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## Rubric assessment of defensible qualitatively differentiated curriculum for gifted and talented learners

#### Abstract

Few would argue that there are children in every classroom who seem to be one step ahead of their peers. What is a teacher to do with and for these individuals who exhibit abilities and corresponding needs far beyond the average? How will their needs best be met? The answer--through the provision of defensible qualitatively differentiated curriculum--is one of the simplest responses and yet one of the most complex issues in the education of the gifted and talented.

## RUBRIC ASSESSMENT OF DEFENSIBLE QUALITATIVELY DIFFERENTIATED CURRICULUM FOR GIFTED AND TALENTED LEARNERS

A Publishable Article

Submitted to the

Department of Curriculum and Instruction

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts in Education

UNIVERSITY OF NORTHERN IOWA

by

Mary Meineke Schmidt

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January 7, 1997 Date Approved

**Greg Stefanich** 

Head, Department of Curriculum and Instruction 9291 Lakewood Pointe Drive Norwalk, Iowa 50211 December 31, 1996

Tracy L. Cross, Editor Journal of Secondary Gifted Education Department of Educational Psychology Teachers College Ball State University Muncie, Indiana 47306

Dear Ms. Cross:

Please accept the enclosed manuscript submitted for publication consideration. "Rubric Assessment of Defensible Qualitatively Differentiated Curriculum for Gifted and Talented Learners" is an original work written in partial fulfillment of the requirements for a Master of Arts in Education of the Gifted from the University of Northern Iowa. I initially developed the rubric as a self-help tool in curriculum development for the academically gifted and talented learners whom I serve in the Norwalk Community School District. The accompanying article was written to explain the background of the rubric project and provide an explanation of the uses of the instrument.

The manuscript is 7100 words (thirty pages) long including title page, abstract, text, references, and figures one through four. Throughout the manuscript, I have followed the <u>Publication Manual of the American Psychological Association, Fourth Edition</u> except in those cases where the manuscript formats and guidelines required by the <u>Journal of Secondary Gifted Education</u> deviate from APA.

If you have questions regarding this manuscript, please contact me at the address above, by telephone (515-285-4960), or by E-mail (mrmsjs@aol.com).

Thank you for your attention to this manuscript.

Sincerely,

Many Meineke Schmidt

Mary Meineke Schmidt encl.

## RUBRIC ASSESSMENT OF DEFENSIBLE QUALITATIVELY DIFFERENTIATED CURRICULUM FOR GIFTED AND TALENTED LEARNERS

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The time in which we live is not a good one to be gifted and talented. Programming for these learners is not politically correct in a social climate which embraces egalitarianism and the attitude that serving the gifted and talented is elitism at its best (Borland, 1993). In this climate of skepticism regarding the necessity of appropriate opportunities for the gifted and talented, it is critical that we provide programming which will not fall prey to the ubiquitous chorus of the critics. Detractors have had a field day, and rightly so, with the programming efforts which provide "fun and games" activities that serve no discernible purpose other than to provoke the animosity of the "ungifted" masses.

One of the foundations of solid programming for the gifted is a strong curriculum which recognizes the special learning needs and characteristics of gifted learners, provides for the development of those characteristics, and goes on to extend or develop further those characteristics (Kaplan, 1986). Unfortunately, many efforts to develop curriculum for the gifted and talented fall into the hands of well-meaning individuals who believe that the only service delivery option for this population is a system of pull-in enrichment classes which expose learners to fragmented units of instruction not included in the regular curriculum at a given grade level. Programs of this nature fail to meet the needs of the gifted and talented whose exceptionalities make them as different from one another as they are from their age peers; and, in addition, they do nothing to appease the critics.

#### Rationale

Few would argue that there are children in every classroom who seem to be one step ahead of their peers. Perhaps they already know the material to be studied. Perhaps they catch on far more quickly than the majority of their age mates. They might even be the ones who rapidly and readily internalize concepts and who function as producers of knowledge rather than simply as consumers. What is a teacher to do with and for these individuals who exhibit abilities and corresponding needs far beyond the average? How will their needs best be met? The answer--- through the provision of defensible qualitatively differentiated curriculum--is one of the simplest responses and yet one of the most complex issues in the education of the gifted and talented. Why is it so troublesome? Perhaps the crux of the conundrum lies in defining the term "defensible qualitatively differentiated curriculum" and then in finding a way to identify that same curriculum as defensible and qualitatively differentiated once it has been developed.

A recent study conducted by the National Research Center on the Gifted and Talented found that in regular classrooms, where gifted and talented learners spend the majority of their time, 84% of the assignments given to the gifted are the same as those given to all students (Westberg, 1993). A host of problems result from this practice, ranging from underachievement, to dropping out, to inability to take risks. There is no doubt that curriculum writers need guidelines, and it seems apparent that a need exists for a means to assess any curricular experience as qualitatively differentiated based on the extent to which it meets a given set of criteria.

