# Educator's Voice

#### NYSUT'S JOURNAL OF BEST PRACTICES IN EDUCATION

VOLUME XIII 2020

#### Included in this issue:

Welcome from Jolene DiBrango

Supporting Inclusive Classrooms with Teacher Partnerships By Elizabeth Daley

The Benefits of Guided Note-Taking in the High School Classroom By Rebecca Greenfeld

Improving Social-Emotional Skills through Gameplay By Celestial Wills-Jackson

#### Resources

For additional information on this and other topics, please visit *nysut.org* 

©2020 NYSUT

# Students with Disabilities

## ACCESS AND EQUITY IN THE SCHOOL COMMUNITY

## In this issue ...

Authors present a range of practices dedicated to students with disabilities and designed to promote access and equity in the classroom. You will read about the intentional design of inclusive classrooms utilizing collaborative teams, and how to develop the supports needed to execute them effectively across school communities; how to navigate instructional accommodations in the Individualized Education Program with a focus on guided note-taking in the high school math curriculum; and cutting edge research that examines how culturally responsive teaching can help students with autism spectrum disorder to gain in equity-based, social-emotional learning. The ideas posed herein are meant to inspire, demonstrate and describe these practices in sufficient detail so that others may discover how to adapt them to classrooms across the state.



800 Troy-Schenectady Road, Latham, NY 12110-2455 🔳 518-213-6000 🔳 www.nysut.org

Andrew Pallotta, President Jolene T. DiBrango, Executive Vice President Ron Gross, Second Vice President J. Philippe Abraham, Secretary-Treasurer

Dear Colleagues,

Students with disabilities, like all children, present a wide range of academic and social strengths and challenges and are entitled to an educational experience that will best serve their individual needs. In addition, these students are to be afforded the same educational access and equity to programs and services as their typical peers. Yet there is no single approach or formula for what works best. It is, therefore, incumbent upon all of us to understand the unique qualities within each child in order to help them to unlock their full and complete potential. With thoughtful planning, professional learning, and ample resources, educators develop a personalized approach that best meets the needs of their students.

In this volume we present a range of practices focused on access and equity in the school community, designed specifically for students with disabilities. Each contributing author has developed a curricular approach building from a research base while responding to the students in their charge and making these practices their own. We hope you will be inspired to do the same.

In Solidarity,

Jolene Di Brango

Jolene T. DiBrango Executive Vice President

#### **EDITORIAL BOARD**

Jolene T. DiBrango Executive Vice President

**Daniel Kinley** Director of Policy and Program Development

> **Dave Rothfus** Research and Educational Services

**Bernice Rivera** Educational Services, Education & Learning Trust

**Clarisse Butler Banks** Lead Editor/Copy Desk Chief, Communications

#### **Publication Coordinator**

Leah Lembo Research and Educational Services

The Editorial Board wishes to thank the following individuals for their contributions to the development of this volume: Maureen Caccavale, Cynthia DeMichele, Susan LaFond, Terry McSweeney, Ellen Sullivan, John Strom and Carolyn Williams.



Representing more than 600,000 professionals in education, human services and health care

800 Troy-Schenectady Road, Latham, NY 12110-2455 518-213-6000 • 800-342-9810

#### www.nysut.org

New York State United Teachers Affiliated with AFT • NEA • AFL-CIO

# Educator's Voice

#### NYSUT'S JOURNAL OF BEST PRACTICES IN EDUCATION

VOLUME XIII 2020

For additional information on this and other topics, please visit **nysut.org** 

# Students with Disabilities

## ACCESS AND EQUITY IN THE SCHOOL COMMUNITY

The Benefits of Guided Note-Taking in the High School Classroom ...... 18 By Rebecca Greenfeld

The materials contained in this publication are protected by copyright. Individuals may copy these materials for educational purposes only. No one may use these materials for any commercial purposes, including but not limited to distribution, modification, reproduction or sale for profit.

In this volume of Educator's Voice, authors may have referenced particular programs, curricula or websites in the discussion of their work. These references do not imply approval or endorsement by NYSUT of any particular product, service, or organization.



#### **SUMMARY**

Teaching partnerships are powerful tools in addressing the needs of academically and socially diverse classrooms. Inclusive classrooms are opportunities for all students to learn and practice the skills they need to meet the demands of the workplace.

# Supporting Inclusive Classrooms with Teacher Partnerships

## Much of what happens

to hamper the growth of co-teaching teams begins with communication gaps between general education and special education teachers. Lively debates about the difference between accommodation and modification, or integrated co-teaching and consultant teaching, even inclusion and programming are meaningful and often passionate. There is no doubt that all educators are invested in the success of inclusive classrooms, but these discussions also illuminate a tension between special educators and general educators.

When it comes to students with disabilities, how much support and how to support is where it gets messy. Individualized Education Programs (IEPs) are designed for one student at a time, there is no template for a student with autism as opposed to a student with intellectual disability. The **Committee for Special Education** (CSE) approaches this responsibility with input from general education teachers, parents, students and service providers, but many general education teachers don't feel confident in this process. This tension is also fueled by the historically rooted narrative that describes special education as a separate education (Bateman and Cline, 2016). This tension is manifested across the nation. According to Learning Forward, a 2019 research report by the National Center for Learning Disabilities, "only 56 percent of teachers surveyed believe IEPs provide value to students ... often include services that are not

Elizabeth Daley supports students and families as a special education teacher at Queensbury High School, where she focuses on pedagogy designed to give students the opportunity to learn and practice independence in skills and decision-making. A National Board Certified Teacher and Teacher Leadership Coach, Daley works to create meaningful parent engagement and build systems to support collaboration between stakeholders. Daley has written curriculum for New York State Teacher Centers for certificate extension pathways and collaborates with her colleagues to design CTLE programs that support evidence-based practices in special education, teaching partnerships, Next Generation Learning Standards and fundamentals of mental health and wellness.

#### Elizabeth Daley, Queensbury Faculty Association

necessary." (p. 14). It can be daunting to maintain high expectations while serving every student's needs. There exists a leap of faith for teachers to trust each other as we adjust our practices.

Framing special education as services within the general education system and providing general educators with a sense of efficacy in skill and knowledge of the processes and vocabulary that describe those services is one of the most powerful advocacy tools of special educators. Assumptions about the needs of students with disabilities are malleable once we have the opportunity to reflect with our colleagues. When teaching partners understand the role of the special educator and are able to communicate with accuracy about their students, they can move on from the debates to the more powerful actions that support students at risk or students with disabilities. Reflective conversations start with establishing a common ground and require a shared vocabulary. Let's start with the fundamental phrase, teaching partnerships: What exactly do we mean by co-teaching and direct consultant teaching?

#### Defining the partnerships: Co-teaching and direct consultant teaching

According to the guidance from New York State Education Department (NYSED), co-teaching and direct consultant teaching are two types of services in which a general education and special education teacher partner to support students with disabilities. Understanding the differences as described by NYSED's Continuum of Special Education Services (2013) helps each partner define roles and responsibilities and avoid assumptions which might hamper the partnership. The intent of this document is to support practitioners in a working understanding of the regulations:

Integrated co-teaching services means students are intentionally grouped together based on similarity of need for the purpose of receiving specially designed instruction in a general education class, usually daily for the identified class. In this model, a general education teacher and a special education teacher share responsibility for the delivery of primary instruction, planning and evaluation for all students. Direct CT Integrated co-teaching services means students are intentionally grouped together based on similarity of need for the purpose of receiving specially designed instruction in a general education class.

## Supporting Inclusive Classrooms with Teacher Partnerships

Much as the success of any classroom teacher is rooted in timely and effective planning so is the success of teaching partnerships.

services are specially designed individual or group instruction recommended for an individual student with a disability in his or her general education class, the purpose being to adapt, as appropriate to the needs of the student, the content, methodology, or delivery of instruction to support the student to successfully participate and progress in the general curriculum during regular instruction. The focus of services provided by the CT is to an individual student with a disability (New York State Education Department, 2013, p. 14-15).

What you will notice in a direct Consultant Teach (CT) classroom, as opposed to a Co-teach classroom, might be indicated by the positioning of the special educator. In the direct CT classroom, most often the special educator will be working next to a student or small group of students, whereas in the co-teach classroom the special educator might be seen leading a whole group review of content or skill instruction, or working with a small group. There is a level of responsibility for all students in co-teaching that narrows to only the small group in direct CT. In another example, in a station rotation in the direct CT classroom, the special educator might move with the small group, rather than stay in one station in order to work with all

students within the co-teaching classroom. What looks the same in both CT and co-teaching classrooms is specially designed instruction. For example, when writing a paragraph that states a claim, this instruction might begin with practice identifying claims within exemplars, or students might have a writing organizer that scaffolds the organization of a paragraph. Specially designed instruction will look and sound different than general education instruction.

Much as the success of any classroom teacher is rooted in timely and effective planning so is the success of teaching partnerships. In both partnerships the responsibility for the learning outcomes of the students with disabilities is shared between both educators requiring each partner to be explicit in their plans. Here's the tough part, most educators report that they do not have adequate time to meet with their partner. And without understanding the full implication and intent of inclusion, co-planning can become something we do only if we have the time. As my teaching partner Kerri Bundy says, much like IEPs are individualized, inclusive classes are individualized! Even though both educators know the content and have spent years teaching together, they have to meet often to individualize instructional practices and customize student products to meet the needs of diverse classrooms. Planning is where

we build trust in each other, design a predictable classroom environment and address any issues that might risk our classroom choreography.

So why the focus on "inclusion" and what might be the shifts all educators are required to make by this term which is commonly used to describe attributes and attitudes, but is in our case, a specific technical term? Bateman and Yell (2019) report that, "Inclusion of students with disabilities in the general education programs is important not only because it is a core component of IDEA, but also because it is good for both general education and special education students." (p. 193). A separate education is inherently an unequal education. As Whitbread describes in her research summary, News - What Does the Research Say About Inclusive Education? for wrightslaw. com: "Although separate classes, with lower student to teacher ratios, controlled environments, and specially trained staff would seem to offer benefits to a child with a disability, research fails to demonstrate the effectiveness of such programs (Lipsky, 1997; Sailor, 2003)."

In the following vignette Mary Lillge, one of my teaching partners in 11th grade English, tells of the impact of inclusion on one of our highest achieving students: One of the students in our class was giggling about the reaction of another student, who has autism, to a new writing assignment. At the end of class, we addressed it with him. We had just a few minutes to process this but instead of jumping right to discipline, Mrs. Daley started with gently asking him the question, "What do you know about autism?" The student was clearly surprised by this approach and as we explained autism and engaged him in identifying how it impacts a student with this diagnosis, we saw this young man change. Since this day, this young person became an ally to his classmate.

#### **Describing Inclusion**

We begin with a description of inclusion (on the following page) from the New York State Board of Regents (Promoting Inclusion of Students with Disabilities, 2015).

The practice of inclusion requires all teachers to be intentional in their planning, both in terms of instruction and environment. Each inclusive setting is focused on high expectations, expectations that are amply and appropriately supported by evidence-based practices. Inclusive classroom practices dovetail with the practices that support students whose Inclusion of students with disabilities in the general education programs is important not only because it is a core component of IDEA, but also because it is good for both general education and special education students.

## Supporting Inclusive Classrooms with Teacher Partnerships



Source: NYSED Engage NY

learning is interrupted by trauma, poverty, weak social-emotional skills, even English language learners and students navigating an unfamiliar culture. (Bateman & Cline, 2016).

When facilitating training for coteachers, whether those partnerships are consultant teachers or integrated co-teaching, whether the classroom or building considers this inclusion or not; three domains of effective collaborative partnerships have been considered here: rapport, instructional strategies, and student outcomes.

#### **Relationship vs. rapport**

As defined by Miriam-Webster (n.d), rapport is a friendly, harmonious relationship especially: a relationship characterized by agreement, mutual understanding, or empathy that makes communication possible or easy. In the classroom, rapport is heard in "we" language and happens when teachers model communication. For example, in order to address a possible misconception when discussing The Great Gatsby, the special educator asks the general educator the following: "I'm confused by the term, modernity. I know the root word is modern, but how does it connect to a book written 100 years ago?"

Rapport is seen in the ease with which student routines are supported - students know how to access supplies, ask questions and which teacher is responsible for attendance, how their work is evaluated and who is giving feedback. Rapport is characterized by respect. Primary to rapport between a special educator and general educator is communication. It's fundamental to the partnership of professionals that they continually connect their practice to common and oft-stated goals. Rapport cannot be assumed.

*Ms.* Tully and *Ms.* Daley co-teach in a ninth-grade social studies classroom. One is a special educator who is also certified to teach secondary English, the other certified in social studies. As the two teachers work with their students through a station lesson, Tully, the content teacher, works at a table with heterogenous groupings of students on map skills. The two teachers have prepared to provide graphic supports (rulers, modified atlas, models) to the students with disabilities. Daley maintains the movement of students through the stations, clarifying directions, giving all students immediate feedback on skills. The students recognize the content strengths of Tully and the assessment strengths of Daley. Teachers refer to each other by their teacher names - "Mrs. D." - and evidence clarity and parity in their roles. Rapport is seen in the effective use of each teacher's strengths, in the smooth transition between the stations and the ease with which all students respond to both teachers as teachers of equal value.

Most teachers hone their craft in relative isolation from their peers. While we mentor new teachers, and create content area Professional Learning Communities (PLCs) to support each other, due to time and scheduling constraints, we don't always have the opportunity to observe each other, reflect on what we see, and relate it to evidence-based practices expected by the Every Student Succeeds Act (ESSA). What might happen when teachers who have always worked in isolation begin or continue working with another professional in the room? At first, it's a relief to have some help with grading, and managing students with disruptive behaviors, and making copies. But beneath the surface, we've opened ourselves up to criticism, and exposed our insecurities. It's best practice to address these possibilities by systematically reflecting on what brings us together and exploring professionally how to address any differences that might interrupt the synergy that our students deserve.

Many teams attribute their success to simply being together for years – having the time to build a relationship. Time spent together can build a relationship. But when we see ourselves as professionals, we recognize that rapport isn't left to chance, time or experience, but we apply skills to strengthen rapport. We hold ourselves accountable to using targeted discussion and careful honesty to build rapport throughout the school year, for the entire tenure of our teaching partnership. It's important for professionals to recognize that collaboration is integral to inclusive cultures. Collaboration is a professional skill that infers action, not attributes.

Rapport is characterized by respect. Primary to rapport between a special educator and general educator is communication.

## Supporting Inclusive Classrooms with Teacher Partnerships

#### Create your own team rapport builders:

## Here are some of the issues and the rapport building questions we created:

**Issue:** Content Teacher feels "put at risk" when paired with a special educator.

**Prompt:** When is the right time for the special educator to step up and teach? How can two teachers share instruction to support students? When will each teacher deliver instruction during a lesson? How will you plan each piece for the teachers?

**Issue:** Content area teacher doesn't want to devalue the special educator.

**Prompt:** How can your co-teacher make you feel valued? What do you need from each other to feel valued?

**Issue:** Both teachers feel that they can't give up control because of the implications of high-stakes tests.

**Prompt:** What are our goals for our students in terms of high-stakes tests? How can we be sure our students are making progress toward our goals?

**Issue:** Teachers feel that it's just luck when they are successful or unsuccessful in partnering.

**Prompt:** What does "lucky" mean to you in terms of students, teachers, colleagues? Relate your definition of lucky to your expectations of yourself and others in the co-teach classroom.

**Issue:** Are we adequately addressing how students "see" co-teaching and co-teachers?

**Prompt:** In what ways might co-teaching be confusing to students? What questions might we need to address from our community of learners?

