Creative Teaching: Pandemic Informed Strategies for Effective Instruction
A Literature Review

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The COVID-19 pandemic is proving to be an ongoing cataclysmic event, and has led to extended periods of remote learning, isolation, varying types of instability, ongoing pandemic stress for our students. The entire world is grieving loved ones and lost opportunities. As a result, almost all students are experiencing some version of psychosocial symptoms. The U.S. Department of Education has provided volumes of information in response to this pandemic impact, and details specific recommendations in regards to support programs, discipline procedures, school, and district policies. However, they only offer vague references as to classroom instructional strategies; it merely directs educators to use evidence-based teaching strategies, incorporate SEL, while also accelerating learning so as to close learning gaps (U.S. Department of Education, 2021). Before 2020, the mainstream classroom had 13-22% of students with specific accommodation needs, that teachers met (U.S. Department of Education, 2021). Teachers have the most time with students, and thus the opportunity to influence students. EVERY student has been impacted by COVID-19. Are there instructional strategies or techniques that can address the variety of demands simultaneously?

This literature review will examine Standard #8 – Instructional Strategies, as defined by the Interstate Teacher Assessment and Support Consortium (InTASC); exploring evidence-based instructional strategies that specifically accommodate for common issues while utilizing a universal design approach to incorporating social and emotional learning components, rich interdisciplinary content, creative mastery demonstration opportunities, and authentic engagement with peers. Employing creative strategies has many benefits, like helping build rapport with students, insight into their diverse needs, and neutralizing some of the issues they are facing; all without leaving the classroom (Tan, et al., 2019; Wiggins & McTighe, 2005).

Purpose & Method

The purpose of this literature review of creative teaching strategies is to

1. Compile several methods of content delivery that are both efficacious and provide evidence of significant benefits for common student challenges arising from the COVID-19 pandemic.

2. Share actionable recommendations from the findings including specific techniques and methods of implementation for educators to utilize in their lessons.

To achieve this, I have reviewed many peer-reviewed resources on the issue to uncover possible recommendations. Artifacts of my own implementation are provided as examples of inclusive strategies in design, creative techniques within learning activities, and student work sample results.

Definitions

Word	Definition
Attention-Deficit/Hyperactive Disorder (ADHD)	The most common neurodevelopmental disorder in childhood can last until adulthood. Children/adolescents may have difficulty focusing, controlling impulsive behaviors, be overly active, have trouble with working memory, or appear disorganized. (CDC, 2021)
Creative Teaching	Teachers who are creative in adapting instruction and who teach students to think critically and creatively.
Creative Skills	1) Fluency (flow-quantity of ideas), 2) Flexibility (of ideas or application), 3) Originality (uniqueness of ideas), and 4) Elaboration (ability to add on or expand idea). (Drapeau, 2014)
Generalized Anxiety Disorder (GAD)	Excessive worry about everyday events that the child/adolescent cannot control and that is consistently expressed/felt on most days over a time period of at least 6 months, to the extent that there is distress or difficulty in performing normal tasks (CDC, 2021)
Flexible Grouping	Small groups that are task based, temporary, as needed, that fluidly form and then dissolve again based on the perceived need, or learning objective of each student's classroom experience (Morin, 2021; Jacobs, et al. 2002).
Needs supportive teaching	Providing for student needs of autonomy, structure (competence), and involvement (relatedness/connection).

Summary

Instructional strategies are the methods through which students can connect with and come to understand core concepts and content. The "how" of teaching. Instructional strategies are always important, but are arguably even more so in the current situation. In the years before COVID-19, efficacy and outcomes of a variety of approaches and related strategies have been studied to provide evidence for use with students who have specific impediments (or disabilities) to learning, so that objective outcomes could be improved and learning gaps closed (Cooper et al., 2018; Chappius & Stiggins 2018). As students returned to school, evidence mounted that the predicted academic, behavioral, and mental health concerns were real and not easily overcome, and were impacting an astounding number of students (Daniunaite, et al., 2021; Hawes, et al., 2021; Sibley, et al., 2021). The path forward is to those implement evidence-based strategies that also consider the whole of the students; incorporate a universal design for learning that actively uses creative teaching strategies to provide the largest number of benefits for all students (Karten, 2017; Meyer et al., 2014).

InTASC Standard #8 – Instructional strategies

InTASC Standard #8 - Instructional Strategies is defined as:

> *"The teacher understands and uses a variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways"* (CCSSO, 2013, p. 38).

