Teachers’ Perceptions of the Federal Definition of Gifted and Talented

Bruce Battles
Western Kentucky University

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Keywords
Gifted and talented, teacher perception, federal definition, identification, misidentification, intellectually gifted

Disciplines
Educational Methods | Gifted Education | Special Education and Teaching
Teachers' Perceptions of the Federal Definition of Gifted and Talented

Bruce Battles, Assistant Professor
Western Kentucky University

Abstract

The Tennessee state law as it refers to the gifted and talented is not as specific in the characteristics found in the Federal definition. The purpose of this study was to find if the perceptions of the local teachers agreed with the Federal characteristics. A survey of 80 middle Tennessee teachers was completed. The total number of schools surveyed was 4 public and one private school. The survey was rated using a 5 point Linker scale. The results were analyzed using the SPSS statistical program. A paired samples test was used in the data analysis. It was found that while the majority of the teachers stated that they knew the law, few agreed on the characteristics from the Federal definition.

The requirement for any program to be successful is that all parties involved in the program must have a clear and precise role in such program. Without these formally stated guidelines the overall effectiveness of the mission is compromised. The lack of a solid knowledge base in the understanding and implementation of how gifted and talented students are identified has an effect on not only the number of students misidentified but also on the effectiveness of the very program that it strives to serve. The identification of the gifted and talented student today is at best a shot in the dark. The national average is around 3%; however, in other countries the rate is as high as 10%. While on the surface the difference of 7% seems small, when you multiply 7% times the total student population of the United Sates, you find a very large number of students that are “lost” in the system. One of the reasons for this confusion is the inability of educators to clearly understand what is gifted and talented. Many theorists have set forth guidelines and concepts for the identification of the gifted and talented student, however the lack of a clear and precise definition is one of the factors that has and continues to prevent the identification of student to admittance to these programs. Each state has the right to define what it considers gifted and talented, for example some states only base their criteria on intelligence scores on achievement tests, while other states use a checklist of specific criteria to measure the entire student. This study used the Federal definition of gifted and talented as set forth by P.L. 100-297, Sec. 4103 The term gifted and talented students means children and youth who give evidence of high performance capability in areas such as intellectual, creative, artistic, or leadership capacity, or in specific academic fields, and who require services or activities not ordinarily provided by the school in order to fully develop such capabilities. Because this study was conducted in a single state
(Tennessee) the participants of this study would have been familiar with the local definition. The state of Tennessee defines gifted and talented as: "Intellectually gifted means a child whose intellectual abilities and potential for achievement are so outstanding that special provisions are required to meet the child's educational needs." TENN COMP. R & REGS. 0520-1-9-01. The Federal definition of gifted and talented is based on many factors; these include IQ scores, psycho-motor skills, leadership ability, creativity, motivation, sense of humor, potential, artistic ability, visual and performance ability, and an advanced mastery of the English language. It is therefore incumbent on educators to not only know the law but to use these guidelines in the referral process when engaged in the process of identifying the gifted and talented student. The purpose of this research is to find out what are the teachers perceptions of the Federal definition of gifted and talented students as stated in the Federal guidelines for referral to a gifted and talented program. The factors believed to have an effect on these perceptions are (a) the number of years taught, (b) the level of education, (c) the understanding of the laws in regards to gifted and talented, and (d) the experience of having taught a gifted and talented student.

Q1 what is the relationship between the numbers of years taught in the classroom and the teacher's perception of the Federal definition of gifted and talented?

Q2 what is the relationship between the level of education of the teacher and the perception of the Federal definition of gifted and talented?

Q3 what is the relationship between the understanding of the current laws in regards to gifted and talented and the teacher's perceptions of these laws?

Q4 what is the relationship between having taught the gifted and talented student and the perceptions of the Federal Law for gifted and talented students?

Q5 is there a difference in the perceptions of the characteristics of the Federal law as it pertains to gifted and talented?

Research hypothesis 1: There exists a statistically significant relationship between the number of years taught in the classroom and the teacher's perception of the Federal definition of gifted and talented.

Research hypothesis 2: There exists a statistically significant relationship between the level of education of the teacher and the perception of the Federal definition of gifted and talented.

