Recently I had the opportunity to do a lot of international travel. I’ve worked with amazing educators in Denmark, England, Germany, the United Arab Emirates, and China. The discussions I have had simply continued to emphasize for me the importance of interprofessional collaboration. The more we work together, the more creative our lessons are and the more students are truly included. The more we work together, the more we are able to universally design lessons, utilize technology effectively, differentiate curriculum, and grow as learners ourselves. As we collaborate, I believe we become more energized, thereby leading to less burn-out and attrition in the field of education. That’s what TCARE is all about!

What are you doing to connect with others, personally and professionally? Think about not only how to collaborate in order to benefit your students, but also how you might help your colleagues with theirs. Consider starting a faculty book club (wine club?) or walking group or a lunch “share your best app” meeting once a month. Don’t shut your door and try to make it through the day. Open it and bring others in!

In this issue, you will recognize some of that interprofessional collaboration. This is the first issue that is officially peer-reviewed and our inaugural group of peer reviewers is named on the back page. In addition, we have an article representing an international perspective on education. We continue to encourage practitioners, researchers and other educators to submit articles that will share practical strategies and tips for our readers. To get information on our submission process and requirements, please visit to www.csun.edu/ctl and go to our publications page.

All my best for the rest of 2017!

Wendy W. Murawski, Ph.D.
Executive Director and Eisner Endowed Chair
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When you hear, assistive technology, you might think, “It’s too expensive!” or “That’s too complicated!” We promise, assistive technology (AT) does not have to be either! Here are some inexpensive and easy-to-implement ATs that will help you meet the needs of all the students in your classroom, and may be especially helpful for students with disabilities.

So, what exactly is AT, and why does it feel so intimidating? Any tool that can be created or purchased, with the intention of improving the functional capabilities of an individual with a specific need, is essentially AT (Individuals with Disabilities Act, 2004). If you wear glasses or contacts, you use AT! You do not always need high-tech AT to meet the needs of students in your classroom. In fact, teachers often find low-tech, teacher-created items can be more effective and easier to customize than high-tech devices.

Easy AT for Math: Mobile Apps
There are many mobile apps to help students facing challenges in math learn and practice skills. We’ve highlighted some free apps, but we encourage you to explore, read reviews, and try some out.

Check this out:
- **Sushi Monster** allows students to practice basic algebra through addition and multiplication.
- Using **Photomath**, students and parents can instantly check a solution using a device’s camera to scan math problems.
- **Maths Formulas Free** includes many formulas middle and high school math students need, and is available in multiple languages.
- **Free Graphing Calculators** can support students working on math outside of class.

Easy AT for Literacy: Adapted Books
Do you have students in your class reading below grade level? This may be because of any number of issues. Students who struggle to read content are not able to learn from it the way fluent readers do. Adapted books, reading materials altered from their original form, are a great AT solution to help level the playing field for students with reading difficulties.

Check this out:
- **Bookshare** offers a large collection of free accessible books for individuals with print disabilities.
- **Adapted Literature and Lessons** from the Paul V. Sherlock Center on Disabilities includes materials to support students with disabilities in accessing the general education curriculum.
- **Accessible Instructional Materials**, by Cheryl M. Jorgenson, will help you create adapted books.
- **Local or School Libraries** may have collections of audio books readily available.

Easy AT for Organization: In-class Tools
Students with disabilities may find organization challenging. These are some tools you can make available in your classroom to help your students get organized.

Check this out:
- **Color-coders**, such as highlighters or colored dot stickers, organize materials by subject, topic, or day of the week.
- **Sticky notes** are useful for keeping place while reading, marking a section of text, or making to-do lists. There are many webpages devoted to sticky notes in the classroom; we suggest you do a search of your own!

Visual schedules help students stay organized throughout the day and prepare for transitions or changes. The Hands in Autism Treatment Center website offers a how-to guide to help you create visual schedules.

Final Thoughts
We hope these resources are a useful addition to your toolkit of strategies and effective for students with disabilities in your classroom. The resources we’ve shared are just a small part of the wide range of AT tools readily available at little or no cost to you, so keep exploring!
When I was young, I was hooked on *The Jetsons*. Their futuristic lives activated my imagination and instilled wonder in me. They had a robot for a maid! How great was that?!

Today, the Skypad Apartments don’t seem too far from reality. Roomba does our vacuuming, Alexa does our ordering, and now there is even Eatsa, a new restaurant chain staffed by Ipads and robots. In many ways, we have been living like the *The Jetsons* for years, but teaching has remained largely the same since I was a kid. Until now. In the past few years we have started to innovate and educate for the future, and I believe teaching and the education system is now in the best place it’s ever been and only has room to get better.

