INCLUDING STUDENTS WITH *Disabilities* IN ADVANCED SCIENCE CLASSES

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National Science Teachers Association

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ABOUT THE AUTHORS

Lori A. Howard, PhD, is an assistant professor of special education at Marshall University in West Virginia. She has taught a variety of special education courses. She has written and presented at conferences on the topics of inclusion, co-teaching, students with disabilities in science, and including students with disabilities in advanced placement courses.

She has also co-written books on co-teaching, including *Team Teaching Science: Success for All Learners*. She and Beth Potts have previously written *How to Co-Teach: A Guide for General and Special Educators*.

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INTRODUCTION

Why This Book

Life is either a daring adventure or nothing.
—Helen Keller

Currently, more and more students with disabilities are choosing to take accelerated high school science classes such as Advanced Placement (AP), International Baccalaureate (IB), or honors classes (Bleske-Resech, Lubinski, and Benbow 2004). Concurrently, there has been an increased focus on science, technology, engineering, and math (STEM) courses in the media, from the U.S. Department of Education, and in professional development course offerings. As the push continues to increase the number of students who take accelerated courses in science, it is likely that more students with disabilities will be encouraged to take these courses or will be placed in advanced courses as a matter of school culture (e.g., everyone takes honors courses).

Often the teachers of accelerated and honors classes are experienced and knowledgeable about science. In many cases, they have earned an advanced degree in a science-related field; however, they may have little or no experience with special education or "including" students with disabilities in these classes. Advanced or accelerated courses are not usually team taught with a special education teacher (Linz, Heater, and Howard 2011). Consequently, science teachers may lack ready access to special educators to share strategies with them to foster the success of students with disabilities in these courses and independent knowledge of those specific strategies.

Although these are high school courses, they are often taught as university-level courses. Many of the students in these classes are high achievers academically with very compliant classroom behavior. Due to the content of the discipline (e.g., physics, chemistry) and the nature of the students, expectations for *all* students in such classes are typically higher than for students in standard classes. Many students with disabilities can succeed in this classroom environment (Hallahan, Kauffman, and Pullen 2009); however, both the science teacher and the students with disabilities will benefit from specialized knowledge of instructional strate-

gies, special education requirements, classroom behavioral interventions, and an understanding of how to apply individualized education program (IEP) accommodations in the accelerated or advanced science classroom. A bonus is that many of these accommodations will benefit students without disabilities as well.

The purpose of this book is to provide the reader (you) with information and guidance on how to successfully include students with disabilities in your accelerated science classroom. Many of you have successfully taught these science classes for years and do not need assistance on the content of science or how to teach. This book will specifically focus on classroom success for students with disabilities. It will also provide practical guidance for situations that may occur in your classes.

The beginning of the book will provide an overview of special education terminology and law as background for working with the IEP team. Several research- or evidenced-based strategies for use in the classroom will also be discussed, as will suggestions for dealing with difficult classroom behavior and management issues. Although the research base for most of these suggestions centers around use in classrooms other than advanced science classes, there is evidence to generalize the strategies for use with multiple populations, so it is logical to extend their use to students in your advanced science classes. We will give special attention to the unique requirements of advanced and accelerated classes such as laboratory experiments, field trips, and high-stakes testing (e.g., College Board testing).

One of our assumptions in this book is that students with disabilities in accelerated and honors classes are on a path to college. An essential skill set for success in postsecondary education is a student's knowledge of him- or herself, paired with the ability to set and work toward goals and to speak up for him- or herself to get the resources needed to meet those goals. Many students pick up these self-advocacy skills without direct prompting and instruction, but students with disabilities need opportunities to develop their self-advocacy skills to help ensure success in a college environment. All of the students' teachers need to be aware of the skills and prompt the student to practice the skills at every opportunity. Throughout this book, you will find special boxes called "Fostering Student Independence." These boxes, written in language directed at students, will provide you with ideas and bullet points to help students think about and advocate effectively for their own needs. See Chapter 2 for more about self-advocacy and "Fostering Student Independence" on the next page for an example of this student-centered box.

