Ideas with IMPACT

2019-2020

idea packet

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Shake Your Neurons!

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SHAKE YOUR NEURONS

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A neuron is a nerve cell that is the basic building block of the nervous system. ... Neurons are specialized to transmit information throughout the body. These highly specialized nerve cells are responsible for communicating information in both chemical and electrical forms.

Neurons (also called neurones or nerve cells) are the fundamental units of the brain and nervous system, the cells responsible for receiving sensory input from the external world, for sending motor commands to our muscles, and for transforming and relaying the electrical signals at every step in between. More than that, their interactions define who we are as people.
HOW DO YOU RESPOND TO AN EXTERNAL STIMULUS?

A STIMULUS IS SOMETHING THAT CAUSES A REACTION, ESPECIALLY INTEREST, EXCITEMENT OR ENERGY.

YOUR EMOTIONS, DECISIONS, AND PHYSICAL ACTIONS ALL HAPPEN THROUGH NERVE impulses TRAVELING THROUGH NEURONS IN YOUR BRAIN, SPINAL CORD AND NERVES

THE BRAIN AND SPINAL COLUMN MAKE UP THE CENTRAL NERVOUS SYSTEM (CNS), AND THEY COORDINATE THE BODY'S RESPONSE TO THE STIMULUS.

THE CNS SENDS A SIGNAL TO AN EFFECTOR VIA MOTOR NEURONS. AN EFFECTOR IS A HORMONE OR A MUSCLE IN THE BODY THAT BRINGS ABOUT A RESPONSE.

PLEASE, WE ASK EVERYONE TO STAND UP AND APPLY THIS CONCEPT WHEN AN EXTERNAL STIMULUS IS PROVIDED BY THE PRESENTER.
OBJECTIVES

a) INFORM AND SUPPORT THE USE OF BEHAVIORAL, COGNITIVE, AND SOCIALIZATION STRATEGIES TO HELP STUDENTS COPE WITH FAMILY RELATIONSHIPS, PEER INTERACTIONS, AGGRESSION, STRESS, SOCIAL SKILLS, AND ACADEMIC DIFFICULTIES.

b) DISCUSS THE STRONG CONNECTIONS BETWEEN PHYSICAL EDUCATION IN THE CLASSROOM, ALLOWING MOVEMENT, BREAKS, RECESS, ENERGIZING ACTIVITIES WITHIN OUR DAILY LESSONS.

c) DEMONSTRATE THAT MOVEMENT CAN BE AN EFFECTIVE COGNITIVE STRATEGY TO STRENGTHEN LEARNING, IMPROVE COGNITION, MEMORY AND RETRIEVAL, ENHANCING LEARNER MOTIVATION AND MORALE.

d) DEMONSTRATE THAT MOVEMENT AND COGNITION ARE POWERFULLY CONNECTED.
PHYSICAL ACTIVITY CAN HELP IMPROVE YOUR ATTENTION AND FOCUS, AS IT RELEASES CHEMICALS IN THE BRAIN THAT AFFECT LEARNING AND MEMORY. EVEN BETTER THAN A CUP OF COFFEE, EXERCISE CAN PROVIDE A SHORT-TERM BOOST TO YOUR MENTAL AND COGNITIVE PERFORMANCE, MAKING YOU SMARTER AND MAKING IT EASIER TO FOCUS.

• [HTTP://WWW.GONOODLE.COM](http://WWW.GONOODLE.COM)

ABOUT THE PRESENTER

• CURRENTLY ENROLLED IN A PHD PROGRAM IN EDUCATION FOCUSING ON PSYCHOLOGY AND PEDAGOGY.

• 2015 MASTER OF SCIENCE IN EDUCATION

• 2005-PRESENT. TAUGHT FROM 3RD-5TH GRADE, SELF-CONTAINED AND LATELY, DEPARTMENTALIZED TEACHING MATH, SCIENCE AND SOCIAL STUDIES TO 3RD GRADES.

