

Center of Excellence on Autism Spectrum Disorders



Southern Connecticut
State University

Assisting Students with Autism in the College Classroom

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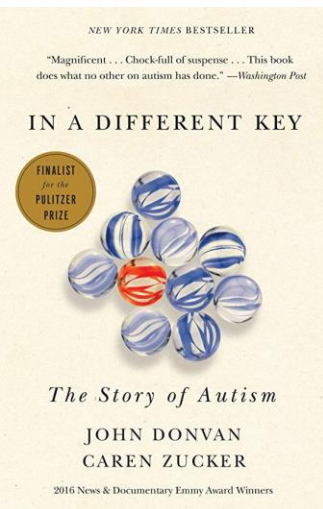
Barbara Cook Ed.D., CCC-SLP

Part 1

Autism Spectrum Disorders: Historical perspective and key attributes

Development of the field:

- Origins of interest
 - Feral children
 - Institutions in 1800s
- Leo Kanner 1943 – 1st description
 - Autism and “insistence on sameness”
- Asperger 1944 – “autistic personality disorder”
 - Same word BUT more verbal, special interest, + family history
- Effectively this sets the current tension between Narrow and Broad views!



What is in a name?

αὐτός

The intended sense of αὐτός is generally defined by its grammatical context. When used as a lone nominal without an article, it is generally the third person personal pronoun. When appended to a nominal and not possessing the definite article it is "self". When combined with the definite article, either appended to a nominal or on its own, it is "same".

What is in a name?

- **Why think of Autism as a learning disability**
 - In the US long history of supporting people with disabilities
 - IDEA
 - Right to education
 - ADA
 - Right to non-disclination, access, 504 plans, accommodations
 - This movement was part of a more general 'revisiting' of civil rights issues in the US
 - Educators – easier to get on board!



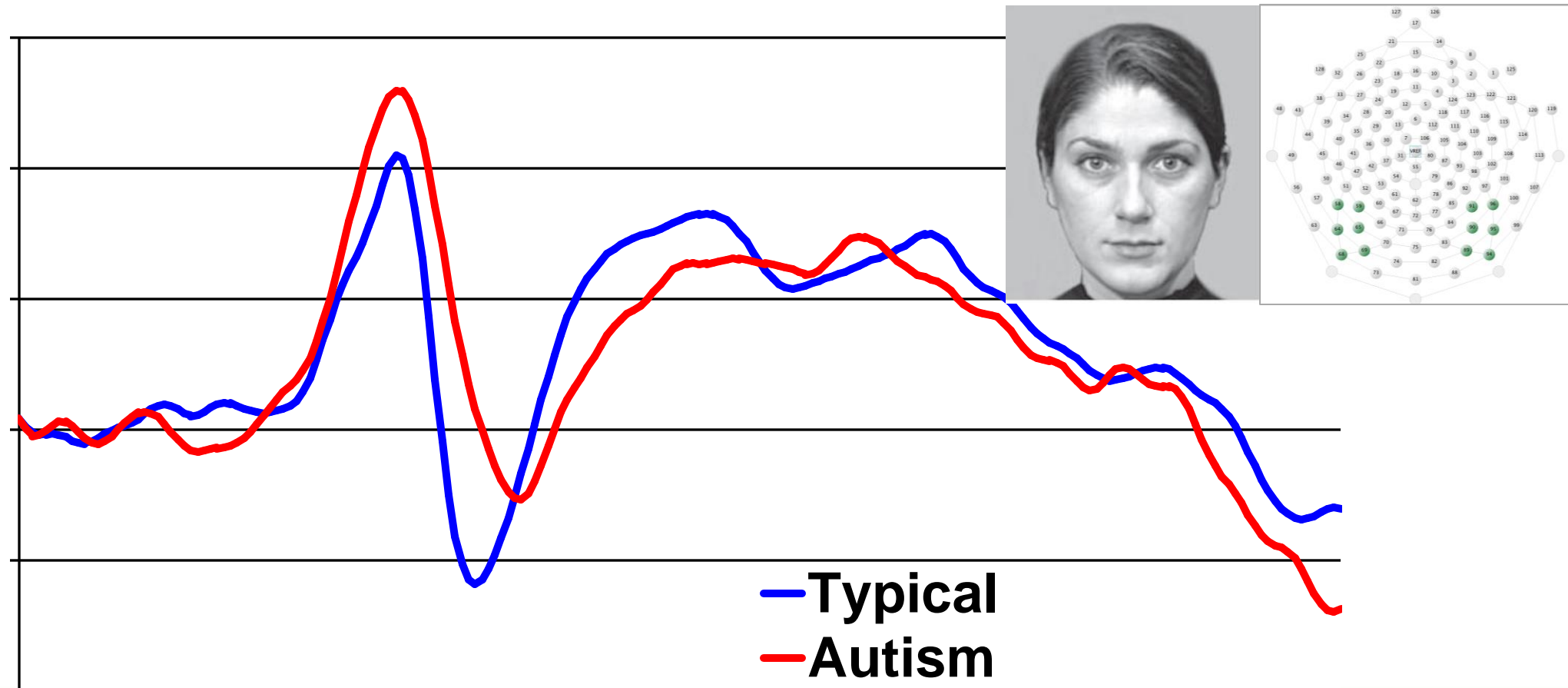
Event-related potentials (ERPs)