**Issue:** Good relationships sometimes get in the way of common planning time.

**Prompt:** What are our planning priorities and in what ways can we continue to honor our friendship without risking our professional tasks?

In order to support teams in creating open-ended questions that we called "rapport builders," the teams can scan teaching blogs, academic article abstracts, professional organization websites for articles about co-teaching. Then together the members should brainstorm a list of 10-15 topics/issues gleaned from that review. Those topics are then turned into open-ended questions. Embed these questions into your planning format and save 15–20 minutes each month just to discuss these prompts. This exercise helps teams nurture rapport, avoid assumptions and ground their practice in professionalism.

For example, in a recent gathering of co-teachers, each member of the group created a six-word summary of an article they found in a simple internet search. The discussion that followed the sharing of the summaries brought forth common issues that might interrupt rapport. Each team of teachers participating in this training created rapport builders. These questions could be embedded in planning time to support co-teaching teams as our team does in the model vocabulary unit plan.

The bulk of the special educator's impact on the students they're supporting in the inclusive classroom happens during planning. Unfortunately, most teaching partnerships report inadequate planning time and most secondary teaching partnerships — consultant models or teaching assistants or aides — do not have scheduled collaborative planning time (McDuffie et al.).

Regardless of scheduled time or lack of scheduled time, planning must be done. Some teams use shared documents and calendars to support planning, others use time in the classroom when students are working independently to collaborate. Other teams take conference days, summer curriculum, or clubs and activities periods to plan. Either way it happens, it's imperative to plan your planning time and planning routine before the school year begins (Murawski, 2012).

When my 11th grade English team approaches planning, we have to prioritize. We often start with our topic, for example, vocabulary. My teaching partner Kerri Bundy describes our planning priorities as follows: I think it is most effective to begin with the skill we are hoping students to take away from the unit or lesson, then to break down who can do each part toward that end.

Then we tease out what students will know, understand and be able to do (Tomlinson, 2018) in a specific planning document format. We don't break until we have described our formative and summative assessments. If the time is up – we'll collapse it with technology applications — and collaborate about activities and the specially designed instruction via our shared planning form (Charles, 2012). (See vocabulary unit plan sample on page 11.)

The reality for secondary classrooms is that the content area teacher is the curricular expert while in both secondary and elementary classrooms, the special educator or English as a New Language teacher tend to have practice in Universal Design for Learning (UDL) and specially designed instruction (Scruggs, 2007). UDL is a framework for designing instruction for each of the three guidelines: Engagement, Representation, Action and Expression. When discussing the activities and the elements of the

Source: High Leverage Practices in Special Education (2017)

#### Collaboration

Collaboration is ethereal in that it is never an end in itself, instead operating as a culture or a means through which any goal can be reached. Collaboration often is indirectly fostered among members of a school work group by arranging time for participants to meet face-to-face, guiding them through the development of positive professional relationships, establishing explicit and implicit procedures for working together, and teaching them about school programs that rely on collaborative interactions (e.g., teams, co-teaching). Collaboration is not explicitly mandated in the Individuals With Disabilities Education Act (IDEA), nor is it generally part of formal policies related to educating students with disabilities, but the requirements of the law and established school practices strongly infer that it is through collaboration that the effective education of students with disabilities is achieved. (Mc Lesky, et al., p. 28).

## Supporting Inclusive Classrooms with Teacher Partnerships

## Co-teaching is all about improving outcomes for all learners.

learning environment that fosters student learning, the give and take between the two teaching partners is where the real excitement and synergy is easiest to see. As a special educator, I am more comfortable deferring to the content expert. But one of my teaching partners, Ms. Lillge, had an opportunity to address my misconception during our planning that changed the way I saw myself and my role for the better. When her teaching partner takes a less active role in planning she said, "I want to know your thoughts on instruction and curriculum. If I know you feel

#### **Instructional Strategies**

**Accommodations** means adjustments to the environment, instruction or materials (e.g., instructional materials in alternative format such as large print or Braille, fewer items on each page; extra time to complete tasks) that allow a student with a disability to access the content or complete assigned tasks. Accommodations do not alter what is being taught.

New York State Education Department (2013, p. 5)

**Program modifications** may be used to describe a change in the curriculum or measurement of learning, for example, when a student with a disability is unable to comprehend all of the content an instructor is teaching (e.g., reduced number of assignments; alternate grading system).

- New York State Education Department (2013, p. 5)

**Specially designed instruction** means adapting, as appropriate to the needs of an eligible student, the content, methodology, or delivery of instruction to address the unique needs that result from the student's disability; and to ensure access of the student to the general curriculum, so that he or she can meet the educational standards that apply to all students.

- New York State Education Department (2013, p. 3)

passionately about something within the subject, I want you to plan it. I do not like doing all the planning and then handing it over to the special education teacher. It makes me feel like a boss, and it probably makes you feel devalued, and then the whole cycle of frustration starts."

When our collaborative planning is effective and timely, we take creative risks and notice that all of our time in the classroom can be spent in coaching learners and observing learners coach each other (Scruggs, 2007). No student is left unengaged, frustrated or bored.

#### **Student Outcomes**

Student outcomes is the vision and why of what we do. Co-teaching is all about improving outcomes for all learners. For our team, we consider three domains of assessment recommended by Tomlinson, et al. (2018): student product related to the learning target; student process related to transition values like diligence, preparation; and finally, student growth. We teach 11th grade English, so for our ultimate learning target we expect that all our students can achieve proficiency in the standards that guide our teaching as measured by the New York State ELA Regents Exam. In designing the sequence toward that end, the expectations for the student products are scaffolded for students with disabilities. Scaffolds are

temporary supports, a writing outline for the central idea task, or a model of an introductory paragraph. These scaffolds allow a student with a disability independent practice of an academic task. In an inclusive classroom, our goal is that all students are completing the same student products at the same time. In terms of process attributes: we want our students to practice not only the reading, writing, listening and speaking skills of adults but to use them to make their community a better place. We design learning activities that offer opportunities to independently practice attributes like grit, preparation, and

#### Vocabulary Unit Plan Sample

Rapport Builder: Co-teaching is a model created to improve outcomes for students with disabilities. What outcomes are we looking for in our classroom? How might we measure those outcomes to ensure success?

#### Unit: Vocabulary

Dates: September - May 10 units

Standard: 11-12L4: Determine or clarify the meaning of unknown and multiple-meaning words and phrases, choosing flexibly from a range of strategies.

11-12L4a: Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.

11-12L4b: Identity and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., conceive, conception, conceivable).

11-12L4c: Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses) to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, its etymology, or its standard usage

11-12L4d: Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).

Т

| Understanding: Having a greater vocabulary helps us communicate ou  | ir needs, describe our conflicts and analyze solutions.  |
|---|--|
|   | t  |
| Know: root word, noun, verb, adjective, adverb, context, etymology, precise   | Do: Create grammatically correct sentences that use the given<br>vocabulary words accurately   |
|   | t  |
| Formative Assessments: definitions, images, sentence practice, paint<br>Summative Assessment: Vocabulary Assessment   | chips  |
|   | t  |
| Possible misconceptions/challenges: not changing the word form to fit recognizing the word in text but not in speech (vice versa)   | the sentence structure, inaccurately using the meaning of the word,  |
|   | <b>↓</b>   |
| Scaffolds, strategies, co-teaching, grouping: heterogeneous grouping, the assessment beyond 5, struggling students can choose a test paper every level. Day 1: write your own definition, compare at your table - pavisual, write sentences. Day 3: review using sentences and image. | teach all words, everyone chooses 5 to master, can earn extra points on<br>r differentiated with synonyms for, visual prompt to challenge students at<br>aint chips sort. Day 2: create rules to remember the difference, draw a |
|   | t  |
|   |  |

Reflection: Students wanted to see the definitions rather than rely on their own definitions. In what ways does this impact higher-order thinking habits? Some students need a scaffold to write sentences - perhaps sentence stems?

## Supporting Inclusive Classrooms with Teacher Partnerships

Self-assessment is a powerful tool in building independent level self-advocacy which is often a challenge for students with disabilities.

accountability. If we want each of our students to identify their strengths and interests and find ways to contribute to the class culture, we need to provide instruction and opportunities to practice that. In Ms. Lillge's English class, we embed a routine to support social emotional learning. All students periodically assess themselves in terms of lesson targets and their contribution to classroom culture. Self-assessment is a powerful tool in building independent level self-advocacy which is often a challenge for students with disabilities. Self-assessment is also a style of formative assessment for our team. By first teaching self-assessment and then embedding it as a habit, students develop a stronger sense of self and also accountability for their learning.

In one unit, we provide more direct instruction in these attributes. Ms. Kerri Bundy designed a unit called Speech for a Cause. Within this unit, students connect with a charitable organization, research their needs and the efficacy of their use of funds, and write a speech to present to their peers. In order to provide scaffolds for this unit, I use Google Classroom to provide a writing outline for my students. In addition, for some of the students with profound reading challenges this outline also provided sentence stems. For some of the students, in order to support

executive function deficits, we provide the research link within the outline and limit the search to one site. During specially designed instruction within the classroom, students with disabilities benefit from having time to practice meta-cognitive strategies like talking about the process of writing or oral modeling of a research strategy. For the domain of student growth, I refer to progress in the goals determined by the IEP for the students with disabilities. For all 11th grade English students, we have quarterly checks that provide evidence of growth.

Before embarking on a co-teaching model; co-teachers need to know why they're co-teaching. And not just in a general sense, they should have the opportunity to state the outcomes and be able to use data to measure their impact.

We teach what we value. If we don't identify those values from the start, our students, parents and communities may not understand why we spend the money to put two teachers in one classroom. The roles of the coteachers can be confusing to students and to parents. Many of the parents of our secondary students didn't attend inclusive schools. Having a district vision shared with parents and all stakeholders in language that is clear and understood by all is supportive to the teaching partners, and to all students. Co-teaching is a unique instructional model that has the potential to move inclusion forward. Think of a truly inclusive classroom as a pebble in the pond which impacts the culture of a grade level, a building and a generation of adults that see inclusivity and diversity as a strength rather than a deficit. Though the co-teaching model has been in place for years, practitioners struggle to feel successful in the model (Fowler, 2019). Strengthening inclusive teaching partnerships needs comprehensive and sustained skill support.

The elements necessary to support effective teacher partnerships are the same elements needed to strengthen inclusive practices in schools. These elements include sharing a vision for student outcomes, strengthening trust by using a shared vocabulary to describe outcomes and professionalizing the partnerships that support those outcomes. Consider the parallels between effective teaching partnerships as a microcosm of inclusive communities. **Professional Development Plans that** support inclusive schools, like the instruction that supports an inclusive classroom, need to be comprehensive, meet the needs of all stakeholders with multiple points of access to content, and create opportunities for participants to individualize application of learning.

#### Needs Assessment Checklist for a Comprehensive Approach to Supporting Inclusive Schools

Often in our planning, my teaching partners and I consider the needs of their classrooms in which there is no special educator. Today's classroom teachers need community support to be successful. Classroom teachers are taking on the challenge of designing learning environments that frame diversity as a strength. We can use these experiences to do the same for our school communities. A Needs Assessment Checklist is a tool for districts to self-assess their approach to addressing the barriers to truly inclusive communities.

School communities are finding it a challenge to put in place sustainable policies and practices to create an inclusive school culture, with classrooms that are designed to welcome diverse learners and instruction that moves all learners toward achievement on the Next Generation Standards. Parents struggle to understand why their child with a disability is expected to meet certain academic standards. Some parents wonder how the teacher is managing to teach all students when the classroom includes students who demand more attention. Teachers struggle to maintain high expectations, and keep instruction accessible to all. Forward Together, a study of teacher efficacy

The elements necessary to support effective teaching partnerships include sharing a vision for student outcomes, strengthening trust by using a shared vocabulary and professionalizing the partnerships that support those outcomes.

## Supporting Inclusive Classrooms with Teacher Partnerships

All stakeholders agree that students who struggle in school should have extra supports special education, related services, multiple tiered systems of support, nutrition, counseling, transportation and mental wellness instruction among others.

in instruction of students with disabilities, published by the National Center for Learning Disabilities describes "what general education teachers currently know and believe about teaching students with identified disabilities and/or learning and attention issues. While many feel unprepared to teach the 1 in 5, (students diagnosed with learning/ attentional disabilities) many are committed to learning more and improving their abilities." (2019, p. 7).

In our experience, students are confused by the roles of each member of the collaborative teams that support their education (Scruggs, et al., 2007). Because we need to balance confidentiality with reality, it's a challenge in the classroom to state with clarity the role of each teacher. And each classroom is unique in its needs, so even though many students have experience in two-teacher classrooms, the model they see practiced in each might be distinct. All stakeholders agree that students who struggle in school should have extra supports - special education, related services, multiple tiered systems of support, nutrition, counseling, transportation and mental wellness instruction among others. But in the classroom, teachers are sometimes overwhelmed by the needs of their students and short on time to identify needed skills, let alone find the resources they need to adjust their teaching to truly activate an inclusive classroom experience.

Every district has its own needs, but the following checklist can be used to design an innovative, tailored and comprehensive series of conversations and professional learning experiences that build and support the many teaching partnerships for inclusive schools. The value of this list is that it comes from the experiences of the special educators, coteaching teams and paraeducators and my own classroom experiences. These are the stakeholders impacting classroom practices and supports for students with diverse needs. And these are the issues that most directly impact our daily practice.

#### Conclusion

Teaching partnerships are powerful tools for truly inclusive schools! Effective collaborative teams model and instruct the attributes of civil social engagement and work readiness attributes. This unique instructional style not only provides for students with disabilities highly effective instruction from a content specific teacher, but access and specially designed instruction through the support of a special educator. The benefits for all students of this type of inclusive learning environment are well documented (Grindal et al, 2016). The everyday real and exhausting challenges of working with an academically, emotionally and behaviorally diverse group of students are overcome when approached with a growth mindset for our students as well as for ourselves, a shared vision and trust. And while these team attributes can develop over time, the surest path to achievement is through targeted professional learning experiences. Embedded time to share knowledge of each teacher's specific content area expertise contributes to the academic outcomes of all students and the independent level outcomes of students with disabilities. Access to coaching and training in evidencebased practices support both members of teams in using systems of anecdotal and quantified data collection through varied methods to inform the design of the instructional environment. We feel lucky when we're paired with a teacher whose style fits ours, or whose expertise we respect. Let's not leave it to luck, let's professionalize the teaching partnerships with systems of support and growth!

#### **Needs Assessment Checklist**

#### Administrators:

- Have we addressed with our constituents the mandates, the reality, the vision of our district policies on inclusive classrooms?
- Presentation for districts and parent organizations: Have we shared with our families, *Why inclusive classrooms*?

#### Classroom Teachers:

- Have we adjusted our assessment practices for the inclusive classroom?
- Have we adjusted our instructional practices for the inclusive classrooms?
- Instructional resources for inclusive classrooms. Have we identified online resources from NYSED, IDEAs that Work, High Leverage Practices as well as local, in-person resources including BOCES and Center for Disability Services available to our practitioners?
- Collaborative Teams: Are we prepared to introduce new practitioners to the skills of building a collaborative team and developing systems to hold teams accountable to the families and students they serve?
- Co-teaching: Are we giving current practitioners support in moving beyond "a good rapport?" Are we gathering data for co-planning, grouping, accountability?
- Mental Health Wellness/ Social Emotional Learning strategies for every classroom environment: What are the strategies that can be embedded in our classroom routines that support classroom management of this uniquely diverse grouping as well as meet the individual needs of each student?
- In what ways might we better use technology to ensure multiple pathways to achievement in secondary classrooms and support collaborative practices?