**Future-Ready Teachers**

In December 2015, the Every Student Succeeds Act endorsed Universal Design for Learning (UDL) as best practice. This is great news for educators because the goal of UDL is not to create robotic students who are all the same. Quite the opposite—the goal of UDL is to create expert learners who are resourceful, who problem solve, and can cope and adapt. They cannot be replaced with engineering, technology, and automation. In addition, students need expert teachers who are equally motivated, innovative, creative, and practical problem-solvers.

**Expert Learning and Expert Teaching**

In order for students to be expert learners, they must have an opportunity to personalize their learning. Traditional education had a single goal: knowledgeable students. If students are only knowledgeable, Siri will give them a run for their money, so they need more than that. Students need to be motivated, purposeful, resourceful, strategic, and goal-directed. There isn’t a curriculum in the world that will get them there without an expert teacher by their side. That’s you!

In order to move away from acquisition of knowledge to acquisition of learning, we have to channel our creativity and provide all students with a personalized education. Personalizing learning doesn’t mean we have to create different lessons for every student in the class—that would be enough to drive anyone to exhaustion. Instead, we use the three principles of UDL: provide multiple means of engagement, multiple means of representation, and multiple means of action and expression to create a buffet of options for students so they can make choices about their learning. Some examples follow.

**Provide Multiple Means of Engagement**

- Create a “Student Passion” board and encourage all students to share what they want to learn about. Design lesson options that build on their interests.

**Provide Multiple Means of Representation**

- Provide more than one option for students to learn content with clear degrees of difficulty. For example, “Choose one of the following four resources to learn about the Civil War…” and there may be a rigorous primary source document, a summary document, a video, and/or a podcast. Students can choose what works best and then share with one another.

**Provide Multiple Means of Action and Expression**

- Provide multiple choices to students on assessments to express their understanding. For example, students may choose to express their understanding in text, audio, video, multi-media, live presentation, etc... but they are also encouraged to suggest additional alternatives if they can meet the standards in another way.

Through the UDL framework, students are intended to become self-directed learners and choose the options that work best for them, not the other way around. With UDL, students learn to take responsibility for their learning. We have an amazing opportunity to teach them how to do that.

UDL isn’t a framework you can implement overnight. It takes practice, patience and persistence (ahem, skills we are looking to cultivate in the next generation!), but once you see it working its magic in your classroom, you will become just as hooked as I am.

**Universal Design for Learning: The Framework for the Future**

Katie Novak, Ed.D., is Asst. Superintendent in Groton-Dunstable School district in Massachusetts and has 15 years of experience in public school settings. She has been featured on the Teaching Channel, is the author of four books on UDL, including the best-selling, *UDL Now!*, and is an internationally recognized expert and facilitator in UDL implementation.
In day-to-day lessons, while students are attempting to understand and learn mathematical concepts, the pressure of getting a correct answer can get in the way of students grappling with their thoughts and expressing them, which in turn hinders learning and whole class discussions. As teachers, we can help students explore math concepts by providing safe opportunities for students to express what they think and what they see. These are tasks where students’ responses are not evaluated as right or wrong but where the focus is on allowing students the freedom of interpretation. Integrating math lessons that focus on what students notice and what they think can help build an environment where students feel their thoughts are important (and not being evaluated) and they become more willing to share their thinking with others. In turn, lessons that elicit student thinking provide a space to critique the reasoning of others through discussions about different interpretations. Tasks such as these are important to integrate into the curriculum throughout the school year, although implementing them within the first few weeks of school are most valuable in developing an environment for whole class and group discussions.

Here is one task to enable students to express their thinking by exploring number and growth patterns. For example, using the figure on the right (from www.visualpatterns.org), ask students to identify and code the pattern they see. After students explore the pattern individually, have them share pattern interpretations in pairs or small groups, which is an effective way of introducing students to listening and thinking about other students’ ideas. These conversations also build students’ self-confidence and illustrate to them that there is value in how they see things. This also provides the opportunity for teachers to move around to different groups and choose the different interpretations they want to highlight in a whole class discussion. To connect students’ ideas and make a mathematical point, a whole class discussion that investigates groups’ different interpretations is important. An easy and efficient way to display handouts for the whole class to see during the discussion is to use a smartphone application, like AirScanner or AirProjector, that allows you to project images from your device’s camera to a web browser using Wi-Fi.