Electric neural activity (EEG) recorded at scalp, time-locked to perceptual events to reveal evoked brain response

- Appropriate for range of cognitive and developmental levels
- *Millisecond* temporal resolution
 - Efficiency
 - Stages of processing
- Economical
- Scalable
- Yields indices of social perception across lifespan



ERPs and faces: Autism



If you don't come into the world with a social frame; You fail to play the social game! You...



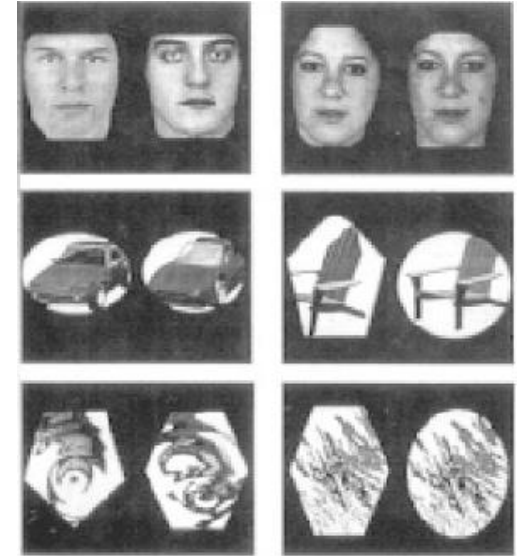
- have trouble integrating multiple cues (executive functioning) and in temporal processing
- tend to process things in whole chunks rather than bits ("gestalt processing")
- have unusual and idiosyncratic learning styles
- have trouble with perspective taking → social difficulties
- don't engage in joint attention, imitation, incidental learning, and many other problems
- see people (at best) as you see other objects
- focus on the non-social world
- look for things like consistency, regularity
- lack interest in communicating

Face Discrimination

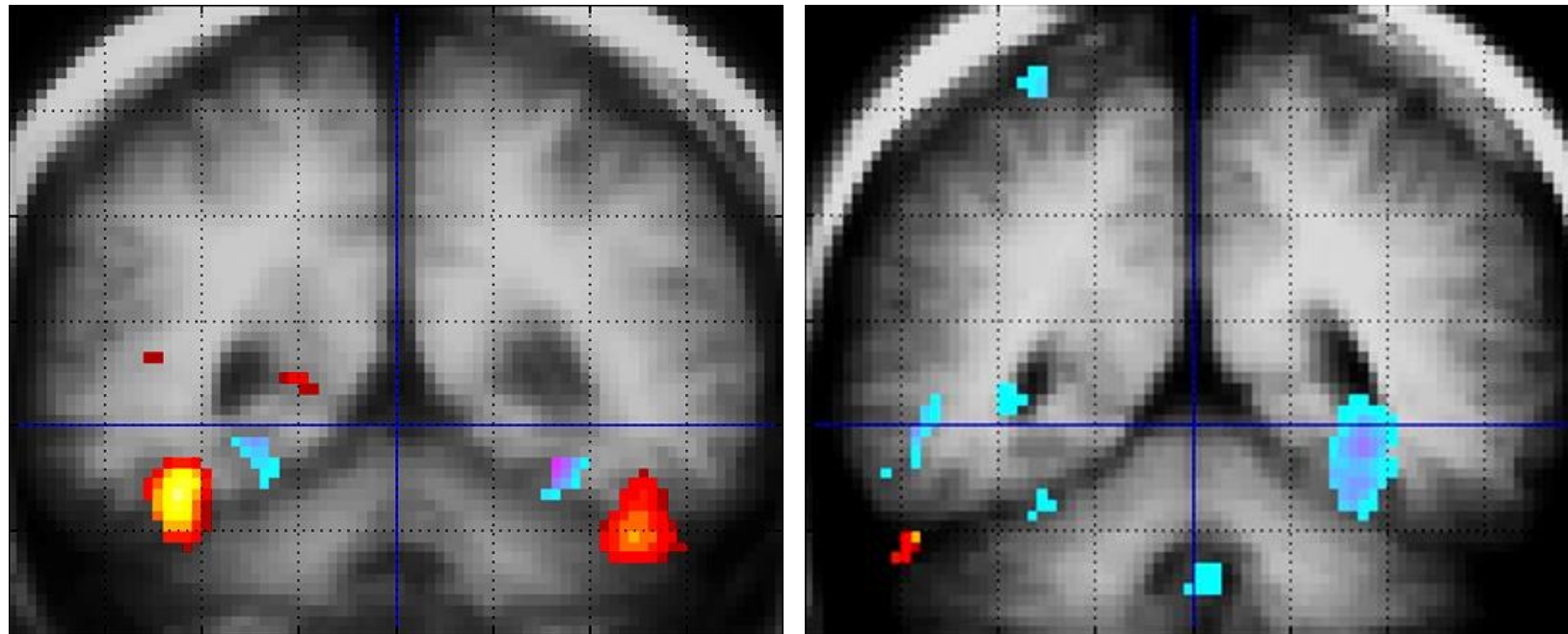
*Schultz, et al. Archives of Gen. Psych.,
57, 331-340*