Research hypothesis 3: There exists a statistically significant relationship between the understanding of the current law in regards to gifted and talented and the teacher's perception of the of the federal definition of gifted and talented.

Research hypothesis 4: There exists a statistically significant relationship between having taught a student who was classified as gifted and talented and the teacher's perception of the Federal definition of gifted and talented.

Research hypothesis 5: There exits a difference in the perception of the components of the Federal definition of gifted and talented as perceived by teachers. The significance of this study is to probe the knowledge base (in relation to the Federal definition of gifted and talented) of the people who by their positions determine
who is referred to the gifted and talented programs. It is noted by Jenkins-Friedman (1984) that only around 100 universities offer course work or a degree in gifted and talented identification. This lack of a sufficient knowledge base on the characteristics of the gifted is not limited to the United States, in Australia according to the Gifted Education Research, Resource and Information Center (GERRIC) it was found the considerable majority of teachers currently employed in Australian schools would have had no instruction, or at best less than one hour of instruction, in their pre-service training, on how to identify and respond to gifted and talented students. ("Training Teachers", 2001). Professor K. B. Start in his testimony to the Senate Select Committee stated ("Training Teachers", 2001) that this lack of knowledge resulted in teachers leaving the universities not only ill-equipped to cope with the needs of the gifted and talented student but also with feeling of professional inadequacy and resentment that manifested itself in negative attitudes towards the appropriate provisions for gifted and talented students. These attitudes appear to be more prevalent in regular education teachers as opposed than those who due to their specific fields have received more training in the identification process (Jacobs, 1975; Leyser & Abrams, 1982; Panda and Bartel, 1972). The number of years teaching and the familiarity with the gifted and talented student has been found to be related to the teacher’s attitude towards the gifted and talented students (Rubenzer and Twait, 1979). This lack of training combined with the vastly different definitions from state to state has resulted in a quagmire of laws that are at best a small safety net for the identification of the gifted and talented. The history of the Federal definition of gifted and talented and its impact on the state laws has been and continues to be a point of disagreement (Karnes and Stephens, 2000). This legal issue has and continues to be resolved in the courts system under such banners as civil rights issues and the redefining of states vs. Federal constitutional rights and statutes (Stephens, 2000). Education in the United States is controlled and regulated by the each individual state government; however with the influx of Federal monies come the required regulations that such monies can only be received with Federal guidelines being met. Therefore the tide of education reform in the gifted and talented community looks toward the Federal definition of gifted and talented as a benchmark from which to build their laws upon.

Method

Participants
The survey was administered to 80 teachers ranging from elementary, middle school, and high school levels. To assure that these findings were valid in all areas of education the survey was administered to four public and one private parochial school. Three of the public schools (elementary, middle and high school) are located in a rural county in the middle Tennessee region. The remaining public school (middle) and the private parochial school (elementary and middle) are located in a county less than 35 mile from a major urban city in the middle Tennessee region. The total student population served by these teachers is estimated to be around fifteen hundred students. The total number of teachers
employed by these five schools is ninety three; the total of surveys completed and
returned was eighty. The participants were 25% male and 75% female. The ages of the
participants ranged from under 25 years old 13.0%, 26-30 years 15.0%, 31-35 years
13.8%, 36-40 years 10.0%, 41-45 years 15.0%, 45-50 years 3.8%, 51-55 years
11.3%, 56-60 years 10.0%, and over 60 years old 5.0%. The educational levels of
the participants were: Bachelor Degree 42.5%, Masters Degree 37.5%, Masters
Degree plus 30 15.0%, Doctoral Degree 3.8%, and one case missing. The length of
teaching in the classroom was found to be: less than five years 31.3%, 6-10 years
17.5%, 11-15 years 15.0%, 16-20 years 7.5%, 21-25 years 8.8%, 26-30 years 6.3%,
and over 30 years 13.8%. The majority of teacher surveyed felt that they did know the
law as it applies to gifted and talented: 41% yes, 29% no, 11.3% didn’t know, and 1.3%
missing.

Apparatus
To conduct this research a 5 point Likert scale survey was used. A total of 24
questions were asked, ranging from demographic data (age, education level, and
number of years taught) to specific questions on personal opinions of the various
characteristics of the gifted and talented student.