The main points about this task are that students were able to think about growth patterns in a way that was “safe.” They could contribute without the pressure of producing the exact algebraic expression that represents the growth pattern. Following the discussion about interpretations, connecting them to the algebraic expression (even briefly) can add multiple levels of differentiation. Both figures represent a different expression that ultimately simplifies into $2n^2 + 2n + 3$. This emphasizes how critical simplifying is and that it is used as a way for mathematicians to communicate conceptual proofs, using a common “language.” Many other extensions can come from this exploration that would make it suitable for higher-level math courses.

Students will need time to be comfortable sharing their thinking. In fact, the examples of students’ interpretations provided in the figures above were not the first time students had explored patterns in this manner. These students had participated in six lessons before this one, each looking at different types of patterns and asking similar questions such as “What do you notice?” or “What patterns do you see?” Students were reluctant at first, but over time, students felt more and more confident in expressing what and how they thought. For some, the reluctance comes because they have always been told how to do math, never asked to think about it. Think about that!
Teaching is such a kick-in-the-pants, joyous, gut-wrenching odyssey that it’s only fair I share with you some tips, tricks and ideas to get you started on just the right foot.

1. Before you teach one lesson, create the systems by which your classroom will be run. You need procedures for...everything. You can always tweak and improve as you go but classrooms without systems create challenges that get even the best teachers into quagmires. Good systems allow your class to run smoothly so you can focus on what YOU do best: teach!

2. It’s all about the pencil. New teachers often get trapped in a struggle with kids over supplies: where they are, why they didn’t bring them to class, losing them, borrowing them. It’s exhausting and keeps you from doing what you need to be doing. In our zeal to teach readiness and responsibility, we mistakenly make supplies a hill we choose to fight for and die on.

3. Make sure you have a clear focus for each day’s lesson that includes what it is you expect kids to learn. Publicize that on your board and say it out loud at the start of class. Knit together each day’s lesson to yesterday’s learning and explain how and why kids need to know this. Right before they leave, ask kids to tell you what they learned. Studies show that teachers who draw connections from day to day increase retention of their material by more than 50%.

4. Maximize your instructional power by putting kids to work. Use classroom “employees” to help you run the room so you are free to teach. Most class tasks can be handled expertly and enthusiastically by your students. Hire them, pay them in extra opportunities, give bonuses for good work, review their performance and rotate duties frequently throughout the year.

5. Discipline your students with dignity. New teachers often get into power struggles with students as they attempt to learn how to assert themselves in this new arena. Avoid this completely. Instead, use proximity and language to sort out what’s happening. Do it with a neutral tone of voice and with a smile on your face whenever possible. Lean down or squat near kids who are off task so you aren’t towering over them. Ask kids who are misbehaving what they are doing, what they are supposed to be doing, and what they are going to do now. There is no blaming or attacks, just a “let’s get back to work” focus.

6. Design lessons and activities that give kids freedom, choice and fun. You know what content standards you must help kids master, but HOW you do that, how you personalize it to match your students’ interests, and increasing kid choice in how they show you they’ve learned is what will make your classroom a lively, special place.

7. Collaborate like crazy. Great teachers are social, reflective, proud but not egotistical and always open to improvement. So find a buddy on campus—or five. Talk to each other, share ideas and support each other. This is how teachers grow and improve. There’s no need to re-invent the wheel or go it alone.

8. Take care of yourself. Teachers, especially new ones, naturally invest insane amounts of time lesson-planning, grading, searching for new curriculum materials and attending to teaching duties. Teacher burnout isn’t a myth, it’s a reality. Be aware of this and become protective of you-time. Carve out two nights a week and one whole weekend day for yourself and nothing else. Whatever you do, do it for you.

9. Have courage to teach boldly, with creativity, and beyond the test. Kids will come to you with a whole host of issues, whether they’re at grade level or not. Your job is to find out where they are, find out what they need and then give it to them. Move them. Any forward academic movement is a good thing. These are the results people are dying to see if we can achieve.

Rebecca Mieliwocki was the 2012 National Teacher of the Year. She is currently the coordinator of secondary induction and professional development for Burbank Unified School District. This is her 22nd year in education.
Have you heard that Denmark is the “happiest country in the world?” It may be because of our pedagogues!