Teaching Assistants and Aides:

In what specific ways might offering meaningful professional learning for TAs support student growth and independence?

### Supporting Inclusive Classrooms with Teacher Partnerships

#### References

- Baker, E. T. (1995). Synthesis of Research / The Effects of Inclusion on Learning. *Educational Leadership*, 52(4), 33–35.
- Bateman, D., & Cline, J.L. (2016). A teacher's guide to special education. Alexandria, VA: ASCD
- Bateman, D., & Yell, M.L. (2019). Current trends and legal issues in special education. Thousand Oaks, CA: Corwin.
- Charles, K. J., & Dickens, V. (2012). Closing the Communication Gap: Web 2.0 Tools for Enhanced Planning and Collaboration. *Teaching Exceptional Children*, 45(2), 24–32. https://doi. org/10.1177/004005991204500203
- Fennick, E. (2001). Coteaching An Inclusive Curriculum for Transition. *Teaching Exceptional Children*, 33(6), 60–66. https://doi. org/10.1177/004005990103300608
- Fowler, S., et al. The State of the Special Education Profession Survey Report. *Teaching Exceptional Children*, 52(1), 8–29, https://doi. org/10.1177/0040059919875703
- Grindal, T., Hehir, T., Freeman, B., Lamoreau, R., Borquaye, Y., Burke,S. (2016). A Summary of the Research Evidence on Inclusive Education.
- McDuffie, K. A., Mastropieri, M. A., & Scruggs, T. E. (2009). Differential Effects of Peer Tutoring in Co-Taught and Non-Co-Taught Classes: Results for Content Learning and Student-Teacher Interactions. *Exceptional Children*, *75*(4), 493–510. https://doi. org/10.1177/001440290907500406
- McLeskey, J., Barringer, M-D., Billingsley,
  B., Brownell, M., Jackson, D., Kennedy,
  M., Lewis, T., Maheady, L., Rodriguez,
  J., Scheeler, M. C., Winn, J., & Ziegler,
  D. (2017, January). High-leverage practices in special education. Arlington,
  VA: Council for Exceptional Children & CEEDAR Center.

Murawski, W. (2012). 10 Tips for Using Co-Planning Time More Effectively. *Teaching Exceptional Children*, 44(4), 8-15. https://doi. org/10.1177/004005991204400401

- National Center for Learning Disabilities (2019). Forward Together: Helping Educators Unlock the Power of Students Who Learn Differently.
- News What Does the Research Say About Inclusive Education? (Kathleen Whitbread, Ph.d.) https://www.wrightslaw.com/info/lre.incls.rsrch.whitbread. htm
- Promoting Inclusion of Students with Disabilities. (n.d.). Retrieved from https://www.regents.nysed.gov/common/ regents/files/P12-Inclusion%20.pdf
- Scruggs, T. E., Mastropieri, M. A., & McDuffie, K. A. (2007). Co-Teaching in Inclusive Classrooms: A Metasynthesis of Qualitative Research. *Exceptional Children*, 73(4), 392–416. https://doi. org/10.1177/001440290707300401
- The University of the State of New York April 2008 (Updated November 2013). Continuum of Special Education Services for School-Age Students with Disabilities. http://www.p12.nysed.gov/specialed/publications/policy/documents/continuumschoolage-revNov13.pdf
- Tomlinson, C., Moon, T. and Imbeau, M. (2018). Assessment and Student Success in a Differentiated Classroom. ASCD. Retrieved December 14, 2018 from http://www.ascd.org/ASCD/pdf/ siteASCD/publications/assessment-and-diwhitepaper.pdf
- Wexler, J., Kearns, D. M., Lemons, C. J., Mitchell, M., Clancy, E., Davidson, K. A., ... Wei, Y. (2018). Reading Comprehension and Co-Teaching Practices in Middle School English Language Arts Classrooms. *Exceptional Children, 84*(4), 384–402. https://doi. org/10.1177/0014402918771543

EDUCATOR'S VOICE 🔳 VOLUME XIII 🔳 PAGE 17



# The Benefits of Guided Note-Taking in the High School Classroom

### **SUMMARY**

Educators are finding themselves working with identified students in content area classrooms and having to navigate the instructional accommodations of the IEP. Guided notes can offer a way to involve the identified learner, help them focus on what is important, remove negative stigma for accommodations, and allow the identified learners to practice their note-taking skills.

## Notebooks, paper,

pens, and pencils are often at the top of the supply list teachers put together for students each year. The implication is that the writing utensils will be used to fill the pages of the notebooks and the paper. This is especially true in middle school and high school settings. Note-taking becomes the main way in which a student interacts with and processes the information being presented. It is a key learning activity that stimulates constructive learning.

#### The Note-taking Process

During the process of note-taking, the student responds to some form of sensory input (digital, written, lecture) and organizes the information to create meaning from it. Notes can be taken verbatim or by individualized, meaningful shorthand. In the case of mathematics, shorthand can include symbols and abbreviations. For example, "mult," "sqrt," and "=" would be meaningful shorthand in a math class. Notes can be taken with or without the assistance of technology. Whatever mode is utilized, the note-taker must identify and assign some structure to the new information (Tinajero et al., 2012). This involves comprehension, verbal working memory, background knowledge, transcription fluency, and attention (Peverly and Sumowski, 2012).

Listening comprehension is employed in that students must decode the auditory information, understand what is being said, identify the main ideas, determine when to record information, and write quickly so as not to

Rebecca Greenfeld earned her doctor of education in Organizational Leadership with an emphasis on special education. She has been teaching mathematics at Brewster High School in New York since 1993. Some of her proudest moments include developing new courses and training in new courses, all for the benefit of her students. In 2016, Greenfeld began training as a Project Lead the Way Engineering Instructor. She is now certified to teach Introduction to Engineering Design, Principles of Engineering Design, and Aerospace Engineering. Additionally, Greenfeld has been teaching online graduate level education courses through NYSUT since 2007. Nothing inspires her more than a cohort of professionals coming together and learning from each other. The goal is a common one — be the best for our students.

#### **Rebecca Greenfeld, Brewster Teachers Association**

miss incoming relevant information (Aragon-Mendizabal et al. 2016; Gur et al., 2013). This requires information to be held in working memory, an application of higher-level cognitive skills (Nakayama, et al., 2013) that students are expected to have upon entrance to high school.

Working memory is a type of shortterm memory and refers to a limited space in the mind where we temporarily store and manipulate information. It is these spaces in which students must choose what is important, decide how to record it, and determine if the concepts need elaboration. Consider taking an empty candy box to a conveyor belt where different sized and decorated candies are traveling by. The box has a label on it, and it is your job to fill it accordingly. The belt is the lecture, it can go fast or slow. It is filled with nuggets of information that may or may not be important for later retrieval based on the label or title of the lecture. Students must split their focus time between listening to understand and grabbing information to record.

Unfortunately, the number of students enrolled in high school content courses who are identified as requiring special supports to access the information is on the rise (Boyle, et al., 2015). Note-taking is an area of support that can assist the identified student in accessing the content area course material. Notes can be electronically recorded, taken by a scribe, handed to the student by the teacher, or partially filled in by the student. Recording a lecture, using a scribe, and receiving a copy of class notes have been identified as placing the student in a passive role (Boyle, et al., 2015).

#### **Benefits of Note-taking**

Notes ultimately serve as a reminder of what happened in class. They are expected to be a resource that students can use to study from or do homework with. The actual notes a student takes can also serve as a formative assessment where teachers review them for neatness and accuracy.

Notes have been linked to academic achievement in terms of exam scores and grades. In 2016, researchers Amini and Kheirzadeh reviewed the notes of 44 college students and compared their test scores. The Working memory is a type of shortterm memory and refers to a limited space in the mind where we temporarily store and manipulate information.

## The Benefits of Guided Note-Taking in the High School Classroom

Notes ultimately serve as a reminder of what happened in class. They are expected to be a resource that students can use to study from or do homework with.

participants with the highest test scores used abbreviations and paraphrasing to write down key points from the lecture (Amini & Kheirzadeh, 2016).

Boyle (2013) reported a moderate 53 percent positive relationship between lecture notes and performance on assessments. The study controlled the variable of notes by providing students with training in a specific form of note-taking. Students, both identified and non-identified, had combined test averages of 74.25 as compared to their control group counterpart with a test average of 60.69. The overall act of taking notes was correlated to high academic achievement scores in this study.

#### Student engagement

The physical act of taking notes assists students in learning by engaging them with the material. Students are required to make meaning out of the perceived audio input through listening and recording the important information. Academic listening is a one-way activity when the action of note-taking is removed (Gur, et al., 2013). The instructional accommodations of a copy of class notes and scribe removes student engagement.

Engaged students can use their notes to raise questions, study, and participate (Reeve and Lee, 2014) thus furthering their engagement in the learning process. Reeve and Lee (2014) pointed out that this is a

#### Figure 1: Note-taking Styles

#### Students and teachers can choose from a variety of note-taking styles:

| Linear                                    | Сог                | Pattern |                         |
|---|--------------------|---------|-------------------------|
| Verbatim<br>Handwritten<br>Computer typed | Questions/Keywords | Notes   | Concept map<br>Mind map |
| Outime                                    | Summary            |         |                         |

reciprocal relationship. The better grades can lead to better conduct as well as an increase in self-esteem and socially acceptable behaviors (Lam et al., 2014; Larwin, et al., 2012).

Cognitive engagement in school includes the strategies a student uses to learn. Note-taking is one such strategy and there are many choices to choose from. Figure 1 shows how note-taking styles can be broken down into three main categories: linear, Cornell, and pattern. Linear notes are straight forward and follow the flow of a lecture without any form of organization. They are more of a transcription of the lecture. Without added organization they lack any clues as to what was emphasized or deemed important by the student.

On the other hand, Cornell notes explicitly add in structure by splitting the page into three distinct segments. Students take notes on a lecture or reading with notes on the right side of the page. Review of notes is built in by requiring students to read their own notes, after the class, and summarize the contents of the page in the bottom section.

As students review their notes, they can ask questions on the left-hand side of the page. This is a space where students can pretend to be the teacher and create questions about the material on the page or ask any questions they need

#### **Figure 2: Student Cornell Notes**



answered for further clarification. These notes work very well for assigned reading passages in secondary level content areas like English or social studies. Figure 2 shows a student taking notes in the Cornell style.

Guided notes are a sub-category of the outline method under the linear style. Basically, they are an advance organizer This figure shows a student explaining how to take Cornell notes while using the Cornell notes style.

## The Benefits of Guided Note-Taking in the High School Classroom

that allows students to follow the flow of a lecture and fill in the blanks by hand. Students follow along with the lecture and fill in the missing information. These notes are already organized in a structure that indicates importance thus relieving the student of precious working memory space.

The figure below demonstrates the use of guided notes in a special education math class.

| Title: Date:<br>Objective(s): To be able to translate word phrases into mathematical<br>form.  |  |  |  |  |
|--|--|--|--|--|
| <ol> <li>Do Now         <ol> <li>Think of as many words as you can that mean positive or<br/>negative. Place these in the table.</li> </ol> </li> </ol>  |  |  |  |  |
| Pos  | itive                                  | Negative                               |  |  |
|  |  |  |  |  |
| Example #1 Pick one word from each column and create a math<br>phrase using it.  |  |  |  |  |
| Positive   |  |  |  |  |
| Negative   |  |  |  |  |
| Example #2   | Listen to the phra<br>mathematical exp | se and translate it into a<br>ression. |  |  |
| 1<br>2   |  |  |  |  |
| Example #3       Match the correct phrase with the correct expression.         1. a number increased by eight       a. X + 4         2. a number decreased by eight       b. X - 4         3. a number multiplied by two       c. X - 2         4. four subtracted from a number       d. 22 |  |  |  |  |
| 5. Tom gain<br>6. Mary weig  | ed four pounds<br>the two pounds less  | e. X - 8<br>s f. X + 8                 |  |  |

**Figure 3: Sample of Guided Notes** 

Page 22 📕 Educator's Voice 📕 Volume XIII

Figure 3 shows a copy of guided notes from a self-contained math class taught solely by a special educator.

Returning to the conveyor belt analogy, the box has been partially filled in with spaces left for the missing pieces. These missing pieces are further defined by how much space is left. If a definition is asked for, a line might be left for the students to fill in. A missing word, variable, or number would require less space. These cues help the student determine how much to write. Figure 4 at right shows examples of guided notes that students receive at the start of a quantitative geometry lecture at the high school level.

In guided notes, space can also be left for pictures to be taped or drawn in (see Figure 5). This turns the act of note-taking into a multisensory activity. Having the picture present can relieve the stress of having to copy a drawing accurately from the board, a device, or a book. Allowing students to cut and paste a picture or diagram into their notes can offer some relief to their working memory in the act of a planned pause.

Moving to a different activity that uses the hands in an alternate way also provides for a break in the stress of having to pay attention and write. In science, it is extremely important that students get the diagrams

### **Figure 4: Guided Notes Examples**

| Spaces defined to assist students with organizing their work   | I. 18 cm<br>12 cm<br>12 cm<br>12 cm<br>12 cm<br>12 cm<br>12 cm<br>12 cm<br>12 cm<br>12 cm   |
|--|---|
| Calculator cues and blank lines to assist<br>students in creating, documenting, and<br>analyzing a graph | Clear any functions out of y =<br>2 <sup>rd</sup> $\rightarrow$ y = (STATPLOT) 1: Plot 1 Off ENTER<br>ZOOM <u>9:ZoomStat</u><br>Sketch the scatterplot here |



The figure above shows how cues can be embedded into guided notes.

The figure at left shows how taped-in figures can be used to help students convey accurate information in notes.

correct. With everyone having the same picture, the teacher can move on to label what is important or explain why it is important. Figure 5 shows an example of a dial caliper that a student had to tape into their notebook and then identify the key parts.

## The Benefits of Guided Note-Taking in the High School Classroom

Aragon-Mendizabal, et al. (2016) found that students who took handwritten notes scored higher on memory tasks. The third task in their experiment of 251 college social and health science students involved the participants either hand copying 35 words or typing the 35 words in a document. The paper and document were then removed, and a distractor task was implemented. After five minutes, the participants were asked to write as many of the words as they recalled. To further test memory, a five-minute break was given and then a word recognition task was administered. The handwriting group recalled more words with a mean of 8.71. They also had fewer recall

errors with a mean of 0.95. The computer group means were 7.22 and 1.40, respectively.

#### **Challenges in Note-Taking**

Note-taking involves the ability to listen, make decisions, and physically write. Boyle, et al., (2015), found that teachers present information at a rate of 110 words per minute in the lecture setting while identified students can only write about 17–20 words a minute. Return to the conveyor belt analogy, turn that belt on high speed, and you are instructed to fill the box in under one minute. That stress can lead to an unfinished task or missing critical pieces. In the classroom, the

| Figure 6: Sample Notes   |   |  |
|--|---|--|
| Teacher Lecture Notes  | Identified Learner Notes  |  |
| 1/8/2020 Free Body Diagrams P#-<br>(FBD)<br>what? pictoral representation<br>why? shows forces<br>how? bries wlarrows<br>removal<br>of actual<br>object<br>Force - a straight line<br>push or pull acting on an o<br>FN normal W-weight<br>FP friction<br>FATP applied<br>Moment = Fd<br>- moment (a) ccw + moment | FBD<br>Forces - push/pull<br>FN FR FR<br>Moment = Fd<br>JCD DA+ |  |

This figure shows the

lecture notes that the instructor used and

the notes an identified

difference between

learner recorded.

combination of listening to a lecture and determining what to record leads to approximately 30 percent of the main ideas presented in a content area lecture to be recorded in the form of notes (Crawford, 2016). Figure 6 at left compares an identified learner's notes and the lecture notes the teacher uses.