The development of the rubric described and presented in this article arose from that need and from my personal quest to move the concept "defensible qualitatively differentiated curriculum" from that of a nebulous, abstract, and enigmatic entity to a substantive, tangible, and attainable reality. The following sections of this article define defensible qualitatively differentiated curriculum; provide a rationale for a rubric as the instrument for assessment; explain the content, process, product, and learning environment segments of the rubric; provide a sample application of the rubric in unit development; and discuss the strengths and weaknesses of the instrument.

A Definition Of Defensible Qualitatively Differentiated Curriculum

Crucial to the use of the rubric is an understanding of the concept of defensible qualitative differentiation. At its most basic level, differentiation may be defined as "...to make unlike; to develop specialized differences in..." (McKechnic, 1993, p. 508). Carol Tomlinson (1995) says that differentiation is

...shaking up what goes on in the classroom so that students have multiple options for taking in information, making sense of ideas, and expressing what they learn. In other words a differentiated classroom provides different avenues to acquiring content,

to processing or making sense of ideas, and to developing products.

(p. 3)

She espouses abandonment of all learners doing the same thing at the same time in the same way. Susan Winebrenner (1993) contends that differentiation is to "...give kids stuff their age peers can't handle and wouldn't want to." It is important to notice that this does not mean giving them more work, but rather different work. In her presented paper "A Responsive Classroom for All Students" Tomlinson (1995) cites the work of C. Harry Passow who suggests applying the "Should, Could, Would" test. "Should all kids do it? <u>Could</u> all kids do it? <u>Would</u> all kids want to?" If the

answer to any of these questions is "yes," then it is not differentiated. C. June Maker and Aleene B. Nielson (1995) put forth the idea that the modifications inherent in differentiation involve "... quality changes rather than quantity, and they must build upon and extend the characteristics (both present and future) that make the children different from other students" (p. 3). Dr. James Borland (1989) adds the sometimes troublesome word "defensible" to his notion of differentiation. He says it is

... a course of study that is in some manner different from the one to which students in the mainstream are exposed ... Differentiation is not enough. To be appropriate, a curriculum for gifted students must be defensible as well ... Defensibility in this context implies that the curriculum is not only different from the norm, but educationally right for gifted students. (p. 172-3)

A synthesis of all these definitions should leave one with the sense that differentiation involves (a) creating specialized differences in curricular experiences; (b) creating multiple options for knowledge acquisition, sense-making, and product creation; (c) providing different work, not more of the same; (d) building on the characteristics which create differences; and (e) providing what is educationally right for gifted and talented students.

#### Why A Rubric?

In their everyday lives, adults know that products and performances represent quality when they meet established criteria. There are no jobs in the real world which require one to fill in the blanks with previously learned information. No one assigns a letter grade as the designation of successful attainment of a real-life goal. Instead, those real-life experiences are assessed in terms of applicability to and relevance within their specific domains. When an employee is granted or denied a performance-based pay increase or promotion, he/she is generally given the reason for that action. A chef gauges culinary success on whether patrons eat the food and if they order the dish again; and, depending on the creation, he/she evaluates the product in terms of color, texture, temperature, flavor, and visual appeal benchmarks in order to identify what is right about the product, what is wrong with it, and how to fix it. Before these performers even begin the processes from which their products result, they are likely have a clear and concrete conception of what represents quality in the final product. In education, the current movement toward authentic assessment reflects a similar realization that, in order to succeed, one must know what success looks like and what path to follow in order to reach the desired outcome.

In her adventures in Wonderland, Alice asked the Cheshire Cat which way she should go. The Cat responded that it depended in large part on where she wanted to get to. When Alice indicated that the destination really didn't matter, the Cat advised, "Then it really doesn't matter which way you go." When Alice added that she only wanted to get <u>somewhere</u>, the Cat assured her that was bound to happen "if only you walk long enough" (Carroll, 1946, p. 72). Such a random approach to curriculum development is likely to result in something other than that which is defensible qualitatively differentiated curriculum. Useful assessments provide both feedback and guidance, and rubrics are invaluable tools in performance-based assessments, for they meet both criteria (Schack, 1994). "A rubric spells out the criteria for different levels of achievement based on a set of standards that you

design. The standards may include <u>benchmarks</u>, performance samples that serve as comparisons for calibration" (Freedman, 1994, p. 21). Therefore, the developer of defensible qualitatively differentiated curriculum for the gifted and talented must begin with the end in mind (Covey, 1989) and have a clear conception of what is desired. This rubric provides such a roadmap primarily in terms of the work of C. June Maker (1995), Dr. George Betts (1985), Dr. James Borland (1989), and Dr. Joyce VanTassel-Baska (1988, 1992, 1993). Their ideas regarding gifted programming and curriculum served as the inspiration for this project.