Some science teachers may have an understandable reluctance to include students with physical or behavioral challenges in their classes. These teachers may fear that one student will disrupt the classroom environment for all of the learners or that one student may require too much individual instruction, thus reducing time for others. These concerns can be addressed through learning more about particular disabilities and strategies to use to foster success. After all, students

FOSTERING STUDENT INDEPENDENCE

Most teenagers want more independence and control over their own destiny, but this requires a set of skills that you may not have perfected yet. These "Fostering Student Independence" text boxes are designed to help you understand and develop the skills you need to be more in control of your academic life.

with disabilities cannot be excluded from these classes just because they have a disability (U.S. Department of Education 2004).

In fact, students with disabilities can also have special talents or gifts; these students are often referred to as *twice exceptional* (Hallahan, Kauffman, and Pullen 2009). These gifted and talented students can excel in advanced classes when learning supports are in place. Consider the "chemistry whiz" who needs an outline to write up the lab report. The student is terrific at solving problems, balancing chemical equations, and doing the experiment, but she needs help organizing her writing. Once an advanced organizer (outline) is provided, she can write up the lab report. So, with a small adaptation or accommodation, the student can successfully participate in the advanced or accelerated classroom.

Another purpose of this book is to encourage science teachers to embrace including students with disabilities. Some great scientists had their own challenges to overcome on their way to greatness. Albert Einstein was considered slow in school. Despite his lack of promise during his elementary years, he certainly became adept at science. This is just one example, and not every student with a disability will become the next Einstein; however, there may be some very good scientists waiting for the opportunity that your accelerated class offers. It is our hope that you, the science teacher, will become familiar with the context of special education. It is also our belief that in working to provide the learning supports and accommodations needed for students with disabilities to be successful, you will benefit all of your students and your own growth as a teacher will be enhanced. You will find new and creative ways to manage lab experiments so that all of the students will benefit, you will think of new ways to design your instruction with individual needs in mind, you will overcome fears related to behavioral flare-ups in your classroom, and you will be more confident in working with your special education counterparts and the IEP team.

To help you make practical connections, each chapter contains a checklist called "Ideas to Get You Started" that creates action items based on the chapter content. We encourage you to consider different ways in which to support the concepts you are teaching and the ways in which you structure your classroom. As you

become more comfortable making classroom accommodations for students with disabilities, we also hope that you come to recognize and appreciate your unique gifts as a teacher.

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CHAPTER 3

Classroom Considerations: Behavior

Though many teachers indicate that behavior management is a major challenge in their classroom, as an advanced science teacher you probably have fewer behaviors to deal with than some of your colleagues do. However, the idea of having students like we describe in Chapter 1 in your class may make you nervous if you think the behaviors will suddenly become an issue in your classroom. First, let us assure you that the IEP team would not place a student in your class if they did not fully believe the student could succeed in your classroom. Second, this chapter will provide you with tools and important vocabulary to understand how best to approach a student who does have behavioral challenges—the best way to deal with behaviors is to be consistent across settings, so work with the special educator to find out what has worked in other classrooms.

Though it is possible you will have behavioral concerns or considerations for any student in your classroom, those with learning disabilities and tactile disabilities (hearing and vision impairments) will generally be less likely to exhibit problem behavior than those with other disabilities; in terms of behavior, they will often look just like your students without disabilities. Students on the autism spectrum and those with emotional disabilities or ADHD, as we discussed in Chapter 1, may require some behavioral supports so they can be academically successful in your classroom. Do not assume that all of your students with disabilities will have behavior problems. Do not assume that all of your students with autism and emotional disabilities will have behavior problems; in fact, it is likely that most will not. Do be aware of how your behaviors and interactions affect the behavior of your students. There are often many things we cannot control in our classroom, but we can control our own behavior, which has a huge effect on the rest of the class. See Figure 3.1 (p. 32) for examples of behavioral choices teachers make.