As one can see, note-taking is a cognitively demanding process. It involves listening, processing, organizing, and writing. The process of taking notes based on a lecture requires that students be able to discern what is important, listen to the information, process the information, and record the information. Rosen et al. (2014) refer to note-taking as a form of data processing where students must sort, record, practice, process, retain, and possibly discard extraneous information. Deficits in writing and verbal language for some identified students make this challenging (Lazarus, 1991, 1993; Larwin, et al., 2012).

Identified students can exhibit a wide range of writing challenges in addition to writing speed. This can include a lack of fine motor skills that are necessary for holding a pencil correctly. Forming numbers and letters then take time and hyper-focus for these students. Add in the stress of recording notes and the handwriting becomes indecipherable for the student and anyone else trying to read

#### **Figure 7: Student Notes**

| 10/3                       |   | 0  |
|----------------------------|---|--|
| •                          | Altries Sketching   |  |
|                            | · 25 uns for a 30 object  |  |
| Considering                | · Main Form of committation believe des   | Jurs Rivertainers  |
|                            | Al 30 april lac   |  |
| Light Legen                | - andthe Sile tosile<br>- Longert - top to bottom<br>- pegith - Front to book   |  |
| Cathographie<br>Resistanta | Allegraphic Michael   |  |
| •                          | - Roman an object in a flow as freeze<br>- Object in a glass box<br>- milliple creas<br>- Hilden Alger indicated by lasted in   | the integrant Subsection was been also been the constant one when a sources the constant of th |
| Chebican<br>The Wors       | a tribus  | The bills 5<br>. Spring (2011)<br>. Third was chubitat to one shore the  |
| Stops                      | "All diversions Cash Shan<br>Sep 1 - Lapur Hoves USing Science and Cash<br>Sep 2 - Cole construction lines Brid cash<br>Star 3 - Fidenting United Cases<br>Star 4 - Endicate Hiller lines | ·Second is received or expla<br>hacken lines<br>grave thy  |
| •                          | Millinea Joekay bring sees the<br>Creater on Only way to ca<br>borner the steepur & country   | Card Card<br>Card Card Card Card Card Card Card Card   |

them. These notes then become useless for later review and recall of the presented information as preparation for a teacher-made assessment, as can be evidenced in Figure 6.

Verbal language adds another layer of possible misinterpretation for some identified students. They can struggle with understanding which word was used and how to record it correctly. Student notes on Mechanical Advantage show how an identified student can take notes when speed of lecture is not an issue.

## The Benefits of Guided Note-Taking in the High School Classroom

An identified student can then lose time trying to figure out how to spell the word thus decreasing their focus on the lecture and their recording time. This then translates to misspellings, misinformation, and notes that are not useful as study aides.

In a 2015 study, 37 eighth-grade identified students were asked to retell a lecture after they were given the opportunity to take notes. They found that these identified students recorded fewer linguistic units, scored lower on comprehension questions and answered inferential and literal questions with less accuracy (Boyle et al., 2015). The students themselves reported five main areas of notetaking difficulty. These were, writing fast enough, paying attention, making sense of notes after the lecture, deciding which information is important enough to record and understanding the professor (Boyle et al., 2015).

Recall that Boyle et al., (2015) discovered a discrepancy between the number of words spoken per minute by a lecturer (110) and the number of words an identified student can write per minute (17–20). This discrepancy can result in missing information. According to Nick B., an identified student in an unsupported

This figure shows how an identified learner notes can be lacking in information and challenging to read.

#### **Figure 8: Missing Information**



#### **Figure 9: Sample Notes**

math elective, he sometimes writes too much information or does not get everything down. Figure 7 (p. 25) shows how Nick was able to take neat notes when time was not an issue because he was watching a presentation that he could pause. He used the Cornell note-taking style. A high school counselor at the same school teaches this method in her organizational skills group that meets at the beginning of each school year to support students.

Figure 8 at left is a prime example of a student missing information. They should contain the same notes but the identified student is missing much of the information and it is challenging to read. Considering that all assessments in this math class were open notes, this student's notes will be useless.

The student in Figure 9 at right was diligent enough to write down all the information and use the color-coding instructional aids that the teacher used. There appears to be some structure to the notes. The question remains as to whether the student will be able to read this to study from or even understand what they wrote. Teacher cues are missing. What does the blue represent? The yellow? Where did the equation come from? Why is that a check? These are all questions the teacher asked and answered in the lecture. The student just focused on the "math" parts.

#### **Special Education**

Identified students can lose the benefit of handwriting notes when a scribe is assigned, or a copy of class notes is given. This type of instructional accommodation is put in place once a student is identified. The Committee on Special Education determines if the student will benefit from these specific interventions once the student is identified.

Students are identified in education based on the 13 categories proposed by the Individuals with Disabilities

The 13 categories under IDEA include autism, deaf-blindness, deafness, emotional disturbance, hearing impaired, intellectual disability, multiple disabilities, orthopedic impairment, other health impairment, specific learning disability, speech or language impairment, traumatic brain injury and visual impairment.

This figure shows the notes of an identified learner in an algebra course.

## The Benefits of Guided Note-Taking in the High School Classroom

Education Act (IDEA). Today students that are identified within these categories learn alongside their peers either in the same classroom or in the same building. Identified students may use instructional accommodations and modifications to gain access to the same standards that apply to the general education population.

#### Inclusion

A major theme in the field of special education has been the desegregation of identified students. IDEA requires that identified students be taught in the least restrictive environment (LRE). This means that the student should be placed with their same-age peers. LRE is a continuum. On one end are small self-contained classes where the students are taught solely by a special educator. This can include teacher aides in the room and a modified curriculum. At the other end, an identified student is enrolled in the same class as their peers. They are given instructional accommodations like preferential seating or clarified instructions. The support is basically brought to the student in the general education environment. This model is not for every identified student. It is the responsibility of the committee on special education to determine if it is appropriate on an individual basis.

The inclusion model allows for identified students to join their same-grade peers in the activity of learning. It meets the criteria of LRE when these students can achieve success in the general education setting when supports are brought to them. The decision to place a student in inclusion for all or part of their academic schedule is one that is made by the special education committee (CSE) when they are developing IEP and the student learning objectives.

The CSE works to remove instructional barriers. These barriers include attitudinal, architectural, information/communicational, physical, policy/practices, and technology (Watt et al., 2014). Inclusion allows the education system to achieve equal outcomes for all students by being sensitive to the individual needs of identified students. It is important to convey the image of inclusion as "supported education" (Polloway et al., 2013, p. 6) so that all stakeholders can work together to create a productive learning environment for all students.

Inclusive models at the secondary level are confronted with an increase in curriculum and accountability. General education teachers are finding themselves in a position to implement effective accommodations, interventions and modifications. In fact, Harrison et al. (2013) reported that in response to high stakes testing, state objectives, and inclusion, multiple accommodations were being recommended by the committee on special education without evidence of effectiveness. Harrison et al. (2013) cite that ineffective definitions of accommodations and modifications are partly to blame. They found that in the inclusive setting it can sometimes be difficult to distinguish the two.

#### Instructional accommodations

Accommodations are intended to reconcile the impact of a given disability as well as address the specific areas of deficiency. Instructional accommodations can include changes in presentation, response, timing, scheduling and setting. General education teachers need to support all students in order to attain equal outcomes. Individual needs and differences must be accounted for so that students do not suffer from what John, Joseph, and Sampson (2014) refer to as "instructional disability." Complete copy of class notes, outlines for lectures, peer note taker, and scribe are some instructional presentation accommodations that can be written into the individualized education plan. According to Harrison et al. (2013), organizational devices such as outlines for lectures or guided notes are used by the student to promote active engagement. They classify these as response accommodations since the students are responding to the lecture through the action of taking notes (Harrison et al., 2013).

The changes to practices classified as accommodations are intended to hold students to the same expectations as their general education peers. The differential boost they provide is only to mediate the impact of the disability on access to the general education curriculum. When chosen and implemented correctly, accommodations can increase the elements of

This figure shows guided notes from math and science classes.

| Figure 10: Guided Notes                                  |  |  |  |  |
|--|--|--|--|--|
| Math Class   | Science Class  |  |  |  |
| Properties   | C. The Language of Life  |  |  |  |
| Commutive Properties of<br>Addition and Multiplication   | Chemical analysis shows that a chronosome is composed of:     In 1953,                                 |  |  |  |
| Symmetric Property                                       | II. DNA  |  |  |  |
| Reflexive Property                                       | DNA molecules consist of small units called Several million nucleotides     make up one strand of DNA. |  |  |  |
| Associative Properties of Addition<br>and Multiplication | 2. Nucleotides consist of:<br>a)<br>b)<br>c)<br>c)   |  |  |  |
| 1 I I I  | 4. The sugar is a 5-carbon sugar called Protection of the sugar is a 5-carbon sugar called             |  |  |  |

## The Benefits of Guided Note-Taking in the High School Classroom

equity and inclusiveness (Watt et al., 2014).

#### **Guided Notes**

Guided notes are a form of pattern note. They provide organization like a graphic organizer with spaces for students to fill in information during the lesson (Bui et al., 2013). Figure 10 shows an example of guided notes in math and science. Guided notes have been shown to improve test scores in elementary, secondary, and graduate education studies. The perception is that guided notes increase learning by organizing material for deeper processing.

#### Research

Lazarus (1991, 1993) utilized guided notes with a mandated in-class review in science, social studies, and a postsecondary psychology class in her seminal research. Both studies reported improved test scores. A 2012 metaanalysis of the literature increased the sample size to over 400 participants with mixed results. Student learning was reported to be negatively impacted by note-taking styles in seven of the 37 effect sizes reviewed, one having a neutral impact, and 29 positively impacting student learning (Larwin, et al., 2012). After reviewing studies centered around note-taking style, Jansen et. al (2017) concluded that "structured note-taking leads to

better memory for lecture content" (Jansen, et al., 2017).

This author researched the impact of the note-taking styles of guided notes and student generated notes on achievement. Archival data was used from the high-stakes mathematics end of course New York State exam known as the Integrated Algebra Regents. The study found that, in general, when achievement is determined to be a passing grade of 65 percent or higher, there was no significant difference between the schoolyear long use of guided notes and student-generated notes. However, when achievement was examined at the level of distinction. 85 percent or higher, the data from the entire sample population and the sample of identified learners reported significant findings such that guided notes results were not similar to the results obtained from the use of student-generated notes.

#### **Benefits of Guided Notes**

Knowing that guided notes and student-generated notes produce not so dissimilar results at the end of a school year on a cumulative assessment prepared by New York State offers educators the choice to use guided notes solely or a combination thereof. It is possible to tailor lessons to use guided notes thus assisting students in structuring the information they are being presented. Additionally, the technologies available today make it easier to create notes with blanks missing. Word, PowerPoint<sup>™</sup> and other tools allow educators to match their presentation of new material with the note structure. This will allow students to maintain better notes for later recall.

The recording of lecture key notes decreases for those students who have been identified with the use of guided notes. The fact that significance was determined at the distinction level for all identified students in this author's research offers new choices for educators as they incorporate identified students into unsupported courses as the least restrictive environment. Guided notes can be viewed as an intermediary instructional accommodation between providing a scribe or a complete copy of class notes. Both options were found by Boyle, et al. (2015) to put the identified learner in a passive role. The guided notes would allow the student to be an active learner in the mainstream environment.

#### **Student Perspectives**

According to Smith and Clason (2017), students have reported that they prefer guided notes (53 percent) and that the use of guided notes improves problem solving skills (43 percent). This author

#### **Figure 11: Guided Notes on Moments**



has been using guided notes since 1993 in math classes to engage students and assist them in organizing information with no distinction being made between identified and non-identified students. Morton (2013), who used guided notes in a high school science class co-taught with a special education teacher, reported that all the students made academic gains.

At the end of a recent set of guided notes this author used in a high school Principals of Engineering class, students were asked if they liked this notetaking style. It is important to note that there was no lecture. Students engaged This figure shows page 1 of the giuided notes students used while engaging with a PowerPoint<sup>TT</sup> on Moments.

## The Benefits of Guided Note-Taking in the High School Classroom

with a PowerPoint<sup>™</sup> presentation and filled in the guided notes. Figure 11 shows a snapshot of page one of the notes that a student filled in.

One student of the 24 surveyed indicated that he did not like the guided notes. This student wanted more of a walkthrough on some of the things in the slides. He did admit that guided notes could be used as an "introduction so that we are familiar with the topic and then do a walkthrough the next day." Most of the remaining students reported that the guided notes were easy to fill in. Comments included that the organization made these notes a "good reference" and "easy to refer back to." Several students also commented on how they were able take in the information at their own pace, how they were "forced to read everything," and learned because they were not "mindlessly following a lesson."

In another class, Aerospace Engineering, students were asked to engage with a PowerPoint<sup>™</sup> about propulsion and take their own notes in their engineering notebook. This process took three class periods with students completing the task at varying paces. Students requested certain pictures to be printed out for clarity purposes. Approximately two weeks later, students were given guided notes to fill in while engaging with the same PowerPoint<sup>™</sup>. Interestingly, it took only one period and only one student recognized that she had taken notes from this PowerPoint<sup>™</sup> previously.

Recognizing a teachable moment, this author generated a pro/con chart so that students could compare taking independent notes with filling in

#### **Figure 12: Student-Generated Notes Comments**

#### **Student-Generated Notes**

#### PROS

| Write down only what you do not know               | 3 |
|--|---|
| You decide the structure                           | 7 |
| Notes are all in a notebook                        | 2 |
| Not limited by blanks left – more room             | 3 |
| Get a better understanding from writing everything | 2 |
| Caters more to the students' needs                 | 1 |
| Quick  | 2 |
| Less stress  | 1 |
| Remember more since I write more                   | 2 |
| l can see my own thought process                   | 2 |
|  |   |

The figure below shows

how students analyzed

their notes they took while

engaging with a PowerPoint.

#### CONS

| Unsure what the most important information is      | 5 |
|--|---|
| Can take longer if you try to write everything     | 9 |
| Diagrams and pictures must be taped in             | 2 |
| Less pictures                                      | 1 |
| Less focus on the material – more focus on writing | 1 |
| Requires more thought and energy                   | 1 |
| Can be useless if not organized                    | 5 |
|  |   |

guided notes. Figures 12 and 13 summarize this qualitative data. The interesting aspect of their analysis of the student-generated notes (Figure 12) is that many of them liked deciding their own structure but many also reported the notes could be useless if not organized. Two other reported cons of note are the time component if they wrote everything and the fact that they were not sure what was important. Time, organization, and knowing what was important turned quickly into pros when the students analyzed their guided notes for the same topic.

#### **Teacher Perspectives**

Teachers also seem to have mixed feelings about notes. The higher the level, the more it is expected that students can take notes, organize materials and prepare for tests. One high school **Advanced Placement Social Studies** 

teacher allows his students to choose the style of note-taking that best suits them. First, he has them use four different styles for taking notes as they independently read chapters. Those styles include Cornell, graphic organizer, outline and a reading guide prepared by him. According to this teacher, these are advanced students, so he can let them choose the style that suits them after they practice linear, Cornell, and pattern styles of notes.

Differentiation or creating a level playing field for students is another reason some educators believe in and use guided notes. Two high school special educators use these notes so that students can access accurate representations of what is being taught. Here are perspectives from three teachers who chose to use guided notes in their classes:

The figure below shows how students analyzed the guided notes they took while engaging with a PowerPoint.