fMRI study

- comparison to normal controls
- task: same or different:
 - people
 - objects
 - patterns
- regions of interest:
 - fusiform gyrus (face)
 - inferior temporal gyrus (objects)
- Both groups equally accurate
 - (tasks set up that way!)
- Finding now replicated >20 times



Face Recognition: Fusiform Gyrus Group Differences



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WINNER OF 5 ACADEMY AWARDS

**ELIZABETH TAYLOR
RICHARD BURTON**

IN ERNEST LEHMAN'S PRODUCTION OF
EDWARD ALBEE'S
**WHO'S
AFRAID OF
VIRGINIA
WOOLF?**



WARNER BROS. PICTURES PRESENTS
ELIZABETH TAYLOR · RICHARD BURTON
"WHO'S AFRAID OF VIRGINIA WOOLF?"
Also Starring GEORGE SEGAL · SANDY DENNIS
Screenplay by ERNEST LEHMAN · Directed by MIKE NICHOLS
Produced on the Stage by RICHARD BARR and CLINTON WILDER
Music by ALEX NORTH



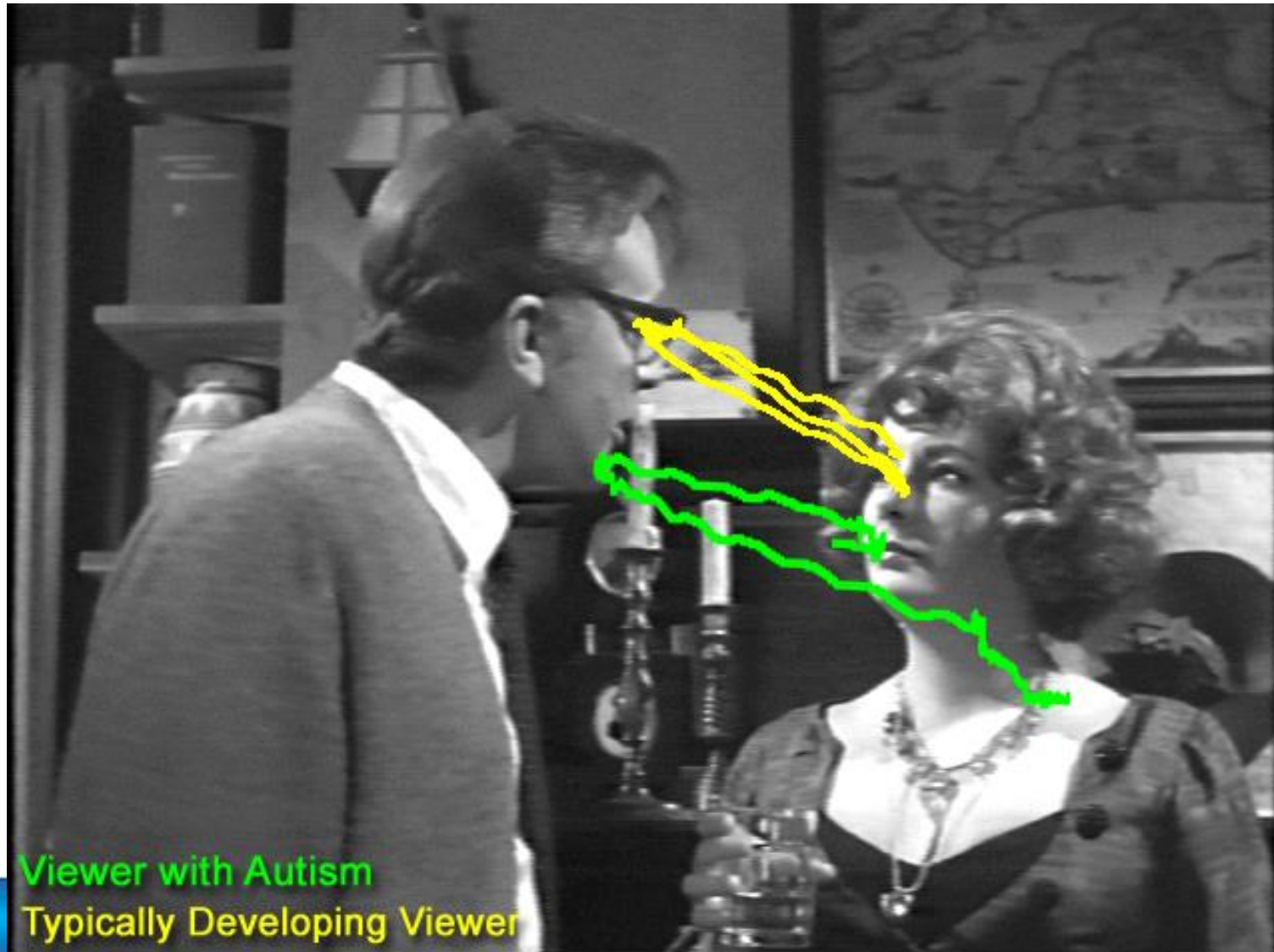
Viewer with autism

Age: 38, FSIQ: 119,
ADOS-4 / ADI-R +,
Vineland Socialization: 69

Typical Viewer

Age: 27, FSIQ: 110

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Viewer with Autism
Typically Developing Viewer

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What is the situation in autism?

It is as if people are hidden!

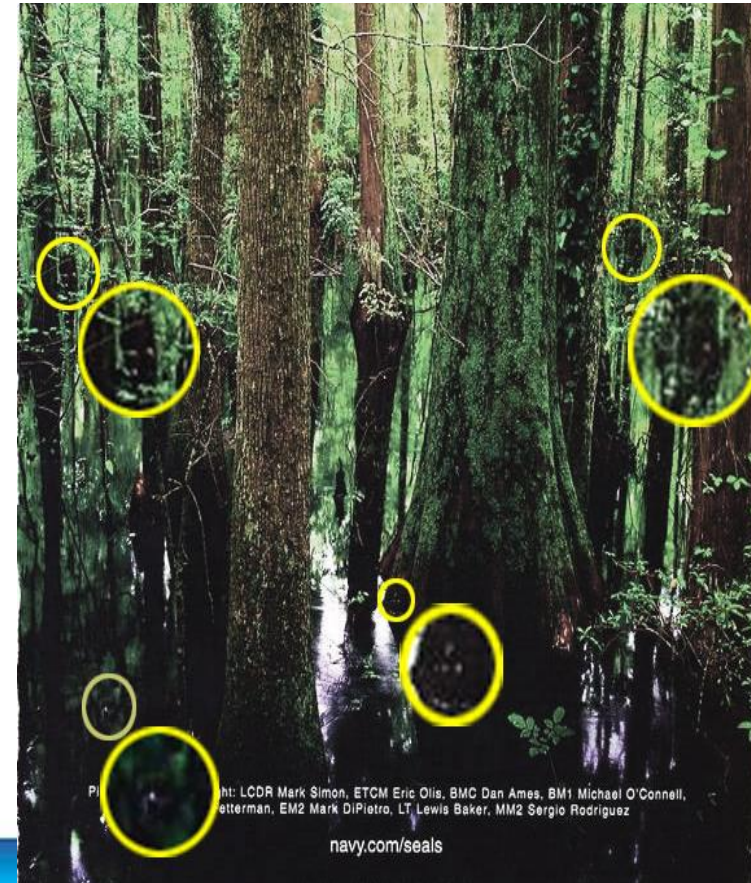
Can u find and count the navy seals?



Pictured from left to right: LCDR Mark Simon, ETCM Eric Ollis, BMC Dan Ames, BM1 Michael O'Connell,
EN1 Jason Fetterman, EM2 Mark DiPietro, LT Lewis Baker, MM2 Sergio Rodriguez

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What is the situation in autism? – It is as if people are hidden!
Can u find and count the navy seals?