Before you read the strategies and tips in the rest of the chapter, take a few minutes to think about the potential problem areas and times in your classroom. See Figure 3.2 (p. 33) for some ideas. Reflect on your years of experience: Have you

FIGURE 3.1. MAKING GOOD TEACHER BEHAVIOR CHOICES

Students respond to a teacher's behavior, and sometimes students behave to elicit a particular teacher reaction. It is important that you remember your actions and reactions can change the flow of your classroom and your behavior is the only behavior you can truly control.

Student Behavior	Appropriate Teacher Response	Less Effective Teacher Response
The student makes a joke at the teacher's expense.	Ignore, laugh along, redirect. In short, do what you tell your students to do if they are bullied.	Punish. Turn it around and make the student the butt of the joke.
The student argues that something you marked wrong on a paper (and is wrong) is correct.	Show the correct answer, offer to demonstrate how you got that answer, then move on. If the student is combative, it is likely he will not hear anything you say until he calms down.	Continue to engage the student, arguing that you are right.
The student is playing with something inappropriate in his desk.	Surreptitiously approach the student, take the object, and let the student know he can have it back later. When it is convenient, talk to the student about the behavior.	Stop your instruction and yell at the student in front of the rest of the class.

had students who have had a hard time following directions or who have gotten into conflict with you or their classmates? What were the circumstances? When have you noticed students get frustrated with tasks? Knowing when students may have difficulty leads to better preparation to avoid behavior problems.

Behavior Contracts

A contract, as you know, is a binding agreement between two or more persons or parties. You may use a type of contract with all of your students at the beginning of the year, laying out expectations and consequences for criteria such as lab behavior or homework. Please see Chapter 7 for an example of a Learning Contract that can be used for *all* of your students. The idea behind a behavior contract for students with disabilities is that the teacher and the student—sometimes with input from and in agreement with other members of the IEP team, such as a special educator or parents—create an agreement, often with a tit-for-tat reward. Depending on

FIGURE 3.2. POTENTIAL PROBLEMS IN THE CLASSROOM

- *Transitions:* This includes the transition into the classroom (What are students supposed to do when they come into class?), movements within the classroom (If all students move to the lab area at the same time, is it safe?), and switching from one task to another (What do students put away? What do they get out?).
- *Group work:* Group work might cause problems because of the student's interpersonal skills or because you are not able to oversee the entire room at the same time.
- *Timing of tasks:* Do you have a plan for if some students finish a task very early or very late in the class period?
- *Lack of structure:* Do students know what is expected of them? Do you have routines set up so expectations are clear?
- *Classroom organization:* Are the materials for labs easily accessible, or are there "bottle necks" as students start labs? Are there enough materials for every student or group? Is there enough personal space between students so that they can easily use notebooks or materials? Do students have a place to put their personal items? Can they find the safety equipment (goggles) easily?

whether or not the student meets certain behavioral expectations, he receives a reward or consequence as laid out in the contract. He can receive a reward for an increase in appropriate behavior or decrease in inappropriate behavior, for instance, or a consequence if he does not meet the expectations. When working with most students with disabilities, however, it is a good rule of thumb to only work in positives such as rewards.

The contract itself will have three major components: target behavior, a tracking process, and consequences (Cook 2005). For a contract to be effective, the behavior has to be meaningfully defined in a way that will enable all parties to recognize it. For instance, if "talking out" is the behavior, teachers who have a very tight definition of the term may include choral responses as talking-out behavior. Someone with a looser conception of the behavior, however, may only count a vocalization as talking out if there was no question posed to which the student could respond. It is also best for the behavior to be stated as a positive, such that the student's challenge is to increase appropriate behavior, instead of focusing on the negative behavior. For example, you could say, "Raise your hand" rather than "Stop calling out."