Procedure
The data was analyzed using the Statistical Program for Social Sciences (SPSS). A
reliability coefficient (alpha = .824) was found in relation to the specific
characteristics of the Federal definition as listed in the survey. These characteristics
were then compared to the various factors listed (age, number of years taught,
knowledge of current laws, and educational level) to see if there was a statistically
significant difference. A paired samples t test was used to compare the data. To check
for a difference in the perception of teachers about the specific characteristics of the
Federal definition of gifted and talented a comparison of mean averages was used.

Results
Null hypothesis 1: There is no statistically significant relationship between the number
of years taught in the classroom and the teacher’s perception of the Federal
definition of gifted and talented.

Table 1
Number of Years Teaching and Federal
Definition Characteristics

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>IQ</td>
<td>.61</td>
<td>79</td>
</tr>
<tr>
<td>Creativity</td>
<td>.83</td>
<td>79</td>
</tr>
<tr>
<td>Leadership</td>
<td>.35</td>
<td>79</td>
</tr>
<tr>
<td>Psychomotor</td>
<td>.27</td>
<td>79</td>
</tr>
</tbody>
</table>

- 22 -
| Sense of Humor | .300 |
| 2.360 | -1.042 |
| Motivation | .44 |
| 2.505 | 1.562 |
| Potential | .17 |
| 2.396 | .653 |
| Mastery of English | .25 |
| 2.468 | .906 |
| Artistic | .58 |
| 2.313 | 2.238 |
| Visual Performance | .24 |
| 2.372 | .896 |

* Significant at .05 level

There is a statistically significant difference in the number of years taught and the teachers perception of the Federal definition of gifted and talented. In the areas of IQ (p=.019), Creativity (p=.001) and in Artistic (p=.028) Therefore the null is not retained.

Null hypothesis 2: There is no statistically significant relationship between the level of education of the teacher and the perception of the Federal definition of gifted and talented.

Table 2

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>IQ</td>
<td>1.346</td>
<td>-5.182</td>
</tr>
<tr>
<td>Creativity</td>
<td>1.082</td>
<td>-4.678</td>
</tr>
<tr>
<td>Leadership</td>
<td>1.120</td>
<td>-8.340</td>
</tr>
<tr>
<td>Psychomotor</td>
<td>1.170</td>
<td>-8.560</td>
</tr>
<tr>
<td>Sense of Humor</td>
<td>1.204</td>
<td>-12.427</td>
</tr>
<tr>
<td>Motivation</td>
<td>1.40</td>
<td>-6.107</td>
</tr>
<tr>
<td>Potential</td>
<td>1.219</td>
<td>-8.953</td>
</tr>
</tbody>
</table>
There is a statistically significant relationship between the level of education and the perception of the Federal definition of gifted and talented. In the area of IQ (p=.006) therefore the null is not retained. It should be noted that in all other areas there was not a statistically significant difference in level of education and the perceptions of the Federal definition of gifted and talented.

Null hypothesis 3: There is no statistically significant relationship between the understanding of the current law in regards to gifted and talented and the teacher’s perception of the federal definition of gifted and talented.

### Table 3
Understanding of the law and Federal Definition Characteristics

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>IQ</td>
<td>.940</td>
<td>-9.009</td>
<td>78</td>
<td></td>
</tr>
<tr>
<td>.046*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Significant at .05 level

There is a statistically significant difference between the understanding of the law and the Federal definition of the gifted and talented. In the area of IQ (p=.046) therefore
the null is not retained. However only in the area of IQ is there a statistically significant difference. If one were to exclude IQ then the null would have been retained.

Null hypothesis 4: There is no statistically significant relationship between having taught the gifted and talented student and the perceptions of the Federal Law for gifted and talented students?

