THE NEURODIVERSITY ALLIANCE

Understanding Executive Functioning in Neurodivergent College Students

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THE NEURODIVERSITY ALLIANCE

3 min

Kellen Story

ADHD, Dysgraphia, Executive Functioning Challenges, Mental Health Disabilities

Who I Am



Facilitator

Education

Bachelor's Degree - Elementary Education, Western Michigan University
Master's Degree - Higher Education Administration, Ball State University

Employment

Ball State University ···· Residence Life

Graduate Hall Director - two years

University of New Hampshire ····· Residence Life

Residence Hall Director - four years

University of Colorado Boulder ····· Disability Services

Program Manager - three years
Assistant Director - four years

The Neurodiversity Alliance

Senior Manager - two years





Why are you here today?



Learning Objectives

- Recognize how executive function challenges — including working memory, cognitive flexibility, and inhibitory control — uniquely manifest in higher education environments.
- Explore adaptable organizational tools and self-regulation techniques that align with neurodivergent cognitive styles.
- Identify 1–2 practical executive functioning strategies to integrate into immediate routines or academic support toolkits.

Icon Guide



Estimated Time for Slide/Activity



Engagement Encouraged



Rock the Vote



Speaking Encouraged

Kellen Story's Kellen Story

A brief snapshot of life with executive functioning challenges

5 min

Entire Section



5 min
Entire Section

"You just need to pay more attention."

I first realized I was different in second grade, when my teacher put a seatbelt on my chair to keep me from moving around.

The Challenges	The "Reasonings"
I couldn't tie my shoes until third grade.	"Isn't trying hard enough."
Couldn't ride a bike until age 9.	"Doesn't want to put in effort."
Handwriting hasn't changed since fourth grade.	"Doesn't take his time."
Poor math exams, remedial courses.	"Not studying enough"
Asks too many questions	"Not paying attention in class."





Contributing Factors

5 min
Entire Section

Rural public school

Limited support

Socioeconomics

No extracurriculars outside of sports

Stigma

Not enough support

30 students in my class

1 of 11 in class to go to college

Encouraged by a guidance counselor to explore other options than college

Most sports combined with two or three other schools.

Lots of travel/commitment.

Grew up in household averaging < $25,000 income

Poor school district

No resources



Neurodivergent Students in Higher Education

- Studies suggest up to 20% of the higher education population is neurodivergent
- 2/3 of college students with disabilities do not disclose their disabilities to their college
- Neurodivergent students are less likely to graduate from college than their non-ND peers



University of Wisconsin-Madison. (2023, March 7). Shining a light on neurodiversity in higher ed. Retrieved October 1, 2024, from https://education.wisc.edu/news/shining-a-light-on-neurodiversity-in-higher-ed/

Hechinger Report. (2023, September 21). The quest for embodied equity on college campuses focuses on neurodivergent students. Retrieved October 1, 2024, from https://hechingerreport.org/the-quest-for-embodied-equity-on-college-campuses-focuses-on-neurodivergent-students/

Neurodivergent Students in Higher Education

Researchers analyzed health insurance records for 238,011 U.S. children born from 2006 to 2012 to examine racial and ethnic differences in ADHD diagnosis and treatment through 2019.

Students of color have a 17% lower adjusted rate of ADHD diagnosis than white students.

By age 12, 11.76% of students of color versus 14.19% of white children had received an ADHD diagnosis

Even after diagnosis, 21.3% of school-age students of color had no recorded ADHD medication or behavioral therapy in the following year.



A National Look at Shifts in Disability Self-Identification for Students Enrolled in Higher Education, January-December 2025, Vol. 11, No. 1, pp. 1–16, DOI:https://doi.org/10.1177/23328584251322511

Topics Covered Today

What is Executive Functioning?

- Three main areas
- Examples

What Actually Works for Students?

- Reframing the approach
- Self-regulation
- Examples



Practical Strategies and Takeaways

- Easy ways to implement tools and strategies



It’s OK to interupt me.



Not something I’d recommend in general for folks with executive functioning challenges, but it’s OK for me I promise!



Entire Activity





Activity:

What needs to be done?

10 MIN

Entire Activity





Write a five page paper. Due Friday.

What needs to be done?

What actions would you take or recommend?



Entire Activity



Start

Keep track of the deadline

Find

Locate the instructions and rubric

Remember

Understand

Gather sources and materials

Figure out what the professor wants

Organize

Adapt

Focus

Handle confusion or unexpected problems

Monitor

Break the paper into steps

Plan

Manage distractions and interruptions

Know whether you're on schedule

Finish

Edit, format, submit



Entire Activity



What happens when

"Write a five page paper. Due Friday."

becomes

"You have four other classes, three papers, a group project, a job, club responsibilities, and an email from financial aid that requires action?"