Tracking is important so that you and the student know if the student is meeting the terms in the contract. Think of this as data collection, and in fact a good tracking system can be supplied to the special educator as evidence of the student's progress towards a goal (see Chapter 2). The biggest challenge with a

tracking system is to find something that will not make the student stand out from classmates. The special educator can help you develop appropriate systems, but suggestions include student self-monitoring with a discrete checklist at his or her seat, the teacher making discrete tallies on a piece of paper, and the teacher keeping a tally counter handy and clicking it when the behavior occurs. See Figure 3.3 for two sample behavior contracts—one geared toward specific student actions and one geared toward a more academic behavior of completing homework.

FIGURE 3.3. BEHAVIORAL CONTRACT

I, _____, am working on raising my hand and waiting to be called on in class. Even when I am very excited, I need to control my behavior by not calling out, but raising my hand instead. The teacher will tally the number of times that I raise my hand and the number of times I fail to raise my hand at least once a week. If I raise my hand more times than I call out, I can help the P.E. teacher with equipment during study hall on Friday each week in the first grading period.

_____	_____	_____	_____
Student Signature	Date	Teacher Signature	Date

Homework Contract

I, _____, recognize the importance of doing homework as practice for the material covered in class. The teacher, _____, agrees to allow me to complete abbreviated homework assignments, determined at her discretion and to include no fewer than one problem of each type. I agree to complete the assigned homework on time, following all appropriate directions, and without complaint. If I turn in 95% of the homework assignments on time, accurately, and having followed all directions for the first semester, the teacher and I will renegotiate the amount and type of homework I am required to do.

_____	_____	_____	_____
Student Signature	Date	Teacher Signature	Date

Positive Behavior Support

If your school uses positive behavior support (PBS), sometimes called positive behavior interventions and support (PBIS), then you likely know what this method is and are familiar with your school-level behavioral expectations and consequences, giving you a starting place for working with students with behavioral issues in your classroom. Even if your school, grade, or department does not use PBS, understanding the principles can help you when you work with students with behavioral difficulties and you can choose to use PBS in your classroom.

The basic premise behind PBS is that we should prevent inappropriate behavior instead of reacting to it. In your classroom, the most important thing you can do is create a comfortable, safe environment where students feel safe emotionally (Hendley 2007). To do this, be an active listener, remember that even high schoolers appreciate praise for appropriate behavior (e.g., "You all are doing a great job working in groups today!"), and encourage students to ask questions (Solar 2011). It is also important to create a structured environment in the classroom and to be consistent; students cannot meet expectations if they don't know the expectations. See Figure 3.4 for specific examples of ways to create a positive environment in your classroom so you can be more proactive than reactive.

FIGURE 3.4. BE PROACTIVE WITH BEHAVIOR

- Have clear rules posted, with expectations phrased positively. For example, use respectful language instead of inappropriate words.
- Compliment your students on appropriate behavior, being specific about the behavior. If you say "Johnny's doing a great job," you miss an opportunity to reinforce what the rest of the students should be doing.
- Be aware of students with covert (quiet, nondisruptive) behaviors and refer to their IEP for ideas on how best to engage them in class.
- Give students clear, complete directions, such as "Open your book to page 24 and read pages 24 and 25 silently, getting out pencil and paper when you are done."
- Avoid idle time. Students need to know what they should do if they finish a task before their peers.
- Have well-planned instruction. Good instruction is the first defense against misbehavior.
- Invest time in getting to know your students. Teachers who value relationships with their students have less uncooperative behavior in their classroom (Gregory and Ripski 2008).

Behavior Plans

Though not commonplace for students included in the general education classroom, the IEP team must create a behavior plan for any student whose behavior "impedes his or her own learning or that of others" (Bateman and Linden 2006, p. 80). This plan can take several different forms and is sometimes called a behavior intervention plan. For some students, definitely those whose behavior leads to suspension for ten days over the course of the year but also other students whose

behavior may be hard to nail down, the IEP team will complete a functional behavior assessment (FBA) before writing the behavior plan. The purpose of FBA is to determine the function of student behavior so teachers can develop strategies to change the behavior. Typically, this is done through observation of the defined behavior and ends with manipulating antecedents or consequences to replace or decrease the behavior (Scott, Alter, and McQuillan 2010).