As mentioned previously, gifted and talented learners spend the majority of their time in the regular classroom. Unfortunately, most teachers do not differentiate for these learners, primarily because they (the teachers) do not know what to do. They do not know what differentiation is, what it looks like, or what strategies are available to use. Many effective teachers are already differentiating for gifted and talented learners; they just do not know it. Recognition of what they are doing right makes further differentiation a purposeful endeavor rather than something that occurs through luck or chance. In order to assist those who create and/or deliver curriculum for the gifted and talented, both regular classroom teachers and gifted education specialists, the rubric presented in this article establishes a set of criteria and a picture of what defensible qualitatively differentiated curriculum "looks" like, so that unlike Alice, each teacher has a clear sense of where "there" is and is not left to wander aimlessly in the hope of someday arriving.

#### **Underlying Assumptions**

Armed with a broad conception of defensible qualitatively differentiated curriculum and a rationale for a rubric as the choice of assessment instrument, the user of this rubric will deal specifically with the content, process, product, and learning environment modifications suggested by C. June Maker as a means to differentiate curriculum for the gifted. Before examining the rubric in detail, it is important for the user to understand the underlying assumptions regarding those four components.

Content may be defined as what is taught/learned. According to Maker (1995), Betts (1996), Borland (1989), and others, the content which high ability learners encounter must be rich, challenging, rigorous, and worth learning. Maker (as cited in Thematic Teaching Units for Gifted Education, 1994) says content must

"... move beyond the basics ... to spend more time on the abstract, complex, and varied. It should be presented in a way which achieves economy, illustrates the organization and methods of inquiry of a discipline, and includes a study of well-known producers, performers, and innovators." (p. 1)

Process is the way teachers teach and students learn. In <u>Planning and</u> <u>Implementing Programs for the Gifted</u>, Borland (1989) appears to emphasize that process and content are inextricable; for process without rich, rigorous content results in wasted effort. George Betts (1996), whose Autonomous Learner Model is heavy in process and affect, would concur; for one cannot be gifted without content. According to Maker (as cited in Thematic Teaching Units for Gifted Education, 1994), processes "... should include those which develop higher-level thought; allow for open-endedness, discovery, and the freedom of choice; encourage group interaction and proof of reasoning; and provide variety in kind and pacing" (p. 1).

Products are the outcomes of student interaction with content. One of the keys to sophisticated production is to associate the product with a real-world situation. As mentioned previously, the real world does not rely on a letter grade; and learners who are addressing existing concerns will be more likely to do what is necessary to meet that challenge in a professional and high-level manner. Maker (as cited in Thematic Teaching Units for Gifted Education, 1994) suggests that products "... should involve transformations or original thinking, and should involve real problems presented to real audiences" (p. 1).

One of the most basic needs of gifted learners is knowing that they have a psychologically safe learning environment in which to experiment with new ideas and modes of expression without the fear of ridicule, failure, or rejection. Maker (as cited in Thematic Teaching Units for Gifted Education, 1994) recommends that the learning environment ". . . should be student-centered, open, accepting, and complex. It should encourage independence and allow for high, purposeful mobility both inside and outside the classroom" (p. 1).

It is essential at this point to meld Maker's ideas with Borland's concept of defensibility which is achieved by providing what is educationally right for the gifted and talented. If one approaches identification not as labeling, but rather as the process of addressing the discrepancy between what the regular curriculum provides and where the child is in his/her learning, defensibility is a less thorny issue. One of the most important guidelines is to base defensible qualitatively differentiated curriculum for the gifted/talented in sound curriculum design practices.

This includes creating what Borland would call a "true curriculum," the elements of which are (a) a systematic study of a body of knowledge, (b) the determination of what basic knowledge (content) is necessary to learn, (c) a logically structured scope and sequence (Borland, 1989), (d) assurance that individuals will be learning what they would not learn in the regular classroom, and (e) carefully planned articulation with core curriculum. The curriculum work of Dr. Joyce VanTassel-Baska (1993) would seem to point to the need for a different curriculum for gifted and talented learners, one based on higher level curriculum skills and more advanced content than what is established for typical learners. These aspects support Maker's premises, help to define curriculum as defensible qualitatively differentiated, and may be identified by the criteria established in the rubric.