• HAVE RECEIVED SOME HONORS AND DISTINCTIONS FROM COUNTY, DISTRICT AND STATE AS WELL, SUCH AS “EXCELLENCE IN TEACHING” 2010-2011; 2012-2013, AWARDED BY THE STATE OF FL

• 2005-2006 BEGAN WORKING FOR MDCPS

LEISURE INTEREST: READING ABOUT EDUCATIONAL PSYCHOLOGY, PEDAGOGY AND RELIGIONS

HOBBY: DOGS, UMBRELLA+CHAIR+BEACH+NAP= RELAXED.. 😊
• **EMOTIONAL HEALTH**: EMOTIONAL HEALTH IS AN IMPORTANT PART OF OVERALL HEALTH. PEOPLE WHO ARE EMOTIONALLY HEALTHY ARE IN CONTROL OF THEIR THOUGHTS, FEELINGS, AND BEHAVIORS. THEY ARE ABLE TO COPE WITH LIFE'S CHALLENGES. ... BEING EMOTIONALLY HEALTHY DOES NOT MEAN YOU ARE HAPPY ALL THE TIME. IT MEANS YOU ARE AWARE OF YOUR EMOTIONS.

• **ENDOCRINE SYSTEM**: THE ENDOCRINE SYSTEM IS THE COLLECTION OF GLANDS THAT PRODUCE HORMONES THAT REGULATE METABOLISM, GROWTH AND DEVELOPMENT, TISSUE FUNCTION, SEXUAL FUNCTION, REPRODUCTION, SLEEP, AND MOOD, AMONG OTHER THINGS.

• **SOCIAL SKILLS**: THE SKILLS WE USE TO COMMUNICATE AND INTERACT WITH EACH OTHER, BOTH VERBALLY AND NON-VERBALLY, THROUGH GESTURES, BODY LANGUAGE AND OUR PERSONAL APPEARANCE.

• **CEREBELLUM**: THE PART OF THE BRAIN AT THE BACK OF THE SKULL IN VERTEBRATES. ITS FUNCTION IS TO COORDINATE AND REGULATE MUSCULAR ACTIVITY. THE CEREBELLUM COORDINATES VOLUNTARY MOVEMENTS SUCH AS POSTURE, BALANCE, COORDINATION, AND SPEECH, RESULTING IN SMOOTH AND BALANCED MUSCULAR ACTIVITY.
OUR RESEARCH...

SINCE SCHOOL YEAR 2016-2017, WE HAVE IMPLEMENTED IN OUR MATH/SCIENCE CLASS FOR 3 RD GRADERS A NEW TOPIC TO BE DISCUSSED AT THE BEGINNING OF THE SCHOOL YEAR CLASSROOM RULES AND PROCEDURES. FREE MOVEMENT, ZUMBA, AND MANY MORE... FREE, AND ZUMBAaaa? THEY SAY.

THOSE WORDS PRODUCES A SENSATION OF RELAXATION, DELIVERANCE, SELF-GOVERNMENT, AND AUTONOMY.

AN AMBITIOUS AND DETAILED CLASSROOM MANAGEMENT PLAN IS CRITICAL FOR THE PROPOSED ACTIVITY TO FLOW SUCCESSFULLY. FIRST OF ALL, THE EDUCATOR NEEDS TO BE CONSCIOUS OF WHAT “FREE MOVEMENT” IN THE CLASSROOM IMPLIES, HE/SHE NEEDS TO KNOW THAT WHILE THE LESSON IS GOING ON THERE ARE SOME STUDENTS WHO WILL BE STANDING UP AND WALKING IN THE CLASSROOM, GETTING USE TO THAT NEW SETTING COULD BE FRUSTRATING AT CERTAIN TIMES.
WHY WILL STUDENTS BE STANDING UP AND WALKING WHILE THE LESSON IS ON? 
DO THEY WANT TO CHALLENGE OR TROUBLE THEIR TEACHER?

EDUCATORS POSSESS A PLETHORA OF PHILOSOPHIES AND STYLES FOR THEIR CLASSROOM DELIVERY. MOST OF THEM, INFLUENCED BY THE HISTORY OF EDUCATION, WORK FORM AN AUTHORITARIAN STANDPOINT, MANEUVERING THEIR POWER AS THE TEACHER TO CONTROL STUDENTS’ BEHAVIOR AND Dictate Classroom Rules AND Routines.

MOVE OVER, ‘SIT STILL! WHY KIDS NEED TO MOVE IN SCHOOL 
BY KELLY WALLACE, CNN

HTTPS://WWW.CNN.COM/2018/05/03/HEALTH/CHILDREN-MOVEMENT-SCHOOLS-CLASSROOM_INDEX.HTML
ANOTHER PIECE BEHIND OUR RESEARCH...

There are millions of different ways to incorporate movement into the classroom, our brains want to move and when we provide them with movement, there is a boost in our natural learning process, it is when creativity, memory, attention spam, focus, mood, and self-confidence, all increase to unimaginable levels.

It is known that the body of a child in movement increases their learning experience, the brain makes meaning out of these experiences.

Gill Connell and Cheryl McCarthy are the authors of “A Moving Child Is a Learning Child”, they state that learning begins with the body and Gill says that the body “is our point of reference. And for children, it’s even more so because the body is the brain’s first teacher” (2013, p.7)

“Physical activity promotes biological changes in the brain that enhance adaptability and connections between brain cells; this brain activity is necessary for learning as well as for the growth of new brain cells” (2012, p.63)
THE BEST TIME TO HAVE OUR STUDENTS MOVING ARE DEFINITELY, IN THE MORNING, AS SOON AS THEY ARRIVE TO CLASS AND AFTER LUNCH, OTHER HOURS ARE GOING TO BE TAKEN INTO CONSIDERATION BY THE PROFESSIONAL CRITERION OR JUDGEMENT, IF YOU ARE TEACHING A CLASS USING HIGH ORDER THINKING SKILLS, YOU MIGHT LIKE TO HAVE YOUR STUDENTS STAND UP, AND DO SOME STRETCHING OR BREATHING EXERCISES OR JUST HAVE THEM DO SOME ZUMBA USING THE WEBSITE THAT HAS BEEN IMPLEMENTED ON THIS RESEARCH.

GONOODLE HELPS TEACHERS AND PARENTS GET KIDS MOVING WITH SHORT INTERACTIVE ACTIVITIES. DESK-SIDE MOVEMENT HELPS KIDS ACHIEVE MORE BY KEEPING THEM ENGAGED AND MOTIVATED THROUGHOUT THE DAY. IT HAS BEEN DESIGNED WITH K-5 CLASSROOMS IN MIND.
TIME FOR A BREAK....

SHOW US HOW YOU SAY HELLO....

HTTPS://APP.GONOODLE.COM/ACTIVITIES/HOLA-BONJOUR-HELLO?S=CATEGORY&T=CROSS%20LATERAL%20SKILLS
RAINBOW BREATH

HTTPS://APP.GONOODLE.COM/ACTIVITIES/RAINBOW-BREATH?S=CATEGORY&T=BREATHE
The use of gestures results in more enduring learning than learning without gestures (Cook, Yip, & Goldin-Meadow, S, 2010). So even the addition of a few small hand gestures can have an impact on how well students remember material.

Students have a media release consent signed by parents to be featured on this presentation.
Stress management

Rounding numbers...
GONOODLE KEY FEATURES

FREE: ANY TEACHER, ANYWHERE, CAN CREATE A FREE GONOODLE ACCOUNT AND START USING MOVEMENT ACTIVITIES RIGHT AWAY.

RESEARCH-BASED ACTIVITIES: USING EXERCISE SCIENCE AND INNOVATIVE RESEARCH, ALL GONOODLE’S ACTIVITIES ARE DESIGNED TO BE HEALTHY FOR THE BODY, ENGAGING FOR THE ATTENTION, AND BENEFICIAL TO THE BRAIN IN SPECIFIC WAYS.

FAST: TRANSITION FROM LISTLESS TO ENGAGED IN MINUTES. GONOODLE TAKES NO TIME TO SETUP, HAS CONTENT OF A VARIETY OF LENGTHS (FROM 1 MINUTE TO 20 MINUTES), AND JUST REQUIRES YOU TO PRESS PLAY.

DESIGNED FOR LONG-TERM ENGAGEMENT: GONOODLE MAKES EARNING MINUTES OF HEALTHY ACTIVITY A GAME THAT YOUR KIDS PLAY TOGETHER. MOTIVATE KIDS TO STAY ACTIVE. EACH CLASS CHOOSES A CHAMP -- A VIRTUAL MASCOT -- WHO GROWS AS THE CLASS EARNS THE POINTS NEEDED TO ADVANCE TO THE NEXT LEVEL. REWARD THEM FOR ENGAGEMENT BY HELPING THEM GROW THEIR CHAMP.

MULTIPLE CLASSES: FOR TEACHERS WHO SEE MULTIPLE GROUPS OF KIDS EACH DAY, GONOODLE CAN BE EASILY SET UP SO THAT EACH CLASS HAS THEIR OWN GAME PROGRESS, CHAMP, AND REWARDS.
EFFICIENCY IN LEARNING

• THE HIPPOCAMPUS NEEDS TIME TO PROCESS INFORMATION BECAUSE IT IS PARTIALLY RESPONSIBLE FOR SHORT-TERM MEMORY AND NAVIGATION

• AS STUDENTS RETURN TO THE CONTENT, THE BRAIN IS ABLE TO REFOCUS

• MOVEMENT HELPS TO DEVELOP SOCIAL SKILLS, WHICH ARE IMPORTANT FOR CONNECTING TO COMPREHENSION AND CRITICAL THINKING SKILLS

• REALIGNING THE BODY/BRAIN CONNECTION HELPS RE-ENERGIZE LEARNING
STRESS RELIEF, MOOD ELEVATION AND SOCIAL PERKS

• If students are uncomfortable or stressed the brain will not retain new information easily, especially when critical thinking skills are being relied upon or the student is needing to connect new information to their personal experiences, prior knowledge or abstract thought.

• Student-to-student and student-to-teacher relationships are a key component in successful learning—research has shown that fun, safe environments where students are kind and supportive of one another equate to more academic success.

• There is much less physical movement in modern day life, especially for children when P.E. and recesses are being reduced to focus more on academic achievement.

• Our best ideas often come when we are having a break.

• You may reduce feelings of being overwhelmed by the content.
CLASS COHESION

• HEIGHTENS THE STUDENT’S ATTENDANCE AND PARTICIPATION IN CLASS
• BUILDS RELATIONSHIPS AND OVERALL CONCERN FOR THE WELL-BEING OF OTHERS
• DEVELOPS SELF-ESTEEM AND A SENSE OF BELONGING
• BOOSTS LISTENING SKILLS AND COMMUNICATION
• PROMOTES LAUGHTER AND FUN WHILE LEARNING
• IMPROVES SELF-DISCIPLINE AND MOTIVATION
TIRED?
DO YOU THINK YOU HAVE REACHED YOUR ATTENTION SPAN FOR THIS LECTURE?
HTTP://WWW.GONOODLE.COM
“IT’S TRULY ASTONISHING THAT THE DOMINANT MODEL FOR FORMAL LEARNING IS STILL “SIT AND GIT.” IT’S NOT JUST ASTONISHING; IT’S EMBARRASSING. WHY DO WE PERSIST WHEN THE EVIDENCE THAT LECTURE ALONE DOES NOT CUT IT IS SO STRONG “ DOLCOURT, 2000; SLAVIN, 1994

THE ROLE OF OXYGEN IN LEARNING

✓ APPROXIMATELY 90% OF THE OXYGEN IN OUR BODY AND BRAIN IS STALE UNTIL WE TAKE A DEEP BREATH, YAWN, GET UP OR MOVE OUR BODIES

✓ LACK OF OXYGEN RESULTS IN CONFUSION, LACK OF FOCUS AND MEMORY PROBLEMS

“IT IS PARADOXICAL THAT MANY EDUCATORS AND PARENTS STILL DIFFERENTIATE BETWEEN A TIME FOR LEARNING AND A TIME FOR PLAY WITHOUT SEEING THE VITAL CONNECTION BETWEEN THEM.” -LEO F. BUSCAGLIA
ATTENTION SPAN
ATTENTION SPAN IS THE AMOUNT OF CONCENTRATED TIME A PERSON CAN SPEND ON A TASK WITHOUT BECOMING DISTRACTED.

A TEACHER’S TALK…

“I FIND EVERYONE IS QUICK TO DIAGNOSE CHILDREN WITH ADHD. IS THERE A “NORMAL RULE OF THUMB” FOR ATTENTION SPAN? I FIND TEACHERS ARE LENGTHY IN THEIR LESSONS AND EXPLANATIONS. HOW LONG SHOULD THE CHILD BE EXPECTED TO PAY ATTENTION? SOMETIMES I FEEL CHILDREN ARE DIAGNOSED WITH ADHD BECAUSE TEACHERS DO NOT CHANGE-UP THEIR TEACHING STYLE, SO ENERGETIC KIDS BECOME FIDGETY AND CONVERSATIONAL. TEACHERS SHOULD PROVIDE CONCISE, AND ENTERTAINING IDEAS IN THEIR LESSON PLANS.

EVERYONE IS QUICK TO LABEL ADHD…WHEN THE TEACHING METHODOLOGY NEEDS TO IMPROVE.”
ADHD IS A DIAGNOSIS THAT SHOULD NOT BE MADE QUICKLY. THERE ARE MANY PARENTS AND TEACHERS WHO OFTEN WONDER IF A CHILD IS RESTLESS IN THE CLASSROOM OR DOES NOT PAY ATTENTION IF THEY MIGHT HAVE ADHD.

IT IS A FACT THAT 1/3 OF CHILDREN DO NOT GET THE AMOUNT OF PHYSICAL ACTIVITY NEEDED ON A DAY-TO-DAY BASIS; SCHOOL IS ONE OF THE BEST PLACES CHILDREN CAN GET THAT DESIRED ACTIVITY BECAUSE APPROXIMATELY 98% OF THEM SPEND AT LEAST SIX HOURS A DAY AT SCHOOL, WHICH IS MOST OF THEIR DAY, ACCORDING TO STUDIES, PHYSICAL ACTIVITY AND PHYSICAL FITNESS ARE ASSOCIATED WITH SUCCESS IN SCHOOLS THROUGH BETTER ATTENDANCE, INCREASED ATTENTION AND ACADEMIC ACHIEVEMENT. IT IS WELL KNOWN THAT PHYSICALLY ACTIVE HUMANS RESPOND FASTER TO SIMPLE COGNITIVE TASKS THAN HEALTHY BUT INACTIVE HUMANS.

THE CENTER FOR DISEASE CONTROL TELLS US THAT IN RECENT YEARS THERE HAS BEEN A JUMP IN THE PERCENTAGE OF YOUNG PEOPLE DIAGNOSED WITH ATTENTION DEFICIT AND HYPERACTIVITY DISORDER, RECURRENTLY KNOWN AS AHDD.
OUR STUDENTS ARE EXPOSED TO “LEARNING” FROM A 40 MINUTES BLOCK TO EVEN ONE ENTIRE HOUR IN A CLASSROOM, THEY ARE GOING TO CLASS WITH BODIES THAT ARE LESS PREPARED TO LEARN THAN EVER BEFORE, THEIR SENSORY SYSTEM IS NOT WORKING PROPERLY, AND THEY ARE REQUESTED TO SIT AND PAY ATTENTION, THEIR NEEDS AND PHYSIOLOGICAL DEMANDS ARE FORGOTTEN. MOST OF THEM ARE WALKING AROUND WITH AN UNDERDEVELOPED VESTIBULAR (BALANCE) SYSTEM DUE TO RESTRICTED MOVEMENT. THEY NATURALLY START FIDGETING TO GET THE MOVEMENT THEIR BODY SO DESPERATELY NEEDS AND IS NOT ENOUGH TO TURN THEIR BRAIN ON.

YOUNG CHILDREN DO HAVE RELATIVELY SHORT ATTENTION SPANS AND GENERALLY DO BEST WHEN ALTERNATING ACTIVITIES WHICH REQUIRE SITTING STILL AND FOCUSING WITH THOSE THAT ALLOW FOR PHYSICAL MOVEMENT.
A normal child can concentrate for 2-5 minutes per year old they are.

So the time your child should be able to focus on the same task is:

If your child is: They should be able to focus:

2  4-10 minutes
3  6-15 minutes
4  8-20 minutes
5  10-25 minutes
6  12-30 minutes
7  14-35 minutes
8  16-40 minutes
9  18-45 minutes
10 20-50 minutes
THE CHUNK METHOD

Many teachers and tutors apply what is known as the “chunk” method to their teaching lessons. With this method, they determine the average age of the students in their classroom. Then, they add 5 minutes to the age. With this idea, a 7 year old will receive 12 minutes of instruction before moving onto a different idea. Experts suggest that this pace is the right speed for the children to learn without losing their attention. In many scenarios, this method has been extremely effective.
LEARNING STYLES AND MOVEMENT

Regardless of the students’ learning style, they learn best when they engage in a variety of multisensory activities. Multi-sensory methods using body movements are called kinesthetic methods. These involve fine and gross motor movements. Everyone has a mix of learning styles. Some people may realize that they have a dominant style of learning, with far less use of the other styles. Others may find that they use different styles in different circumstances. There is no right mix. Nor are your styles fixed. You can develop ability in less dominant styles, as well as further develop styles that you already use well.
MIND AND BODY RELATEDNESS


RESEARCHERS HAVE TRACED A PATHWAY FROM THE CEREBELLUM BACK TO PARTS OF THE BRAIN INVOLVED IN MEMORY, ATTENTION, AND SPATIAL PERCEPTION. AMAZINGLY, THE PART OF THE BRAIN THAT PROCESSES MOVEMENT IS THE SAME PART OF THE BRAIN THAT PROCESSES LEARNING.
DISCUSSION TIME

WHAT MAKES A TINY PERCENT OF KIDS BECOME VIOLENT?
DESPAIR TURN INTO ANGER, AND ANGER INTO ..... 
IS THE SOLUTION TO SUSPEND OR EXPEL THE STUDENT?
EDUCATORS CAN PREVENT/REDUCE PSYCHOLOGICAL ISSUES IN STUDENTS, SUCH AS VIOLENCE, NEGATIVE THOUGHTS, BULLYING, LOW SELF-ESTEEM, GRIEVANCES, DEPRESSION.
WE ALL HAVE A RESPONSIBILITY TO GIVE HELP AND SUPPORT TO OUR STUDENTS. IF WE GO BACK TO OUR OBJECTIVE #1, WE WILL UNDERSTAND ONE OF THE GREATEST TIPS THAT WE MUST TAKE BACK TO OUR SCHOOL FROM THIS CONFERENCE.

INFORM AND SUPPORT THE USE OF BEHAVIORAL, COGNITIVE, AND SOCIALIZATION STRATEGIES TO HELP STUDENTS COPE WITH FAMILY RELATIONSHIPS, PEER INTERACTIONS, AGGRESSION, STRESS, SOCIAL SKILLS, AND ACADEMIC DIFFICULTIES.

LET’S LISTEN TO AN ARTICLE BY MENTAL HEALTH AMERICA (MHA) – FOUNDED IN 1909 – THE NATION’S LEADING COMMUNITY-BASED NONPROFIT DEDICATED TO ADDRESSING THE NEEDS OF THOSE LIVING WITH MENTAL ILLNESS AND TO PROMOTING THE OVERALL MENTAL HEALTH OF ALL AMERICANS.
THANK YOU FOR YOUR ATTENTION