match, know, locate, report, recognize, observe, choose, who, what, where, when, cite, define, indicate, label, memorize, outline, record, relate, reproduce, underline. <b>Skill.</b> Indication of the student's confidence that they can now do what is include or required in the assignment. <b>Attitude.</b> Indication that what is include in the assignment will be worthwhile or useful on the job. <i>New World Additions:</i></p> <p><b>Confidence.</b> Indication that they believe they can apply the content of the assignment. <b>Commitment.</b> Indication of the intention to use the content of the assignment.</p>	<p>Description reflecting achievement of mastery level of performance.</p> <p><i>Level Three (Behavior).</i> To what degree participants apply what they learned during training when they are back on the job.</p> <p><b>Indicators.</b> Indicators (measured indirectly). The assignment includes an indication of intention to use what was include in the assignment, practical application, process to carry it out, skills, knowledge, or attitude. <i>New World Addition:</i></p> <p><b>Required Drivers.</b> The student includes a discussion of processes and systems that reinforce, encourage and reward performance of critical behaviors on their job.</p>	<p>Description reflecting highest level of performance.</p> <p><i>Level Four (Results).</i> To what degree targeted outcomes occur as a result of the training event and subsequent reinforcement.</p> <p><b>Indicators.</b> Indicators (measure indirectly). The assignment incorporates a plan of action which will apply the assignment and an analysis of the likely of success and resources needed. <i>New World Addition: Leading Indicators.</i> A plan for short-term observations and measurements suggesting that critical that would measure the behaviors and how to indicate if they are on track to create a positive impact on desired results.</p>	

Table 8

*Single-Point Rubric Template using Bloom's Taxonomy*

<b>Concerns</b> <i>Areas that Need Work</i>	<b>Criteria</b> <i>Standards for This Performance</i>	<b>Advanced</b> <i>Evidence of Exceeding Standards</i>
Description reflecting beginning level of performance. <b>Knowledge (Remembering)</b>	<b>Criteria #1:</b> Description reflecting achievement of mastery level of performance. Description reflecting achievement of mastery level of performance. Description reflecting achievement of mastery level of performance. <b>Synthesis (Creating)</b>	Description reflecting highest level of performance Description reflecting highest level of performance. <b>Comprehension (Understanding)</b>

Table 9

*Single-Point Rubric Template using Costa Three Levels*

<b>Concerns</b> <i>Areas that Need Work</i>	<b>Criteria</b> <i>Standards for This Performance</i>	<b>Advanced</b> <i>Evidence of Exceeding Standards</i>
Description reflecting movement toward mastery level of performance. <i>Level One (Define);</i>	<b>Criteria #1:</b> Description reflecting achievement of mastery level of performance. Description reflecting achievement of mastery level of performance. <i>Level Two (Analyze);</i>	Description reflecting highest level of performance <i>Level Three (Apply);</i>

Table 10

*Single-Point Rubric Template using Kirkpatrick's Four Levels*

<b>Concerns</b> <i>Areas that Need Work</i>	<b>Criteria</b> <i>Standards for This Performance</i>	<b>Advanced</b> <i>Evidence of Exceeding Standards</i>
Description reflecting beginning level of performance. <i>Level one (Reaction).</i>	<b>Criteria #1:</b> Description reflecting achievement of mastery level of performance. <i>Level Three (Behavior).</i> Description reflecting achievement of mastery level of performance	Description reflecting achievement of mastery level of performance. <i>Level Three (Behavior).</i>

Table 11

*Template Developmental Rubric*

Example Domain/ Standard	Initial Level	Intermediate Level	Mature Level
Cognitive	Assumes knowledge is certain and categorizes knowledge claims as right or wrong; is naive about differences; resists challenges to one's own beliefs and views perspectives as wrong	Evolving awareness and acceptance of uncertainty and multiple perspectives; ability to shift from accepting authority's knowledge claims to personal processes for adopting knowledge claims	Ability to consciously shift perspectives and behaviors into an alternative viewpoint or worldview and to use multiple frames
Intrapersonal	Lack of awareness of one's own values and intersection of others; lack of understanding of other views; externally defined identity yields externally defined beliefs that regulate interpretation of experiences and guide choices; difference is viewed as a threat to identity	Evolving sense of identity as distinct from external others' perceptions; tension between external and internal definitions prompts self-exploration of values; recognizes legitimacy of other viewpoints	Capacity to create an internal self that openly engages challenges to one's views and beliefs and that considers viewpoints in a global and national context; integrates aspects of self into one's identity
Interpersonal	Dependent relations with similar others is a primary source of identity and social affirmation; perspectives of different others are viewed as wrong; awareness of others differences is lacking; view problems egocentrically	Willingness to interact with diverse others and refrain from judgment; relies on independent relations in which multiple perspectives exist (but are not coordinated); self is often overshadowed by need for others' approval. Begins to explore other viewpoints	Capacity to engage in meaningful, interdependent relationships with diverse others that are grounded in an understanding and appreciation for differences; willing to recognize change

King, P.M. &amp; Baxter Magolda, M. B., pp. 571-592, 2005.