Table 4
Having taught gifted before and Federal Definition Characteristics

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>IQ</td>
<td>-.96</td>
<td>-9.6</td>
<td>1.018</td>
<td>10.758</td>
<td>79</td>
</tr>
<tr>
<td>Creativity</td>
<td>-.76</td>
<td>-9.422</td>
<td>.961</td>
<td>-9.422</td>
<td>79</td>
</tr>
<tr>
<td>Leadership</td>
<td>-1.24</td>
<td>-13.060</td>
<td>1.019</td>
<td>-13.060</td>
<td>79</td>
</tr>
<tr>
<td>Psychomotor</td>
<td>-1.32</td>
<td>-14.470</td>
<td>.966</td>
<td>-14.470</td>
<td>79</td>
</tr>
<tr>
<td>Sense of Humor</td>
<td>-1.86</td>
<td>-17.510</td>
<td>1.079</td>
<td>-17.510</td>
<td>79</td>
</tr>
<tr>
<td>Motivation</td>
<td>-1.14</td>
<td>-11.784</td>
<td>1.063</td>
<td>-11.784</td>
<td>79</td>
</tr>
</tbody>
</table>

Potential         -1.41 | 1.043 | -14.261 | .442 | 79   |
Mastery of English | -1.34| 1.064 | -13.349 | .182 | 79   |
Artistic          -1.05 | 1.049 | -10.830 | .871 | 78   |
Visual Performance 1.60 | 1.026 | -13.945 | .707 | 79   |

There is not a statistically significant difference in having taught a gifted student before and the teachers perceptions of the Federal definition of gifted and talented. Therefore the null is retained (p> than .05 in all cases).

Null hypothesis 5: There is not a difference in the perception of the components of the Federal definition of gifted and talented as perceived by teachers.

Table 5
Federal Definition Characteristics

<table>
<thead>
<tr>
<th>Variables</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>Neutral</td>
</tr>
<tr>
<td>IQ</td>
<td></td>
</tr>
<tr>
<td>48.8%</td>
<td>30.0%</td>
</tr>
<tr>
<td>5.0%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.0%</td>
</tr>
<tr>
<td>--------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Creativity</td>
<td>65.0%</td>
</tr>
<tr>
<td>Leadership</td>
<td>1.3%</td>
</tr>
<tr>
<td>Psychomotor</td>
<td>32.5%</td>
</tr>
<tr>
<td>Sense of Humor</td>
<td>33.8%</td>
</tr>
<tr>
<td>Motivation</td>
<td>18.8%</td>
</tr>
<tr>
<td>Potential</td>
<td>10.0%</td>
</tr>
<tr>
<td>Mastery of English</td>
<td>1.3%</td>
</tr>
<tr>
<td>Artistic</td>
<td>32.5%</td>
</tr>
<tr>
<td>Visual Performance</td>
<td>5.0%</td>
</tr>
<tr>
<td></td>
<td>3.8%</td>
</tr>
</tbody>
</table>

In looking at this data the following characteristics are perceived as being gifted and talented by the participants in this survey: IQ, creativity, and artistic ability. (The criteria for this is a score of strongly agree and agree that is greater than 50%).

**Discussion**

The Federal definition of gifted and talented encompasses more characteristics than the state of Tennessee allows. It is not surprising therefore, that teachers in Tennessee do not feel that many of the characteristics of the Federal definition are not applicable to their students. However, given the fact that research tends to indicate that there is more than one area in which a student can be gifted and talented in, the state of Tennessee definition of gifted and talented lags behind the educational research. The majority of the null hypotheses were rejected because of only one or two relationships. It should be noted that over all the majority of teachers in this survey did not agree with the Federal characteristics of gifted and talented. However the majority 51.3% stated they knew the law as it pertains to gifted and talented. This research tends to indicate that until there is a uniform way of defining gifted and talented the confusion of what really is gifted and talented will continue to manifest itself. It further should be noted that the universities that train the new teachers need to have in place a better curriculum that provides more training to allow the new teacher to be better understand the characteristics of the gifted and talented. Some other interesting data did emerge from this study: 65% of the participants were able to correctly identify the percentage of gifted in over all population, 78% strongly agreed or agreed that students who are gifted or talented have higher expectations put on them by parents, teachers, and administration, and 85% responded that gifted and talented students do not have an easier time in school because
of their giftedness. One limitation of this research is the lack of current research literature in this area. Most of the articles found were from 20 to 30 years ago. As the Federal definition has evolved over time the research has not followed. The research on the gifted and talented student continues in the areas of curriculum and instruction, however until the student is identified he or she can not participate in the program. It is the responsibility of the classroom teacher to become better informed as to the correct procedures to follow when seeking out gifted and talented students.

Reference


Appendix 1
Graphic presentation of frequency data from surveys.