What this means for you is that a student may come into your classroom with a behavior plan in place, based on an FBA, so designed to alter a known behavior. For instance, last year, the IEP team conducted an FBA and determined that Frank's inappropriate behavior (engaging peers in discussion) typically occurred when Frank didn't know what he was supposed to be doing or was not sure how to proceed with the task (the antecedents). The IEP team created a behavior plan that included teaching Frank strategies for asking for help or indicating that he needed help in appropriate ways. You will want to read the behavior plan to know what strategies Frank should be using so you can prompt him if he forgets, as well as to understand the positive and negative consequences that are in place through the behavior plan.

Working With the IEP Team

In most cases, students will come into your classroom with strategies and plans already laid out. The IEP team will have spent time working on ideas, and the special education team will have taught the student how to use appropriate strategies to control their behavior. You will want to learn what these strategies are so you can remind students to use their strategies and prompt them with the steps if they are struggling. See Figure 3.5 for an example of a strategy students may have been taught for controlling their behavior and "Fostering Student Independence" for prompts to help students self-monitor.

FIGURE 3.5. STRATEGY EXAMPLE

One strategy for problem solving that students may have been taught to use is the acronym DIRT.

- **D**: Define the problem
- **I**: Identify choices
- **R**: Reflect on the choices
- **T**: Try it out!

Source: Cook 2005.

However, there may also be times when a student begins to exhibit behaviors in your classroom that did not exist in other settings, were not problematic in other

FOSTERING STUDENT INDEPENDENCE: SELF-MONITORING

Don't you hate it when the teacher has to call you out for your behavior? You spoke out of turn, weren't paying attention, or were playing with something in your desk, but having the teacher point out your behavior can be embarrassing. You can use something called self-monitoring to help decrease the number of times you aren't doing what you're supposed to be doing. Follow these steps, with help from your teachers. Research shows us that this works with high school students like you! (Graham-Day, Gardner, and Hsin 2010)

- Decide on the behavior to monitor. This should be a behavior that impedes your learning or the learning of others in the classroom. Define the behavior such that you will be consistent ("I only popped out of my chair to pick up an eraser from the floor; does that count as being out of my seat?"). When possible, phrase the behavior as a positive—you will feel much better about yourself if you are counting the things you are doing right rather than those you need to improve. Your teachers can help you define what is appropriate.
- Think about how to track or monitor your behavior.
    - How often will you check the behavior? Some behaviors (raising hand) can be counted every time they occur, while it is best to use a sampling method for other behaviors. For instance, were you on task for the entire last five minutes of class?
    - How will you record the behavior? Keeping a tally will be appropriate for most behaviors, but you will need a reminder of the time period if you are taking data every few many minutes. One idea is to download an app to your phone that will set off a timer (on vibrate only!) in prescribed intervals. Be sure to get permission if you are going to use any technology that may otherwise be considered contraband.
    - You want to be consistent and accurate in tracking your behavior. Talk to your classroom teacher to see if he or she, or maybe a friend, can track the behavior for a few days so you can compare results.
- Reflect on how self-monitoring is changing your behavior.
    - Graph the data from your tracking system. That should help you visualize the inappropriate behaviors decreasing and the appropriate behaviors increasing.
    - Consider other things that may be affected by your behavior change. For instance, did your grades go up? Is it easier to do group work?
    - If you don't see a lot of change, think about setting a specific goal with a reward for yourself. Maybe spending half an hour less studying one night and instead playing a video game.

Source: Rafferty 2010.

settings, or do not respond to the same interventions as in the past. Any time a student with an identified disability is struggling in your classroom, you need to communicate with the special education teacher. If behaviors are disruptive, the IEP team may meet to discuss altering the BIP. It is probable that someone will come into your class to observe and take data or that the special educator or school psychologist will provide you with questionnaires and forms to help define the

behavior and determine the function of the behavior. The IEP team can help you brainstorm strategies to put in place to change or extinguish the behavior.