So what *IS* executive functioning?

10 MIN

Entire Section

The everyday processes that help us manage ourselves and our actions.

Executive functioning helps us:

- **Remember and use information**
- **Plan and prioritize**
- **Get started and follow through**
- **Adaptability when circumstances change**
- **Regulate attention, emotions, and responses**



Executive functioning challenges are not:



Entire Section

A disability that is diagnosed.

Most often seen in students who have ADHD, autism, mental health disabilities, and traumatic brain injuries.

Other contributing factors: Stress, sleep deprivation, lifestyle choices.

An indicator of a student's intelligence or work ethic.

Executive functioning challenges can manifest in many different ways depending on a students' personal and academic journey.

10 MIN

Entire Section

Three main areas of executive function

Working Memory



Holding information in mind while using it.

Cognitive Flexibility



Shifting approaches, adapting to change, and considering alternatives.

Inhibitory Control



Pausing or managing an automatic response to support a longer-term goal.

Executive Functioning Areas

Examples from our activity

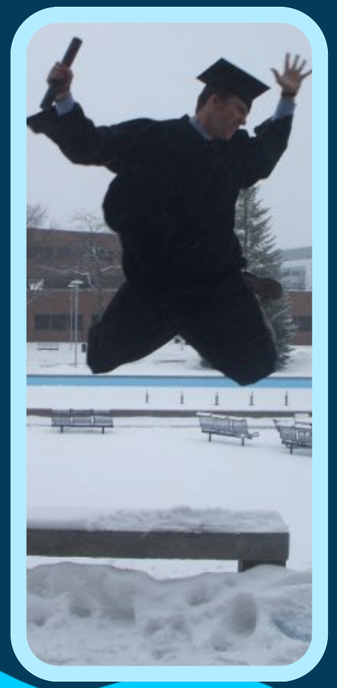
10 MIN

Entire Section

Task:	Executive Functioning Utilized:
Remembering the deadline:	Working memory.
Breaking down the paper:	Planning and organization.
Getting started:	Task initiation.
Knowing whether you're on schedule:	Cognitive flexibility.
Staying on task:	Attention regulation and inhibitory control.
Adjusting when instructions are confusing:	Time management and self-monitoring.

My college experience as an example

Working Memory



Forgetting Items for class

Could not keep up with verbal instruction

Multi-step processes were difficult

Cognitive Flexibility

Getting stuck on one minor item and unable to move past

Difficulty with switching strategies

"25 x 4"

Inhibitory Control

Prone to gratification-seeking activties as distractions





stand-up comedy club champion

resident assistant

alternative spring break

campus activities board

homecoming committee

Students for Obama

Residence hall association

founding father pi kappa phi

tour guide

intramural sports champion

drivesafe volunteer

Orientation leader

Other common ways executive functioning may manifest for students in higher education:

A student spends hours perfecting the introduction to an essay and finds it difficult to shift to the next section, even though the deadline is approaching.

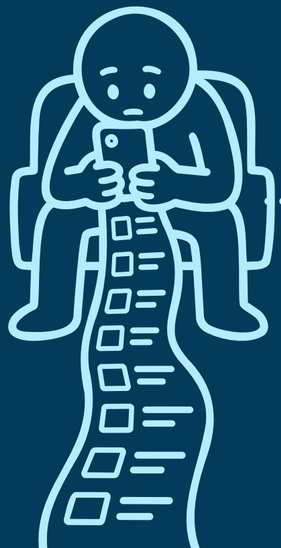




During a lecture, a student focuses on writing down one concept and loses track of the professor's explanation of the next concept.



A student moves from a discussion-based seminar to a fast-paced math lecture and needs additional time to adjust to the new expectations and thinking style.



A student intends to study for an exam but repeatedly checks social media or responds to messages instead.

5 min

Entire Activity

What have you noticed?

What trends do you notice among your students?



Helping my students:

What actually works?

The short answer...

It depends!

Staff or faculty, there is one overarching theme:

Reframing our methodologies of teaching, advising, and understanding.



5 min

Entire Activity

Activity: The Challenge.

What tools do you suggest?

Choose **one** of the common student challenges below and respond with some suggested tools/ideas in the chat.