#### The Rubric Explained

The rubric is made up of four parts. Any one of the four areas (content, process, product, learning environment) may be modified, changes may occur in combination, or all four aspects of the curriculum may be differentiated. It is up to the teacher/facilitator to discern the most appropriate modifications for any given unit or learning experience. The teacher/facilitator who applies this instrument may choose to differentiate content if he/she determines that the learner has already mastered the material. He/she may differentiate in the area of process if learners require a more complex interaction with the subject matter. Product may be a singular area of differentiation if the teacher/facilitator determines that the learner must demonstrate interaction with the content in a more sophisticated way. Finally, the teacher/facilitator may decide that learning environment is the most crucial aspect of differentiation for a given unit or experience and that the removal of time and space constraints will best meet learner needs. On the other hand, he/she may ascertain that, for a selected unit, the differentiation of a combination of areas (e.g., process and product, or content and product) would best meet the needs of the gifted and talented learners. Further, that same teacher/facilitator may decide that all four areas of the curriculum must be differentiated. This conscious attention to differentiation of one or all of the areas is an essential consideration because it becomes a way not only to differentiate the curriculum for gifted and talented learners in general, but to individualize it to suit specific learners' needs as well. Once the areas to be differentiated have been selected, the rubric exemplars for those areas may be used as guidelines in unit development; or an existing unit may be measured against the rubric to determine the extent to which it is defensible gualitatively differentiated curriculum relative to content, process, product, and/or learning environment.

#### The Rubric Applied

To understand the use of the rubric, a demonstration of its application is appropriate. Space limitations prohibit the application of the entire instrument; however, the application of a few exemplars from each of the four sections (content, process, product, and learning environment) should leave the reader with an understanding of how the rubric is meant to be used as a curriculum design tool. The scenario which follows considers several of the rubric exemplars from each of the four areas and demonstrates how they may be applied to the development of the described project.

Consider the gifted education specialist who is approached by the seventh grade core teachers (science, health, math, English, and social studies) in a middle school. This group has decided to modify what was previously a paired health and science disease project so that it will become an interdisciplinary portfolio project to be completed by all learners in a class of approximately 175. The goal of the project is to create an interdisciplinary portfolio centered around a disease/affliction/genetic condition. Examples of topics researched include hemophilia, stroke, cleft lip/palate, and sudden infant death syndrome. All core teachers will be involved in the portfolio project, and all learners are experienced in the portfolio process. In their English classes, learners will practice paraphrasing and notetaking and will learn correct bibliography format skills. In mathematics classes they will encounter activities dealing with costs of treatment, medication, and insurance. The social studies teacher will ask learners to examine the historical perspectives of the maladies; and in science and health classes, learners will deal with the physiological and psychological ramifications of their selected topics.

The role of the gifted and talented specialist is to develop a separate project for the eight individuals in this class who have been identified for gifted and talented services. The core teachers have indicated that they would like this project to be technology-oriented and focus, at least in part, on the use of technology as a presentational tool. It must adhere to the same one-month time frame as the project undertaken by those completing the regular assignment. This differentiated project will achieve the same result, an interdisciplinary disease portfolio, but will appropriately challenge the high ability learners, ask them to encounter more complex content, and result in a more sophisticated product via more complex processes. The four application sections which follow allow the reader to follow the thoughts of the gifted and talented specialist as he/she develops the disease portfolio unit requested by the core teachers.

#### Content Exemplars Applied

The first step is to identify those curricular objectives which the project is designed to meet in each of the core areas as well as those student outcomes identified for gifted and talented learners. Exemplar eight in the content section (Figure 1) describes defensible qualitatively differentiated curriculum as being "... articulated with core curriculum." This attention to core objectives helps to ensure that this experience is not fragmented and ancillary to the core curriculum. The next step might be to ascertain a broad theme, concept, or theory with which to associate the unit and learning experiences. "Quality of Life" would seem to meet the theme requirement identified in exemplar one under content. As the specialist considers further development of requirements for the portfolio, he/she may consider exemplar seven which says that a unit which is defensible qualitatively differentiated curriculum "... consistently takes the learner beyond experiences in the regular classroom." A decision to have learners create electronic portfolios using Microsoft PowerPoint, is the first step in meeting that criterion. An additional expectation that learners will research in a local medical school library and locate

their own experts to interview, exemplifies the presentation of opportunities beyond those in the regular classroom.

#### Process Exemplars Applied

Use of the process section of the rubric in the development of the unit might focus on exemplars nine, five, and three (Figure 2). Number nine is the first which the specialist might consider, for he/she has decided that the learners will be allowed to choose their own topics. Exemplar five suggests that it is important that the "experiences and activities encourage frequent interaction between learners." In recognition of this fact, and because he/she realizes that high ability learners need interaction with ability peers, the specialist will allow the learners to pair up for the project. No group grade will be given, so individual accountability within the group process will be evident as will the ability for partners to function cooperatively. The final exemplar under consideration in the process section addresses the importance of the learners "... being active participants in evaluating the appropriateness of facts, data, information, and sources to the content and purposes of the unit." As part of the project, learners will be asked to keep a bibliography. The evaluation occurs when learners are asked to select the most valuable resource they encountered and, conversely, to identify one which they did not use. In a portfolio reflection they will discuss why they made each decision and what criteria were the basis for each choice. In addition, the creation of the electronic portfolio will necessitate careful decisionmaking regarding what information is the most important and relevant and how it may be most concisely presented.

#### Product Exemplars Applied

Since there are only four exemplars in the product area, all will be discussed (Figure 3). The final products for this project, the electronic portfolio, a computergenerated informational pamphlet, a word-processed reflective journal, and graphs/charts created using a spreadsheet, are all open-ended in nature. This will allow learners the room they need to create original, detailed work. Because the time is short, just about one month, original research, though possible, is not practical. This means that the product will potentially be original in presentation, but perhaps not with regard to content. Since one of the purposes of the project is to help learners use technology as a presentational tool, they will experience many applications. This addresses exemplars two and three which state that learners are able to "... choose the product representation most appropriate to a topic" and that they "... are asked to develop an extensive product types repertoire." The vast possibilities existing within the PowerPoint and Microsoft Publisher applications require the learner to become proficient with the software in order to choose the most appropriate layout and representation of information in the final products. Finally, involving the learners in the development of a rubric to assess the products addresses the last product exemplar regarding provisions for self-evaluation and audience evaluation. The showcase portfolios developed by all students could be shared at a Health Fair for fifth graders. Those students could evaluate the electronic portfolios; however, the specialist might decide to invite to the Health Fair those individuals whom the learners interviewed for their portfolios. Those specialists could conference with the learners and offer their comments regarding final products.

#### Learning Environment Exemplars Applied

As the specialist considers the learning environment necessary for the successful completion of this project, he/she realizes that an open, accepting environment (exemplar two) will be critical to learner success (Figure 4). Most of the learners are unfamiliar with the computer applications, so the specialist will provide direct instruction and not only allow learners to experiment, but encourage it as well. Because the learners were allowed to choose their own topics and have been presented with open-ended products, their own interests and abilities can drive much of the unit. Therefore, it is both differentiated for the gifted and talented population and individualized to meet the specific needs of each learner. The gifted and talented specialist knows the importance of providing learners with exposure to rigorous, rich, and meaningful content when he/she makes arrangements for research in the medical school library. This is one way to give learners "... access to various and sophisticated materials and resources." The final exemplar in this area is concerned with learner mobility. Because seventh graders do not drive, leaving school is not normally a consideration. However, if parents wish to take their child to an interview or to conduct research, that certainly is allowed. The specialist provides mobility by taking the whole group or smaller sub-groups on field trips which are relevant to the project. The learners are also given the freedom to make telephone calls, access the Internet, and send e mail as needed and to move between the classroom, the library, and other teachers' rooms as necessary.

On the whole, the atmosphere created by this specialist is one of trust, acceptance, and high expectations. Through this defensible qualitatively

differentiated experience, learners will rise to the challenge and encounter academic rigor, via advanced processes, to create sophisticated products, in a psychologically safe environment.

#### Strengths of the Rubric

A looming question would certainly be, "Why should I bother with such an instrument?" Its strengths are many. First of all, it provides a picture of what curriculum for the gifted and talented needs to look like. In making that image clear, the rubric enables both a gifted education specialist and a regular classroom teacher to create defensible qualitatively differentiated curriculum on a consistent basis. Learners benefit because their needs are systematically met, both in a gifted and talented resource room and in the regular classroom where they spend so much of their time.

A second strength of the rubric is that it is applicable to all subject areas. The exemplars are not content-specific; therefore, modification of the instrument to suit the purposes of a given subject area is not necessary.

A further strength is the versatility of the instrument. It allows a teacher to focus on one area, content, process, product, or learning environment, in which to differentiate curriculum; or all four areas may be modified within the same unit. The ability to focus on limited areas makes the differentiation task more manageable for a beginner to the differentiation scene. Another aspect of flexibility is that the rubric may be used in one of two ways. The first is as a guide when developing a unit for gifted and talented learners. With this rubric at his/her side during the curriculum design process, the teacher/facilitator may employ the exemplars in the rubric as a reflective yardstick against which to measure the progression of curriculum development. It is then likely that he/she will be better equipped to recognize that adjustments need to be made when a given step falls short of the criterion. A second option is to use the rubric to assess the extent to which an existing unit meets the criteria for defensible qualitatively differentiated curriculum. It may only be necessary to revise portions of the unit, or the evaluation may result in discarding that piece of the curriculum and beginning again.