This standard requires that the methods implemented deliver and use content that is relevant to the student and subject matter as well as creates opportunities for engaging learning activities that are accessible and encourage students to make connections to their existing knowledge, build and practice skills, and make it meaningful in the world as the student knows it.

Preparation & Learning Environment

"The school must be a genuine form of active community life, instead of a place set apart in which to learn lessons," a sentiment written by John Dewey that reflects the belief that schools must deliver learning experiences that are effective and relevant to the world today, to allow the students to explore and create what will become the future (Urban et al., 2019). Student-centered relationships, considerations, and facilitated learning exercises are the best opportunities to create a sense of belonging and empowerment, creating an environment where students are more than mere participants in their education but also architects of what is possible. Rapport is part of classroom management and contributes to the classroom environment (Knoster, 2013; Beaty-O'Ferrall et al., 2010). Relationships help supply motivation and improve behavior and avoid further declines in academic motivation and depressive symptoms, (Sasson et al., 2021). Needs-based teaching addresses students' needs for autonomy, connection, and success; to create these learning experiences and an environment that considers and supports all learners is the essence of universal design for learning (Sawyer, 2004; Wang et al., 2021; Wiggins & McTighe, 2005). The support of parents and teachers is found to be predictive of their motivation and self-efficacy beliefs; in combination with peer relationships, they provide ongoing protection from more extreme psychological and developmental impacts of isolation and instability caused by the COVID-19 pandemic (Juvonen, et al., 2022; Berk, 2018; Ahmed, et al., 2008).

Evidence for Efficacious Instructional Strategies

Inattentiveness and lack of focus are symptoms that have been found with increasing frequency in adolescents in the wake of the pandemic, which presents more intensely in students diagnosed with ADHD (He et al., 2021). Research shows that using engagement strategies like opportunities to respond, connection to student lives, incorporating movement, and chunking activities and instruction, are instructional strategies that provide positive behavioral supports to

counter inattentiveness or inability to retain focus (Ormrod, et al., 2019; Center on Positive Behavior Integration & Supports, n.d.).

Multiple studies report that adolescent students, are under great stress, and increasingly alarming numbers display increased symptoms of generalized anxiety, social anxiety, depression, and panic/somatic as well as linear regression in school behaviors among adolescents (Hawes, et al., 2021; Korpa, et al., 2021; Daniunaite, et al., 2021; Morales et al., 2022). Stress and anxiety have been shown to directly impact brain function in a way that inhibits learning and working memory (Vogel & Schwabe, 2016). Strategies that have been found to have high levels of efficacy in countering the impacts of anxiety while avoiding triggering additional episodes include schedule consistency, consistent communication, choice, small groupings, and kinesthetic learning experiences (Jacobs, et al. 2002; Killu & Crundwell, 2016).

Creative teaching strategies and learning activities have been found to increase student self-efficacy, intrinsic motivation, and acts as an emotional stabilizer (Conradty et al., 2020; Lugosi & Uribe, 2020). Creativity itself is emerging as a way of cultivating positive psychological functioning and happiness, as findings have begun to highlight a connection between problem-solving and creativity; autonomy and self-efficacy appear as primary underlying outcomes from repeated practice (Tan, et al., 2019; Sawyer, 2004).

Artifacts

The artifacts chosen demonstrate effective instructional strategies for easing the most common mental-health/behavior impacts resulting from the pandemic while also incorporating development of the skills and elements of creativity that support problem-solving and autonomy. The classroom has activity stations using five tables set up and counters around its perimeter. Students are randomly assigned to a starting station, creating the first flexible group, and as a student completes that task, they move clockwise to the next station. Students will move at

different paces, and the groups will change (flexible grouping) providing a variety of interactions. The station format of day one offers the physical movement that is proven to aid inattentive students' focus and the hands-on small group style aids the neutralization of some anxiety symptoms (Killu & Crundwell, 2016; Ormrod et. al., 2019). Day two engages students in creative writing while assessing their ability to use tools learned on the first day to translate and identify theme to then create an original derivative version.

Artifact one, station one is a hands on – pencil and paper activity that focuses on the creative skills of originality and fluency, targets the benefits of humor for relieving stress, and engaging ADHD focus on dopamine from entertainment, while also playing to the age of the participants (Drapeau, 2014; Rizzolo et al., 2011; CDC, 2021). In this activity, the student creates a Shakespearean insult, Madlibs style, then translates it to modern English using the provided dictionary.