Medication

If the student is on medication, it is even more important that you communicate with the IEP team and parents about changes you see in behaviors. Please note that the school (including teachers and members of the IEP team) should *never* recommend or endorse that a student take medication. Decisions about medications need to be made by a medical doctor, and no one in the school is qualified to make recommendations about medical functions. However, when parents make teachers aware of changes in medications, then it is very helpful for teachers to communicate changes in behavior so that parents can work with the medical doctor to make appropriate medication decisions. Again, this is so important that we have to repeat it: Do not recommend that students take medications.

As you are probably aware from personal experience, medications often have side effects, ranging from those that have very little impact on daily life (e.g., hair loss) to those that can affect a person's behavior just as much as the medication can (e.g., fatigue, hunger, thirst). Though adolescents are often very sleepy because of their sleeping habits, do be aware that this is a common side effect of medications used for various emotional disabilities, ADHD, and autism. If you know that the student is on medication, you may need to cut him or her a little slack because yawning and drowsiness may not be the student's fault. The student also may really be extra thirsty or hungry and need the extra trip to the water fountain or bag of chips before class starts, though you may naturally be concerned that they are avoiding class activities.

Just because a particular behavior may be linked to medication doesn't mean that you have to ignore it no matter the effect on the class. Instead, you can accommodate the behavior. As you think about changes you can make in your classroom, remember to be a creative problem-solver. Although you may not normally allow food or drinks, maybe you can institute a "first five minutes" rule that allows all students to eat or drink for the first five minutes of class (as long as they clean up after themselves, don't go into lab areas, and follow other guidelines). Maybe a student having a hard time staying awake would benefit from having the option to stand instead of sit, or he may perhaps require accommodations such as receiving a copy of the notes after class. Remember to keep the IEP team informed about any concerns you may have. If side effects are severe, talk to the parent and IEP team about what you are seeing in your classroom—it is possible that the student can change the time of day he takes the medication, allowing him to be more alert when in your class, or that your classroom may not be an appropriate placement.

Social Skills

As we discussed in Chapter 1, social skills can be an area in which many students with disabilities stand out from their peers. In your classroom, this will often manifest as awkwardness in interactions with peers and with you, but it can include other classroom behaviors as well. In general, the student should have strategies he or she has learned to cope with social skill deficits, though your role may include reminding the student to use the strategies. For instance, the student may have a laminated card with reminders about working with peers, and you may want to refer the student to review the card before group work begins. It will also be helpful for you to give examples of appropriate and inappropriate behavior if you are going over behavioral expectations with the class. Also remember that you set the tone for your classroom, and other students' tolerance of their classmates' quirks may depend on how you react to situations in your classroom.

Classroom Disruptions

Many teachers have nightmares about that one student who causes major classroom disruptions in class every day. How a teacher defines "major" depends on context and can range from a few instances of calling out to a full-blown yelling-fest. As we have repeated many times, the IEP team would not suggest a student take your class if they did not believe the student could be successful, and that includes not having regular bouts of highly disruptive behavior. If your tolerance for interruption is very low, you may need to work on increasing your tolerance (see Figure 3.6). Snapping at students every time they are slightly disruptive ("I needed a tissue!") leads to more problems in the long run, including creating an unfriendly classroom environment.

FIGURE 3.6. INCREASING TOLERANCE FOR DISRUPTIVE BEHAVIOR

- Be aware of your tolerance, and question why your tolerance level is what it is. If there is a good reason (easily get headaches, safety during labs), communicate the reason for your high expectation to students.
- Remember that things that bother you don't necessarily have to disrupt the entire class. Consider covert ways to prompt a student back to task.
- Think about the function of the disruptive behavior and consider alternate ways for the student to fill the need, or provide the student with what he needs before he disrupts the class.
- Fake it. Someone's behavior might grate at your nerves, but you can pretend it doesn't; doing so will have the same outward effect as the behavior not bothering you at all.