What is a “pedagogue”? In Denmark, a pedagogue is a professional who works in schools and collaborates with teachers specifically around children’s wellbeing and learning. A pedagogue has a bachelor’s degree in social education. It is a 3.5 year-long study, whereas a teacher has a bachelor’s degree as a teacher, which is a 4 year-long study.

A pedagogue will typically focus on children’s social and emotional wellbeing, as well as learning. This typically entails planning leisure time activities at the after school club (called SFO in Danish). They are used to plan different practical and esthetic working stations, such as crafts, theater and role-plays, soccer, bonfire, arts, or music. The purpose of this is to offer all children strong possibilities for developing and maintaining a healthy social and emotional life.

Lots of Danish research shows that pedagogues contribute to all children’s wellbeing, both in the classroom and during the afterschool club. Pedagogues work with children’s abilities to manage conflicts amongst themselves. Their focus on social activities has a positive effect on children’s friendships, acceptance of—and respect for—differences, which furthermore has a positive effect on anti-bullying strategies.

How is the role of a pedagogue changing with the movement towards more inclusive classes? In 2014, the Danish Government agreed upon a new School Reform. As a part of this reform, pedagogues will be much more involved in the daily school practice than before. In fact, the new law specifically requires pedagogues to collaborate with teachers upon teaching tasks. The pedagogues are expected to find a way to infuse leisure time activities into teaching practice and therefore make sure that all children are offered activities in a differentiated and creative environment. This is heretofore unprecedented and teachers and pedagogues are slowly working on how this collaboration will play out in the classroom.

How does one address social-emotional needs in a class traditionally focused on academics? Typically, pedagogues are in charge of the class and the content for a few hours per week. In most situations, the teacher is not present and the pedagogues use that time to target emotional and social support, without having to concentrate on specific subject contents like math. In the future, however, Denmark is looking to incorporating techniques like co-teaching to help increase the collaboration between pedagogue and teacher. Here are some examples of ways Danish pedagogues enhance the social-emotional wellbeing of children:

- **Tactile back massage**—children are asked to pair up. If there is an uneven number, then three pupils are asked to sit behind each other. Instrumental quiet music is played in the background and children give each other back massages. They are instructed to do circular or straight hand movements on the back of the other child. They can also imagine that it is raining or maybe storming and use these metaphors as inspiration for how to massage. The children are also encouraged to ask each other how it feels, and adjust the movements to the other child needs. While the children massage each other, the pedagogue is reading a story.

- **Story telling**—the pedagogue plans different stories to read and discuss with the students. The choice of stories is based on the social or emotional need of the class or some children in the class (without the pedagogue pointing that out). For example, they would read and discuss stories about: “How to be a good friend!,” or “What happens when someone you love dies,” or “I don’t dare,” or “I am angry.” In this way, they address emotional issues as happiness, sorrow, loneliness, anger, anxiety and so, and they give the students tools and strategies to handle their emotional struggles.

**Cristina Gulløv, M.A.** is a doctoral student at Århus University in Denmark, as well as an adjunct lecturer at University College Syd. She was originally a social pedagogue and is researching their collaboration and possible co-teaching options with classroom teachers.
Stop thinking of lesson plan organization, the open house, the report cards, and parent teacher conferences and start thinking of “me time.” This is for your own sanity as a veteran or new teacher. You absolutely need an escape, and you need to select what your cerebral massage will be. Most importantly, you need to follow through with your selection.

**Identify a place that floats your boat.**
Consider buying a membership instead of buying just one ticket to your top location. It’s imperative to provide yourself with “A Sanity for Me Regimen.” My place of choice in Los Angeles is the Huntington Gardens. A sagacious strategy of supreme self-care could not be more wisely done than buying that annual membership to your wonderland of choice, for purchasing one is like buying a gym membership and a constant relaxation mecca for the mind.

**Use the time you are given.**
At my very first teaching orientation, I asked two sassy 30-year veteran teachers what they did to maintain their sanity as teachers. They responded knowingly, "You know those ten sick days they give you? Well, you take those sick days, child. *You take those sick days!*” As those veterans exclaimed, “You have ten days as a teacher, and maybe one day out of the month, after a grueling week, you need that day for yourself. **TAKE that day for yourself. You deserve it.”** That was some of the best advice I've ever received.

And so, for my own sanity, I take my exercising power walks at The Huntington Gardens, go there at least once a month, and frequent there often during the summer months. I recommend you find your own mecca and don’t be afraid to take the days you need for your own self-care.

George Miserlis is a special education teacher with the Los Angeles Unified School District in California. He has 11 years of teaching ESL and Special Education.
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