Artifact two, station three utilizes flexibility as a creative skill as students use familiar lyrics for gamification in the matching task, coupled with the benefits of problem-solving and pattern recognition skills frequently demonstrated by ADHD students (Drapeau, 2014; Papastergiou, 2009; Tan, et al., 2019; Wang et al., 2021). This station also features popular song lyrics that have been printed and laminated, and the same songs transformed into a Sonnet ala Shakespeare. These transformed popular song lyrics are called *Pop Sonnets*; created by Erik Didriksen and published in a book of the same name (2015). Students use the clues in the language of the original song compared to the PopSonnet to infer the matches, then enter them into the google form before moving on to another station.

Artifact three, station five, focuses on the creative skill of elaboration. This task allows for discussion and collaboration at their small tables (although it requires that each student put it in their own words), which helps the students focus and remain engaged. The students are provided

a short worksheet to use for notes, and access to a google form to fill out once they are ready. The worksheet prompts the students to translate some of Shakespeare's iconic lines from Elizabethan English to their modern English equivalent, and the slides on the overhead projector are rotating through a modeled example (school-appropriate slang is encouraged).

Artifact three, day 2, focuses on the creative skill of originality. In this activity, there are no stations. Instead, Shakespeare's Sonnet 141 is read, discussed, analyzed, then the class views and analyzes the version read in *10 Things I Hate About You* as written by the "Kat" character (Junger, 1999). Students work in their table groups to analyze collaboratively, then independently to create their own version. Student example images are provided of this in artifact three, slides eleven and twelve. By making the presentation/performance of their derivative sonnet optional (for extra-credit), students with social anxiety or GAD are able to focus on the creativity of the task without performance pressure, and those who want to challenge themselves can make their performance more purposeful. The immediate nature, chunking of activities, and issuing a challenge all give ADHD/inattentive students needed motivation to focus.

Conclusion and Recommendations

The COVID-19 pandemic continues to have a vast and reverberating impact on students. The research data and conclusions have led to detailed recommendations for support programs, districts and schools, but none could be found that had complied the evidence-based techniques for instructions that could be applied in the classroom to bridge students unfinished learning to grade level standards there were also chosen to counter the impacts and support the healing process. Students spend more time in classrooms with teachers than anywhere else, which gives teachers the opportunity to purposefully and consistently influence students. Children learn best when they experience joy, rigor, and purpose in the learning process.

To better understand the demands and expectations on students at each specific school, it is recommended to "walk in their shoes." The student experience that can be simulated through shadowing (and engaging in each task they do) and documenting activities and observations. A school-wide implementation of creative teaching strategies in every classroom can be achieved through using an anchor text with a variety of creative teaching strategies and explanations like those found in Patti Drapeau's *Sparking Student Creativity: Practical Ways to Promote Innovative Thinking and Problem Solving* to inform professional development (Drapeau, 2014). Using both the information from the anchor text and the student experience to apply a student-centered approach that is flexible, inclusive, responsive to SEL needs, and incorporates relevant, project-based, and standards-driven learning activities. Trainings that would support this goal include: work-shopping gamification of learning activities, student-directed instruction opportunities, re-evaluating assessments for efficacy in measuring what matters, universal design implementation resources, provide examples of specific evidence-based techniques for all content areas. Educators should engage in creating reservoir of content area instruction resources utilizing these techniques to pool effort and minimize invested time. Administrations and districts need to incentivize and reward both that reservoir and cross-discipline collaboration, especially in secondary schools where it is most labor intensive to accomplish. Creative instructional strategies incorporated within a consistent framework supports the growing needs of students today and has the potential to provide the type of learning environment that leads to student driven innovations and a future only they can imagine.

References

Ahmed, W., Minnaert, A., van der Werf, G., & Kuyper, H. (2008). Perceived Social Support and

    Early Adolescents' Achievement: The Mediational Roles of Motivational Beliefs and

    Emotions. *Journal of Youth and Adolescence*, *39*(1), 36–46.

    https://doi.org/10.1007/s10964-008-9367-7

Beaty-O'Ferrall, M. E., Green, A., & Hanna, F. (2010). Classroom Management Strategies for

    Difficult Students: Promoting Change through Relationships. *Middle School Journal*,

    41(4), 4–11. https://doi.org/10.1080/00940771.2010.11461726

Berk, L., (2018). *Exploring Child & Adolescent Development,* (1st ed). Pearson.