Table 12

*Holistic Rubric using the Bloom Taxonomy Criteria description for the two examples: Course Content and Course Style Examples.*

Score	Description
6	Demonstrates exceptional understanding by <i>Creating</i> , putting elements together to form a coherent or functional whole of the relationships between business terminology, concepts, and current business issues; putting elements together to form a coherent or functional whole; a new pattern or structure.
6	Demonstrates exceptional understanding by <i>Creating or reorganizing</i> elements into a new pattern or structure through generating, planning, or producing the effective use and application of APA style writing; applying, evaluate, and judge.
Score	Description
1	Demonstrates minimal understanding of the material Few requirements are met <i>Remembering</i> relevant knowledge of the relationships between business terminology, concepts, and current business issues; describing, recognizing, and recalling relevant knowledge.
1	Demonstrates minimal understanding of the material. Few requirements are met. <i>Remembering</i> the effective use and application of APA style writing

Table 13

*Holistic Rubric using Costa's Three Levels description for the two examples Course Content and Course Style Examples.*

Score	Description
3	Demonstrates exceptional understanding of the material. All requirements are met and some are exceeded. <i>Level Three (Apply)</i> ; applying and evaluating gathered information about the business terminology, concepts, and current business issues; applying and evaluating gathered information.
3	Demonstrates exceptional understanding of the material. All requirements are met and some are exceeded. <i>Level Three (Apply)</i> ; applying and evaluating the effective use and application of APA style writing; applying, evaluate, and judge.
Score	Description
1	Demonstrates partial understanding of the material. Some requirements are met. <i>Level One (Define)</i> ; focus on recalling the business terminology, concepts, and current business issues; applying and evaluating gathered information.
1	Demonstrates partial understanding of the material. Some requirements are met. <i>Level One (Define)</i> ; focus on the effective use and application of APA style writing; describe, identify, list, name, and scan.

Table 14

*Holistic Rubric using Kirkpatrick's Four Levels Criteria description for the two examples: Course Content and Course Style Examples*

<b>Score</b>	<b>Description</b>
4	Demonstrates exceptional understanding of the material. All requirements are met and some are exceeded and included a plan for the application of the business terminology, concepts, and current business issues; results-a plan for action which will apply the assignment, a plan to measure the behaviors and how to indicate if they are on track to create a positive impact on desired results.
4	Demonstrates exceptional understanding of the material. All requirements are met and some are exceeded and included a plan for the application of the effective use and application of APA style writing; results-assignment incorporates a plan of action indicate if they are on track to create a positive impact on desired results.
<b>Score</b>	<b>Description</b>
1	Demonstrates minimal understanding of the material. Few requirements are met. A lack of personal or life relevance of the business terminology, concepts, and current business issues; results-a plan of action which will apply the assignment, a plan to measure the behaviors and how to indicate if they are on track to create a positive impact on desired results.
1	Demonstrates minimal understanding of the material. Few requirements are met. A lack of personal or life relevance of the effective use and application of APA style writing; reaction-indications of the student's active involved in and contributing to the learning experience, mentally stimulated, attention, curiosity, interest, optimism, and passion, connected in some way to real-world issues, problems, and contexts

Table 15

*Analytic Rubric using Bloom's Taxonomy for Course Content and Course Style Examples*

Analytic	Knowing 1	Comprehension 2	Application 3	Analysis 4	Synthesis 3	Evaluation 4	Score
Category #1 Course Content	Description reflecting beginning level of performance; by describing specific facts, ideas, vocabulary in identifying and analyzing business cycles.	Description reflecting movement toward a level of performance; by identifying and analyzing business cycles.	Description reflecting achievement of a higher level of performance; identifying and analyzing business cycles.	Description reflecting highest level of performance; in identifying and analyzing business cycles.	Description reflecting achievement of mastery level of performance; in identifying and analyzing business cycles.	Description reflecting highest level of mastery; by identifying and analyzing business cycles.	
Category #2 Course Style	Description reflecting beginning level of performance; by remembering (listing) the specific facts related to listing the five levels of APA style headings.	Description reflecting movement toward a level of performance; by showing the value (in order) related to the five levels of APA style headings.	Description reflecting achievement of a higher level of performance; by synthesizing (relationship to subject sentences) the relationship by listing the five levels of APA style headings.	Description reflecting highest level of performance; by listing the five levels of APA style headings.	Description reflecting achievement of mastery level of performance; by applying the five levels of APA style headings.	Description reflecting achievement of mastery level of performance; by applying the five levels of APA style headings.	