CHAPTER 3

"Argumentativeness"

It is a teenager's prerogative to disagree with adults, and some teenagers will disagree to the extreme at every opportunity, even if they do not have a disability. It is important that you try not to engage students once they get defensive if you know they will not take your explanation. For instance, on a bad day, a student with a mental health issue argues with you that the atomic number for oxygen is not eight; you, obviously, are right, but no matter what you say or show the student, she does not back down and continues to insist that you are wrong. At this point, it is best for you to back off, give the student time to process, and mentally reset. If you continue to engage with this student, or any student in such a defensive state, you will only waste time, energy, and the attention of the rest of your class.

In general, you can try to avoid some "argumentativeness" by explaining why you are asking students to do certain tasks (write out entire equations, not read the second half of the lab until everyone is done with the first, and so on). Providing clarity in your instructions will also help with this—the less wiggle room there is in your directions, the less a student can logically disagree ("You just said get out your book; you didn't say to open it!"). Finally, it is best to stay calm and not take the student's "argumentativeness" personally. Yes, he or she is arguing with you, but it's not about you. It may be about the student trying to push your buttons or gain control, but it is not an attack on you. Take deep breaths and redirect yourself and the student.

Excessive Questions

All kids go through a phase where they ask questions ad nauseam, but individuals with some disabilities, most typically Asperger's syndrome, continue this behavior. It is important to remember that the student cannot completely control this, and although it is natural for you to get frustrated, the better tact is to use strategies to help the student ask questions at appropriate times. Direct the student to write her questions down and ask at the end of class or during transition time. If the student is really struggling, you may consider limiting the number of questions she can ask by giving her five coupons and requiring that she turn in a coupon every time she asks a question. When the coupons are gone, she has to hold all questions. Over time this should help her determine which questions are most important and filter out superfluous questions.

Internalizing Disorders

Not all students with disabilities will exhibit behavior issues. Some of those who are not exhibiting overt, disruptive behaviors may have internalizing, or covert, behaviors that will affect their performance in your classroom. Anxiety and depression are examples of internalizing disorders that may manifest in a student

not being outwardly disruptive, but having a hard time being an active participant in class all the same. You will know which students have this designation by reading student IEPs and talking to the case managers. You can glean information from these resources to help you know how best to approach the student in your classroom. Many students with anxiety will be working on learning or applying coping strategies, and if you can reinforce the use in your classroom, that will be helpful. For all students with internalizing disorder, it will be important for you to watch for any changes in behavior and immediately communicate those changes to the case manager and parents (Kauffman and Landrum 2009).

Working With Peers

Students with disabilities often have a difficult time making friends. If you have a socially awkward student in your class, consider their existing relationships as you assign groups. If the student is comfortable working with a particular peer, consider grouping those two together often, unless they are poor influences on each other. Individuals with disabilities often tend to socialize with individuals from whom they may not learn appropriate behaviors but instead who engage in risk behaviors and have behavioral issues themselves (Farmer et al. 2011). When you allow students to choose their own groups, keep an eye on how students interact with each other. Is there a student who is always picked last, with peers reluctant to let him or her in their group? If so, you may need to always assign groups so that peers do not have an opportunity to shun the student.

Cheating and Plagiarism

Though cheating is a concern for all teachers, there is no reason to believe students with disabilities are more likely than students without disabilities to cheat. Thus, you should approach any student with a disability you suspect of cheating or plagiarism in the same way you would approach a student without a disability. Begin the school year by being clear about what constitutes cheating and plagiarism in your classroom: Is it okay to have a parent give the student feedback on a paper? When students collaborate, how will work be divided? What are the guidelines for citing where the students get information?

If there is cheating and plagiarism in your classroom, it may be masking a greater problem, such as a student's inability to do the required work, or a student's lack of belief that they can do the work (McTigue and Liew 2011). Talk to the student about the issue to determine if this is a self-esteem issue, an improper placement, a lack of understanding expectations, or just pure and simple inappropriate behavior. It may be helpful to include the special education case manager in the discussion with students with disabilities, as the case manager may be aware of patterns of behavior.