Development of the Field:

- Autism was brain based, highly genetic, responded best to structured teaching
- An explosion of research since 1980
- With earlier diagnosis and treatment more students are doing better and seeking college
 - They present special challenges for teachers and learning supporters
 - Often academics are much stronger than adaptive skills
 - College poses many more demands for self-monitoring and organization
 - Issues in social interaction inside/outside college classroom
 - Within class may need help in understanding "classroom etiquette"

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Part 2

Linking Challenges and
Strengths to Effective Teaching

Universal Design for Learning

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What is Universal Design for Learning?

Theory and practice outlined by Anne Meyer, David Rose, & David Gordon in the 90's

Design principles focus on customizing instruction to meet individual needs

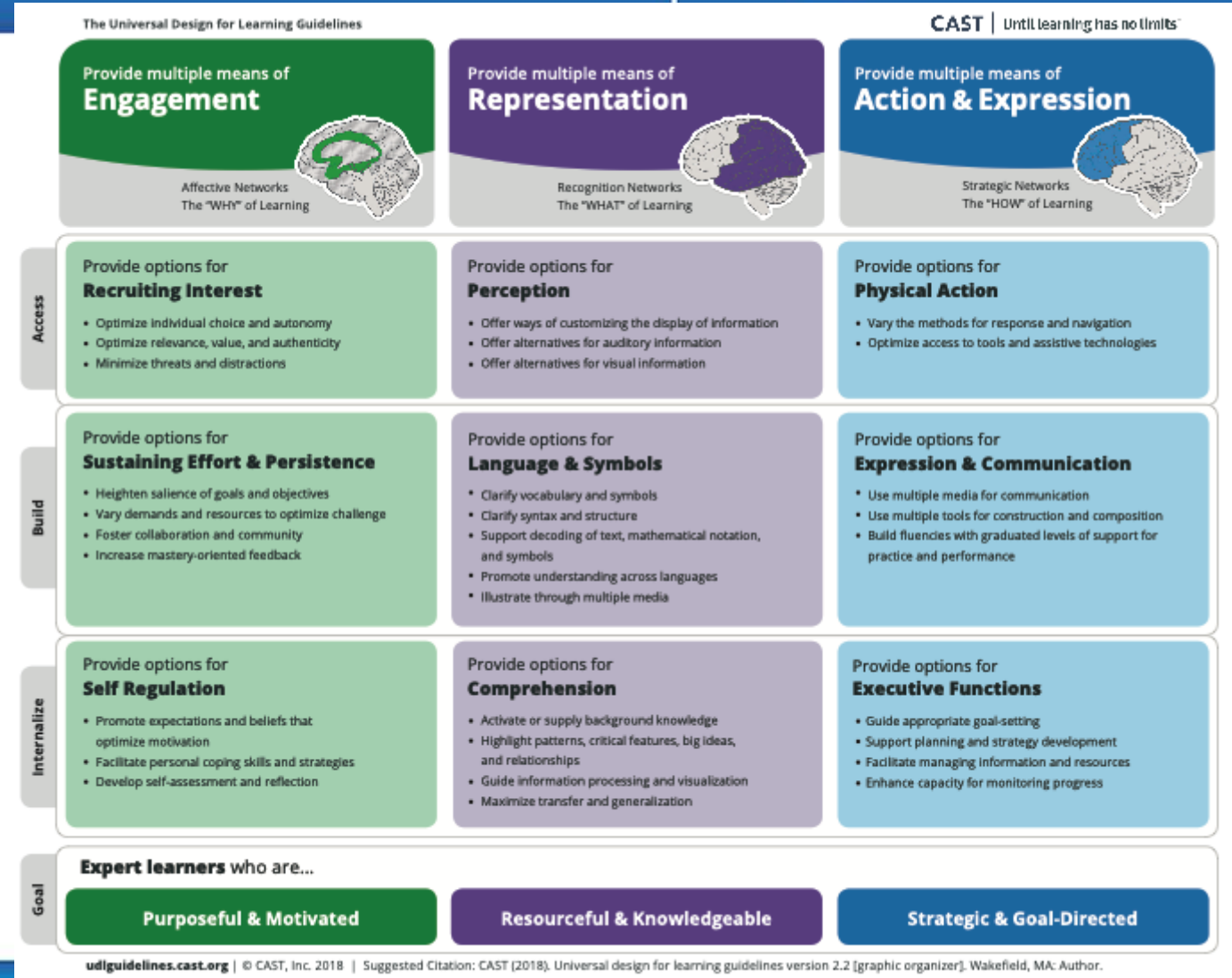
Frequently focuses on:

Auditory

Visual

Tactile

Kinesthetic



Universal Design for Learning Implementation

Key Questions to Consider When Planning Lessons

Think about how learners will engage with the lesson.