Table 16

*Analytic Rubric using Costa' Three Levels for Course Content and Course Style Examples*

	Developing 1	Accomplished 2	Exemplary 3	Score
Category #1 Course Content	Description reflecting movement toward mastery level of performance by defining, describing, identifying and analyze business cycles.	Description reflecting achievement of mastery level of performance. The student will identify, compare, contrast, synthesize and analyze business cycles.	Description reflecting highest level of performance The student will identify, analyze, and evaluate the business cycles.	
Category #2 Course Style	Description reflecting movement toward mastery level of performance by defining, describing, and examine factors related to listing the five levels of APA style headings.	Description reflecting achievement of mastery level of performance by analyzing, examining, comparing, contrasting, synthesize factors related to listing the five levels of APA style headings.	Description reflecting highest level of performance by applying, and evaluating the five levels of APA style headings.	

Table 17

*Analytic Rubric using Kirkpatrick's Four Levels for Course Content and Course Style Examples*

	<b>Beginning 1</b>	<b>Developing 2</b>	<b>Accomplished 3</b>	<b>Exemplary 4</b>	<b>Score</b>
<b>Category #1 Course Content</b>	Description reflecting beginning level of performance. The student will apply, identify, and analyze business cycles.	Description reflecting movement toward mastery level of performance. The student will apply with confidence, identify, and analyze business cycles.	Description reflecting achievement of mastery level of performance. The student will show an application, identify, and analyze business cycles.	Description reflecting highest level of performance. The student will plan for short-term observations and measurements, identify, and analyze business cycles.	
<b>Category #2 Course Style</b>	Description reflecting beginning level of performance. The student will list the five levels of APA style headings and connected in some way to real-world issues, problems, and contexts.	Description reflecting movement toward mastery level of performance. The student will list the five levels of APA style headings and acquire the intended knowledge, skills.	Description reflecting achievement of mastery level of performance. The student will list the five levels of APA style headings and participants apply what they learned.	Description reflecting highest level of performance. The student will list the five levels of APA style headings and proposed measures to evaluate, and get feedback.	

Table 18

*Single-Point Rubric using Bloom's Taxonomy-Course Content and Course Style Examples*

<b>Concerns Areas that Need Work</b>	<b>Criteria Standards for This Performance</b>	<b>Advanced Evidence of Exceeding Standards</b>
	<b>Criteria #1:</b> Description reflecting achievement of mastery level of performance. The student will correctly define GDP as the output in dollars (or another currency) of final goods and services produced in a country in a given year	
	<b>Criteria #2:</b> Description reflecting achievement of mastery level of performance. The student will correctly list and apply the five levels of APA style headings.	

Table 19

*Single-Point Rubric using Costa Three Levels Course Content and Course Style Examples*

<b>Concerns</b> <i>Areas that Need Work</i>	<b>Criteria</b> <i>Standards for This Performance</i>	<b>Advanced</b> <i>Evidence of Exceeding Standards</i>
	<b>Criteria #1: Course Content.</b> Description reflecting achievement of mastery level of performance the student will define GDP as the output in dollars (or another currency) of final goods and services produced in a country in a given year with an application of what they learned	
	<b>Criteria #2: Course Style.</b> Description reflecting achievement of mastery level of performance. The student will correctly list and apply the five levels of APA style headings with an application of what they learned	

Table 20

*Single-Point Rubric using Kirkpatrick's Four Levels Course Content and Course Style Examples*

<b>Concerns</b> <i>Areas that Need Work</i>	<b>Criteria</b> <i>Standards for This Performance</i>	<b>Advanced</b> <i>Evidence of Exceeding Standards</i>
	<b>Criteria #1: Course Content.</b> Description reflecting achievement of mastery level of performance The student will define GDP as the output in dollars (or another currency) of final goods and services produced in a country in a given year with an application of what they learned	
	<b>Criteria #2: Course Style.</b> Description reflecting achievement of mastery level of performance. The student will correctly list and apply the five levels of APA style headings with an application of what they learned	