It is also important to remember that accommodations are *not* cheating, though it is important for you to be clear with yourself, the IEP team, and the student about where the line is between using an accommodation and cheating. For instance, perhaps a student is allowed the accommodation of word processing his final exam essay questions. Does this include using spell check and grammar check? When you get the list of a student's accommodations at the beginning of the year, seek clarification on any items that concern you.

Discipline

Given the academically advanced nature of the students in your advanced science classes, and given that an IEP team has decided that any student with a disability in your class will be able to successfully complete the course, it is unlikely, yet possible, that students in your class will require high levels of discipline. It is important for you to understand what makes school-level discipline for a student with a disability different than for students without disabilities, so that you can understand that two students committing the same infraction and receiving different punishments is not a lack of justice; rather, it may be a difference in needs.

Students with disabilities who engage in behavior that would typically result in suspension, or temporary removal from school, may be suspended for as many as 10 days total during the school year without the IEP team needing to take any action. So, let's say that Phillip brings drugs to school—he can be suspended just as his peers without disabilities would be. However, before suspending Phillip for day 11 (for the same infraction or a series of different infractions), the IEP team must meet for what is called a manifestation determination hearing to determine if the behavior that caused the suspension is a result of Phillip's disability. The idea is that if the disability caused the behavior, then the IEP failed to meet Phillip's needs and we need to change the IEP. If the disability did not cause the behavior, then the IEP is accommodating the disability as it should be and the student should be suspended as the behavior would typically warrant (Bateman and Linden 2006). So, if the drugs Phillip brought to school were his bipolar medications, and he failed to drop them off with the school nurse because he was in a manic stage of his disorder, the infraction was directly related to his disability. The IEP team would meet, determine that the behavior was a manifestation of the disability, and consider adjustments to his behavior plan to prevent this behavior from happening in the future. If the team determines the behavior was not a result of the disability (perhaps Phillip brought marijuana to school), then Phillip would be suspended and the IEP team would not have to consider any IEP changes. So, students with

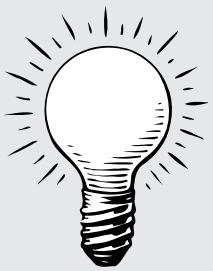
disabilities can receive the same discipline that their nondisabled peers receive, depending on the circumstances.

Conclusion

Behavior management is probably never an issue in your advanced-level science class, and you should not assume that it will be now that you have a student with a disability in your class. Remember that good preparation on your part will go a long way toward creating an environment in which the student has no reason to engage in major misbehaviors. Having knowledge of consequences and strategies already in place creates consistency so the student avoids changes in rules or expectations between your classroom and other settings. Finally, if you do have concerns or any issues arise, remember that the special education teacher is your best resource.

IDEAS TO GET YOU STARTED

- Review your current classroom management practices. Are your expectations clear? Do you have smooth transitions?
- Review any BIPs in your student's IEP. Do you understand the behavior and what to do if the student exhibits the behavior in your classroom? If not, talk to the special educator to get clarification.
- Does one of your current students need a behavior contract? Think about how to negotiate a deal with him or her to improve behavior.



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"It is our belief that in working to provide the learning supports and accommodations needed for students with disabilities to be successful, you will benefit all of your students and your own growth as a teacher will be enhanced." — From the introduction

Are you an experienced science teacher who needs a foundation in special education basics when students with disabilities are placed in your advanced classes? Then this book is the resource for you. Both practical and teacher friendly, this book will help you

- think of ways to design your instruction with individual needs in mind,
- find new and creative ways to manage lab experiments so all your students will benefit,
- overcome fears of behavioral flare-ups in the classroom, and
- become more confident when working with your special education counterparts and the IEP team.

Including Students With Disabilities in Advanced Science Classes starts by introducing you to special education terms and laws and concludes with ways to approach end-of-year testing. In between, you receive straightforward guidance on real-life situations, plus problem-solving strategies, behavior contracts for students, and practical classroom tips. Authors Lori A. Howard and Elizabeth A. Potts encourage you to embrace including students with disabilities in your advanced classes and give you the tools you need to help all of your students succeed.

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