

CANVAS Meeting Minutes

January 23, 2026

People in Attendance

- Andrea Haas
- Anita Rehberg (Harper College)
- Beth Felsen (Spectrum Transition Coaching LLC)
- Brady Esham (Boston University)
- Brett Ranon Nachman (College Autism Network)
- George Wolford (App State University)
- Helen Rottier (University of Wisconsin-Madison)
- Hyejung Kim (Binghamton University)
- Janna Barnes
- Kaitlyn O’Konis (UMass Amherst)
- Katie McDermott
- Lee Williams (College Autism Network)
- Lori Wischnewsky (Texas State University)
- Mack Ottens (Binghamton University)
- Maria Montenegro (UT-Rio Grande Valley)
- Mario Crown (Boston University)
- Michael Canale (University of Maryland, Baltimore County)
- Ney Alliey (UT-Rio Grande Valley)
- Pamela Childers (Santa Fe College)
- Sam Benson (Cornell University)
- Stacy Miner (Kent State University)
- Tonya Paulette (College Autism Network)
- Yuririam Rodriguez (UT-Rio Grande Valley)

CANVAS Updates

- Join our CANVAS list-serv - Our primary means of connecting, sharing info
 1. Click [here to join](#)
 2. Send email to the list <https://groups.google.com/a/collegeautismnetwork.org/forum/#!forum/can-canvas/join> by emailing can-canvas@collegeautismnetwork.org
 3. [CAN Membership Details](#) We appreciate the support your membership provides to help us offer CANVAS and other opportunities.
 4. We recently welcomed Dr. Tonya Paulette to the CAN leadership team as our new Associate Director!
 5. [The Summit Spotlight: Insights and Innovations](#) series features webinars based on well-received presentations from our most recent College Autism Summit. They will be held on Feb 12, Feb 19, Feb 26, March 5, and March 12 from 3pm-4:30pm ET.

Share a Resource

- Susanne Bruyere and Katie Brendli Brown, Cornell University, Yang-Tan Institute on Employment and Disability, ILR School passed along some articles of theirs
 1. Saleh, M., Chang, H-Y., Bruyère, S. & Vogus, T. (2022). Neurodiverse applicant screening, interviewing and selection. In S. Bruyere & A. Colella (Eds.). *Neurodiversity in the Workplace, Society for Industrial Organizational Psychology Frontiers of Research Series*. Oxfordshire, UK: Francis Group Publishers. (pp. 98-123).
 2. Chang, H-Y, Saleh, M., Bruyere, S., & Vogus, T. (2023). Making the employment interview work for a neurodiverse workforce: Perspectives of individuals on the Autism Spectrum, employers, and service providers. *Journal of Vocational Rehabilitation*, 59, 107-122. DOI:10.3233/JVR-230031

Presentation Details

Presenters: Dr. Hyejung Kim (Associate Professor, Binghamton University) and Dr. Mack Ottens (Career & Outcomes Data Analyst, Binghamton University)

Presentation Title: What Drives STEM Pathways for Autistic Students? The Role of Context, Self-Efficacy, and Outcome Expectations

Presentation Notes:

- In setting up this study, the team shared about the rising prevalence of autism, with some autistic traits aligning with STEM skills (e.g., routines and systemizing). Autistic students are less likely to secure employment following high school compared to their non-autistic peers (37% vs. 66%). We know little about how autistic students navigate STEM pathways. The authors draw from Lent and colleagues' (2003) Social Cognitive Career Theory, recognizing that career choices are informed by context, self-efficacy, and outcome expectations. They apply an anti-deficit lens to contrast the challenging narratives that fill much of the discourse.
- Context relates to the people in students' lives. Self-efficacy relates to how one believes their skills will inform their ability to complete their tasks. Outcome expectations are related to what people imagine will result from their actions.
- The research questions are threefold: what are the STEM majors chosen by autistic college students relative to their non-autistic counterparts; 2) what distinguishes autistic college students from their non-autistic peers in terms of proximal context, self-efficacy, and outcome expectations in the context of STEM; and 3) what factors, both directly and indirectly, influences the shaping of their STEM major pathways?
- They drew on the High School Longitudinal Study (HSLs) 2009 data that gathered data from around 23,000 students across five points in time: twice in high school, one year after graduating (2013), 2016 and a final wave planned for 2025.
- Their sample included 180 autistic students, or 1.4% of all 9th graders.
- Given the wealth of data from the federal government, there's lots of variables to choose from. It has restricted use and had many restrictions in how the data could be accessed and used. They examined a lot of demographic variables, as well as accounted for proximal context, self-efficacy, and outcome expectations