Table 21

*A Rubric for Judging Your Rubric*

Criteria	Beginning	Developing	Accomplished	Exemplary
<b>Statement of Purpose</b> Purpose is clearly stated	Purpose is not clearly stated.	Purpose is somewhat clearly stated.	Purpose is mostly clearly stated.	Purpose is very clearly stated.
<b>Criteria.</b> <ul style="list-style-type: none"> <li>• observable and measurable</li> <li>• reflect important and essential elements</li> <li>• distinct from other criteria</li> <li>• clear and unambiguous language.</li> </ul>	Few of the criteria are observable and measurable; few reflect the most important and essential elements of the task; few are written with clear and unambiguous language.	Some of the criteria are observable and measurable; some reflect the most important and essential elements of the task; some are written with clear and unambiguous language.	Most of the criteria are observable and measurable; most reflect the most important and essential elements of the task; most are written with clear and unambiguous language.	All of the criteria are observable and measurable; all reflect the most important and essential elements of the task; all are written with clear and unambiguous language.
<b>Rating Scale.</b> The number of items reflects purpose of assessment.	The number of rating points does not reflect the purpose of the assessment.	The number of rating points somewhat reflects the purpose of the assessment.	The number of rating points mostly reflects the purpose of the assessment.	The number of rating points clearly reflects the purpose of the assessment.
<b>Performance Descriptors.</b> <ul style="list-style-type: none"> <li>• observable and measurable</li> <li>• use parallel language across the scale</li> <li>• indicate amount, frequency or intensity</li> </ul>	Few of the performance descriptors are observable and measurable; few use parallel language across the scale; few indicate amount, frequency or intensity.	Some of the performance descriptors are observable and measurable; some use parallel language across the scale; some indicate amount, frequency or intensity.	Most of the performance descriptors are observable and measurable; most use parallel language across the scale; most indicate amount, frequency or intensity.	All of the performance descriptors are observable and measurable; all use parallel language across the scale; all indicate amount, frequency or intensity.
<b>Reliability.</b> <ul style="list-style-type: none"> <li>• inter-rater reliability (consistent scoring among multiple graders)</li> <li>• intra-rater reliability (consistent scores with the same grader over time)</li> </ul>	Rubric does not provide inter-rater or intra-rater reliability.	Rubric provides some inter-rater and intra-rater reliability.	Rubric mostly provides inter-rater and intra-rater reliability.	Rubric provides strong inter-rater and intra-rater reliability.
<b>Validity.</b> <ul style="list-style-type: none"> <li>• content validity (skills measured represent the skills in the broader domain area)</li> <li>• construct validity (criteria reflect the knowledge and skills you are attempting to measure)</li> <li>• criterion validity (rubric score is similar to a score given in a real-world context)</li> <li>• face validity (rubric appears to be valid to its users)</li> </ul>	Rubric does not provide content, construct, criterion, or face validity.	Rubric provides some content, construct, criterion, and face validity.	Rubric mostly provides content, construct, criterion, and face validity.	Rubric provides strong content, construct, criterion, and face validity.

Stevens &amp; Levi, 2004

Table 22

*Metarubric Checklist*

Rubric part	Evaluation criteria	Yes	No
<b>The dimensions</b>	Does each dimension cover important parts of the final student performance?		
	Does the dimension capture some key themes in your teaching?		
	Are the dimensions clear?		
	Are the dimensions distinctly different from one another?		
	Do the dimensions represent skills that the student knows something about already (e.g., organization, analysis)?		
<b>The descriptions</b>	Do the descriptions match the dimensions?		
	Are the descriptions clear and different from each other?		
	If you used points, is there a clear basis for assigning points for each dimension?		
	If using a three-to-five level rubric, are the descriptions appropriately and equally weighted across the three-to-five levels?		
<b>The scale</b>	Do the descriptors under each level truly represent that level of performance?		
	Are the scale labels encouraging and still quite informative without being negative and discouraging?		
	Does the rubric have a reasonable number of levels for the age of the student and the complexity of the assignment?		
<b>The overall rubric</b>	Does the rubric clearly connect to the outcomes that it is designed to measure?		
	Can the rubric be understood by external audiences?		
	Does it reflect teachable skills?		
	Does the rubric reward or penalize students based on skills unrelated to the outcome being measured that you have not taught?		
	Have all students had an equal opportunity to learn the content and skills necessary to be successful on the assignment?		
	Is the rubric appropriate for the conditions under which the assignment was completed?		
	Does the rubric include the assignment description or title?		
	Does the rubric address the student's performance as a developmental task?		
	Does the rubric inform the student about the evaluation procedures when their work is scored?		
	Does the rubric emphasize the appraisal of individual or group performance and indicate ways to improve?		
<b>Fairness and sensibility</b>	Does it look like the rubric will be fair to all students and free of bias?		
	Does it look like it will be useful to students as performance feedback?		
	Is the rubric practical given the kind of assignment?		
	Does the rubric make sense to the reader?		

(Stevens &amp; Levi, 2004).