Challenge A:



"I FORGOT"

Challenge B:



"I DONT KNOW HOW TO START"

Challenge C:



"I LOST TRACK OF TIME"

Challenge D:



"TOO MUCH GOING ON"

5 min
Entire Activity

How to approach each challenge

Challenge A:



"I FORGOT"

Potential Solution:

Include the deadline in the original communication. Offer a calendar invitation.

Challenge B:



"I DONT KNOW HOW TO START"

Potential Solution:

Providing a checklist of anticipated items to focus on, or to begin doing to help break down tasks.

Challenge C:



"I LOST TRACK OF TIME"

Potential Solution:

Instead of just a finalized due date, provide suggested milestones along the way.

Challenge D:



"TOO MUCH GOING ON"

Potential Solution:

Offer brief recaps of meeting/class that encompasses main theme and one or two focal points.

What doesn’t work

“HAVE YOU JUST TRIED USING A PLANNER?”



Instead, try this...

Instead of thinking:

"What tool should this student use?"

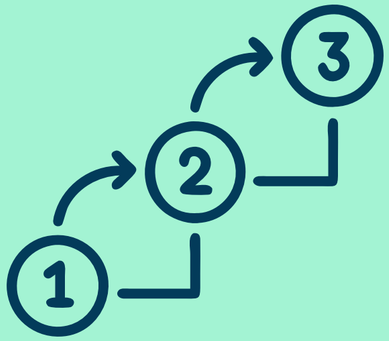
Think first:

"Where does the main challenge lie?"	**Student comprehension**	**Practical solutions**
	Identify barriers of learning by asking student about progress	Campus resources and workshops, asking what supplemental materials may help
"Where is the process breaking down?"	What makes sense to the student? Where are they experiencing the most stress?	Suggest review of area that is problematic. Identify different methodologies of instruction that may appeal to entire class.

Self-Regulation

More than just sitting still and trying to remain calm; self-regulation can involve managing attention, emotions, motivation, and responses to stressful or distracting situations.

When it feels impossible...



Tiny Steps

When attention is difficult to manage...



Change Environment

When it’s all too overwhelming...



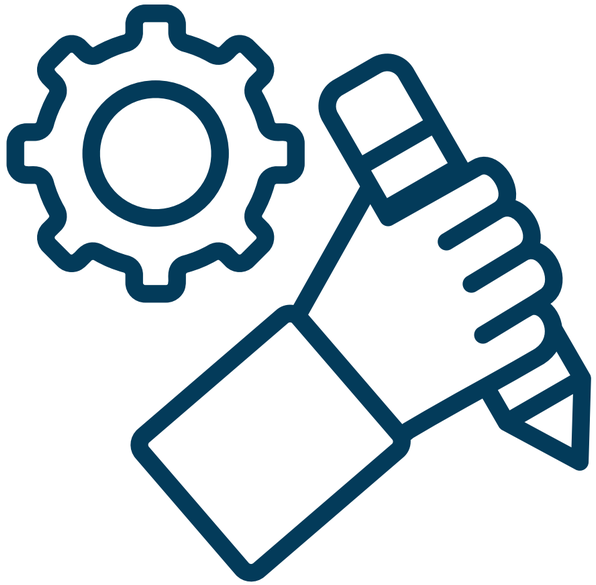
Pause, Reduce, Identify

5 min

Entire Activity

Activity: Practical Strategies







Activity:
Practical Strategies

Step 1:

Choose a routine

Identify one recurring task in your role.

Step 2:

Choose a strategy

Identify one strategy from today you can implement and how.

Step 3:

Commit!

WHAT will you change and WHEN will you change it?

5 min

Entire Activity





Examples

Step 1:

Choose a routine

Identify one recurring task in your role.

Step 2:

Choose a strategy

Identify one strategy from today you can implement and how.

Step 3:

Commit!

WHAT will you change and WHEN will you change it?

Strategy	Immediate Implementation
Break tasks into steps	Turn complex instructions into multiple steps
Reminders and Suggested Status	Schedule reminders and ideal progress status
Task Initiation Support	Identify small first actions students can take

Last minute everyday tips

Suggested Do’s and Dont’s

Here are a few easy ways to incorporate executive functioning support for students daily.

DO’S

- Implement easy additions such as symbols, colors, and phrases.
- Move your syllabus statement to the front
- Ask about learning styles
- Suggest resources
- Create timelines

As seen in today’s presentation

- Estimated time
- Cues for action
- Describe imagery
- Variety of slide modality
- Reiteration

DON’TS

- Assume your written instruction is universally understood
- “Out” students
- Offer vague suggestions
- Micro-manage
- Divert greatly from syllabus
- Assume the student has a disability

QUESTIONS?