Does the lesson provide options that can help all learners:

- regulate their own learning?
- sustain effort and motivation?
- engage and interest all learners?

Think about how information is presented to learners.



Does the information provide options that help all learners:

- reach higher levels of comprehension and understanding?
- understand the symbols and expressions?
- perceive what needs to be learned?

Think about how learners are expected to act strategically & express themselves.



Does the activity provide options that help all learners:

- act strategically?
- express themselves fluently?
- physically respond?

From: *Universal Design for Learning: Theory and Practice*
Available at udltheorypractice.cast.org

For print and accessible EPUB, contact publishing@cast.org or any book retailer.



Step 1: Identify the Individual Challenges and Strengths

What you might observe by students:

in both on the ground and online classes

May identify small details and miss the larger concept

(i.e. see the trees and miss the forest)

Examples:

- See the steps to an assignment and lack understanding of how each will come together for a completed project
- Steps are viewed as critical to a project and will struggle to omit steps if asked to do so due to a change in the requirements of the project
- Enter a classroom and sit in the front row, very close to the instructor, not recognizing the impact of this proximity
- Eating a meal during a synchronous online session and not recognizing how others can see each other more directly than in another setting

What you might observe by students:
In both on the ground and online classes

May rely on auditory reception, yet benefit from visually presented information

- May not bring tools to take notes given perception of strong auditory memory
- May not use notebooks, agendas, or other systems to organize work
- Confuse messages of the speaker by not relying on voice intonation and prosody

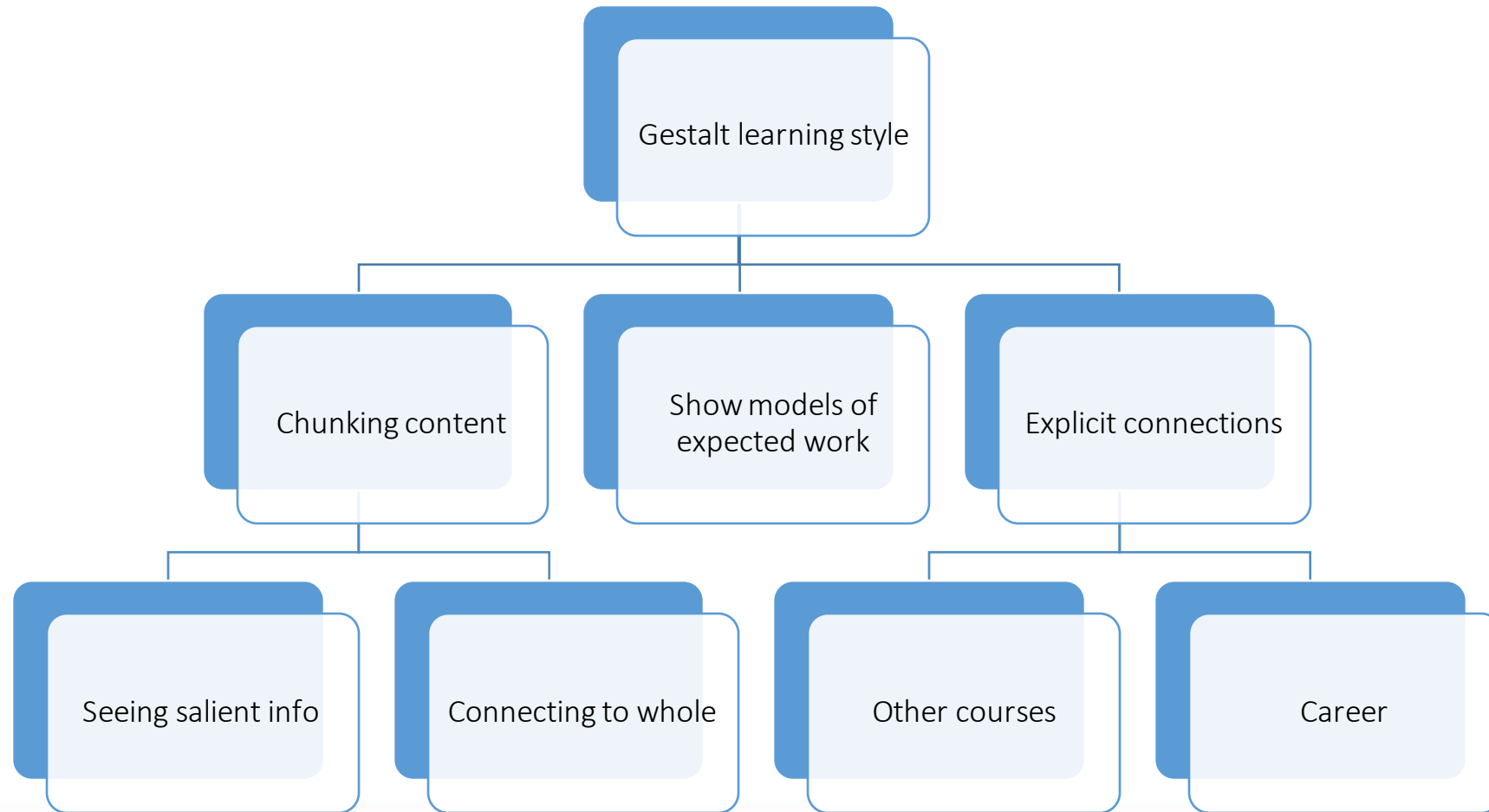
What you might observe by students: *In both on the ground and online classes*