#### **Figure 13: Guided Notes Comments**

|  |   | Guided Notes  |   |
|--|---|---|---|
| PROS                                   |   | CONS  |   |
| Easy                                   | 5 | Less thinking   |   |
| Less time                              | 7 | Too structured  | 2 |
| More organized                         | 6 | Don't read everything   | 2 |
| Still room to add                      | 1 | Less focus on the smaller details                               | 3 |
| Shows exactly what is important        | 7 | Can be boring   | 1 |
| Nothing left out                       |   | Uses a lot of paper   | 1 |
| Diagrams and pictures are built in     | 3 | Don't retain as much since don't write as much                  | 1 |
| Less writing                           | 2 | Time consuming  | 1 |
| Looks like a lot of work but it is not | 1 | All notes not together in a notebook                            | 2 |
|  |   | No individuality – organizing and writing what you already know | 2 |

## The Benefits of Guided Note-Taking in the High School Classroom

#### Co-Taught Math

I use guided notes as a method to ensure that students have all the important information of the lesson. It reduces the amount of writing they must do, and I find it more time efficient. As we know, some students write very slowly, and they miss key points in lessons because they are trying to write so feverishly that they cannot listen and write at the same time.

I also use guided notes to increase

note taking skills, and help students

#### ENL Science

This figure shows how<br/>questions and tables can<br/>be placed into notes to<br/>save time for analysis<br/>versus copying.to identify important content, terms,<br/>concepts on their own without me<br/>telling them this is important, etc. I<br/>use them especially for diagrams and<br/>the visual learners as it is a great

|   | Is Use each of              | fthe         |            |           |
|---|-----------------------------|--------------|------------|-----------|
| ymbols $+, -, \times, an$                     | d ÷ to make th              | ie           |            |           |
| ollowing math sent                            | ence true.                  |              |            |           |
| 2 3 7   | 1 11                        | = 0          |            |           |
|   |                             |              |            |           |
| //glencoe.mcgraw-hill.com/sites/dl/free/00787 | 40428/589238/m1_nat_wpwb.pd | r            |            |           |
| CADIDOLI                                      | Height at                   | the Shoulder | der Weight |           |
|   | inches                      | centimeters  | pounds     | kilograms |
| CARIBOU                                       |                             |              |            |           |
| Cows (females)                                | 43                          | 107          | 220        | 99        |
| Cows (females)<br>Bulls (males)               | 43<br>50                    | 107<br>125   | 220<br>400 | 99<br>180 |

**Figure 14: Guided Notes** 

way to not just only see the diagram, but they are active in labeling and chunking/ annotating important information they see in the diagram.

#### **Special Education**

- I use guided notes for several reasons:
- 1) Less writing for students with motor difficulties.
- 2) Reduces time for students to take notes.
- 3) Important vocabulary is stressed and can be presented as fill in the blanks different ways (differentiation).
- 4) Gives students an accurate representation of what is being taught and learned.
- 5) I get to control font size. Many worksheets are too busy.

At the college level, Sujarittham, et al. (2016) created guided notes with embedded problems for their physics courses. They wanted to make the abstract concepts of physics available to all students. Ultimately, using test data and interviews, they found that student learning could be made more effective with the use of these notes.

Likewise using guided notes saves instructional time since students do not need to write as much. This was also found to be the case in a 2017 research study at the college level by Boulanger and Johnstone. They were able to identify a savings of 600 lecture minutes by using pre-made guided notes in their

engineering course. Figure 14 at left shows an example of guided notes where the question and table are already typed into the notes to save time.

#### **Digital Learning**

Using guided notes as a homework assignment is one way to flip the classroom and provide more time for students to practice concepts. Notes can be created using technology. One method is to create lessons, insert what you want students to write in a different color, make a copy, and then replace the color with blank lines. Figure 15 below shows how a set of guided notes is developed.

In addition to using technology to create guided notes, teachers can use a variety of other tools to create meaningful content for students. Instructional videos on specific content are filling the internet. Questions can be embedded into instructional videos thus creating another form of guided notes. Students can view the content prior to the question as many times as they like to answer the question. Digital learning like this is often assigned outside of class time to either present a subject or review one. Teachers can also make their own videos of a lecture and require students to watch it prior to attending class. This is often used in the Flipped classroom model where more time in class is used for practicing the content the student first engages with at home. Again, students can pause or rewatch a video thus alleviating the stress of a lecture that is only a class period long at the secondary level.

By adding guided notes to an instructional video, teachers can scaffold another layer of support for the identified student. The notes provide the structure and organization based on Using guided notes as a homework assignment is one way to flip the classroom and provide more time for students to practice concepts.

> The figure below shows how guided notes are created in a Geometry course.

#### Figure 15: Guided Notes Construction

| Teacher Notes   | Student Guided Notes                                |
|---|---|
| If lines are <b>paralle</b> l,<br>they have <u>SAME</u> slopes.   | If lines are <b>parallel</b> ,<br>they have slopes. |
| $y = -\frac{3}{2}x + 4$ $y = \frac{3}{2}x + 1$ $z = -\frac{3}{2}x + 1$  | $y = -\frac{3}{2}x + 4$ $y = \frac{2}{3}x + 1$      |
| If lines are <b>perpendicular</b> ,<br>they have <u>NEGATIVE RECIPROCAL</u> slopes.<br>5) If line 1 has an equation of y = 5x - 12: | If lines are <b>perpendicular</b> ,<br>they have    |
| a) What is the slope of a line that is parallel to line 1?  |   |

## The Benefits of Guided Note-Taking in the High School Classroom

importance of material. The student can then watch the video at their own speed to fill in the notes. Questions can be embedded into the notes, asking the student to process the information at their level.

#### Conclusion

The use of guided notes compared with student-generated notes helps identified students with the five main areas that research has deemed important for successful note-takers. Recall that these are what Flowers refers to as his five steps to note-taking: decoding, understanding, identifying main ideas, deciding when to write, and speed writing. Students no longer must identify the main idea or decide what to write. By filling in most of the notes, the teacher also reduces the stress of speed of writing for the identified student. They remove some of the decision process by providing the clear organization of material. The fact that students can only record 17-20 words per minute of lecture becomes a moot point.

This style of notes can be individualized by ability level, spacing, and the amount of pre-filled information. Teachers can prepare them ahead of time to follow the lesson format and provide main ideas. The fact that guided notes also provide key lecture point cues in the information that is left for the student to fill in frees up working memory space saved for decoding and understanding. Students no longer need to focus on things like words that may be challenging or new. Add in the use of instructional videos that students can watch at home, and students are further freed up to watch the lecture at their own pace or rewatch it, as necessary.

It is evident that guided notes offer educators and students the flexibility of design and use in the classroom and at home. They are a tool that is easy to implement while providing the supports our identified students need.

#### REFERENCES

- Amini Asl, Z. & Kheirzadeh, S. (2016). The effect of note-taking and working memory on Iranian EFL learners' listening comprehension performance. *International Journal* of Research Studies in Psychology, Vol. 5, No. 4, 41 – 51. http://doi.org/10.5861/ ijrsp.2016.1583
- Aragón-Mendizábal, E., Delgado-Casas,
  C., Navarro-Guzmán, J. I., Menacho-Jiménez, I., & Romero-Oliva, M. F. (2016).
  A Comparative Study of Handwriting and Computer Typing in Note-taking by University Students, Análisis comparativo entre escritura manual y electrónica en la toma de apuntes de estudiantes universitarios. Comunicar, 24(48), 101-107.
- Boyle, J. R. (2012). Note-taking and secondary students with learning disabilities: challenges and solutions. *Learning Disabilities Research & Practice* (Wiley-Blackwell), 27(2), 90-101. http://doi.org/10.1111/j.1540-5826.2012.00354.x
- Boyle, J. R. (2013). Strategic notetaking for inclusive middle school science classrooms. *Remedial and Special Education*, 34(2), 78-90.

- Boyle, J. R., Forchelli, G. A., & Cariss, K. (2015). Note-taking interventions to assist students with disabilities in content area classes. *Preventing School Failure*, 59(3), 186–195. http://doi.org/10.1080/1045988X.2014.903463
- Bui, D. C., Myerson, J., & Hale, S. (2013). Note-taking with computers: Exploring alternative strategies for improved recall. *Journal of Educational Psychology*, 105(2), 299-309. http://doi.org/10.1037/a0030367.
- Crawford, M. J., (2016). Lecture notetaking: questions and answers. *The Language Teacher*, 40.2.
- Greenfeld, R. B. (2019). A Causal-Comparative Study on the Equivalence of Algebra Notetaking Styles and Academic Achievement (Doctoral dissertation, Grand Canyon University).
- Gur, T., Dilci, T., Coskun, I., & Delican, B. (2013). The impact of note-taking while listening on listening comprehension in a higher education context. *International Journal of Academic Research*, 5(1), 93-97. http://doi. org/10.7813/2075-4124.2013/5-1/B.16
- Harrison, J. R., Bunford, N., Evans, S. W., & Owens, J. S. (2013). Educational accommodations for students with behavioral challenges: A systematic review of the literature. *Review of Educational Research*, 83(4), 551-597.
- Jansen, R. S., Lakens, D., & IJsselsteijn, W. A. (2017). An integrative review of the cognitive costs and benefits of note-taking. *Educational Research Review*, 22, 223-233.
- John, Y. J., Joseph, S., & Sampson, A. (2014). Prospective teachers using guided math notes to differentiate mathematics instruction. *International Journal of Research in Social Sciences*, Vol. 4, No. 1, 64 – 76.
- Lam, S. F., Jimerson, S., Wong, B. P., Kikas, E., Shin, H., Veiga, F. H., ... & Stanculescu, E. (2014). Understanding and measuring student engagement in school: The results of an international study from 12 countries. *School Psychology Quarterly*, 29(2), 213.
- Larwin, K., Dawson, D., Erickson, M., & Larwin, D. (2012). Impact of guided notes on achievement in K-12 and special education students. *International Journal of Special Education*, 27(3), 108-119.
- Lazarus, B. (1991). Guided notes, review, and achievement of secondary students with learning disabilities in mainstream content courses. *Education & Treatment of Children* (*ETC*), 14(2), 112.
- Lazarus, B. (1993). Guided notes: effects with secondary and post-secondary students with mild disabilities. *Education and Treatment of Children, 16*(3), 272-289. http://www.jstor.org/stable/42899317

- Nakayama, M., Mutsuura, K., & Yamamoto, H. (2013). Effectiveness of instructional suggestions for note-taking skills in a blended learning environment. *Proceedings of* the International Conference on E-Learning, 333-339.
- Nakayama, M., Mutsuura, K., & Yamamoto, H. (2016). Lexical analysis of student's learning activities during the giving of instructions for note-taking in a blended learning environment. *International Journal of Educational Technology in Higher Education*, Vol. 6, No. 1. http://doi. org/10.7763/IJIET. 2016.V6.648.
- Nakayama, M., Mutsuura, K., & Yamamoto, H. (2017). The possibility of predicting learning performance using features of note-taking activities and instructions in a blended learning environment. *International Journal of Educational Technology in Higher Education*, 14:6. http:// doi.org/10.1186/s41239-017-0048-z, 333-339.
- Peverly, S. T., & Sumowski, J. F. (2012). What variables predict quality of text notes and are text notes related to performance on different types of tests? *Applied Cognitive Psychology*, 26(1), 104-117. http://doi.org/10.1002/ acp.1802
- Polloway, E., Patton, J., Serna, L. & Bailey, J., (2013). Strategies for teaching learners with special needs (10th ed.). Upper Saddle River, NJ: Pearson. ISBN-13:97801326156.
- Reeve, J., & Lee, W. (2014). Students' classroom engagement produces longitudinal changes in classroom motivation. Journal of Educational Psychology, 106(2), 527.
- Rosen, S. M., Boyle, J. R., Cariss, K., & Forchelli, G. A. (2015). Changing how we think, changing how we learn: Scaffolding executive function processes for students with learning disabilities.
- Smith, K., & Clason, D. (2017). Using Blanks in Guided Lecture Notes.
- Sujarittham, T., Emarat, N., Arayathanitkul, K., Sharma, M. D., Johnston, I., & Tanamatayarat, J. (2016). Developing specialized guided worksheets for active learning in physics lectures. *European Journal of Physics*, 37(2), 025701.
- Tinajero, C., Lemos, S. M., Araújo, M., Ferraces, M. J., & Páramo, MF (2012). Cognitive style and learning strategies as factors which affect academic achievement of Brazilian university students. *Psicol. Reflex. Crit.* [online]. 2012, vol.25, n.1, pp. 105-113. ISSN 0102-7972.
- Watt, S., Vajoczki, S., Voros, G., Vine, M. M., Fenton, N., & Tarkowski, J. (2014). Lecture Capture: An Effective Tool for Universal Instructional Design? *Canadian Journal of Higher Education*, 44(2), 1-29.



#### SUMMARY

The mix of culture and social and emotional learning (SEL) is an important one. Today, school settings embrace both learners and educators from a diverse range of cultures, languages, and behavioral norms. Given this, researchers are exploring how cultural responsiveness, educational equity, and transformative SEL can influence how students develop SEL competencies.

# Improving Social and Emotional Skills through Gameplay

## What is Social and Emotional Learning?

Greeting someone new and making a good first impression are important skills that fall within the complex and multifaceted umbrella of social and emotional learning (SEL). Students are often taught specific strategies, such as making eye contact and shaking hands, to support the development of SEL. In fact, research has demonstrated that integrating SEL instruction into the academic day is critical for positive and continuous growth in both academic and social learning. Social and emotional learning includes affective skills such as relationship building, goal setting, developing self-awareness, and making responsible decisions (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011).

Children with autism spectrum disorder (ASD) who exhibit deficits in prosocial skills, such as engaging in conversation and responding to social problem-solving skills, represent one student group in need of support with social and emotional learning (DiGennaro-Reed, Hyman, & Hirst, 2011). Two particular characteristics of children with ASD are reciprocal social-communicative deficits (responding to and returning eye contact) and social behavioral challenges (interpersonal social emotional communication) (Kanner, 1968; Tonge, Dissanayake, & Brereton, 1994). Direct eye contact is considered the most important platform for social interaction and communication (Csibra, 2006). Thus, eye contact processing has been regarded as a "model system" for studying social interaction and communication among children with ASD (Senju & Johnson, 2009).

Celestial Wills-Jackson, Ph.D., taught as a special educator for more than 15 years. Her research is focused on social skills deficits of children diagnosed with emotional behavioral disorders (EBD) and autism spectrum disorder (ASD). Currently, Wills-Jackson is an assistant professor and site coordinator in Early Childhood and Childhood Education for the School of Education at Lehman College-City University of New York. As coordinator, she is focused on strengthening teacher performance and improving the teacher preparation program utilizing teacher performance data for program improvement to foster clinically rich, effective student teaching. Additionally, Wills-Jackson is a licensed behavior technician working with families and children with autism.

#### **Celestial Wills-Jackson, PSC-CUNY**

According to Weissberg, et al., (2015), "SEL is the process through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions (p. 6)." Social and emotional learning are defined by the Collaborative for Academic, Social, and Emotional Learning's (CASEL) five interrelated sets of cognitive, affective, and behavioral competencies: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making.

In their meta-analysis review, Durlak, et al., (2011) identified these core competencies indicating that students engaged in SEL programs and interventions improved their social and emotional skills with an impact on the five interrelated sets of cognitive, affective, and behavioral competencies. Figure 1 presents a conceptual framework of (a) five interrelated domains; (b) short and long-term student outcomes within school curriculums; (c) schoolwide policies for SEL implication; and (d) practices to enhance SEL with schools and families.