Centers for Disease Control (CDC), (2021). *Data and Statistics on Children's Mental Health*.

    https://www.cdc.gov/childrensmentalhealth/data.html

Center on Positive Behavior Integration & Supports. (n.d.). *Effective Teacher Instructional Behaviors

    to Decrease Challenging Student Behavior.* PBIS.Org. Retrieved 09–05-21, from

    https://www.pbis.org/resource/effective-teacher-instructional-behaviors-to-decrease-

    challenging-student-behavior

Chappuis, J., & Stiggins, R. (2016). *An Introduction to Student-Involved Assessment FOR

    Learning* (7th ed.). Pea

Conradty, C., Sotiriou, S. A., & Bogner, F. X. (2020). How Creativity in STEAM Modules

    Intervenes with Self-Efficacy and Motivation. *Education Sciences*, *10*(3), 70.

    https://doi.org/10.3390/educsci10030070

Cooper, K. M., Downing, V. R., & Brownell, S. E. (2018). The Influence of Active Learning

    Practices on Student Anxiety in Large-Enrollment College Science Classrooms. *International

    Journal of STEM Education*, 5(1), 23. https://doi.org/10.1186/s40594-018-0123-6.

Council of Chief State School Officers, (2013). *Interstate Teacher Assessment and Support*

    Consortium InTASC Model Core Teaching Standards and Learning Progressions for

    Teachers 1.0: A Resource for Ongoing Teacher Development. Washington, DC: Author.

    https://ccsso.org/sites/default/files/2017-12/2013_INTASC_Learning_Progressions_for_Teachers.pdf

Daniunaite, L., Truskauskaite-Kuneviciene, I., Thoresen, S., Zelviene, P., and Kazlauskas, E. (2021)

    Adolescents Amid the COVID-19 Pandemic: A Prospective Study of Psychological

    Functioning. *Child and Adolescent Psychiatry and Mental Health,* 15(45).

    https://doi.org/10.1186/s13034-021-00397-z

Didriksen, E. (2015). *Pop Sonnets: Shakespearean Spins on Your Favorite Songs*. Quirk Books.

Drapeau, P. (2014). *Sparking Student Creativity: Practical Ways to Promote Innovative Thinking and*

    Problem Solving. ASCD.

Hawes MT, Szenczy AK, Klein DN, Hajcak G, Nelson BD (2021). Increases in depression and

    anxiety symptoms in adolescents and young adults during the COVID-19 pandemic.

    Psychological Medicine 1–9. https://doi.org/10.1017/ S0033291720005358

He, S., Shuai, L., Wang, Z., Qiu, M., Wilson, A., Xia, W., Cao, X., Lu, L., & Zhang, J. (2021). Online

    Learning Performances of Children and Adolescents With Attention Deficit Hyperactivity

    Disorder During the COVID-19 Pandemic. *INQUIRY: The Journal of Health Care*

    Organization, Provision, and Financing, *58*, 004695802110490.

    https://doi.org/10.1177/00469580211049065

Jacobs, G., Power, M., & Loh, W. (2002). *The Teacher's Sourcebook for Cooperative Learning:*

    Practical Techniques, Basic Principles, and Frequently Asked Questions. Corwin.

Juvonen, J., Lessard, L. M., Kline, N. G., & Graham, S. (2022). Young Adult Adaptability to the

    Social Challenges of the COVID-19 Pandemic: The Protective Role of Friendships.

    Journal of Youth and Adolescence. https://doi.org/10.1007/s10964-022-01573-w

Junger, G. (Director) & Lazar, A. (Producer) (1999). *10 Things I Hate About You* [film].

    Touchstone Pictures.

Karten, T. (2017). *Building on the Strengths of Students with Special Needs: How to Move*

    Beyond Disability Labels in the Classroom (1st ed.). ASCD.

Killu, K. & Crundwell, R.M.A., (2016). Students With Anxiety in the Classroom: Educational

    Accommodations and Interventions, *Beyond Behavior*. *25*, 2. pp. 30-40

Knoster, T., Ed. D. (2013). *The Teacher's Pocket Guide for Effective Classroom Management*

    (2nd ed.). Brookes Publishing.

Korpa, T., Pappa, T., Chouliaras, G., Sfinari, A., Eleftheriades, A., Katsounas, M., Kanaka-

    Gantenbein, C., & Pervanidou, P. (2021). Daily Behaviors, Worries and Emotions in

    Children and Adolescents with ADHD and Learning Difficulties during the COVID-19

    Pandemic. *Children*, *8*(11), 995. https://doi.org/10.3390/children8110995

Lugosi, E., & Uribe, G. (2020). Active learning strategies with positive effects on students'

    achievements in undergraduate mathematics education. *International Journal of*

    Mathematical Education in Science and Technology, 1–22.

    https://doi.org/10.1080/0020739x.2020.1773555

Meyer, A., Rose, D., & Gordon, D. (2014). *Universal design for learning: Theory and practice*.