- Interactions in class (with professors and/or during group projects) can range on a continuum from little to no interaction to excessive interaction due to inherent challenges with taking perspective and interpreting the contextual cues of a situation
 - Point of view may be skewed to singular perspective
 - Share jokes or use sarcasm that results in awkward response from peers or professor
 - Share opinions about various topics and potentially pass judgement that reflects not considering others point of view
 - May think all questions are directed to them *or* may think no questions are directed to them because their name is not called
 - “Ghosting” class, not considering impact on peers or professor

Step 2:
Universal Design for Learning for
Effective Teaching Strategies

Questions to Consider

How is the material presented to adjust to a gestalt learning style?



How is the material presented to adjust to a weaker auditory vs stronger visual modality for learning style?

Visual representations

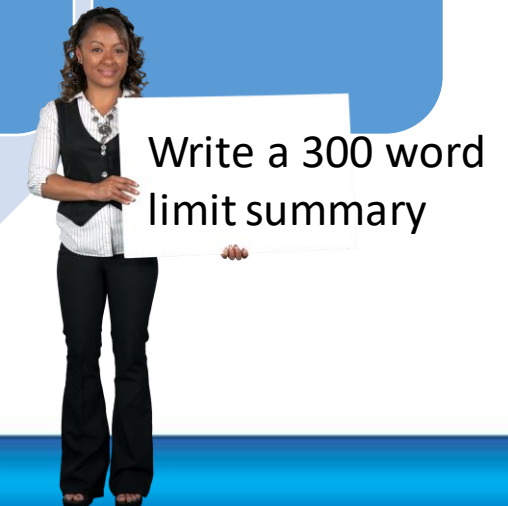
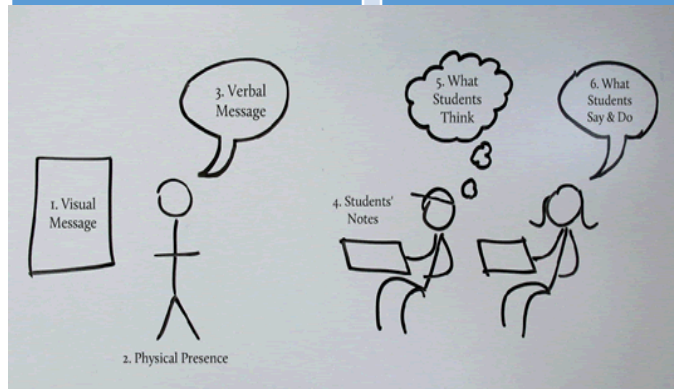
Video examples

Graphic organizers of
the content

Time to respond, take
notes

Precise language for
explanation, directions

Be brief, concise



How to support engagement in the lesson given organizational challenges:

- Use Syllabus and Blackboard (visual supports)
- Concrete instructions in a task-list format versus paragraph description
- Give clear expectations
- Assist to frame assignments into a graphic organizer
- Use rubrics for clear outcome and feedback
- Give adequate time; set due dates in Blackboard at beginning of semester; Use Blackboard Calendar
- Set meeting during office hours as a check-in
- Conduct weekly tele-meetings and share screen to guide to course materials
- Provide a course outline that includes dates of sessions, topics of learning, and due dates

Course Content Outline

Date	Topics	Reading and Assignments Due on Class Date
1/28	Syllabus Review and Evidenced Based Practices	READING: Syllabus and Register for Online Internet Modules (autisminetmodules.org) READING: Reichow et al. CHAPTER 1 Begin Reading: The PRT Pocket Guide Reading Chapters 1-4 (Read before April 8th) REVIEW: Online Internet Module: 1. Visual Supports
2/4	Determining Evidence Based Practices	READING: Reichow et al. CHAPTER 2 ONLINE INTERNET MODULES: 1. Peer-Mediated Instruction and Intervention (PMII) 2. Self-Management
2/11	Evidence Based Practices: Behavior	READING: Reichow et al. CHAPTER 4* ONLINE INTERNET MODULES: 1. Restricted Patterns of Behavior, Interests, and Activities 2. Video Modeling 3. Transitioning Between Activities
2/18	No Class: President's Day	