Gender

Years Taught

Age

Level of ed

Appendix 2

Date: __________ Certification area(s): ____________________________ Major: __________

List the county where you teach.

Please circle where you will be teaching: Elementary, Middle, or Secondary School
Setting (ex. Resource, P.E., Art, Music, Guidance, Speech Pathologist, Regular, or other)

Is this your first year teaching? __________

If no, how many years experience do you have? ____ 1-2 ____ 3-4 ____ 5-6 ____ 7+

Please mark your gender: ______ female ______ male

1. Do you expect to have any students with special needs in your classroom? __________
2. If so, how many students do you expect to receive resource assistance? ____
   How many students do you expect to have for inclusion? ____

Please answer the following questions by circling the number based on the following scale:

5 - Strongly agree 2 - Somewhat disagree
4 - Agree 1 - Disagree
3 - Somewhat agree 0 - Strongly disagree

3. I feel highly qualified to meet the educational needs of my special education students.

4. I feel highly qualified to meet the disciplinary needs based upon my student(s) disabilities.

5. The approach to teaching learning disabled students is similar to teaching students who have academic difficulty.

6. I feel highly qualified to refer someone for special education services.

7. A student with mental retardation can graduate from college.

8. A student with a learning disability can graduate from college.

9. I will modify my special needs student’s work only if I am instructed how to do so by the special education teacher.

10. Students with learning disabilities have average to above average IQs.

11. Students with learning disabilities interact with peers, teachers, and parent the same as their other classmates.

12. I feel comfortable referring accommodations for a student with special needs.
13. Improving a student’s self-concept, in most instances, will raise their academic achievement.

14. A student who exhibits behavioral problems in the regular education classroom and stops the educational progress of others should immediately be placed in the resource room.

15. If a student uses a wheelchair, you should place him/her in the back of the room to maximize accessibility.

16. A student with a motor problem will automatically have a learning disability.

17. A student with a vision problem will automatically qualify for special education.

18. A deaf student will academically progress in the regular classroom if they have a cochlear implant (a surgically inserted device that allows a deaf person to hear).

19. All of a special education student’s needs can be fulfilled in the regular classroom.

Please answer the following questions based upon your personal knowledge. This is only a survey. Please provide specific short answers.

1. How many special education classes have you attended? ________ in-services? ________

2. Briefly discuss your understanding of Public Law 94-142. __________________________

3. List some characteristics of ADHD (attention deficit hyperactivity disorder). __________________________

4. If a student is having academic difficulty in your classroom, what should you do first? __________________________
5. If a student is exhibiting a behavioral problem in your classroom, what should you do first?

6. If a student has a motor disability, where should he/she be placed in the classroom?

7. If you expect to have an inclusion classroom what method(s) of communication will you plan to be using with the special education teacher: collaboration, consultation, or both? Whom do you expect to accompany these students (ex. Special Education Teacher, paraprofessional, no one, other)?

8. What information should you be able to find in a student’s IEP?

9. Do you feel as though you were adequately trained to address all aspects of a special education student’s needs (academically, physically, & socially)? (yes or no)

If not, please mark your areas of concern on a scale of 1-5 with greatest concern being 1 and least concerned being 5.

- Teaching methods
- Classroom accommodations
- Socialization with peers
- Physical disabilities
- Visual disabilities
- Auditory disabilities
- Learning disabilities
- Recognition of different disabilities
- Consultation procedures
- Recognition of different disorders
- Proper paraprofessional(s)
10. What troubles you the most about having a student with a disability included in your classroom?

11. Do you wish that you had received additional information on dealing with students who have special needs? If so, what areas do you feel should be focused on (ex. academics, socialization, recognition, etc.)?

12. As a professional educator, will you seek additional information in regards to special needs students or special education (whether through coursework or in-service training)? Please mark the one that applies:
   - None at all
   - Rarely (1 or 2 in-services)
   - To some extent (3 or more in-services)
   - Somewhat (1 or 2 college courses)
   - Extensive (3 or more college courses)

13. According to IDEA, a student is to be educated in the Least Restrictive Environment (LRE). Do you feel that special education students should be mainstreamed into the regular classroom (full inclusion of the student)? Why or why not?
Please write any additional comments in the area below: