USING VISUALLY BASED INSTRUCTIONAL SYSTEMS FOR CLASSROOM PLANNING AND INTERVENTION

PITTSBURGH REGION-PBIDA CONFERENCE

DYSLEXIA TODAY 2018:
BEYOND RESEARCH - KNOWLEDGE TO PRACTICE
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AGENDA

1. DYSLEXIA, STRESS, COMMUNICATION AND LANGUAGE
2. CLASSROOM ARRANGEMENT TO SUPPORT READING SUCCESS
3. ASSISTIVE TECHNOLOGIES

Objectives

1. Participants will understand the concepts of functional communication, its intent and appreciate the value of a universal approach to providing functional opportunities for expressive and receptive communication in the classroom.
2. Participants will understand how communication is a fundamental variable to student success and that when this is compromised, it is much more likely for problem behaviors to arise.
3. Participants will be exposed to a variety of visually based communicative strategies ranging from pictorial cues to use of technological resources as a means to provide functional communication opportunities.
DYSLEXIA

DYSLEXIA IS DEFINED AS AN UNEXPECTED DIFFICULTY IN LEARNING TO READ. DYSLEXIA TAKES AWAY AN INDIVIDUAL'S ABILITY TO READ QUICKLY AND AUTOMATICALLY, AND TO RETRIEVE SPOKEN WORDS EASILY, BUT IT DOES NOT DAMPEN THEIR CREATIVITY AND INGENUITY.

-FROM HTTP://DYSLEXIA.YALE.EDU/DYSLEXIA/DYSLEXIA-FRIENDLY-ENVIRONMENT/

CNN LINK HTTPS://WWW.CNN.COM/2016/03/05/HEALTH/DYSLEXIA-SIMULATION/INDEX.HTML

WEBAIM QUIZ: HTTPS://WEBAIM.ORG/SIMULATIONS/DYSLEXIA-SIM.HTML
F.A.T CITY

• FRUSTRATION
• ANXIETY
• TENSION

YOUR REACTIONS?
STRESS/ANXIETY AND DYSLEXIA

- A child’s success or failure with reading will often predict the relationship between dyslexia and consequent emotional and social difficulties. Ultimately, this will have implication for academic performance and social interactions over a child’s lifetime.

This includes stress reactions due to:

- Having little or no control
- Cumulative exposure to failure despite high rates of effort and energy contributed to reading
- Poor self image, which translates into withdrawal or associating with younger peer groups.
- Depression
COMMUNICATION?

THE ABILITY TO TALK/READ IS DIFFERENT FROM THE ABILITY TO COMMUNICATE.

CHILDREN WITH EXCEPTIONALITIES, WITH AND WITHOUT SPEECH, STRUGGLE TO LEARN HOW TO COMMUNICATE WITH OTHERS.
RANGE OF COMMUNICATION

• COMMUNICATIVE FUNCTION REFERS TO THE MANY PURPOSES OR REASONS TO COMMUNICATE A SINGLE MESSAGE. COMMON COMMUNICATIVE FUNCTIONS CAN BE DIVIDED INTO SEVERAL CATEGORIES:

• REQUESTING TO SATISFY PERSONAL NEEDS - SUCH AS ASKING FOR A PREFERRED OBJECT
• RESPONDING TO OTHERS - SUCH AS ANSWERING A SIMPLE QUESTION
• COMMENTING - SUCH AS DESCRIBING WHAT HE IS DOING
• REQUESTING INFORMATION - SUCH AS ASKING WHO, WHAT, WHERE, WHY QUESTIONS TO OBTAIN NEW INFORMATION
• EXPRESSING FEELINGS - SUCH AS SAYING "I FEEL SICK"
• USE PROSOCIAL STATEMENTS - SUCH AS SAYING "THANK YOU" OR GIVING A COMPLIMENT
TYPICALLY... HOW DO WE COMMUNICATE ???

... THROUGH OUR LANGUAGE

- TEACHER’S LECTURING
- WRITTEN CONTENT IN BOOKS, POSTERS, NOTES, WORKSHEETS, RUBRICS, COMPUTER PROGRAMS.... ETC, ETC, ETC.
- STUDENT’S TALKING IN GROUPS, IN RECESS
- SCHOOL-WIDE: FLYERS, POSTERS, MENU’S, LETTERS FROM THE PRINCIPAL
- TEXT MESSAGING, EMAILS ...

WORDS WORDS AND MORE WORDS !!!!
COMMUNICATION VS. LANGUAGE

• COMMUNICATION IS AN INTERACTIVE EXCHANGE BETWEEN TWO OR MORE PEOPLE TO EXPRESS NEEDS, FEELINGS, AND IDEAS.

• UNLIKE LANGUAGE, WHICH IS SYMBOLIC AND RULE BASED, COMMUNICATION IS SOCIAL, CONSTANTLY CHANGING AND REQUIRES FLEXIBILITY.

• COMMUNICATION CAN BE EXPRESSED VERBALLY (BY MEANS OF SPOKEN, SIGNED, OR WRITTEN LANGUAGE) OR NONVERBALLY (BY USING PICTURES, GESTURES, EMOTION, AND OTHER BEHAVIORS).

• Language is a formal symbol that has structural qualities, including morphology, semantics and syntax.

• Language can be (a) oral speech, (b) sign language, or (c) written language.
  • Receptive language: an individual learns the rules of a particular language to understand the meaning of another person’s needs, feelings, and ideas.
  • Expressive language: an individual learns to use the rules of his or her particular language to express wants, needs, feelings, and ideas.
SO WHAT IS MORE IMPORTANT IN TODAY’S CLASSROOMS?

LANGUAGE

OR

COMMUNICATION

It’s not that easy is it?

So... How do we bridge a fundamental gap between an environment that uses WORDS and a student whose weakness lies in understanding the exact "medium" that we use most in schools???
CLASSROOM ARRANGEMENT TO SUPPORT READING SUCCESS
RECOMMENDED SYSTEMS

• DAILY SCHEDULE INDICATING **WHEN/WHERE** ADULTS ARE TO BE AND WITH WHOM THEY ARE TO BE WORKING
• DAILY LESSON PLAN INDICATING WHICH STUDENTS ARE TO BE TAUGHT **WHAT AND WHERE**
• **MATERIALS ORGANIZED** SO THAT THE LESSON PLAN IS EASILY FOLLOWED
• DATA SHEETS KEPT WITH MATERIALS OR IN THE APPROPRIATE LOCATION SO THAT **DATA CAN BE EASILY TAKEN**
• **INDIVIDUAL VISUAL STUDENT SCHEDULES** AS APPROPRIATE
• **STUDENT WORK STATIONS** AS APPROPRIATE
THE INTENTIONS OF TASK ORGANIZATION

• VISUALLY STRUCTURED ACTIVITIES CLEARLY INDICATE THE ACTIVITY THE INDIVIDUAL SHOULD COMPLETE, THE STEPS FOR COMPLETING THE TASK, AND THE IMPORTANT OR ESSENTIAL FEATURES OF THE TASK.

• VISUAL CUES TO CLARIFY, ORGANIZE AND INSTRUCT THE CHILD OF WHAT IS EXPECTED.

• PICTURES, COLOR-CODING, NUMBERS, SYMBOLS

• INDEPENDENT IN ENVIRONMENT AND LESS RELIANT ON OTHERS TO HELP.
TASK ORGANIZATION
SCHEDULING

• VISUAL SCHEDULES ARE A VISUAL REPRESENTATION OF PLANNED ACTIVITIES IN THE ORDER IN WHICH THEY WILL OCCUR USING SYMBOLS, WORDS, PICTURES, PHOTOGRAPHS, ICONS, OR ACTUAL OBJECTS.

• SCHEDULES LET THE STUDENTS KNOW WHAT ACTIVITIES WILL TAKE PLACE AND IN WHAT SEQUENCE.

• TYPES OF SCHEDULES
  • SYMBOLS
  • WORDS
  • PICTURES
  • PHOTOGRAPHS
  • ICONS
  • OBJECT
• THE GOAL OF ROUTINES IS TO CREATE A FRAMEWORK FOR ACTIVITIES THAT WILL OCCUR WITHIN THE CHILD’S SCHEDULE.

• STRATEGIES:
  • PROVIDE EACH INDIVIDUAL HIS OWN SET OF DIRECTIONS.
  • HAVE VERY CLEAR, SYSTEMATIC SCHEDULE FOR EACH LESSON
    • SHORT LECTURE OR MINI-LESSON
    • SMALL-GROUP WORK
    • INDEPENDENT WORK
  • CLEAR EXPECTATIONS FOR LESSON SEGMENTS
    • LECTURE – STUDENT LOOKS AT THE TEACHER AND RAISES HANDS TO ANSWER OR ASK QUESTIONS
    • SMALL-GROUP WORK – MAY STAND UP, APPROACH TEACHER TO ASK QUESTIONS, HAVE QUIET DISCUSSIONS
    • INDEPENDENT WORK – REMAIN AT DESK, RAISE HAND TO REQUEST HELP
WORK SYSTEMS

• WORK SYSTEMS ARE VISUALLY STRUCTURED SEQUENCES THAT PROVIDE OPPORTUNITIES TO PRACTICE PREVIOUSLY TAUGHT SKILLS, CONCEPTS, OR ACTIVITIES. THEY TELL THE STUDENT WHAT ACTIVITIES NEED TO BE COMPLETED IN INDEPENDENT WORK AREAS. THE GOAL IS INDEPENDENCE. TELLS THE STUDENTS WHAT ACTIVITIES NEED TO BE COMPLETED IN INDEPENDENT WORK AREAS.

• INCLUDE:
  • BINS
  • DRAWERS
  • WRITTEN LISTS
  • FOLDERS AND BINDERS
GENERAL GUIDELINES FOR WORKSTATIONS

WORK ROUTINELY FLOWS IN A LEFT TO RIGHT DIRECTION

Tasks to be completed

Student

Finished Basket

Teacher

Toy to play with after work is finished
MATERIAL ADAPTATIONS

• KEEP DIRECTIONS SHORT – BULLETS NOT PARAGRAPHS
• KEEP MOTIVATION HIGH AND KEEPING WORK AMOUNTS LOW (CHUNK WHEN POSSIBLE)
• BLOCK EXTRANEOUS, IRRELEVANT MATERIALS (COVER SHEETS, WINDOWS)
• HIGHLIGHT ESSENTIALS (WORDS, PHRASES, DIRECTIONS)
• USE PLACEHOLDERS (BOOK MARKS, LINE FINDERS, CORNER CUTS)
• EXTRA PRACTICE OPPORTUNITIES
• GLOSSARIES OF FREQUENTLY USED TERMS, KEY WORDS OR PHRASES (POST THESE VIA WHITEBOARD OR HANDOUT)
• USE READING GUIDES (PARAGRAPH, SECTION, PAGE OR STORY FOCI)
MODEL INTERACTIVE INSTRUCTION

• USE EXPLICIT TEACHING PROCEDURES (ORGANIZERS, GUIDED PRACTICE, CORRECTIVE FEEDBACK, PRACTICE OPPORTUNITIES

• REPEAT DIRECTIONS (VERBALLY, VISUALLY) EARLY AND OFTEN (RE: VISUAL ATTENTION SPAN DEFICITS)

• CONSISTENT ROUTINES

• GRAPHIC ORGANIZERS

• STEP BY STEP INSTRUCTION, WITH FREquent CHECK IN’S FOR ACCURACY

• COMBINE VERBAL AND VISUAL INSTRUCTION, LECTURE + POWERPOINT, OVERHEAD OR HANDOUT

• BALANCE INSTRUCTION (LARGE V SMALL GROUPS, INDIVIDUAL V GROUP V INDEPENDENT WORK)

• USE MNEMONICS FOR KEY INFORMATION

• REVIEW DAILY OR AT THE END OF UNITS AND CONNECT NEW INFORMATION TO PRIOR KNOWLEDGE
MAXIMIZING STUDENT PERFORMANCE AND FEEDBACK

• VARY RESPONSE MODES, NOT JUST WRITTEN RESPONSES

• DESIGN AN OPEN FORMAT ORGANIZER THAT STUDENTS COMPLETE WITH EACH LESSON (TOPIC, MAJOR THEMES, SUPPORTING INFORMATION, ESSENTIAL CONCLUSIONS)

• USE PROXIMITY AND DECREASE DISTRACTIONS

• REINFORCE USE OF PLANNERS, CALENDARS TO ORGANIZE SCHOOL WORK

• USE SYMBOLS TO DENOTE KEY TERMS (*, -, #)

• PROVIDE EXEMPLARY WORK SAMPLES

• DESIGN WORKSHEETS HIERARCHICALLY (EASIEST TO HARDEST) INDUCE EARLY SUCCESS

• PEER MEDIATED LEARNING (+ CLASSROOM CULTURE)

• PROVIDE FLEXIBLE WORK TIMES, TO ALLOW FOR EXTRA HELP, PEER TO PEER INSTRUCTION, ETC.)

• ALLOW FOR PLANNED SUBSTITUTIONS (ORAL V WRITTEN REPORTS, PROJECT V FINAL PAPER)
WHEN GRADING …

• FOCUS ON CONTENT AND CREATIVITY FIRST AND FOREMOST

• REWARD THE EFFORT, NOT JUST THE PRODUCT

• PURPOSELY CONTROL FOR SPELLING ERRORS, SENTENCE FORMATION ISSUES INDEPENDENT OF DESIRED CONTENT
  • THROUGH EXPLICIT RUBRICS

• ALLOW FOR ALTERNATIVE SUBMISSION FORMATS- ORAL RESPONSES, VIDEO SUBMISSIONS, WORD PROCESSING, VOICE TO TEXT PROGRAMS

*** REMEMBER WRITTEN LANGUAGE IS NOT THE STUDENT’S BEST AREA, DESPITE OUR RELIANCE ON THIS CLASS-WIDE MEDIUM TO COMMUNICATE, THEREFORE TEACHER’S SHOULD BE WILLING TO ADAPT AND ACCOMMODATE AS NECESSARY.
SUPPORTING STRUGGLES

• WHEN (NOT IF) A STUDENT STRUGGLES:

1. IS THE A CLEAR AND EFFICIENT MANNER FOR STUDENTS TO ALERT TEACHERS?
   CAN A STUDENT A TIERED SYSTEM OF SUPPORTS?
   EX: 1. REREAD,
        2. ASK A FRIEND,
        3. ASK THE TEACHER,
        4. CHECK FOR SUCCESS

2. IS THE CLASSROOM CLIMATE SUPPORTIVE OF STUDENT’S SEEKING HELP?
   TEACHER SHOULD REINFORCE ANY STUDENT ATTEMPTS TO SEEK HELP AND MODEL THIS
   THROUGH THE SCHOOL DAY.

*** WHAT WILL BE YOUR PLAN?
As students work day to day remember …

Students work each day with effort and determination …

All while tolerating and working within a skill set that is …

Fundamentally an area of weakness, at best …

And potentially (and realistically) an area of stress, anxiety or worse …
WHEN ADJUSTING THE CLASSROOM AND INSTRUCTION IS NOT ENOUGH … ASSISTIVE TECH

• ASSISTIVE TECHNOLOGY (AT):

• ASSISTIVE TECHNOLOGY CAN SUPPORT, CHANGE OR MODIFY AN INDIVIDUAL’S ABILITY TO SUCCEED AT TASKS THAT THEY OTHERWISE MAY NOT BE ABLE TO ACCOMPLISH.
ASSISTIVE TECH EXAMPLES

• EXPLORE USE OF:
  • AUDIO RECORDINGS / SMARTPENS TO TAKE NOTES
  • KURZWEIL 3000 LITERACY TOOLS
  • ADAPTED WEB TECHNOLOGIES EX: BROWSEALOUD –
  • WORD PROCESSORS WITH PREDICTIVE TECHNOLOGY
  • APPS FOR VARIOUS NEEDS
    BUILD EXCITEMENT AROUND READING: READ TO KIDS
    WRITING FLUENCY: AUDIO NOTE
    STRUGGLING WRITERS: DRAGON DICTATION
    WORD PATTERNS: ABC WRITING
    PHONICS: PHONICS GENIUS
    SITE/ HIGH FREQUENCY WORDS: SEE.TOUCH.LEARN
ASSISTIVE TECH EVALUATION - SETT FRAMEWORK

• FRAMEWORK FOR ASSESSING AT NEEDS:
  • STUDENT
  • ENVIRONMENT
  • TASKS
  • TOOLS

All decisions about tools MUST be driven by team decisions and goals decided upon by those IEP teams.

GOALS Drive TOOLS;
Tools do not drive goals!!

We should always avoid….
“I got an AT device; now what should I work on with it?”
IN CLOSING …

“A LOT OF PEOPLE WHO ARE BRILLIANT ENTREPRENEURS THINK THEY CAN DO EVERYTHING. THEY DON’T DEVELOP THE TEAM THAT THEY NEED TO HAVE IN ORDER TO ACCOMPLISH THEIR GROWTH AS A SUCCESSFUL COMPANY…. I HAVE BEEN ABLE TO RECOGNIZE MY STRENGTHS AND MY DEFICITS AND BUILD UP AROUND ME GREAT PEOPLE IN THE DEFICIT AREA."

- CHARLES SCHWAB, A HIGHLY SUCCESSFUL ENTREPRENEUR AND DYSLEXIC,