- The team examined STEM major choices among autistic and non-autistic students, as well as differences in those STEM pathways.
- Their study employed a structural equation model (SEM) and drew from Lent's social cognitive model.
- Confounding variables included race, sex, and income.
- Latent variables included a bunch, such as proximal contexts, self-efficacy accounted for students' certainty in excelling in course contexts and assignments, understanding complex textbook material, and mastering course-taught skills. Outcome expectations examined whether students believed the math and science course would be useful in their everyday life, college, and career. Ultimately, the outcome variable was if students were enrolled in an NSF-recognized STEM major.
- Demographically, autism was less represented by Hispanic and female populations, but there was no significant difference based on family income. For their study, autistic students were less likely to attend postsecondary education than the general population, but when they enroll, they were more likely to enroll in STEM majors than their non-autistic counterparts.
- Unsurprisingly there were STEM disparities, in that white males irrespective of autism status were more likely to have guiding figures in STEM, have stronger STEM outcome expectations, and preference for STEM majors.
- Being non-Hispanic white positively influenced students' proximal context.
- Sex was negatively associated with outcome expectations and major expectations.
- Being female explained outcome expectations only among non-autistic students.
- Self-efficacy played a central role in shaping outcome expectations and STEM major selection.
- Fathers of autistic college students were less likely to work in STEM fields, but mothers were more likely, yet this was not statistically significant.
- Autistic students were more likely to discuss STEM courses with their parents, but less likely with their peers.
- In ninth grade, autistic students reported higher math and science self-efficacy than their counterparts. By 11th grade, science was higher, but math had declined (below their non-autistic student counterparts). There continued to be a notable erosion of their math self-efficacy.
- In 9th grade, autistic student viewed math as more useful for their college career and daily life, but those declined by 11th grade.
- Implications illustrate the vitality of interventions focusing on mastery experiences and the real-world utility of STEM as necessary.
- The small autistic people made it difficult to look at specific STEM majors.
- They showed a graph that illustrates major distinctions in autistic students' self-efficacy from 9th to 11th grade in each math and science. Non-autistic students are relatively stable over time.

Presentation Q&A:

- Maria: "Why were there such changes in autistic students' self-efficacy from 9th to 11th grade?"

- Some of those implications are beyond the scope of this study. Dr. Kim's assumption might be there is a high academic focus during the early years that focus a lot on college-ready elements. Interest-based programs are perhaps more absent from high schools in the United States. Other research is showing similar inclinations toward STEM among autistic young people.
- Katie: "In the dataset was there information on the type of math and science classes for the students? For example, College Prep, Honors, AP, etc. I wonder if this has an implication on self-efficacy throughout the high school experience."
 - They focused on courses that were more pertinent to what they were aiming to measure. There is an online portal that allows users to access some of the data, including looking at the codebook and potentially relevant courses. STEM-based programming at schools are also so important.
- Brady: "Based on the Implications of the study, how can the findings be utilized to support autistic students in the transition from High School into higher education settings, as well as early-stage career preparation or exploration?"
 - It would be useful to stage interventions. Interest-based groups during summers or via internship experiences with local businesses could be good opportunities. Applying for local opportunities could be useful.
- Brett: How do you explain how autistic students' parents' careers in STEM impact their pursuits of these majors?
 - This finding mirrors other research about the relationship between the mother's occupation and the students' occupation. Dr. Kim said she does not want to put too much spotlight on them so much as the school experiences.
- Dr. Kim said that the secondary data analysis of national datasets took much more time than collecting her own primary data (qualitative) for her work. There's lots of great potential even though there are limitations. She hopes the data could be used more widely. If you have any questions about utilizing the data let her know.
- Lee: Often STEM is presented very monolithically yet entering a field may be constrained for many neurodivergent students. Do you see any future for granulating or categorizing STEM fields that are more destined for students to reach greatness?
 - Dr. Ottens shared how it's important for students to learn how they can translate skills to different fields. Providing more STEM education earlier is helping students with longer-term outcomes. Making the content more fun is useful for young kids, too. Employing more longitudinal work would be additive in figuring out their pathways. Dr. Kim noted how labs are often challenging for neurodivergent children. Intervening and offering supports at this stage is super important too.

Upcoming CANVAS Presentation

Date: Thurs, February 19 at 2pm EST

Meeting Link: <https://pitt.zoom.us/j/94678534725>

Presenters: Ren Butler (PhD Student, Carnegie Mellon University), JiWoong Jang (PhD Student, Carnegie Mellon University), and Dr. Andrew Begel (Associate Professor, Carnegie Mellon University)

Presentation Title: Preparing Autistic Students for the AI Workforce: Weaving Technical Skills with Social-Emotional Learning

Presentation Description: As AI becomes more central to society, autistic people risk being left out of AI careers—not because of ability, but because of communication differences and unspoken workplace norms. Many computing programs focus on technical skills while overlooking teamwork and social learning. We describe an NSF-funded program that supports autistic community college students through a multi-week experience combining AI learning, communication practice, and social-emotional skill building, followed by internships. We share lessons from the first year: what worked, what was challenging, and how we adapted in year two. The talk offers practical insights for creating inclusive, neurodiversity-affirming pathways into AI careers.