Finally, the rubric ensures that curriculum is developed with purposeful attention to gifted and talented learners' needs. It states those needs clearly and explicitly in terms of curriculum and learning experiences. As noted previously, many teachers do not differentiate for the high ability learners because they do not know where to begin or how the needs of these learners differ from the norm. The rubric assists in clarifying those points.

#### Weaknesses of the Rubric

The instrument presented here is not a panacea for the curriculum and programming problems related to serving gifted and talented learners. Certainly, it does not address all possibilities for differentiation. There are other options including, for example, acceleration, curriculum compacting, early entrance into college, concurrent enrollment, and in-depth independent study. A teacher/facilitator's determination that content, process, product, and/or learning environment modifications are the most appropriate and defensible means of qualitatively differentiating curriculum for the gifted and talented learner must be based in a careful diagnosis of learner needs. The rubric presented in this article does not give the regular classroom teacher or the gifted and talented specialist license to presume that he/she now holds the answer for every gifted and talented learner in every classroom and every situation. Each learner must be considered individually and appropriate decisions made for him/her based on a careful assessment of needs.

In what may be considered both a strength and a weakness, the rubric as presented may not be a good fit for every user. The strength lies in its affability to change. If so inclined, one may use the basic premise to create a rubric based on the work of another expert or to develop one which is far more eclectic in its composition. On the other hand, if one is not inclined to make necessary changes and uses the rubric in a situation where it does not represent the best choice, the results will be skewed and inaccurate; and gifted and talented learners will be less likely to receive the curriculum most "defensible" for them.

A final weakness may be that the teacher who does not have a strong background in curriculum development will find the instrument difficult to use. That lack of background may mean that the rubric is, at worst, unintelligible "gibberish" and, at best, cumbersome and time-consuming to use. A solution is to provide training in the application of the rubric for all intended users and to monitor both the stated and the delivered curricula in terms of the exemplars.

#### Conclusion

As educators accept the ethnic and cultural diversity in their classrooms, they face the irrefutable reality that learners are different from one another in multitudinous ways. They do not eat the same foods in the same quantities, they do not play the same games at the same level of skill, and those who are the same age do

not all wear the same sized clothing. Not all have the same hair color, the same age to height proportions, or the same likes and dislikes. If they are so different in their physical attributes and needs, it would seem to follow logically that they are different in their cognitive and learning needs as well. As logical as it may seem, this a point not widely accepted.

"Education in this country is a mass movement . . . seeking to instruct and prepare virtually all youngsters for adult roles in society. In the name of efficiency, curriculum writers and teachers develop one curriculum per grade level, one lesson plan per class, and define success by one measure. As long as this happens and high ability kids don't struggle, excellence <u>won't</u> be possible." (Tomlinson, 1995, p. 8)

What, then, can be done to ensure that gifted and talented learners "struggle"? Quite simply, they need to be provided with curriculum which has been thoughtfully and carefully constructed specifically for them. In other words, it must be defensible and qualitatively differentiated. In response to <u>National Excellence: A Case for</u> <u>Developing America's Talent</u>, Patricia Bruce Mitchell of the National Alliance of Business (1994) says that in the schools we seek, the students with high ability will

... experience challenging work which engages and instructs so that children will learn to use their minds well . . . move at their own pace ... receive the special attention of all educators, and are not the sole responsibility of special educators . . . not have to compete with the less able for resources . . . [realize that] achieving success for all students is not equated with achieving the same results . . . be challenged to go well beyond age level norms . . . experience the school stretching to meet them at their level . . . [find that] the school does not pull them back to a preset level based on age or normative standards . . . not have their intellectual abilities seen by students or teachers as being an embarrassment or a liability. (p. 63)

A careful comparison of these attributes and the Rubric for Assessing Defensible Qualitatively Differentiated Curriculum will lead one to the realization that the rubric may serve as a roadmap to the "there" toward which visionary educators journey.

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#### Figure Captions

Figure 1. Rubric Assessment of Defensible Qualitatively Differentiated Curriculum for Content.

Figure 2. Rubric Assessment of Defensible Qualitatively Differentiated Curriculum for Process.

Figure 3. Rubric Assessment of Defensible Qualitatively Differentiated Curriculum for Product.

Figure 4. Rubric Assessment of Defensible Qualitatively Differentiated Curriculum for Learning Environment.

	Defensible Qualitatively Differentiated	Qualitatively Differentiated	Perhaps Differentiated; Not Qualitatively
1.	Unit is easily associated w/ a broad theme, concept, or theory.	Theme is identified but not all activities & exper- iences relate to it.	Theme is not apparent
2.	Experiences w/in unit re- quire learners to apply facts, knowledge, etc in meaningful ways to theme, concept, or theory.	Application to theme occurs but is not relevant or appropriate.	Little application of knowledge to theme.
3.	Learners demonstrate transfer of ideas across disciplines.	Learners manipulate ideas only w/in the discipline.	Ideas remain discipline specific and no transfer or manipulation occurs.
4.	Unit contains experiences which are related to broad concept or theme and con- tribute to learner understand- ing and internalization of theme.	Unit contains some experiences in which relationship to theme is unclear or non- existent.	Unit experiences are fragmented and unrelated.
5.	Learning experience represents consistent but appropriate challenge.	Learner is challenged on occasion.	Unit represents little, if any, challenge for learner.
6.	Unit requires learner to inte- grate multiple concepts and/or disciplines.	Multiple concepts and/ or disciplines presented but no integration required.	Unit limited to one concept and/or discipline.
7.	Unit consistently takes the learner beyond experiences in the regular classroom.	Some overlap with experiences in regular classroom	Unit represents few significant differences from regular class- room experiences.
8.	Unit is articulated w/ core curriculum.	Unit has vague or weak connections to core curriculum.	Unit is taught in isolation from core curriculum.
9.	Unit provides purposeful opportunities for learner to study creative & productive individuals & to relate their characteristics to the learner's own life.	Occasional opportunities for study of people.	Few, if any opportunities for study of people.
10.	Unit requires learner to use discipline specific methods of inquiry.	Learner is asked to become aware of but not use discipline specific methods of inquiry.	Learner neither learns nor uses discipline specific methods of inquiry.
11.	Learner learns a variety of inquiry techniques and is asked to apply them in appropriate situations.	Learner learns inquiry technique(s) but is not asked to use them appropriately in specific situations.	Learner uses inquiry techniques incorrectly or in inappropriate ways.

	Defensible Qualitatively Differentiated	Qualitatively Differentiated	Perhaps Differentiated; Not Qualitatively
1.	Higher level thought pro- cesses are applied to mean- ingful, rich content.	Thinking skills are taught in isolation.	Content is trivial and does not lend itself to higher level thinking.
2.	Learner is required to transform acquired know- ledge to create new ideas and/or products and to apply that knowledge	Minimal transforma- tion is expected. Skills necessary to achieve transformation are weak.	No transformation is required; only a reworking of existing knowledge. to new situations.
3.	Learners are asked to evaluate the appropriate- ness of facts, data, information, and sources to the content and purposes of the unit.	Teacher provides evaluation of appropriateness of facts, data, information, and sources.	There is no evaluation of appropriateness of facts, data, infor- mation, and sources.
4.	Experiences & activities w/in unit are open-ended & divergent in nature. They stimulate independent thinking & investigation on the learner's part.	Experiences & activities are a mixture of mostly convergent w/ some divergent. Teacher suggestions are the basis for further thinking & investigation.	Experiences & activities are, convergent, closed, & "dead end" in nature.
5.	Experiences & activities encourage frequent interaction between students.	Occasional opportunities for interaction are provided.	Minimal interaction is required or encour- aged. Occurs by chance rather than design.
6.	Experiences & activities frequently allow for learner choice in areas of interest.	Experiences & activities occasionally allow for learner choice.	Experiences & activities rarely, if ever, allow for learner choice.
7.	Experiences & activities require the use of inductive reasoning to discover patterns, ideas, & underlying principles.	Experiences & activities require occasional use of inductive reasoning perhaps resulting in the discovery of patterns, ideas, & underlying principles.	Experiences & activities rely mostly on the use of deductive reasoning.
8.	Experience requires the learner to use higher level thinking skills to reach conclusions & then to explain their reasoning.	Experience requires that the learner use higher level thinking skills to reach conclusions but does not ask them to explain reasoning.	Activities & experiences rarely ask the learner to come to conclusions based on higher level thinking.
9.	Learners are given freedom to choose topics.	Topics are a mixture of learner & teacher selected.	Topics are teacher- selected.
10.	Learners are given freedom to choose learning exper- iences.	Learning experiences are a mixture of learner & teacher selected.	Learning experiences are entirely teacher selected.

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	Defensible Qualitatively Differentiated	Qualitatively Differentiated	Perhaps Differentiated; Not Qualitatively
1.	Product is original & highly detailed.	Product is highly detailed but not onginal.	Product lacks detail & is paraphrase of other's work.
2.	Learner acquires skills necessary to choose product representation most appropriate to topic.	Learner choice of product representation is by chance rather than design.	Learner is unable to select appropriate product type; relies on teacher choice.
3.	Learner is asked to develop an extensive product types repertoire.	Experience provides occasional opportunities for product variety.	Experience does not allow for product variety.
4.	Experience includes provisions for product self-evaluation and evaluation by an aud- ience chosen by the learner and one for whom product was intended.	Experience asks that only one type of evaluation (self- or learner-selected audience) be completed.	Product directed toward and evaluated only by teacher.