Over the past 20 years, SEL programs and intervention have evolved. Social and emotional learning is implemented in schools in many different ways: as a

Source: CASEL Wheel and Competencies by CASEL, 2020



#### **Figure 1: Core SEL Competencies**

## Improving Social and Emotional Skills through Gameplay

structured curriculum with lessons devoted to specific times and locations within the school day, as a schoolwide positive behavior intervention system (SW-PBIS) whereby SEL principles are embedded into the school culture, and through afterschool and out-of-school assignments involving service learning and community involvement opportunities (Osher et al., 2016).

Although these skills are teachable, teaching these discrete skills has proven challenging for some practitioners working with children with ASD. Researchers have indicated specific instructional strategies for teachers to use promoting SEL. Figure 2 below displays the relationship between teacher SEL skills and the SEL teaching practices.

Social and emotional learning is the process through which children develop and manage emotions, solve interpersonal challenges, build peer relationships, and engage in responsible decision-making. As such, teachers must articulate effective strategies to promote students' development of SEL competencies. Therefore, teachers must also understand how to improve their own SEL competencies to best teach students on both social and instructional levels (Yoder, 2014).

The relationship between teacher

#### Figure 2: Relationship Between Teacher SEL Skills and SEL Teaching Practices



SEL skills and the SEL teaching practices affords teachers with specific instructional strategies such as:

- Reflection and self-assessment on SEL as a fundamental aspect of lesson planning
- Teacher's delivery and ability to foster student SEL through instructional practices
- Self-reflection tool allowing teachers to consider how their competencies reflect and support instructional practices of SEL
- Self-reflective feedback to use as professional development strategies or teacher evaluations

This SEL tool (see Figure 2) for teachers allows teachers to strengthen their own SEL competencies for successful SEL implementation with students. Teachers developing effective social and emotional skills help improve empathetic relationships with students and help students develop the prosocial skills for a conducive learning environment. A direct prosocial skill to develop is eye contact. We use our eyes as a means of communication. Two core indicators of autism are the lack of eye contact and social peer relationships. Practicing good eye contact is an essential skill for effective communication, but exactly how important is it and how is it defined?

## Why is Direct Eye Contact Important?

Children with ASD represent one student group in need of support with social emotional learning, exhibiting deficits in pro-social skills such as engaging in conversation and responding to social problem-solving skills (DiGennaro-Reed, Hyman, & Hirst, 2011). Two particular characteristics of children with ASD are reciprocal social-communicative deficits (responding to and returning eye contact) and social behavioral challenges (interpersonal social emotional communication) (Kanner, 1968; Tonge, Dissanayake, & Brereton, 1994).

Direct eye contact is considered the most important platform for social interaction and communication (Csibra, 2006). Thus, eye contact processing has been regarded as a "model system" for studying social interaction and communication among children with ASD (Senju and Johnson, 2009). Senju and Johnson defined direct eye contact as an emotional response that triggers one's eyes to become captured by another person's eyes.

Direct eye contact with an individual, termed mutual gaze, is considered a significant component of interpersonal response (Nuske, Vivanti, & Dissanayake, 2015). "Dynamic facial cues, such as gaze direction and facial expression, are integrated with body gestures and prosody to allow humans Direct eye contact with an individual, termed mutual gaze, is considered a significant component of interpersonal response.

## Improving Social and Emotional Skills through Gameplay

Social games such as role-playing afford children with ASD the opportunity to improve their empathy and peer relationship skills. and other higher primates to interpret the attentional focus and internal state of others during social interactions" (Graham, 2016, p. 553). Direct eye contact holds the attention of others and makes it harder for both individuals to disengage from one another (Senju, Hasegawa, & Tojo, 2005). Direct eye contact and peer social interactions are essential behaviors that allow students to respond to social cues and have social and emotional competence. Without such behaviors, students may endure unfavorable, long-term academic and behavior outcomes.

Children with ASD also exhibit a range of behaviors such as deficits in social function and communication that may interfere with education and positive interactions, including social impairments such as inadequate eye contact and deficits in socialization (i.e., responding to name, following someone's point, interest in other children, or social smiling) (Jeffries, Crosland, & Miltenberger, 2016; Laushey & Heflin, 2000). Thus, social skills training is an essential component of intervention for children with autism. Though there exists a plethora of research on children with ASD, there is limited published research on children with ASD exhibiting inadequate eye contact and deficits in social activities.

This gap in research identifying both deficits in children results in unreliable, invalid diagnostic practices, as well as ineffective SEL practices. To close this knowledge gap, instructional programs and interventions are needed to improve deficits in social communication and behavior patterns. Eye contact and social games with peers are essential behaviors that allow students to respond to social cues and have social and emotional competence.

#### Benefits of Social Gaming Activities with Peers

Social games such as role-playing afford children with ASD the opportunity to improve their empathy and peer relationship skills (Dudzinska, Szymona, Pacian, & Kulik, 2015). According to Vygotsky (1962), learning is a social activity. He proposed that learning takes place through peer to peer social interactions. Consequently, practitioners can incorporate SEL strategies into the classroom to maximize the student's ability to socially engage with peers through games, discussion, and roleplay activities. Researchers have suggested playing games to improve the physical, cognitive, linguistic, emotional and social development in children with autism (Cankaya & Kuzu, 2010). Such games could include children with ASD participating in cooperative learning

activities, playing organized sport games, and conversing with their peers during lunch. The inherent benefits of playing these games may teach children with ASD to understand the mental states of others, the metacognitive process, or learning strategies needed to facilitate their social communication and social problem solving.

Behavioral role-play scenarios with peer interactions have been found to be successful interventions increasing the sociocultural competence of children and adolescents with ASD (Englund, Levy, Hyson, & Sroufe, 2000). The importance of teaching role-play skills is to have children develop skills including (a) asking for an object and responding according to the answer given, (b) appropriately getting the attention of another, (c) waiting for his turn, and (d) looking at or in the direction of another person who was speaking to him.

Seminal research by Englund et al. (2000) developed a valid observational measure of social competence in the peer group. The researchers determined an important criterion was to evaluate the appropriateness for assessing social competence of children to function effectively with peers in role-play scenarios.

#### Intermixing Culturally Responsive Teaching with Social and Emotional Learning

Jagers, Rivas-Drake & Borowski (2018) defined equity-based SEL as transformative SEL. They explain it as a process whereby both students and teachers build respectful relationships founded on common cultural similarities and differences and learn to examine root causes of inequity while developing collaborative solutions to social challenges. Equitybased SEL incorporates instruction based on children's lived experiences framed around SEL core competencies such as children learning key components of self-awareness, particularly of the cultural characteristics and interactions that include peers from culturally linguistically diverse backgrounds in the classroom. Diversity is defined as the traits and characteristics that make people unique while inclusion refers to the behaviors and social norms that ensure people feel welcome.

McCallops et al. (2019) suggested effective culturally responsive social and emotional competencies should incorporate valued student engagement. Student engagement refers to the degree of attention, needs and interest students show when they are learning or being taught. The framework that conceptualizes culturally responsive SEL instruction includes the pedagogy of empathy Diversity is defined as the traits and characteristics that make people unique while inclusion refers to the behaviors and social norms that ensure people feel welcome.

## Improving Social and Emotional Skills through Gameplay

(self-management), self-awareness, self-regulation, relationship skills (awareness of others), and responsible decision-making (motivation). Table 1 outlines a brief description of these pedagogical components.

As practitioners, it is important to focus on culturally responsive SEL

efforts to improve student academic performance without explicitly addressing the cultural dynamics of peer interactions from diverse ethnic and linguistic backgrounds. Increasing evidence of the positive impacts of SEL programs has prompted practitioners to advocate and promote the well-being of

#### **Table 1: Components of Culturally Responsive SEL**

| Empathy<br>(Self-management)                   | <ul> <li>Having the ability to understand the perspective of others, including those from culturally and linguistically diverse socioeconomically diverse backgrounds.</li> <li>Effective practice could include relationship building activities. Students can engage in questioning and listening to peer viewpoints. Therefore, culminating shared understanding on various topics.</li> </ul>   |  |
|--|---|--|
| Self-awareness                                 | <ul> <li>A reflection of one's own implicit bias, cultural identity, and emotional well- being.</li> <li>Effective practice could incorporate reflective journal writing. Students can self-reflect and build their character.</li> </ul>   |  |
| Social Awareness<br>(Relationship skills)      | <ul> <li>Reflecting and gaining an appreciation of diversity and the feelings of peers.</li> <li>Effective practice could target facial expressions of emotions through relationship building activities.</li> </ul>  |  |
| Self-regulation                                | <ul> <li>Allowing students to self-adjust their expression of biases and cultural diversities.</li> <li>Effective practices would engage diverse cultural relationships among peers embracing emotion-filled self-reflections.</li> </ul>   |  |
| Responsible<br>decision-making<br>(motivation) | <ul> <li>Having the ability to learn, participate and interact in diverse learning settings and with peers who are culturally, linguistically diverse to make constructive choices.</li> <li>Effective practice uses a social-behavioral learning strategy intervention (SODA: Stop-Observe-Deliberate-Act) in the classroom. This strategy includes role-play for situation options, disadvantages, advantages, and solution by providing a set of rules meant to help children attend to relevant social cues, process these cues, and select specific social skills needed to participate in a social activity.</li> </ul> |  |

children from diverse backgrounds. Equity-based SEL means that every student can acquire and effectively apply knowledge, attitudes, and skills necessary to understand and manage emotions, express empathy toward others, maintain social relationships, and make responsible decisions.

Below is a description of a structured, school-based program that fosters transformative, equity-based SEL competencies associated with the pedagogical components in Figure 3. The Sanford Harmony program has identified schools as cultural institutions. They have incorporated multiple methods to teach positive social interactions within inclusive classroom settings. Additionally, the Harmony program has developed a multi-layered approach to creating a mutually respectful community of learners from diverse backgrounds. Therefore, this program was developed to deliver equity-based SEL competencies into the classroom.

#### Sanford Harmony Social and Emotional Learning Program

According to Sanford Harmony, the program promotes learning communities and healthy relationships among peers of abilities, disabilities, ethnicity, race, and linguistic backgrounds. The categories of Meet Up and Buddy Up teach sociocultural collaboration among students and peers and students and teachers. Both methods provide for practice of important social and emotional competencies, such as positive communication, collaboration, and problem-solving connected to real-world situations. These collaborative goals are accomplished throughout the program in meaningful ways including:

- Relationship-building lessons and activities that help students learn and practice SEL competencies.
- Everyday practices that provide students with ongoing, supported opportunities to interact with peers and participate in dialogue and decision-making about issues related to the classroom experience.

Utilizing these real-world situations afford students to embrace both interpersonal competencies and positive attitudes for appropriate classroom behaviors.

In addition to the SEL competencies mentioned above, the Meet Up and Buddy Up categories offer equitybased practices such as cultural integration, community-building, equity integration, and experiential learning opportunities through structured unit lessons. The Meet Up promotes inclusivity among all children in the classroom. According to the Harmony guidelines, Meet Up should occur the Equity-based attitudes, and to understand

## Improving Social and Emotional Skills through Gameplay

By using tools that promote and support SEL among students of diverse populations, it helps to develop peer relationships, strenghthen social peer interactions, and advance interpersonal skills. same time every day, preferably during circle time for 10-20 minutes. It is ideal to discuss ideas, ask questions, and introduce peer relationships. By connecting with peers, students develop problem-solving skills, empathy toward others and value relationships within the classroom community.

#### Sanford Harmony designed the Meet Up component to promote several competencies:

- 1. Foster a classroom environment of inclusivity; where all students feel connected.
- 2. Establish a student-centered class setting encompassing peer interactions.
- 3. Effectively communicate, problem solve, and make responsible decisions.
- 4. Provide opportunities for students to socially engage with each other.
- Supports students in increasing pro-social skills such as interpersonal skills and peer relationships; which foster mutual eye contact and peer communication skills.

The Buddy Up component promotes peer interactions between diverse peers. This module cultivates diversity in students' experiences, leading to positive social peer relationships. Students are paired with different buddies each week to adopt cultural awareness and social responsibility toward each other. This practice is recommended four to five times per week, lasting between 5 and 45 minutes.

#### The Harmony program designed the Buddy Up module to adopt several competencies:

- 1. Foster inclusivity in the classroom.
- 2. Provide students opportunities to communicate and interact successfully with peers from diverse backgrounds.
- Provide opportunities for students to connect through meaningful games and activities.
- 4. Promote empathy including sharing, caring and understanding peers.
- 5. Provide opportunities for cultural awareness supporting social, emotional, and cognitive growth.

## Studying the Sanford Harmony Program

The Sanford Harmony program supports culturally responsive teaching practices. By using tools that promote and support SEL among students of diverse populations, it helps to develop peer relationships, strengthen social peer interactions, and advance interpersonal skills. This study was conducted over 20 weeks to examine the effects of a structured social skills program in increasing social and emotional skills for five adolescents with autism spectrum disorder (ASD) in a behavioral clinical setting.

Each of the participants met certain eligibility criteria which included: aged between 10 and 15 years old, had a clinical diagnosis of autism, were assessed with decreased eye contact and low social peer interactions. The purpose was to see whether a structured social skills program would be effective at improving social and emotional skills (direct eye contact?) in these students and to investigate potential supports to accommodate students with ASD in order to improve their prosocial skills, including mutual eye contact and sociocultural communication skills. The study was guided by the following two research questions:

- 1. To what extent does the implementation of games and activities using a structured social skills program improve the frequency of mutual eye contact for peers with ASD, in a small group setting?
- 2. To what extent does the implementation of games and activities using a structured social skills program improve the number of culturally relevant and verbally reciprocated responses during structured conversation for students with ASD, in a small group setting?

The Harmony program values diversity among peer relationships and improved social communication skills. Sanford Harmony incorporates multiple components to teach SEL competencies and to create an inclusive classroom environment. The Harmony components are designed as chapters and are listed below.

- Diversity and Inclusion. Promotes a community environment in the classroom as children learn to recognize and appreciate one another's similarities and differences.
- Empathy and Critical Thinking. Children develop empathy, reduce stereotyped thinking and learn critical thinking skills.
- Communication. Healthy and unhealthy communication patterns are explored, and children practice effective ways of engaging with others.
- Problem Solving. Children learn constructive approaches to resolving conflict, focusing on conflictresolution steps that facilitate healthy relationship patterns.
- Peer Relationships. Children practice positive social skills and learn the qualities that are important to friendship, the consequences of bullying, and how to provide peers with support (Sanford Harmony, 2020).

## Improving Social and Emotional Skills through Gameplay

#### **Two Units of Study**

This research study examined two units, Communication and Peer Relationships, to learn more about the effectiveness of Sanford Harmony's games and activities to increase both sociocultural strategies and eye contact responses during peer interactions for students with ASD.

While both units were examined to better understand how they may contribute to increased direct eye contact, the Communication Unit focused on experiential learning and community-building exercises to increase students' ability to identify their own communication styles. Within this unit, students were provided with opportunities to practice effective ways of engaging with others. Unit practices of these approaches included: morning Meet-up and Buddy up, following classroom routines, collaborative problem-solving among peers, and allows students to act out scripted plays while peers identify communication functions as they occur.

During the Communication unit, students learn positive social cues and identity negative social cues while engaged in role-play activities reading scripted plays. Positive social cues are recognized as "Communication Boosters" such as active listening with mutual eye contact, facilitating empathy toward peers, negotiating or problem-solving, and supporting and encouraging peer interactions. Additionally, students learn to identify "Communication Bloopers" such as interrupting peers, controlling or initiating bullying behavior, ignoring peers, and withdrawing or removing oneself from group participation.

The Peer Relationships Unit incorporates the "Battle of the Bullies" game. Within this unit, students race to the finish while considering effective and ineffective ways to deal with bullying and the consequences of each. The purpose of the Peer Relationships unit is designed to:

- Provide opportunities to promote positive cultural peer interactions and relationships
- Provide opportunities and qualities important to friendships and the negative consequences associated with bullying
- Instruct students how to support and positively cooperate with their peers

The Peer Relationship game is implemented with a gameboard card, Team 1 selecting and reading the Battle Card out loud and Team 2 draws an Action Card from the same deck. Both team members must decide together whether the Action is

#### **Figure 3: Peer Interaction**

positive or negative. If the Action is positive, Team 2 moves a space forward, based on the number of the die. If the Action is negative, Team 2 moves a space backward, based on the number of the die. The game proceeds until all teams (including Team 1) have drawn an Action Card from the first deck. The team that reaches or is closest to the finish wins the game.

Both the Communication and Peer Relationship units were used to promote positive cultural and equity interactions and relationships between students and their peers. Through their participation in paired peer group activities, students learned about qualities important to friendships including cultural assets, negative consequences associated with bullying, and how to provide their peers with supportive cultural competence. In addition, students were engaged in lessons, activities, and games to understand commonalities, respect diversity among their peers and paired reciprocal eye contact.

#### Outcomes of the Harmony Program

Baseline data were collected until a stable trend of target behavior was observed. Baseline sessions were recorded during two-minute interval recording. This strategy recorded whether eye contact and sociocultural verbal responses occurred or did not occur during a timed twominute interval recording, lasting 30 minutes. Behavior technicians were instructed to facilitate the engagement of their students in child-child pairs of social play. The

of social play. The child-child pairs engaged in age-appropriate social games (i.e., UNO, Guess Who, and children's version of Monopoly).



A depiction of a child-child peer interaction; children playing the game,"Telephone."

A depiction of adolescents with autism giving direct eye contact to peers

#### **Figure 4: Direct Eye Contact with Peers**



Source: The Social Express, Inc. "Improving your child's social skills: Making eye contact."

## Improving Social and Emotional Skills through Gameplay

A structured culturally responsive social skills program has potential to improve direct eye contact and sociocultural skills for students with disabilities in an educational setting. At the end of baseline, the objective of the intervention was to capture mutual eye contact simultaneously with sociocultural communicative engagements with peers. Mutual eye contact was noted when one child looked directly into his or her peer's eyes while playing games or engaged in social activities. Verification of mutual eye contact was confirmation that the children's prosocial skills were improving and maintained after the study.

Mutual direct eye contact between peers was assessed using direct observation to specifically teach naturalistic environmental training (NET). A two-minute interval recording was used to measure the frequency of direct eye contact combined with verbal responses elicited. The number of direct eye contact acts per twominute intervals was calculated during 30-minute, 45-minute, and 60- minute sessions. The values were also used to evaluate Sanford Harmony's effectiveness for each participant.

Social engagements were measured using a combination of both direct observation and differential reinforcement of other/replacement behaviors (DRO). The number of occurrences from both measurements were combined to evaluate the frequency of social engagements. This indicated the percentage of time each participant was socially interacting or engaged with his or her partner. This included behaviors directed toward peers, (e.g., commenting, reciprocal questions, staying on topic, and initiating conversations). The researcher implemented tasks such as directly prompting the students as to what to say or instructing them to follow the same conversation pattern their peer was initiating. The Sanford Harmony curriculum guided students in their social engagements through games and activities.

#### Evaluation of a Structured Culturally Responsive SEL Program

This study was conducted to examine the effects of a structured social skills program in increasing social and emotional skills for five adolescents with ASD in a behavioral clinical setting. Overall, this study provided preliminary evidence that a structured culturally responsive social skills program has potential to improve direct eye contact and sociocultural communication skills for students with disabilities in an educational setting.

Results from data and visual analysis revealed all participants significantly increased their direct eye contact and sociocultural communication skills after implementing the Sanford Harmony SEL program. In addition, data were calculated indicating the Sanford Harmony program was a highly effective intervention increasing eye contact for students with ASD.

The structured social skills intervention increased the direct eye contact of all the participants in the study. Specifically, during the Harmony Communication Unit, four of five participants increased direct eye contact more than 50 percent over their baseline phase data. Only Participant 1 improved her direct eye contact less than 50 percent (baseline mean data = 25 percent; intervention mean data = 45 percent over baseline data) during the Communication Unit. However, she showed significant improvement during the Peer **Relationships Unit (intervention** mean data = 72 percent over baseline data). The other participants increased their eye contact during both the Communication Unit and the Peer Relationships Unit more than 50 percent over their baseline phase data for the observed sessions.

During the Harmony intervention, visual data analysis showed there was one participant for whom the Harmony Communication Unit was a questionable intervention to increase culturally relevant social engagements. Participant 5 was the only student whose baseline score averaged 13 percent. Several factors determined this student's lower baseline score such as excessive absenteeism, being bullied in school, and being four years older than the other participants. After introducing the Communication and Peer Relationships Units, his averages increased significantly from baseline: for the Communication Unit (mean = 70 percent over baseline); for the Peer Relationships Unit (mean = 82 percent over baseline).

#### **Direct Eye Contact** Maintenance Communication Peer Relationship Baseline Unit Unit 100 980 65400 100 Percent Correct Participant #1 \$ ~6 20 100 90 80 70 50 40 30 20 Percent Correct Participant #2 5 ~6 10C 980 700 500 320 10C Percent Correct Participant #3 0, ~ 100 980 760 4300 100 Percent Correct Participant #4 ŝ, 5 Sessions

#### Figure 5: Performance on Direct Eye Contact

## Improving Social-Emotional Skills through Gameplay

The average percentage of social engagement for all other participants was 60 percent over the baseline phase data during the Communication Unit and 61 percent during the Peer Relationships Unit. Overall, as hypothesized and based on data and visual analysis, Sanford Harmony gameplay activities were effective in increasing culturally relevant social engagements for each participant with ASD.

During the intervention phase, Participant 1 initially experienced difficulty communicating in age-appropriate peer social engagements. She preferred talking to adults asking them rote questions such as "Is it time for snack?" Throughout the intervention, she made socially significant progress with her peer and addressed concerns related to the games such as "You won," "Do you want to play again?" While eating with her peer, Participant 1 learned to ask, "What do you have for snack?" Participant 5 was 15 years old and the oldest in the group. While in high school, he experienced a lot of bullying. Therefore, his social interactions were deficient at the beginning of the intervention. By the end of the study, Participant 5 experienced a decreased behavior management program which allowed him more time at the behavior clinic as opposed to supervised visits at home. Thus, providing more social time to

engage in new friendships within the behavioral clinic.

#### Implications for SEL in the Classroom

According to CASEL (2015), SEL is implemented in schools in many different ways: as a structured curriculum with lessons devoted to specific times and locations within the school day, as a schoolwide positive behavior intervention system (SW-PBIS) whereby SEL principles are embedded into the school culture, and through afterschool and out-of-school assignments involving service learning and community involvement opportunities (Osher et al., 2016).

The results of the present study highlight the potential for providing teachers and behavior analysts with existing tools to implement social and emotional learning interventions in their educational settings. Baseline observations indicated that the behavior clinic did not have specific social and emotional learning games or activities to use in instructing students to socially interact. The Sanford Harmony program is a structured program, embedded with child-centered games and activities for both peer-to-peer groups or peerteacher groups to facilitate social skills training, that may hold value in educational settings.

Another important implication is that the social and emotional learning can be individualized to the needs and interests of each student. The program used in this study provided the basis for (a) skills to be taught, (b) the use of consistent phrases and language by participants and therapists, (c) integrating social and emotional practices into peer relationships, and (d) making an effort to cultivate diversity through social engagements gameplay. However, professional discretion was used in modifying appropriately and making on-the-spot professional decisions during implementation. Prior to any intervention, teachers should establish individualized planning for peer-mediated activities. Therefore, teachers would benefit from considering the diverse intellectual and functional levels of students prior to intervention practices. This would increase the effectiveness of interventions.

#### Supporting SEL Practice in the Classroom Instructional Setting

Researchers from the Center on Great Teachers and Leaders indicated 10 instructional strategies for teachers to use that promote SEL (Dusenbury et al., 2015). These current practices include (a) studentcentered-discipline, (b) teacher language, (c) responsibility and choice, (d) warmth and support, (e)

cooperative learning, (f) classroom discussions, (g) self-reflection and self-assessment, (h) balanced instruction, (i) academic press and expectations, and (j) competence building (Yoder, 2014). Figure 2 displays the relationship between teacher SEL skills and the SEL teaching practices. These approaches and practices are consistent with transformative SEL, thereby fostering how cultural responsiveness and educational equity can influence students with disabilities develop SEL competencies. Table 2 illustrates a descriptive tool to help practitioners think about how to implement these 10 instructional strategies.

#### Conclusion

At a time when social-emotional learning is increasingly gaining traction as a point of interest in schools, specific interventions to support even students with the most challenging behaviors is critical. The results of the present study (Wills-Jackson, 2018) support the findings of previous researchers by demonstrating that social and emotional learning can be implemented effectively with students with autism. The study extends previous literature by incorporating games and activities as intervention practices to improve mutual direct eye contact and culturally responsive social engagement

## Improving Social-Emotional Skills through Gameplay

| Table 2: Teaching Social and Emotional Interactions |                                      |  |   |
|---|--------------------------------------|--|---|
| SEL Skill   | Teaching Practice                    | Description  | Example   |
| Self-awareness                                      | Student-centered<br>discipline       | Being aware of how your cultural beliefs and<br>background affect your instructional teaching<br>practices with your students.   | Holding class discussions<br>with your students so<br>they can solve class problems.  |
|   | Cooperative<br>learning groups       | Understanding how student responses<br>(positive and negative) affect your<br>emotions and your behaviors during<br>social teaching practices.   | Providing opportunities<br>for your students to share<br>their work and receive<br>feedback from peers.   |
| Self-management                                     | Teacher language                     | Modeling behaviors (e.g., form<br>guidelines, set boundaries) to<br>help students learn to regulate<br>emotions during social teaching<br>practices.   | Promoting positive behaviors<br>by praising your students<br>when they display positive<br>social skills (e.g., praise positive<br>actions or steps to improve).    |
|   | Classroom<br>discussions             | Effectively using multiple strategies (e.g.,<br>breathing techniques and mindfulness)<br>when you have a strong emotional reaction<br>in the classroom (e.g., stress, anger) when<br>implementing instructional practices. | Asking your students to<br>listen to and think about<br>their peers' opinions<br>and whether they agree<br>with them.   |
| Social awareness                                    | Responsibility<br>& choice           | Successfully supporting positive emotions<br>and responding to negative emotions<br>during social teaching practices.  | Asking for student input<br>when making decisions<br>about how your classroom will<br>operate in developmentally<br>appropriate ways.                               |
|   | Self-assessment<br>& self-reflection | Addressing the commonalities and differences<br>(e.g., racial, ethnic, cultural) that exist among<br>students when you implement the<br>instructional teaching practices.  | Creating opportunities<br>for your students to<br>monitor and reflect<br>on their social learning.  |
| Relationship skills                                 | Warmth & support                     | Using the social teaching practices to<br>help form meaningful relationships with<br>your students and cultivate their SEL skills,<br>and being successful at building meaningful<br>relationships                         | Creating structures in your<br>classroom where your students<br>feel included and appreciated<br>(e.g., morning meetings, small<br>group & whole-class share outs). |
|   | Balanced instruction                 | Being comfortable helping your students resolve<br>interpersonal conflicts that come up during<br>instructional teaching practices, and you have<br>experienced success with this.   | Making sure that your activities<br>are not just fun, but represent<br>one of the best ways for your<br>students to learn the content.                              |
| Responsible<br>decision-making                      | Academic press & expectations        | Being effective at considering multiple forms of<br>evidence, such as balancing the needs and the<br>behaviors of your entire class, while implementing<br>the social teaching practices.                                  | Supporting your students<br>socially and emotionally while<br>challenging them with new or<br>higher levels of learning.  |
|   | Competence<br>building               | Implementing the instructional teaching practices,<br>you balance awareness of students' emotional<br>needs and academic needs.  | Using student misconceptions<br>to guide your instruction<br>without singling your student out.   |

Source: Adapted from the Teaching the Whole Child: Instructional Practices That Support Social and Emotional Learning in Three Teacher Evaluation Frameworks by Yoder, 2014. Retrieved from https://gtlcenter.org/sites/default/files/SelfAssessmentSEL.pdf

for students with autism. Although this study was conducted in a clinical setting, the findings suggest there may be value in exploring ways to use the combination of games, activities, a structured social skills training program such as Sanford Harmony, and modification of materials to meet the social and communication needs of students with a wide range of abilities and disabilities across all educational settings.

The literature in this study highlights a number of approaches, strategies, and practices that are consistent with equitybased SEL, improving the social and emotional competencies for both children and teachers. Teaching approaches that focus on social teaching practices and those that focus on instructional teaching practices can facilitate the development of student social, emotional, and academic skills. In addition, programs such as Sanford Harmony foster culturally aligned SEL competencies that improve prosocial skills for children with autism, in particular eye contact and social engagements. While in some cultures direct eye contact can be taken as a challenge of authority, generally brief eye contact is most often considered acceptable. To empower cultural relevance, one must always be cognizant of culturally, linguistically diverse customs. This can be accomplished by asking questions, seeking answers, and acting accordingly to cultural responsiveness.

#### References

- Carbone, V. J., O'Brien, L., Sweeney-Kerwin, E. J., & Albert, K. M. (2013). Teaching eye contact to children with autism: A conceptual analysis and single case study. *Education and Treatment of Children*, 36(2), 139–159.
- Cankaya, S., & Kuzu, A. (2010). Investigating the characteristics of educational computer games developed for children with autism: A project proposal. *Procedia - Social and Behavioral Sciences*, 9, 825–830. https://doi. org/10.1016/j.sbspro.2010.12.242.
- Collaborative for Academic, Social and Emotional Learning (2015). https://casel.org/ what-is-sel/
- Csibra, G. (2006). Social learning and social cognition: The case for pedagogy. Processes of Change in Brain and Cognitive Development: Attention and Performance XXI, 249–274.
- DiGennaro-Reed, F. D., Hyman, S. R., & Hirst, J. M. (2011). Applications of technology to teach social skills to children with autism. *Research in Autism Spectrum Disorders*, 5(3),1003–1010. https://doi.org/10.1016/j. rasd.2011.01.022
- Dudzinska, E., Szymona, K., Pacian, A., & Kulik, T. (2015). Selected forms of therapy for individuals with autism spectrum disorder. *Current Issues in Pharmacy and Medical Sciences*, 28(1), 21–23. https://doi. org/10.1515/cipms-2015-0035
- Durlak, J., Weissberg, R., Dymnicki, A., & Schellinger, K. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development*, 82(1), 405-432.
- Dusenbury, L. A., Newman, J. Z., Weissberg,
  R. P., Goren, P., Domitrovich, C. E., & Mart,
  A. K. (2015). The case for preschool through high school state learning standards for SEL.
  In J. A. Durlak, C. E. Domitrovich, R. P.
  Weissberg, T. P. Gullotta, J. A. Durlak (Ed),
  C. E. Domitrovich (Ed), ... T. P. Gullotta (Ed) (Eds.), Handbook of Social and Emotional Learning: Research and Practice. (pp. 532–548). New York, NY, US: Guilford Press.

