Identifying Twice Exceptional Students:
A Toolkit for Success

Mary G. Rizza
William F. Morrison

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Mary G. Rizza
William F. Morrison

Abstract

Students identified as gifted who also display one or more areas of disability remain under-identified both in special and gifted education programs. All too often school personnel do not have the resources necessary to make decisions about this unique group of students commonly called the twice-exceptional. The purpose of this article is to propose a general toolkit for use in identifying students who are twice-exceptional. The toolkit has been designed as an outline of the general issues and offers suggestions for implementation. There are four categories to the toolkit: pre-referral and screening, preliminary intervention, evaluation procedures, and educational planning. Each aspect of the toolkit has been designed to be broad and easily adapted for use in a variety of settings. Chief among the recommendations for successful implementation of this or any other plan is that school personnel in charge of making decisions about students who are twice-exceptional be informed about the nuances of the dual diagnosis. Also important is that personnel from special and gifted education work together to make informed decisions.

Keywords

twice-exceptional, gifted, learning disability, gifted disabled, identification

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SUGGESTED CITATION:
The term twice-exceptional is used to describe a group of students who are gifted and identified with a disability. Twice-exceptional, as a term, is being used because it is general in nature and includes all disability categories. Identification of students who are twice-exceptional remains a problem despite the accumulation of research on the topic (Barton & Starnes, 1989; Baum & Owen, 2003; Brody & Mills, 2004, 1997; Kokot, 2003; Tallent-Runnels & Sigler, 1995). The main issue remains the underrepresentation of students with disabilities in gifted programs (Cline & Schwartz, 1999; Coleman, Gallagher, & Foster, 1994; Johnson, Karnes, & Carr, 1997). In a study of recommended policies, Coleman and Gallagher (1995) found that most states had language regarding identification and encouraged provisions for twice-exceptional students, yet there still remained underrepresentation in programs. This discrepancy is believed to be caused by problems related to communication of policy intent, concern over number of students, availability of adequate resources, and building bridges for special populations. No longer is the question whether these students exist, but how to reconcile that they need two sets of services. All too often decisions about which services to provide are made without considering the possibility of making room in the schedule for both. While it seems logical to think that these students require services that meet both sets of needs, all too often schools define the need for appropriate challenge as remediation rather than enrichment.

The literature is replete with evidence that an increasing number of gifted students may also struggle with learning and behavioral disabilities (Baum & Olenchak, 2002; Neihart, 2000). Identification is also problematic due to misunderstanding by professionals that leads to misdiagnosis (Baldwin & Valle, 1999; Webb, et al., 2005). For example, disorganization is not only a symptom of attention deficit and a specific learning disability, but also of giftedness. Proper identification requires understanding of not only the specific characteristics of each area of exceptionality but also the nuances of a dual diagnosis. Since there is an overlap in behaviors, diagnosis becomes complicated. All too often, the multiple classification causes problems in true understanding of the interaction between the giftedness and disability (Baum & Olenchak, 2002; Lovecky, 2004; Webb et al., 2005). Keeping an open mind is key to combatting the problem of misdiagnosis and allowing for multiple classifications. It is vital that teachers and other school personnel accurately recognize the characteristics for an accurate identification so that an appropriate plan can be drawn up.

Baum and Owen (2003) have identified three categories of twice-exceptional students. The first is comprised of students who are identified first as gifted who later show deficits, next, are students in special education who show evidence of talent in one or more areas and, finally, students whose gifts and disabilities result in seemingly average performance. In addition to showing outstanding ability, Mills and Brody (1999) describe the twice-exceptional as those who also show evidence of a discrepancy between expected and actual achievement, and evidence of a processing deficit. Both definitions include provisions for students to show areas of strength, which is the basis for gifted identification. It is important to remember that twice-exceptional students are those who conform to the definition of giftedness in that they show, or have the potential to show, outstanding performance. Likewise, these students must also demonstrate and qualify for special education services.

The purpose of this article is to propose a general toolkit for use in identifying students who are twice-exceptional. Each aspect of the toolkit has been designed to be broad and easily adapted for use in a variety of settings. The reader should consider this
when reviewing each aspect, and remember that each can be changed to meet the needs of the school or district.

**Toolkit**

The toolkit described next is the result of a collaborative project involving the authors who worked with three school districts to identify a practical plan for identifying the twice-exceptional. The resulting toolkit is a combination of the best practices as outlined in the research literature with current identification options in the state. The toolkit has been designed as an outline of the general issues and offers suggestions for implementation. While it is recommended that any identification plan include these categories, the actual contents should be modified to meet the specific needs of the district or school and more importantly, the population of students being served.

There are four categories to the toolkit: pre-referral and screening, preliminary intervention, evaluation procedures, and educational planning. The intent of the toolkit is to move from one category to the next in an attempt to formulate a plan to address the needs of an individual student. It is expected that the process will be followed from start to finish by a group of informed personnel who will work in concert to design an intervention appropriate for the individual student with respect given to both areas of strength and weaknesses. Each of these categories will be further described in the following paragraphs.

**Pre-Referral and Screening**

As discussed earlier, child-find efforts will be restricted to the three commonly accepted categories of twice-exceptional students:

1. Students first identified as gifted who later show indicators of a specific disability area.
2. Students identified as having a specific learning disability and who also show outstanding talent in one or more areas.
3. Students who may appear average or underachieving because the disability area masks any manifestation of giftedness.

To this end it is important to accept that students in gifted programs may show processing problems consistent with a learning disability or behavior issues related to an attention or emotional problem. Likewise, students in special education programs should be afforded the opportunity to work in areas of strength or interest to best show indicators of talent in specific areas, academic or otherwise. Finding students in category 3 above will prove most difficult because they may not appear on the referral lists of either group. We must also appreciate that there are students who are average and do not require additional services. Having a history with the student will assist in decision making because there will be some disconnect between potential and performance which may only become apparent by looking at the student’s cumulative record. Students who are indeed twice-exceptional and fall into category 3 will have shown potential in the past. Often they have been identified as gifted earlier in their career, yet no longer participate in services because of a drop in motivation or achievement. No matter what the category, when a change in expectations (i.e. achievement) occurs, the existence of twice-exceptionality should be considered.

The intent of the pre-referral process is to attend to the issue that the majority of students who are twice-exceptional will first be identified as a student with a disability or as eligible for gifted services. Therefore, pre-referral may be accomplished during the regular screening procedures used to identify populations of either group. As is usual in
special education referrals, initial screening will be based on classroom performance. When looking for twice-exceptional students within the special education population, we seek out instances of outstanding performance that can be used to justify a second look by the gifted education team. Similarly, there may be students in the gifted program who are having difficulty with tasks that warrant further analysis for a possible learning disability. Teachers, therefore, are often the first line of defense in these child-find efforts. It is highly recommended that even small deviations in performance be monitored closely and followed over time to determine if it is indicative of a pattern of behavior. Above all, teachers need to be proactive in making recommendations for further evaluation of students who may be identified as twice-exceptional. The next step in this process is to test out such a hypothesis with a preliminary intervention.

**Preliminary Intervention**

Most schools have a procedure in place for referrals to special education, often called a student or individual assistance team. The team is assembled to determine the next course of action for the student being referred. In the case of the twice-exceptional, and because the issues cross categories, this new team may be similar in makeup to the group assembled to make the referral. Whenever possible, it is recommended that the team used for twice-exceptional assistance should mirror that used for special education, as established by the district, yet also include gifted specialists. This will insure that proper legal procedures are followed for any special education placement later recommended by the evaluation team and that all those with expertise are able to provide input into the decision.

Since the team will be asked to evaluate student performance in different areas, it should consist of regular, special, and gifted education personnel so that appropriate interventions can be planned that meet the specific needs of the individual under review. As such, the team must be provided with all pertinent information about the student so that action taken on her/his part will be purposeful and relevant. Any persons with information on the student’s performance should be included at whatever level available.

Again, the purpose of this stage in the identification process is to test interventions that will inform the team as to what further evaluations will be necessary. At this point in the process, the assistance team will collect information about the student’s strengths and weaknesses, determine areas that need remediation and those that may be enriched, and form an action plan for the classroom teacher to implement. This is not a new process in special education, the difference however, is that both remediation and enrichment will be provided to the student to determine the impact on achievement or behavior. One imperative that cannot be ignored at this stage is the role taken by the gifted education personnel in the school. The intervention used at this stage should include the gifted teacher who assumes a similar role to that of the special education teacher. If inclusion is the model to be implemented, then the gifted teacher should be working with the regular education teacher either in collaboration or consultation to design a plan that includes enrichment. The results of the intervention should be monitored and adjusted as needed to determine the level of services needed by the student. Often students will be appropriately served at this stage, but district requirements may require formal identification to continue services. In other cases, the intervention may be possible in the classroom for only a short period of time and the teacher may need further support to implement an appropriate plan. In either of these two latter cases, the results of the pre-
liminary intervention stage may be a recommendation for further evaluation.

Evaluation Procedures

If it is determined by the previous stage that further evaluation is required, then district procedures for identification in either special or gifted education should be followed. However, it is essential that in the case of the twice-exceptional student, a multifactor evaluation (MFE) is essential to determine further interventions to be made for the student. While this is the normal procedure for special education, in many states identification for gifted may not be as structured. The MFE, therefore, will insure that all information needed for a proper identification will be made. In the case of the twice-exceptional MFE, it is recommended that both test and authentic assessment techniques be used. The nuances of the dual diagnosis may be lost if only test or grade data is used. Including products and portfolio assessments will insure that strengths and weaknesses are described in authentic ways according to the specific processing techniques used by the student. This is particularly important for students whose areas of talent lie outside the domains covered in the regular curriculum. Conversely, students who are able to utilize memory skills or context clues when reading may elude detection for a learning disability until much later in their school career. Using grade level test prompts may not accurately measure what the student knows or can process. Valuable information, therefore, may be gleaned from examining the cumulative record of a student suspected to be twice-exceptional. Teachers again can be important informants about a specific student’s capacity for learning. Tracking progress over time is an essential tool in identification because of the subtle changes in achievement witnessed by the twice-exceptional.

When test data are used, it is essential that interpreters have advanced knowledge of the nuances of the dual diagnosis. Many twice-exceptional students display an uneven pattern of test performance, even within the same battery of tests. There is no one profile attributed to twice-exceptional students, but there are considerations that can be applied. First and foremost, the test data must be evaluated in terms of specific strengths and weaknesses. The testing used should also evaluate levels of functioning in a variety of processing skills. For example, some students are highly verbal but may not read particularly well. There are also students for whom math is a strength, yet because of a reading issue, they may not show their true potential in math when the task requires reading as in word problems. It is suggested, when evaluating the standardized test scores of the twice-exceptional that subtest scores be considered instead of full scale indices. Subtest scores often reveal more specific information related to strengths and weaknesses because full scale or cluster scores are comprised of discrepant scores. In other words, regression to the mean effects may cause flat or seemingly average scores.

Similarly, the twice-exceptional may show inconsistent patterns or low performance on proficiency or group achievement tests. At times our expectations for student achievement is challenged because of high or low scores. The same caution should be used when evaluating these scores and we should have a clear understanding of what the test measures and what it does not. It is helpful at this juncture for the assessment team to assemble a portfolio of student work to best describe strengths and weaknesses. Such a portfolio should consist of all indicators of ability including, but not limited to, curriculum assessments, student projects, and any other indicators related to their work in class. Each school and district should take time to identify authentic assessment items currently used
by teachers at each level and insure that appropriate evaluation rubrics have been designed.

It is also recommended that parents and community contacts who have direct knowledge of the student be consulted to find further support for potential projects completed outside the realm of school. For many students, the frustration of school interferes with their ability to demonstrate strength areas. By looking at projects completed at home or during extracurricular activities, we can get a clearer view of how the student prefers to work or the level at which s/he is capable of producing work. Twice-exceptional students are characterized by their learning differences and unique learning styles. All too often, these styles are in conflict with the requirements of the classroom. There are instances when students are so concerned with getting work completed that they don’t have time or opportunity to be creative. To get an accurate profile of the student, sometimes we have to look beyond the classroom to find instances of learning that are not always measured by tests.

**Educational Planning**

Educational planning for the twice-exceptional must include discussion of all areas of change (i.e. strengths and weaknesses.) The rules for special education identification are clearly outlined by the law and must include an Individual Education Plan (IEP). Identification of twice-exceptional students must conform to these rules, but must also include discussion of the services to be provided that address the gifted needs of the student. In the best of all situations, the student would meet the requirements of both categories and personnel in both areas would provide services. There are, however, situations where the diagnosis is complicated by the fact that the student’s ability and disability areas mask each other. This will be the case when criteria for both categories are currently based on standardized test data, which may not meet the child-find requirements for twice-exceptional identification. Using alternative or curriculum based measurement to make the case for the twice-exceptional will preclude difficulties in appropriate planning. In some cases, the team may decide that services may be more appropriately rendered by a 504 (behavior) plan rather than an IEP. Having personnel who are well versed in both special education and gifted education rules will facilitate the overall planning process and ensure that both types of student needs will be accommodated. No matter what plan is implemented, there must be language that describes student strengths and weaknesses with specific direction for both remediation and enrichment modifications to the curriculum to be provided.

**Conclusion**

The toolkit presented here was designed to provide a general outline for schools and districts to design a plan for the identification of twice-exceptional students. To this end, it should be considered within the parameters of the school or district in which it will be implemented. While each category must be considered, successful implementation requires that the specifics conform to the requirements of the school/district while still meeting the needs of the student.

A key ingredient to successful implementation of the toolkit is knowledge acquisition. It is highly recommended that staff involved in the identification process be adequately prepared in the unique needs of the twice-exceptional. Access to information can be accomplished via formal and informal methods that include in-service training, attendance at workshops and conferences, or university coursework. Intradistrict consultation and collaboration among experts in each
area of concern can be an effective option because it exists within the culture of the school.

Collaboration is another important consideration for successful implementation of this or any plan for identification. Alliances among the key informants should be facilitated at every stage of the process. Bringing together personnel well versed in special education and gifted education to discuss the needs of the student will not only inform, but also help to dispel stereotypes about expectations. The sharing of knowledge should lead to coordination of services needed to make the appropriate accommodations. As discussed previously, this can be accomplished within the current structure for identification since each group would normally meet to discuss programming for students in the separate areas. In some cases, the collaboration will not translate into additional meetings but simply the coordination of schedules. In cases where services for gifted are not part of the school dynamic, community or university personnel could be sought for advice.

The identification and subsequent educational programming for twice-exceptional students cannot be optional. The education of each child should not be based on what they do not know, but allow them to grow and learn according to their individual potential.

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**About the authors:**

Mary Rizza is Associate Professor in the School of Intervention Services at Bowling Green State University, OH where she also serves as Coordinator of Gifted Services.

William Morrison is Associate Professor in the School of Intervention Services at Bowling Green State University, OH where he serves as Undergraduate Coordinator of Special Education.