
Thinking Smart About Twice Exceptional Learners: Steps for Finding Them and Strategies for Catering to Them Appropriately

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The basis for this synthesis of our understanding of twice exceptional identification and service began with a project funded by the United State government. A Jacob Javits grant for \$.875 million dollars was awarded for a 5-year study of twice exceptional primary school children. Project 2Excel began in October, 2008, and continues to the present. The project includes 4 public (government) school districts, all of which serve gifted and talented children in homogeneous, self-contained classrooms. The districts were purposefully selected on the following criteria: (1) each provided a self-contained gifted program in a single school; (2) each provided additional cluster grouping programs in other district schools for those students who chose not to attend the self-contained program; (3) each had experienced “increasing” numbers of children who had qualified (or nearly qualified) for gifted services; (4) each had experienced qualified gifted children in the self-contained classrooms who were not “thriving” with their challenging curriculum and expectations; each had different demographics regarding racial make up, socioeconomic levels, and district size (number of schools and children served in the district).

It was hoped that by including settings with varying demographics on race, SES, and special education numbers, the results found in this project might be generalisable to other schools or districts in the state (and perhaps even in the U.S. or overseas). The four school districts participating included: (1) an inner city gifted magnet school, comprised of 1,034 gifted students in years K-8, a school within a larger urban district of approximately 40,000 students, housed in 56 primary (or primary/early secondary) schools and 15 middle or high schools; 42% of the students at this school are of color, 26% receive free or reduced lunch, 17% are second language learners, and 7% receive special education services; (2) a small, second ring suburban, “blue collar” district, comprised of 3 primary schools, and 1 middle and high school, respectively; 22% of the population are of color, 26% receive free or reduced lunch, 5% are second language learners, and approximately 5% are receiving special education services; (3) a moderately sized first-ring suburban district of 11,000 students, housed in 10 primary schools, 3 middle schools, and 2 high schools with 34% being children of color, 29% on free or reduced lunch, 7% being second language learners, and 7% receiving special education services in the district; (4) a moderately sized second-ring suburban district of 17,000 students housed in 14 primary schools, 4 middle schools, and 4 high schools, with 21% of the school population of color, 14% receiving free or reduced lunch, 4% as second language

learners, and 12% being service for special education needs. Within each of these school and district settings, twice exceptional learners were randomly assigned to treatment or control classrooms. For two of the districts, the experimental and control classrooms were housed in the same school and for two of the districts, the experimental, self-contained classrooms were housed in a single school and the control students were “clustered” in other schools in the same district.

The goals of Project 2Excel were fivefold: (1) develop a systematic identification system for gifted learners with Attention Deficit Disorders (ADHD) OR Emotional/Behavioural Disorders (EBD) OR Autism Spectrum Disorders (ASD) OR with Specific Learning Disabilities (SLD); (2) provide training for “experimental” teachers on twice exceptionality via an on-line series of courses leading to a Certificate of Twice Exceptional Education, additional in-service training on curricular specifics with built-in writing days across each school year, yearly stipends for materials and resources, and biweekly classroom supervision by project personnel; (3) develop a “toolkit” of strategies to accommodate/adapt gifted maths and reading/language arts curricula across the 5 years included in the project; (4) provide training and support to the parents of twice exceptional experimental and control students; and (5) to disseminate what is learned about identification, programming, and parenting with the larger communities of these districts and beyond via the “toolkits”, a parent resource manual, and a project website (www.stthomas.edu/project2excel).

In gathering data, matched pairs of gifted children identified with the same forms (and degree, as much as possible) of exceptionality were randomly assigned to experimental and control classrooms. The matched pairs were pre- and post-tested in their first school year in the project (September, 2009 - June, 2010) on maths and reading achievement levels (using the Iowa Tests of Basic Skills out-of-level), motivation to learn in maths and reading (CAIMI), and self-efficacy about maths, reading, and learning in general (Harter Self-Perception Scales). The experimental children began to receive their first year of 2e services and will continue to receive these services for the next four years of the project; the controls will continue with their current levels of services (for giftedness and for special education). Parents of the experimental and control students receive four training sessions yearly on home-based strategies and resources on twice exceptionality.

Strategies for Identification of Twice Exceptionality

From this multi-pronged study, we have learned 10 general lessons about identification for twice exceptionality at this point. These strategies range from what works in terms of instrumentation, procedure, and protocol.

Strategy 1: A tiered system of identification is needed

In “finding” our population of twice exceptional learners in this first year, it was necessary to develop a 3-tiered system (see Table 1). The first tier was a more general screening (involving a look at discrepant WISC-4 scores and gifted and special education behavioural checklists completed by teachers), and each successive tier relied on more and more sophisticated instruments to begin to “rule out” those

students who may have been over included or overrepresented in the first tier of identification. As Table 2 shows, there were distinct differences as well as similarities in the prevalence of twice exceptionality found among these four very different populations. One district tended to “attract” twice exceptional children to its self-contained program (families from other districts would send their children there, knowing that this program was superior). Other than this district anomaly, there were fairly even percentages of children identified for each twice exceptionality area. ASD, however, was significantly less represented than the research had suggested. As Table 2 shows, approximately 14% of the 504 gifted children in self-contained Year 4 classes were 2e. If we were to consider a class of 30 gifted learners, that means we could expect 4 of those children to present with a second exceptionality in each classroom. GT/ADHD learners represented 7% of the 504 gifted children. At 30 gifted learners in a self-contained class, we could expect 2 of those children to present with an ADHD disorder. EBD and SLD each represented 3% of the children in this study. Again, at 30 children in a gifted, self-contained classroom, we might expect to find 1 EBD and 1 SLD child in each 4th grade classroom. GT/ASD learners represented 1% of the 504 gifted children. At 30 children in a gifted self-contained classroom, we might expect that there would be 1 such child in every third classroom, based on the findings of this project thus far.

Table 1. Tiers for Twice Exceptionality Identification

Tier 1	Tier 2	Tier 3
<ul style="list-style-type: none"> • Discrepancies among subtest or index scores on ability tests used by a district • District characteristics or behaviour checklists of specific disability category provided to teachers of students “suspected” of presenting with a disability 	<ul style="list-style-type: none"> • ADHD: Connor’s Rating Scales • EBD: Behavior Assessment System for Children (BASC-2); Behavior & Emotional Rating Scales • ASD: BASC-2; Autism diagnostic interview (ADIR-R) • SLD: Woodcock Johnson Tests of Achievement 	<ul style="list-style-type: none"> • ADHD: Connor’s Continuous Performance Test; Aschenbach Rating Scales • EBD: Student Risk Screening Scale; Strengths and Difficulties Questionnaire • ASD: Autism Diagnostic Observation Scale • SLD: CTP; wrap (Writing Assessment)

Strategy 2: There is a need for an identification team to identify precisely

In our project, it was discovered that the most precise and valid prevalences were found when the identification team included a special education person for each special education area, a gifted specialist, plus others in the school, such as the school nurse, school social worker, and any physician information in the children’s file.

Table 2. Prevalence of Twice Exceptionality in Project 2Excel

District	GT#	ADHD (#, %)	EBD (#, %)	ASD (#,%)	SLD (#, %)	Total (#, %)
A	128	7 (5%)	5 (3%)	1 (0.7%)	2 (2%)	15 (11%)
B	124	22 (18%)	8 (6%)	2 (2%)	9 (7%)	41 (33%)
C	147	4 (3%)	2 (1%)	0 (0%)	3 (2%)	9 (6%)
D	105	4 (4%)	0 (0%)	2 (2%)	3 (3%)	9 (9%)
Total	504	37 (7%)	15 (3%)	5 (1%)	17 (3%)	73 (14%)

Strategy 3: The identification team needs to be trained in using an identification protocol

All members of the team must practise with the spectrum of instruments (objective measures) and checklists (subjective measures) and child study observation techniques in order to achieve the greatest accuracy in identification as twice exceptional.

Strategy 4: The WISC-4 is valuable in providing “inclusive” data on potential twice exceptional children.

Children with discrepancies among their index scores of 23 points or more on this test of ability seemed to include all of the children who were ultimately identified as twice exceptional, but there may have been some false positives among this group. Later tiers of the identification protocol helped to rule these children out, that is, having underachievement or basically “weak” areas of processing not powerful enough to be considered a true disorder or disability.

Strategy 5: Don’t look far from the ‘family tree’.

The traits of twice exceptionality were, in most cases, found in other immediate family members within one generation of the child. There are, at most, 3 children to whom this does not apply.

Strategy 6: Finding twice exceptional children may be easier in gifted self-contained classroom than in mixed ability classrooms.

In mixed ability classrooms, the child’s giftedness may allow the child to look “average” so he or she may not be recognised as either gifted or special education qualified. In our project, when the control teachers were told they had a 2e child in their class, many mentioned that they didn’t believe it and that there was another child in there who was more 2e than the one pointed out!

Strategy 7: It is critical to look harder than we have previously for eligible girls.

In this study, we found that especially for the disabilities that are emotional, attentional inattentive type of ADHD or for SLD that girls seem to be able to “hide” their issues more effectively, even when their disability is as severe as boys’ in the same classes.

Table 3. Developmental Prevalence: Single School (Case) Study

Year	GT#	GT/ADHD (#, %)	GT/EBD (#, %)	GT/ASD (#, %)	GT/SLD (#, %)	Total 2e
3	128	5 (4%)	5 (4%)	1 (0.7%)	2 (2%)	13 (11%)
4	128	7 (5%)	5 (4%)	1 (0.7%)	2 (2%)	15 (12%)
5	128	13 (10%)	8 (6%)	5 (4%)	10 (8%)	36 (28%)
6	128	5 (4%)	3 (2%)	2 (2%)	6 (5%)	16 (13%)
7	89	10 (10%)	6 (7%)	3 (3%)	2 (2%)	21 (22%)
8	88	13 (14%)	5 (5%)	4 (5%)	2 (2%)	24 (26%)
Total	689	53 (8%)	32 (5%)	16 (3%)	24 (4%)	125 (19%)

Strategy 8: Identification for twice exceptional may have developmental differences to some degree.

To test the accuracy of this, we collected full 3-8 data on one of the district schools and found a consistency in the prevalence at each year level. As Table 3 summarises, there was an anomaly found for Year 5 children in this school, but overall there was a small increase in numbers from year to year, culminating with Year 8. ADHD and ASD showed what increase in identification was evident. In interpreting these data, approximately 19% of the 689 gifted students followed in grades 3-8 presented with some degree of special education need. This would suggest that for a class of 30 gifted children in a self-contained classroom, we might expect 6 of them to be twice exceptional. By the end of Year 8, ADHD seemed to be the most prevalent twice exceptionality to crop up over time, suggesting that across a school, in each gifted classroom of 30 students we might expect to see 2-3 students who are GT/ADHD. SLD tended to emerge as a dominant area at Year 6, but in general one might expect to find 1 SLD student in a classroom of 30 gifted learners. EBD represented 5% overall of the gifted population in this school and we might expect to see approximately 1½ students in such a class (perhaps 1 EBD student one year, 2 in the next, etc.). And for

ASD with 2% overall of the 3-8 population, we would be seeing approximately 1 student in every other 30-student self-contained gifted classroom.

Strategy 9: The school nurse may be one of the best identifiers of twice exceptional.

When one considers that this person has intimate knowledge of family illness, medications, family dynamics that impact a child's physical and mental health, there is a wealth of data there to inform the identification process about emotional, attentional, and autistic issues, in particular.

Strategy 10: It is important to help parents understand the importance of early identification.

In this project, we found that many parents "suspected" there was some issue in their otherwise very bright child before starting school, but were reluctant to have their child "labelled". This then allowed the child to struggle but remain "average" in their year level classroom, rather than to address and perhaps countermand many permanent self-efficacy and intrinsic motivational issues.

Strategy 11: We must look in three places for twice exceptional.

Our first place was to find children in the self-contained gifted classrooms who were not "thriving" in the complex, multi-faceted, challenging learning environment (after ruling out deliberate underachievement). Secondly, we need to look in mixed ability classrooms for children who seem to have a "spark" but may not have been identified formally as gifted. And, a good look at the special education files, particularly at the intelligence test scores provided will alert us to highly discrepant sub-test and index scores on objective measures that may point to a processing or memory issue. In particular, in this study we found that discrepancies (23 points or more) between the verbal index score and the perceptual reasoning index meant there was a potential exceptionalism being presented, but even more strongly were similar discrepancies between either the verbal or the perceptual index and the working memory and/or processing speed index scores predictive of twice exceptionalism.

In consideration of the second goal of Project 2Excel, this first year of implementation produced several evidence-based strategies for addressing the distinct learning differences of twice exceptional learners in Year 4. These strategies are included below.

Strategy 1: No single strategy that addresses a gap, be it cognitive, affective, behavioural, or physical works for long. It is necessary to have a long list of possibles.

In this project, we found that there was approximately a 2-week "honeymoon" for a strategy, no matter what the category, and then it would be necessary to initiate another strategy to deal with the same issues.

Strategy 2: Strategies must be developed and integrated within the differentiated curriculum to cover several components of the "whole learner".

These components included: (1) specific adaptations of the curriculum; (2) cognitive access to the curriculum/meta-cognition; (3) behaviour adjustments; (4) social skills development/instruction; (5) self-awareness/self-regulation training; and (6)

physical accommodations to the learning space. Tables 4 and 5 list several strategies for each of these components.

Table 4. Curricular, Organisational, and Memory Development Strategies

Curriculum	Organisational	Memory
<ul style="list-style-type: none"> • Multimedia resources to access outcomes • Technological tools, such as word processors, word prediction programs, calculators, spell checkers, etc. • Multisensory instruction • Real life tasks • Socratic method • Oral discussion using supporting text • Direct instruction in thinking skills, conceptualisation, and transfer • Elimination of distractions, busy-ness in learning content, direct, pertinent focus 	<ul style="list-style-type: none"> • Graphic organisers, visual instructions, visual presentations, visual clarity checks, visual organisation • Checkpoints for long-term projects, work, content acquisition • Frequent, consistent progress monitoring • Added time to organise materials, assignments, desk, locker, etc. • Homework hotline • Simple specific place for submitting completed work • Consistency in schedule – advance warning of changes to schedule 	<ul style="list-style-type: none"> • Instruction in how the mind remembers (metacognition training) • Instruction in how to highlight, underline, summarise information to be remembered • Visual imagery techniques • Use of environment resources to recall information –notes, texts, pictures, etc. • Posted cues, prompts, rules, steps for performing tasks (also copy attached to student’s private work space)

Table 5. Self-Understanding, Social Skills, and Behavioural Strategies

Self-Understanding	Social Skills	Behavioural
<ul style="list-style-type: none"> • Positive self-talk • Instruction in how to identify, challenge, modify, and replace non-productive thoughts • Relaxation techniques • Identification of a “go to” person at school for child to see when things begin to overwhelm • Instruction in how to externalise what is occupying the child internally 	<ul style="list-style-type: none"> • Self-advocacy, self-efficacy instruction • Social stories • Video monitoring to provide self-management skills • Encouragement of risk-taking, self-initiated responses • Provision of catch phrases, response to use in “sticky situations” • Conflict resolution skill instruction • Provision of a “buddy” to aid social transitions in classroom, lunch area, playground, etc. 	<ul style="list-style-type: none"> • Child identified motivators for maintaining expected behaviours • Direct behavioural modification does not work unless 2e child has negotiated how modifications will take place • Tangible self-monitoring and reflection charts to be used by student • Teacher works with 2e child on frequent, consistent basis, especially when task is to be started, progress needs monitoring, end of work time is coming • Muting of noise, light, temperature, colors, and clutter in classroom • Provision of fidgets, weighted blankets, shirts, yoga balls tennis-shoed chair legs • Situating 2e child near teacher’s desk (up front) or next to positive role model for behaviour and learning • Lenience in letting child stand up, move, or remove self from setting when needed

Strategy 3: A child “profiling” team must plan the specific strategies that address the child’s strengths and weaknesses.

The term, “profiling” has been consciously used instead of the special education protocol of “child study team” to allow for the educational strategy planning of children who are twice exceptional but not formally eligible for special education services. Members of that team, we have found when looking at the results in Project 2Excel, should include a special education specialist, a gifted education specialist, the school’s curriculum coordinator, a principal or deputy principal, and the parent of the child. The latter representation ensures that the child’s perspective will be included for consideration.

Strategy 4: It is important to not “water down” the gifted curriculum provided for the 2e child.

It is critical that in working through the intellectual strengths of the 2e child that we allow access to a stimulating, challenging set of outcomes and expectations as for all other gifted learners, but it is necessary to find alternative ways for the child to access this curriculum. We have found that often these children are very sensitive when things are “done differently” or “instead” for them and as a consequence they will fail to complete the work or refuse to use the proffered alternatives if they will stand out as being different than their classmates. Many of our experimental teachers found that providing alternative access openly for anyone in their classroom to select was the best way to allow the 2e child to accept the learning alternatives provided.

Strategy 5: Use an ORR chart (Observation-Reflect-Respond) to help identify ways to respond to the child’s strengths in the classroom.

Tables 6-8 show examples of how the ORR process can be used to work through the 2e child’s strengths in the “domains” of thinking, responsibility, task analysis, imagination, aesthetics, and socialisation. As can be seen, the teacher or parent is expected to identify positive behaviours in the twice exceptional child, then reflect on what this is saying about that child’s style, preferences, ways of learning, and then think of appropriate ways to respond to the child’s strengths, hoping to bring up an area of challenge in the doing. The use of such a strategy does, indeed, start with the child’s strengths but ultimately gets around to working on areas of concern through those strengths. This requires, for many, a paradigm shift in thinking about the potentiality of the twice exceptional child and particularly represents direction away from the medical or deficit model of “accommodation” for such learners.

Strategy 6: Consider the severity or degree of the disability or disorder in deciding which accommodation tools to use.

This strategy uses the term, accommodation, but for many researchers in the field, there has been an attempt to talk about strategies without ever mentioning the dreaded words, modification, adaptation, or accommodation. Too often these latter terms preclude focus on strengths or preferred ways for learning. That aside, however, this strategy basically tells us that there is no single tool that will work for all students who are GT and ADHD or who are GT and EBD. The degree to which the child presents with the second exceptionality as well as the degree to which the child expresses a gift or talent will mean finding the “perfect” set of strategies that address both sets of educational needs simultaneously. Even at that, the amount of time

devoted to implementing these strategies may also vary, according to the severity or degree of the exceptionalities on which the strategies are focused.

Table 6. ORR Chart for Thinking and Responsibility Domains

Observation (T) Thinking or (R) Responsibility Domain	Reflection (T) Thinking or (R) Responsibility Domain	Response (T) Thinking or (R) Responsibility Domain
Sits alone and looks through reading materials for hours	Does this child enjoy learning about things? What are the child's interests? Does the child understand what is read?	Ask questions about reading materials. Collect books and articles that would be of interest to child. Provide variety of reading materials for the child
Asks questions about everything and anything.	What is the child curious about? How can I help this child answer questions?	Gather materials to find answers to child's questions. Talk with child about possible answers. Choose guiding questions to help child find answers.
Finds connections and relationships between things.	What is the process the child uses to see connections?	Ask child for observations of what is common or different between things. Ask child to explain how connections were made.
Remembers things that others forget.	Does child have a strong memory?	Play memory games with child. Memorise and recite poems and songs, lists together.
Brings home animals in need of care.	Does the child have an interest in animals? Does the child feel responsible for animals?	Introduce child to books about animals. Interview a veterinarian. Suggest helping neighbor with a pet.
Tries hard even when mistakes are made.	Does the child complete difficult tasks? Does the child deal well with frustration? Is the child persistent? Is the child a perfectionist?	Praise child's efforts. Explain a good way to learn is from our mistakes
Finishes a project on own.	Is the child able to work alone? Do adults in child's life help more than they need to?	Praise child for completing tasks. Give child added responsibilities
Talks about helping people.	What opportunities could I offer to the child to meet this need?	Join service organisations. Volunteer in community.
Is always ready for school on time.	Does the child take responsibility for himself?	Discuss issues about fairness. Give child more opportunities for independence. Praise child's organizational skills.

Adapted from Besnoy, 2006.

Table 7. ORR Chart for Task Analysis and Imagination Domains

Observation (TA) Task Analysis or (I) Imagination Domains	Reflection (TA) Task Analysis or (I) Imagination Domains	Response (TA) Task Analysis or (I) Imagination domains
Explains how to play complex game.	Is child capable of doing more complex tasks than I thought possible?	Let child explain the steps in a task to sibling. Play complex games with child. Ask child to help solve a problem.
Finishes long-term project with ease.	What time management skills does this child have?	Allow child to become involved in extracurriculars. Ask child to help plan family/school activities.
Keeps a neat and organized bedroom.	Is this carried over into other aspects of the child's life?	Ask child to help organise issues or needs at home. Assist child in transferring skills to other areas as needed.
Recognises different ways to solve the same problem.	Are the child's ideas more effective ways of solving a problem? Does the child see solutions in a different way?	Reinforce child's unique thinking. Ask child to explain steps used to solve a problem.
Sits and plays make believe games.	Do child's toys promote pretend play? Should I get involved during this play?	Acknowledge value of play Get involved in it. Introduce new scenarios to the play.
Draws pictures on sidewalk, scraps of paper, and in sand at beach.	Does the child have interests in drawing? How can I promote this interest?	Ask the child to draw something specific. Show examples of many kinds of drawing. Introduce different materials for drawing.
Dances around to music in his or her head.	Does the child enjoy moving to a beat?	Clear special place for movement. Play variety of music. See if child would like dance lessons.
Has fun playing with "any old stuff" around the house.	Is the child able to think about everyday objects in a different way?	Use questions to promote creative thinking about items. Ask, "Can you think of another use for...?"
Makes up stories about everyday things.	How can I encourage this creativity without being judgmental? How do I nurture original thinking?	Encourage child to create stories. Ask questions that force child to give more details. Encourage child to write down the stories.

Adapted from Besnoy, 2006

Table 8. ORR Chart for Aesthetic and Social Domains

Observation (A) Aesthetic or (S) Social Domain	Reflection (A) Aesthetic or (S) Social Domain	Response (A) Aesthetic or (S) Social Domain
Talks about beautiful sunsets, etc.	Does the child often comment about beauty in nature? Is the child observant?	Talk about colours, form, and composition in nature. Point out aesthetically pleasing things in the environment.
Recognises beauty in art and architecture.	Does child observe the environment for things of beauty?	Take child to art galleries, museums. Take art books out of the library for the child. Take a city architecture tour.
Is always listening to music.	What is it about the music the child appreciates? What kind of music does the child like to listen to?	Take child to concerts. Share personal music library with the child.
Sits by aging relative and cuddles for a long time. Is solicitous to older adults. Has good friends.	Does the child think about others' needs first?	Let the child know that affection shown to others is important.
Enjoys listening to and telling family stories.	How does the child attract good friends? Does the child prefer fewer good friends rather than many?	Create play dates for child. Talk about value of friendship. Read books about friendship.
Leads others.	Is the child family oriented? What encourages the child's interest in family? What leadership qualities does the child have?	Arrange family get-togethers and school events. Write family stories into a book. Allow child to take the lead with family or friends in weekend activity. Enrol child in leadership activities.

Adapted from Besnoy, 2006.

Strategy 7: Use gifted/talented peers or “buddies” to model appropriate skills in the classroom, playground, and during transitions.

Probably the biggest life saver for a teacher faced with a severely twice exceptional child will be finding a “peer” for this child to help out when the teacher (or parent) have other things that need doing. Often the buddy can sit near to the 2e student and just by doing the tasks assigned can provide a good role model of how to proceed as well as what needs to be done. It is important, that the chosen “buddy”, however, be happy to do this; otherwise, we may be exploiting the good nature of or not addressing the gifted needs of the buddy in this process. The act of being a buddy should not preclude having one’s own educational needs addressed. In Project 2Excel we have found this of extraordinary value for gifted learners who also present with ADHD and ASD, in particular.

Strategy 8: Provide alternative means for assessing the achievement of curriculum outcomes for the child with twice exceptionality.

What has been particularly helpful in our project has been having the teachers share a possible list of alternative ways to be assessed and letting the child choose the options he or she feels will show off his success most readily. Some of the ideas that

have worked successfully, come from special education resources and some are idiosyncratically “gifted” in nature. Added time for reading, test taking, as well as being able to show what has been learned in a more verbal or visual medium have all worked well. One of our true success stories this year involved a young boy who had difficulty (in Year 4) with handwriting even on wide-lined paper. His writing was slow, illegible, and for him, very frustrating because he would forget his ideas before he could get them down on paper. For an end-of-the-year biographical research project in the class, he chose to study Bobby McFerrin, the singer who uses his voice in very unusual ways. His teacher permitted him to create a 12-minute film, completely scripted by him (using Word Prediction software for the writing part), edited by him, and which included his voiceovers, uploaded photos, and live videos of McFerrin. This teacher realised that the child had truly shown what he could “write” when the physical act of handwriting did not have to be involved and the final product was worthy of a young adult, rather than a Year 4 student! In looking at this alternative means, both special education accommodations were used (word prediction software) as well as gifted strategies (transformational products in nontraditional media).

Strategy 9: Divide longer term projects assigned into small pieces with steps the 2e child can check off.

Organisers such as webs (Inspiration), electronic organisers (the whole gamut of graphic organisers), study guides, electronic calendars/reminders, multiple modality access to content and assignment descriptions can be used as reminders for the child of what has to be done and by when. This strategy requires the teacher to be much more sequential than simultaneous in presenting longer-term project expectations, but it will end up with the project actually completed rather than never turned in.

Strategy 10: Work directly and collaboratively with the child to design rubrics on how the work will be assessed.

This strategy has been separated from the eighth strategy so that the importance of assessment is NOT incorporated into a single strategy in the list. The more control the twice exceptional children feel they have over being successful in showing what they can do, the more likely we are to see what they can do. This also helps with developing a sense of self-efficacy, which can often be damaged when these children see when they are not succeeding as their classmates are. Samantha Abeel’s telling memoir, *My thirteenth winter*, describes this issue extremely well. Abeel is a twice exceptional learner with severe dyscalculia and an inability to tell time or plan how to manage time on her own and we are able to watch how she slowly descends into anxiety, self-loathing, and dependency as she progresses from kindergarten to year 7, when her disability is finally documented and she begins to understand what has gone “wrong” for her.

Strategy 11: Reinforce all instructions and expectations directly with the child, asking him or her to sequence the activities after the lesson or event.

This one-on-one follow-up is crucial to the child’s actually knowing what has to be done, by when, and how. Even when the teacher has presented the “task” or assignment in a multi-modal way (Smart Board, oral), the individual, “do you understand what you need to do” follow-up will ascertain for both you and the child that he or she can proceed.

Strategy 12: Consider adjustments in time for project deadlines, test taking, and reading of material.

Research was recently reported that when children with disabilities of various kinds are allowed 'extra time', it is rare that they take the full allotment of extra time they are given. In many cases, they take the same amount of time given to all students in a class, but their anxiety and stress levels are reportedly much alleviated by this possibility. It seems to be critical that the twice exceptional child begins on an assignment or task feeling they can "do" it and with appropriate progress monitoring we will know whether or not more time might be needed in order for them to succeed. It goes without saying, however, that adjustments in outcomes (eliminating all the "would be nice" ones and sticking to the minimum essential ones) is also helpful.

Strategy 12: Provide direct memory training, plus associative, mnemonic, and environmental cues and prompts to build working memory.

One teacher in our project this past year, had a white board that identified the major activities of the day and when each would occur (along with a clock on her television screen that showed the actual time, minutes to go, etc.). She also had an individual note for the twice exceptional student to put in his work folder for the day with space to check off as each activity took place. She also reviewed the activities orally with the entire class at the beginning of the day, as well as announcing when it was getting close to a transition to the next activity. These environmental cues were extremely effective, even though they presented her with additional work each day. (They probably also encouraged her to stay "on task" herself so as not to vary the activity schedule too much with her more anxious and inattentive students. She had 8 twice exceptional learners in her single self-contained gifted classroom!). The other strategy included her deals with the issues of holding information in working memory so that it can be manipulated. There are hundreds of ways to "work on" working memory, many of them visual for those with visual strengths, many of them auditory for those with auditory strengths, as well as strategies that incorporate kinesthetic or tactile experiences. It is currently unclear about whether we can "teach" for working memory, but even if we cannot, we can provide possible avenues that may help a child with memory deficits to have a chance to be more successful.

Much of our work in the next four years of this project will focus on validating the efficacy of these preliminary understandings of how to find and serve children with twice exceptionalities. What has been shared here are common practices that worked in this first actual year of implementation. What we have basically learned is that the most important strategy of all is to focus on the individual child through his or her strengths, passions, and personal characteristics that make him or her a 'good' learner. Once we see what those strengths are, we must identify strategies that complement those strengths in helping to overcome skill gaps, in whatever domain they may lie. Most of all, we need to remember that these children, although very gifted, will always have to work harder than their intellectual peers. This means we must start early to focus on the value of hard work and putting forth effort – a good lesson, I think, for ALL children with gifts and talents!