### Improving Social-Emotional Skills through Gameplay

- Englund, M. M., Levy, A. K., Hyson, D. M., & Sroufe, L. A. (2000). Adolescent social competence: Effectiveness in a group setting. *Child Development*, 71(4), 1049–1060.
- Graham, K. (2016). Extending the language classroom with Edmodo. Modern English Teacher, (2), 41.
- Jagers, R. J., Rivas-Drake, D. & Borowski, T. (2018). Equity and social and emotional learning: A cultural analysis. *Measuring SEL Using Data to Inspire Practice: Framework Briefs*, 1-17.
- Kanner, L. (1968). Autistic disturbances of affective contact. International Journal of Child & Adolescent Psychiatry, 35(4– 8), 98–136.
- Kratochwill, T. R., Hitchcock, J. H., Horner, R. H., Levin, J. R., Odom, S. L., Rindskopf, D. M., & Shadish, W. R. (2013). Single-case intervention research design standards. *Remedial and Special Education*, 34(1), 26–38.
- McCallops, K., Navelene Barnes, T., Berte, I., Fenniman J., Jones, I., et al., (2019). Incorporating culturally responsive pedagogy within social-emotional learning interventions in urban schools: An international systematic review. *International Journal of Educational Research*, 94(2019), 11-28. https://doi. org/10.1016/j.ijer.2019.02.007
- Nuske, H. J., Vivanti, G., & Dissanayake, C. (2015). No evidence of emotional dysregulation or aversion to mutual gaze in preschoolers with Autism Spectrum Disorder: An eye-tracking pupillometry study. *Journal of Autism* and Developmental Disorders, 45(11), 3433–3445. https://doi.org/10.1007/ s10803-015-2479-5

- Osher, D., Kidron, Y., Brackett, M., Dymnicki, A., Jones, S., & Weissberg, R. (2016). Advancing the science and practice of social and emotional learning. *Review of Research in Education*, 40(1), 644–681. https://doi. org/10.3102/0091732X16673595
- Rollins, P. R. (2016). Words are not enough: Providing the context for social communication and interaction. *Topics* in Language Disorders, 36(3), 198-216.
- Sanford Harmony (2020). https://sanfordprograms.org/
- Senju, A., Hasegawa, T., & Tojo, Y. (2005). Does perceived direct gaze boost detection in adults and children with and without autism? The stare-in-the-crowd effect revisited. *Visual Cognition*, 12(8), 1474–1496.
- Senju, A., & Johnson, M. H. (2009). Atypical eye contact in autism: Models, mechanisms and development. Neuroscience and Biobehavioral Reviews, 33(8), 1204–1214. https://doi. org/10.1016/j.neubiorev.2009.06.001.
- The Social Express, Inc. "Improving your child's social skills: Making eye contact." Retrieved from http://thesocialexpress. com/tag/making-eye-contact/
- Tonge, B. J., Dissanayake, C., & Brereton, A. V. (1994). Autism: Fifty years on from Kanner. *Journal of Pediatrics and Child Health*, 30(2), 102–107.
- Vygotsky, L. S. (1962). Thought and language. Massachusetts Institute of Technology.

Weissberg, R. P. Durlak, J. A., Domilrovich, C. E. & Gullotta, T. P. (2015). Social and emotional learning: Past, present and futhre. In J. A. Durlak, C.E. Domitrovich, R. P. Weissberg and T.P. Gullotta (Eds.), *Handbook of social* and emotional learning: Research and practice, 3-19. New York, NY: Guilford Press.

Wills-Jackson, C. (2018). Implementing gameplay skills to increase eye contact and communication for students with emotional and behavioral disorder and comorbid disabiliites. (Publication No. 5979) [Doctoral dissertation, University of Central Florida], Showcase of Text, Archives, Research and Scholarship (STARS) – Faculty Scholarship and Creative Works. Electronic Theses and Dissertations. http://stars.library.ucf. edu/etd/5979

Yoder, N., & Center on Great Teachers and Leaders at American Institutes for Research. (2014). Self-assessing social and emotional instruction and competencies: A tool for teachers (pp. 1–30). Center on Great Teachers and Leaders. Retrieved from https://gtlcenter.org/ sites/default/files/SelfAssessmentSEL.pdf

# Resources

#### National Organizations

#### **Council for Exceptional Children**

The Council for Exceptional Children (CEC) is a national, non-profit organization dedicated to improving educational outcomes for individuals with exceptionalities. On this website you will find a wealth of information about the latest news on laws and legislative developments, the Special Education Today Newsletter, The Policy Insider, Teaching Exceptionally Podcast, The CE catalogue and CEC TV. cec.sped.org/

#### US Department of Education Individuals with Disabilities Education Act (IDEA)

This site offers extensive information and resources on laws and policies, grants, reports, and other publications. Resources for educators include early childhood practices and outcome measures, equity-based inclusion, evidence-based practice, transition planning and graduation, as well as sample lessons, activities and videos. https://sites.ed.gov/idea/?src=ft

#### Understood

This organization offers programs for families, educators and young adults that focus on "empowering people who learn and think differently." Their featured topics include understanding differences, classroom management, culturally responsive teaching, functional assessment, and partnering with families. The website posts articles and videos on relevant and innovative practices such as UDL, Elkonin Sound Boxes and the Fraction Number Line. understood.org/

#### NEA

National Education Association offers resources for teaching remotely, and also produces the Special Education Newsletter, the CE Catalogue, Policy Insider, and Teaching Exceptionally Podcast. There is much more to explore on this site including resources for families. cec.sped.org/Tools-and-Resources

#### AFT

The American Federation of Teachers website features a resource page for educators with publications that address supporting students with autism, working with medically fragile students, diabetes, school nursing and more. aft.org/education/publications/students-special-needs

#### New York Resources

#### NYSUT

NYSUT Factsheet 2020

Special education certification has undergone many changes in the past 20 years. Prior to 2004, the special education certificate was considered an 'All Grades' certificate, or K-12. Individuals with this certificate could fulfill any and all assignments related to special education, including special class assignments. Read more about these and other changes in the field in NYSUT's updated factsheet on NYS certification for students with disabilities.

nysut.org/resources/all-listing/research/fact-sheets/fact-sheet-certification-studentswith-disabilities

#### The Center for Autism at SUNY Albany

The Center for Autism at SUNY Albany (CARD) is a resource center for families, educators, and community professionals. The center offers education and training for school personnel, families, and community professionals; comprehensive evaluations for autism spectrum disorders; ongoing research to improve the quality of life for individuals with autism and experiential learning opportunities for graduate and undergraduate students. Visit the site to learn more about programs, research, training and education, and comprehensive autism evaluation. albany.edu/autism

#### NYSED

There is a wealth of information available at the New York State Education Department website on special education. Find the latest on guidance, policy and program implementation. The site provides links to materials for accessible instruction, approved schools, assistance for parents, state assessment, mediation and many other topics.

p12.nysed.gov/specialed/

## **NYSUT Education & Learning Trust**

The Education & Learning Trust is NYSUT's primary way of delivering professional development to its members. ELT offers courses for undergraduate, graduate and in-service credit, partnership programs that lead to master's degrees and teaching certificates, and seminars as well as professional development programs for teachers and school-related professionals.

#### **Courses and Seminars for Practitioners**

#### Online — Behavior Management and Intervention (SPED 6045)

This course is designed to help pre-service and in-service teachers identify, record, evaluate, and intervene with students who are displaying behavioral difficulties in the classroom. The course teaches universal and targeted behavior management assessments, techniques, and interventions for special educators within school-wide, classroom, and individual settings. This course focuses on both low and high-incidence emotional and behavioral problems encountered in general and special education environments. Specific emphasis will be on understanding the characteristics and interventions that work with the most challenging students, and assessment and intervention techniques for students with intensive behavioral needs will be emphasized. Intervention techniques will include functional behavior assessment, positive behavior support, crisis management, and applied behavior analysis. Students will learn how to develop classroom and individual behavior management plans. 3 graduate credits

#### Online — Introduction to History of Special Education Law (SPED 6005)

This course will provide a comprehensive overview of the history of education law and the history of education of students with disabilities, advocacy, and disability laws from the mid-20th century. Students will be introduced to the role and responsibilities of the special education teacher in their legal obligation to the exceptional student, parents, and school. Particular emphasis will be placed on federal and New York State Education Department Law- Part 200 mandates and current special education laws and core issues that developed from the disability movement: Individuals with Disabilities Education Act (IDEA) (PL 94-142), No Child Left Behind Act (NCLB), Individualized Education Programs (IEP), Parental Rights and Procedural Safeguards, Due Process, introduction to initiatives such as PBIS, FBA and RTI, and future litigation as it comes into effect. 3 graduate credits.

#### Online — Psychoeducational Assessment Practices and IEP Development and Implementation (SPED 6060)

This course focuses on special education processes, including screening, assessment, Individualized Education Program (IEP) development/monitoring, and evaluation. Referral and assessment for special education eligibility, norm-referenced and teacher-developed assessments, legal and procedural issues in IEP development, and strategies for assessing students from culturally and linguistically diverse backgrounds will be included. The course will include discussion and practice of the components of effective assessment, including examination of evaluation procedures, from pre-referral intervention, eligibility/placement decision making to progress monitoring of scientifically based instructional interventions based on Response to Intervention (RTI) and Positive Behavioral Interventions and Supports (PBIS). Focus will include academic, affective, behavioral, work-study skill, adaptive functioning, and environmental measures. Students will also learn how to interpret and evaluate the psychometric properties of psychoeducational assessments as part of choosing valid and reliable assessment tools. Additional course topics will address emerging evaluation trends, test modifications/ accommodations, parent involvement in the IEP process, and progress monitoring and reporting. 3 graduate credits ELT Special Education Programs

#### Online — Cooperative Learning for Students with Special Needs (SED 661)

This course focuses on promoting student achievement and development in a collaborative learning community. Communication skills for effective teaching in an inclusive or special education setting are described, modeled and then practiced by course participants. Through the lens of cooperative learning, participants will focus on the following topics: curriculum development, planning and behavior management, instructional planning, and differentiating instruction. Improving students' social competence and the acquisition of functional living skills will be explored. In addition, participants will demonstrate effective collaboration among teachers and other professionals and discover ways to establish partnerships with families and community. 3 graduate credits.

#### Online — Introduction to History of Special Education Law (SPED 6005)

This course will provide a comprehensive overview of the history of education law and the history of education of students with disabilities, advocacy, and disability laws from the mid-20th century. Students will be introduced to the role and responsibilities of the special education teacher in their legal obligation to the exceptional student, parents, and school. Particular emphasis will be placed on federal and New York State Education Department Law-Part 200 mandates and current special education laws and core issues that developed from the disability movement: Individuals with Disabilities Education Act (IDEA) (PL 94-142), No Child Left Behind Act (NCLB), Individualized Education Programs (IEP), Parental Rights and Procedural Safeguards, Due Process, introduction to initiatives such as PBIS, FBA and RTI, and future litigation as it comes into effect. 3 graduate credits.

#### Online — Literacy Instruction for Students with Special Needs (EDUC 561)

Candidates will develop competencies enabling them to provide appropriate instruction for students experiencing difficulties in acquiring literacy skills. These include students receiving academic intervention services, and those in compensatory and special education programs. 3 graduate credits.

#### Online Session II — Cooperative Learning for Students with Special Needs (SED 661)

This course focuses on promoting student achievement and development in a collaborative learning community. Communication skills for effective teaching in an inclusive or special education setting are described, modeled and then practiced by course participants. Through the lens of cooperative learning, participants will focus on the following topics: curriculum development, planning and behavior management, instructional planning, and differentiating instruction. Improving students' social competence and the acquisition of functional living skills will be explored. In addition, participants will demonstrate effective collaboration among teachers and other professionals and discover ways to establish partnerships with families and community.

#### Seminars — Available virtually

#### Autism Spectrum Disorder: Adjusting the Educational Image

#### Meets Standards I, III, IV

This training provides up-to-date information on the clinical and associated features of Autism Spectrum Disorders (ASD). Attention will be given to how these features manifest themselves and present unique instructional and learning challenges within educational settings. The seminar goes beyond the core features of the disorders and covers evidence-based, proactive strategies for helping children and adolescents with ASD succeed in schools today. This seminar fulfills the state requirements for the 3-hour Autism training in the needs of students with Autism pursuant to Sections 3004(4) and (5) of the Education Law and Subpart 57-3 of the Regulations of the Commissioner of Education. (3 hour)

#### Collaborative Identification of English Learners with a Disability Meets Standards I, II, III, IV, V, VI, VII

Participants will examine the many facets of identifying English learners with special needs. Federal regulations and New York's CR Part 154-3 regulations will form the foundation of this session. Participants will analyze a case study and apply concepts and tools acquired throughout the program. Enriching discussion will focus on the collaborative process of identifying ELs who have a disability. Many practical resources and tools will be provided for educators to utilize from throughout the collaborative process of identifying ELs with a disability. (3 hour) Historically, there has been a problem of over-and under-identification of English learners for special education. Participants in this six-hour seminar will simulate a team approach model using a case study

#### SRP Seminars: (All available virtually)

#### How SRPs Can Support Students with ADHD

The number of students in our classrooms diagnosed with Attention Deficit Hyperactivity Disorder and other attention difficulties has increased dramatically. The symptoms can disrupt the child's learning and affect their relationships with peers and adults. This seminar is designed to help the school-related professional achieve a better understanding of ADHD and provide intervention strategies to facilitate positive student behavior. (This seminar was previously titled ADHD Strategies)

#### The IEP: Supporting Student Instruction

Being a school-related professional today requires many skills to become an integral part of school wide success. In this seminar participants will become familiar with the special education process, terms/concepts, and learn what is in an IEP and how it impacts an SRPs role in supporting student instruction.

#### Supports for Students with Autism

Ending the achievement gap between students with and without disabilities requires addressing the essential factors that can influence their success. This three-hour training provides up-to-date information on the clinical and associated features of Autism Spectrum Disorders (ASD). Attention will be given to how these features manifest themselves and present unique instructional and learning challenges within educational settings. The seminar provides evidence-based, pro-active strategies for helping children and adolescents with ASDs succeed in schools today.

#### Disability Awareness

SRPs often work with students who are identified as having one of the 13 disability categories. This seminar will provide participants with a general understanding of the disability categories and key concepts related to the education of students with disabilities. Participants will experience what it is like to have a disability and learn strategies for improving student learning and behavior.



Visit our site at *www.nysut.org/elt* to learn about what else we can offer.



## UPCOMING: EDUCATOR'S VOICE, VOL. XIV

# Leveraging Student Strengths through Project-Based Learning and Authentic Assessment

Project-based learning and authentic assessment are student-centered practices which encourage in-depth learning through activities that foster student collaboration, creativity, and critical thinking. In a project-based learning environment students are guided toward the discovery of personal meaning and application of new knowledge to situations beyond school. Authentic assessment goes

beyond the traditional paper and pencil test. It can include demonstrations and performance tasks that aim to build on every student's strengths. Especially relevant in the digital era, where data is applicable to almost everything we do, these

practices can foster research and critical literacy skills as well as agency and social capital, which are more important than ever for our students.

> Volume XIV will focus on educators across disciplines and grade levels who highlight these exciting practices in their school or classroom, or from academic collaboration in higher education with P-12 partners.

> > Publication is set for Spring 2021.

## Educator's Voice Engaging All Learners Through Content Area Instruction Educator's Voice Family Engagement and Community Partnerships Educator's Voice Culturally Responsive Teaching: Celebrating Diversity in Our Schools

## **Educator's Voice**





## Representing more than 600,000 professionals in education, human services and health care

800 Troy-Schenectady Road, Latham, NY 12110-2455 518-213-6000 • 800-342-9810

#### nysut.org

New York State United Teachers Affiliated with  $\mbox{AFT} \cdot \mbox{NEA} \cdot \mbox{AFL-CIO}$