    CAST Professional Publishing.

Morales, S., Zeytinoglu, S., Lorenzo, N. E., Chronis-Tuscano, A., Degnan, K. A., Almas, A. N., Pine,

    D. S., & Fox, N. A. (2022). Which Anxious Adolescents Were Most Affected by the COVID-

    19 Pandemic? *Clinical Psychological Science*, 216770262110595.

    https://doi.org/10.1177/21677026211059524

Morin, A. (2021, April 27). *Flexible grouping: What you need to know*. Understood.

https://www.understood.org/en/school-learning/for-educators/universal-design-for-

learning/what-is-flexible-grouping/

Ormrod, J. E., Anderman, E. M., & Anderman, L. H. (2019). *Educational Psychology:*

Developing Learners (10th Edition) (10th ed.). Pearson.

Papastergiou, M. (2009). Digital Game-Based Learning in high school Computer Science

education: Impact on educational effectiveness and student motivation. *Computers &*

Education, *52*(1), 1–12. https://doi.org/10.1016/j.compedu.2008.06.004

Rizzolo, D., Zipp, G. P., Stiskal, D., & Simpkins, S. (2011). Stress Management Strategies For

Students: The Immediate Effects Of Yoga, Humor, And Reading On Stress. *Journal of*

College Teaching & Learning (TLC), *6*(8). https://doi.org/10.19030/tlc.v6i8.1117

Rothstein-Fisch, C., Trumbull, E., (2008). *Managing Diverse Classrooms: How to build on*

Student's Cultural Strengths. ACSD.

Sasson, I., Yehuda, I., & Miedijensky, S. (2021). Innovative learning spaces: class management

and universal design for learning. *Learning Environments Research*.

https://doi.org/10.1007/s10984-021-09393-8

Sawyer, K., (2004). Creative Teaching: Collaborative Discussion as Disciplined Improvisation

Educational Researcher 33, 2 (pp. 12-20) https://www.jstor.org/stable/3699971

Sibley, M., Ortiz, M., Gaias, L., Reyes, R., Joshi, M., Alexander, D., Graziana, P., (2021). Top

Problems of Adolescents and Young Adults with ADHD During the COVID-19 Pandemic,

Journal of Psychiatric Research 136 (p. 190-197).

https://doi.org/10.1016/j.jpsychires.2021.02.009

Tan, C. S., Tan, S. A., Mohd Hashim, I. H., Lee, M. N., Ong, A. W. H., & Yaacob, S. N. B.

(2019). Problem-Solving Ability and Stress Mediate the Relationship Between Creativity

and Happiness. *Creativity Research Journal*, *31*(1), 15–25.

https://doi.org/10.1080/10400419.2019.1568155

Urban, W. J., Jr., J.L. W., & Gaither, M. (2019). *American Education* (6th Edition). Taylor &

Francis. https://online.vitalsource.com/books/9780429760174

U.S. Department of Education, Office of Planning, Evaluation, and Policy Development. (2021,

June). *ED COVID-19 Handbook, Volume 2: Roadmap to Reopening Safely and Meeting

All Students' Needs*. Washington D.C.

https://www2.ed.gov/documents/coronavirus/reopening-2.pdf

U.S. Department of Education, Office of Special Education and Rehabilitation Services. (2021).

Supporting Child and Student Social, Emotional, Behavioral, and Mental Health Needs.

Washington D.C. https://www2.ed.gov/documents/students/supporting-child-student-

social-emotional-behavioral-mental-health.pdf

Vogel, S., & Schwabe, L. (2016). Learning and memory under stress: implications for the

classroom. *Npj Science of Learning*, *1*(1). https://doi.org/10.1038/npjscilearn.2016.11

Wang, Y., King, R. B., Wang, F., & Leung, S. O. (2021). Need-supportive teaching is positively

associated with students' well-being: A cross-cultural study. *Learning and Individual

Differences*, *92*, 102051. https://doi.org/10.1016/j.lindif.2021.102051

Wiggins, G. & McTighe, J. (2005). *Understanding by Design*. Alexandria, Maine: ASCD.