	Defensible Qualitatively Differentiated	Qualitatively Differentiated	Perhaps Differentiated; Not Qualitatively
1.	Experiences & activities reflect learner interests & ideas.	Experiences & activities are a combination of learner & teacher directed.	Teacher chooses all experiences & activities.
2.	Atmosphere encourages expression of new ideas, acceptance of diversity, and exploration.	New ideas, diversity, or exploration are accepted but not encouraged.	Atmosphere is one of non-acceptance of the new and unfamiliar.
3.	Learners have access to various and sophisticated materials and resources.	Materials are sophisticated but limited in scope & type.	Materials are out- dated and intellectually non- challenging.
4.	Groupings are fluid and are guided by situation & learner choice.	Groupings are fluid but are largely teacher- determined.	Groupings are rigid, static, and teacher- determined.
5.	Groupings approximate real- life situations.	Groupings are contrived but show some correlation to real-life.	Groupings are in no way reflective of real-life situations.
6.	Learners are allowed to move in & out of the classroom & building as needed to meet learning goals.	Learners are provided with set & predetermined times during which they are mobile.	Learners are confined to the classroom & building for designated time periods.

#### Biography

Mary Meineke Schmidt is a gifted education specialist in the Norwalk, Iowa, Community School District and is the teacher/coordinator for grades 6-12 gifted and talented programming in that district.

#### Biography

Mary Meineke Schmidt received a BA in speech and English from Iowa State University in 1977 and an MA in Education of the Gifted from the University of Northern Iowa in 1996. She taught 8th-12th grade English/language arts for fifteen years and is currently the teacher/coordinator for grades 6-12 gifted and talented programming in the Norwalk, Iowa, Community School District.

### Appendix

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## Author's Guidelines Journal of Secondary Gifted Education

The Journal of Secondary Gifted Education is a peer-reviewed journal. Authors interested in being published in JSGE should submit manuscripts or queries to the journal's editor: Tracy L. Cross, Editor, Journal of Secondary Gifted Education, Department of Educational Psychology, Teachers College, Ball State University, Muncie, IN 47306; Phone (317) 285-8500; FAX (317) 285-5455.

The journal publishes manuscripts that are based on current or new research in the field of secondary gifted education, or on actual classroom practice of methods employed in the education of gifted secondary students. Manuscripts should be based on research by the author or build upon research conducted by others.

Throughout the year, various topical issues may be covered in special issues of the journal. Authors chosen for one of these issues will be notified after acceptance. Since these issues cover one specific topic in-depth, authors may be asked to revise their manuscripts with an emphasis on one aspect of their research. Note: The editorial staff of *JSGE* interprets secondary education to include the late elementary grades as well as early college experiences.

Publication decisions require four months to complete. Authors are notified by mail as to the status of their manuscripts. *JSGE* does not return manuscripts, disks, graphs, or photos. Publication is usually within one year of acceptance. However, publication can sometimes take up to 18 months.

Authors are encouraged to follow the guidelines listed to the right. Failure to follow these guidelines may result in the return of the manuscript or a longer time in the review process.

## **Manuscript formats and guidelines**

Manuscripts should not exceed 35 pages including all references, figures, and tables. Authors should send four copies of each manuscript. They should be typed, double-spaced on one side of the page only. Each page of one copy should be labeled with the page number and the author's name in the upper right-hand corner. The other three copies should include a cover page with the author's information, but have no name on the subsequent pages. They should be sent on letter-bond paper or heavier (no onion-skin or erasable bond paper). Manuscripts should include at least a one-inch margin around the page. A cover page must be enclosed including the author's name, academic credentials, title, school and program affiliation, and home and work addresses and phone numbers. Enclose a brief biography.

An abstract and a complete list of works cited must accompany all manuscripts. Please use Publication

Manual of the American Psychological Association (4th edition) for documentation and bibliographical information. References should be included on a separate sheet at the end of the manuscript.

Manuscripts should be submitted on 3.5-inch computer disk in either MS Word, MS Works, Word Perfect, MacWrite II, or Clarisworks for the Macintosh. The disk must be labeled with the author's name, address, and phone number, the title of the manuscript, and the word processing software used. Please include four hard copies also, even when submitting a manuscript on disk.

The journal's editor strongly suggests authors use non-sexist language.

Graphs and illustrations must include complete attribution. They should be as large as possible. All graphs will be reproduced by the *JSGE* staff prior to publication. Illustrations must be in black ink on white paper.





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