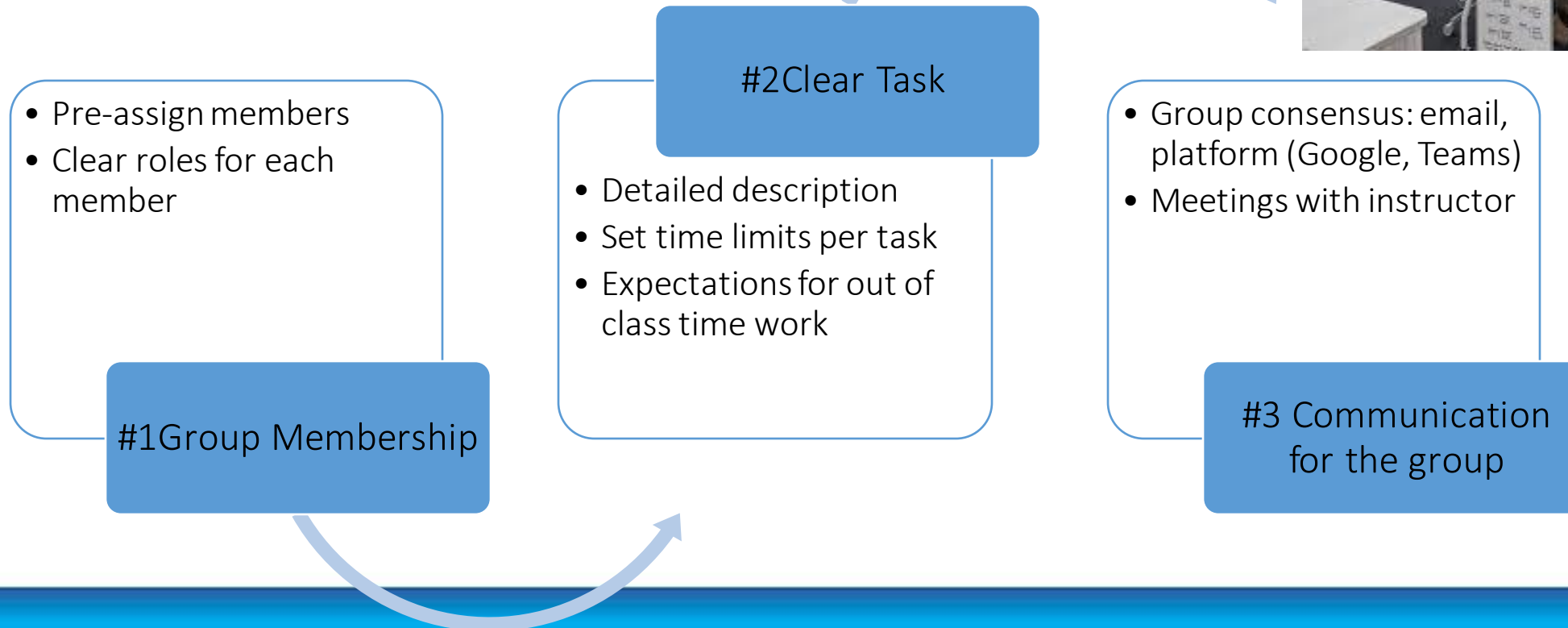
How to support engagement in the lesson and assist learners to act strategically in their learning:

When there is misinterpretation related to communication &/or difficulty understanding ambiguous instruction and seeking support:

- Provide examples and use clear language
- Exaggerate and emphasize key points
- Pair gestures and words
- Teach in context
- Avoid overly elaborate language
- Explicit teaching
- Use weekly meeting for extra time to provide explanations and clarifications for content

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How to support engagement in the lesson and assist learners to act strategically during group work:



How to support engagement in the lesson and assist learners to act strategically in their learning:

Addressing difficulty with attention and social expectations to show engagement, both in on ground course and in online:

- Isolate and highlight relevant information
- Structure environment and set rules of engagement
- Support attention by a process of randomizing asking students to respond to questions
- For synchronous sessions, encourage video on and use various functions for students to respond:
 - Chat
 - Polling
 - Quiz (I.e. Microsoft Forms, Google Forms, Kahoot, etc.)



**For more information
visit our website southernct.edu/asd-center
Or email asd-center@southernct.edu**

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<https://go.southernct.edu/giving/autism-center.php>