AUTISM 101

An Introduction to Academic Success



STAIRWAY TO STEM

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INTRODUCTION



When I joined Stairway to STEM (STS) in May 2018, I had worked in higher education for almost 15 years, mostly as a teacher, and I know I was very good at my job. Yet, I had never had an autistic student disclose their diagnosis to me, and I had never had any autism-specific teacher training.

I began thinking of a student I taught in 2014, and how I wished I'd known more about autism specifically and neurodiversity in general when he was in my class.

This student didn't disclose a diagnosis to me or ask for any accommodations. In fact, he may not have had a formal diagnosis, and research suggests that, coming from a minority community, it's less likely that he would have received one.

Understanding more about autism would have helped me place this student's strengths and weaknesses in a clearer context. It would have helped me better understand and navigate some behaviors he exhibited, such as struggling to make eye-contact or communicating particularly bluntly, which varied from more typical student behavior.

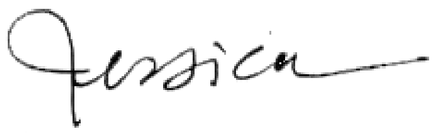
While I know this student felt welcome in class, benefited from instruction, and was respected and liked by his peers and myself, I think I missed an opportunity to better teach him in small ways that are nonetheless important. Additionally, any number of factors, had they been different, could have more negatively affected his experience: the maturity of his peers, the format of the class, or the necessity for extensive note-taking, for example.

The STS team put this book together so that educators who are interested in supporting autistic students can use the content in the first section to deepen their understanding of academic practices and outlooks that best meet the needs of the autistic community. These resources can also help you better understand the unique challenges autistic students often face.

Equally as important, we know how handy it is to have a sharable resource when students approach us for help. Section Two compiles some of our most effective posts on common academic challenges that autistic students face: organization, time management, and interacting with professors. We hope you'll share this e-book with colleagues, your Disabilities Services Office, and, most of all, students. (Additionally, the resources in Part Two can be hugely effective for all students!)

Thank you for your commitment to supporting autistic students. If you have the chance to reach out after reading this material, we'd love to hear what you think.

You can reach me at:
jmurray@stairwaytostem.org



Jessica Murray
Stairway to STEM
Managing Editor

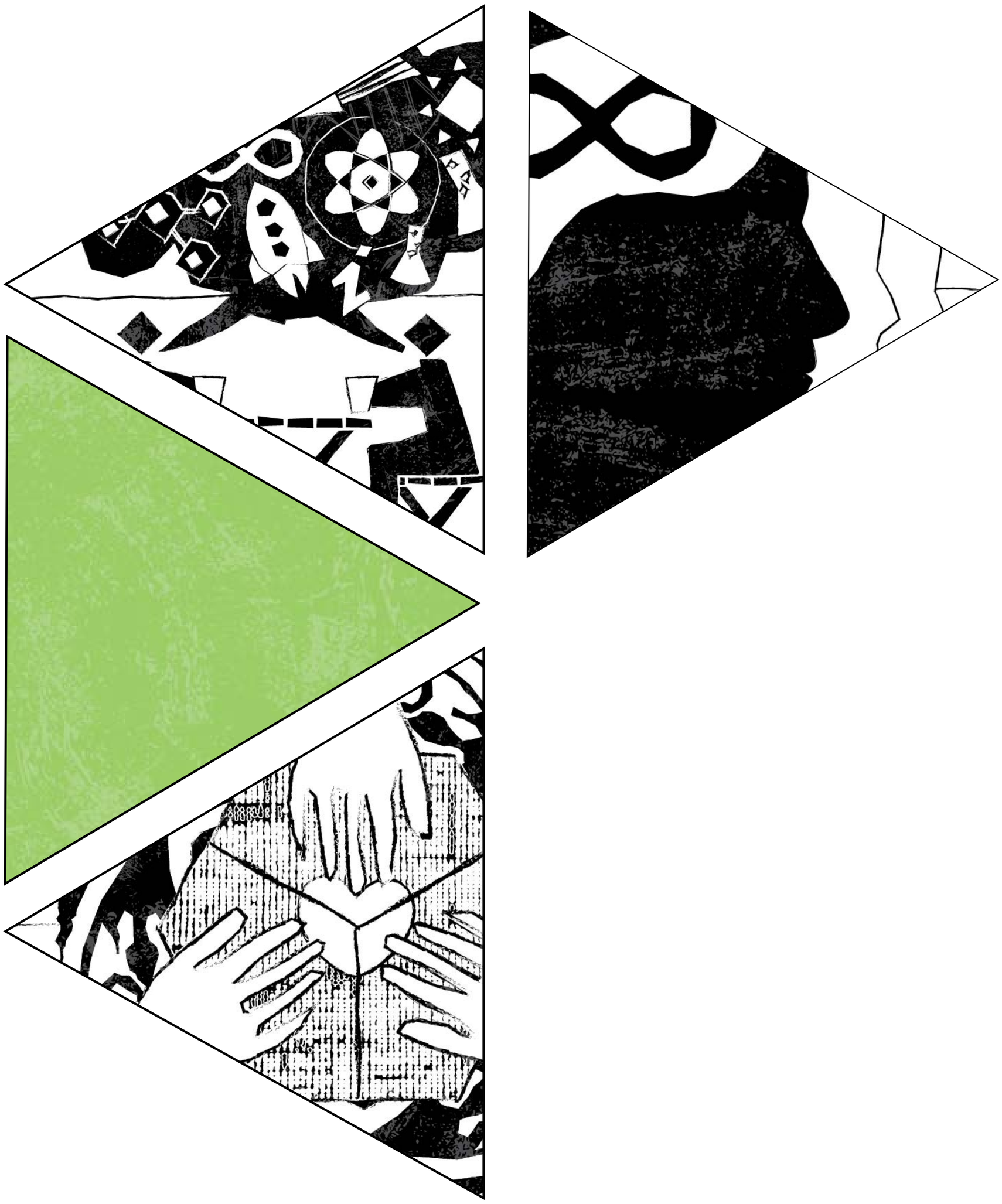
A NOTE ON THE RESOURCES



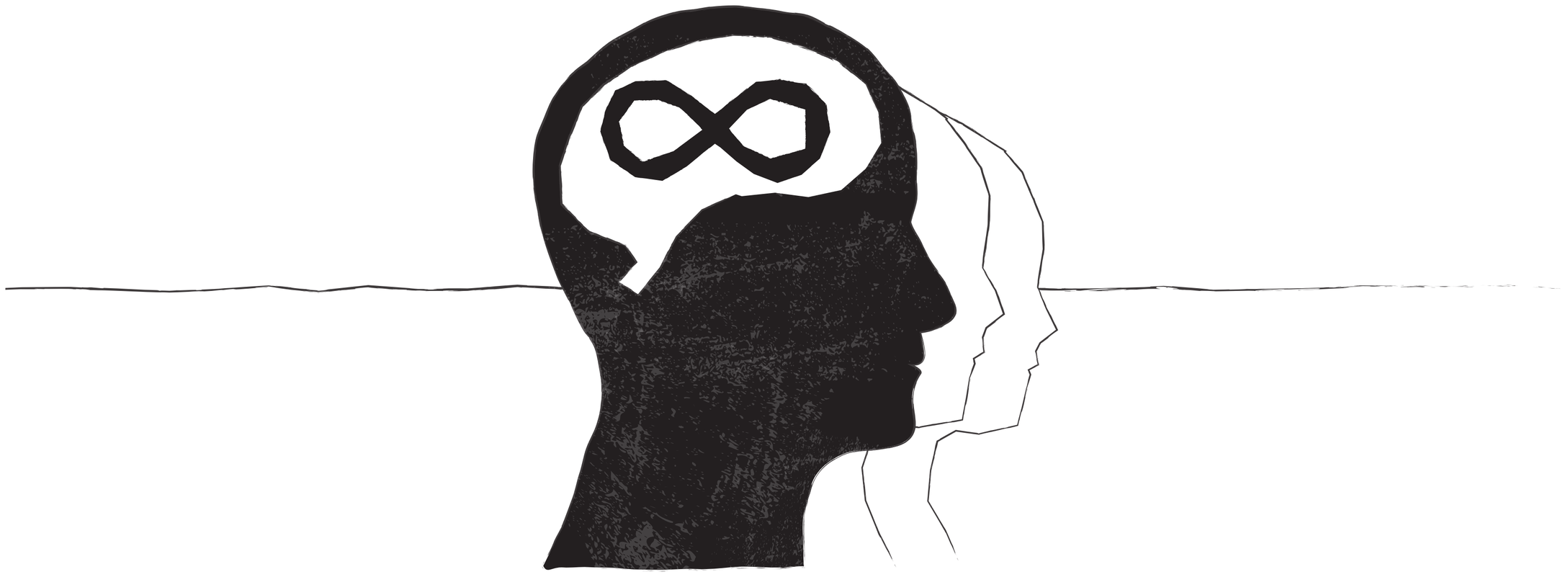
Some of our materials use the phrase “autistic student,” while others use “student on the spectrum” or a related variant. Whether to put identity first, as in autistic student, or person first, as in student with autism, is a significant debate in the autistic community. You can learn more on STS here. In a nutshell, our contributors who have autism diagnoses employ the language constructions they prefer, and the great majority prefer identity first.

Additionally, where posts reference other posts, we have generally chosen to leave the references, even if it is to material not included in this book, in order to alert readers to related material accessible on STS.

AUTISM IN COLLEGE



In these three texts, you'll learn more about contemporary autistic culture, as well as how being autistic without a supportive community can take a particularly high emotional and social toll. (While it's true that we sometimes have the idea that STEM fields are "outside of" more social fields, some of our contributors find that their STEM classes required as much as or more social skills than their non-STEM ones.) Finally, we'll hear from a student who has struggled to access disability support and what that has meant for her college opportunities.



Autism 101: Autism Cultural Responsiveness for Improved Interactions

by Sara Sanders Gardner

Maybe you've been teaching autistic students for years, or maybe you're about to have one in your class for the first time. Either way, thinking about autism as a culture and the communication and behavior implications of this social justice approach will support your efforts to have productive interactions with and among all your students, including the neurodivergent ones.

Using social justice as an interaction and instructional model means that, rather than attempting to manage or fit autistic students into an expected communication or behavioral pattern, you will instead attempt to understand them, provide accessible communication, and a classroom environment that values diversity in all forms.

As an autistic faculty member who directs an autism advocacy and access program at a large community college, and who also provides training and consultation to a large technology corporation, as well as being the parent of an autistic software developer, I have the unique opportunity to teach, study, learn, and live with autism and autistic individuals, both at home and at work. I'd like to share some of the things I've learned about autism as a culture and as a disability, and talk about some definitions, myths, the everyday struggles with ableism, and, discuss how neurotypical (not-autistic) people can learn the communication style of autistic individuals so that interactions can truly become successful two-way endeavors.

Language

You may have learned that it's polite or respectful to use person-first language when referring to disabled people. This isn't always the case! Many autistic individuals (and other disabled people) prefer identity-first language, which incorporates disability as part of their identity. So, much as we might refer to a person as tall, thoughtful, or any one of a number of descriptors, so too do we refer to them as an autistic person, placing their autism as part of their identity.

This is a matter of personal choice, and the best thing to do is to ask the individual which they prefer – person-first or identity-first language – if you find that you need to discuss their disability.

Definitions and Diagnosis

The American Psychiatric Association's Diagnostic and Statistical Manual, Fifth Edition (DSM-5) describes autism in the form of deficits and severity of social-emotional reciprocity, nonverbal communicative behaviors, and managing relationships, marked by restricted, repetitive patterns of behavior, interests, or activities, and / or sensory sensitivities. For in-depth information see www.cdc.gov/ncbddd/autism/hcp-dsm.html. Viewing autism from this medical or deficit model leads us to try to "fix" our students – to mold them into a typically-behaving and typically-interacting student.

As more autistic adults share their experiences, a new model has emerged: the social justice, or neurodiversity model of autism. This model states that autism, while it can have many disabling features, is not at its core a communication deficit, but a communication difference – one that should be honored and respected. For more in-depth information see www.tolerance.org/magazine/summer-2016/a-new-frame-of-mind. This brings us to...

Autistic Culture

The Autistic Self Advocacy Network states it best on the website "Autism Acceptance Month" www.autismacceptancemonth.com/resources/101-3/autism-acceptance/autistic-culture/

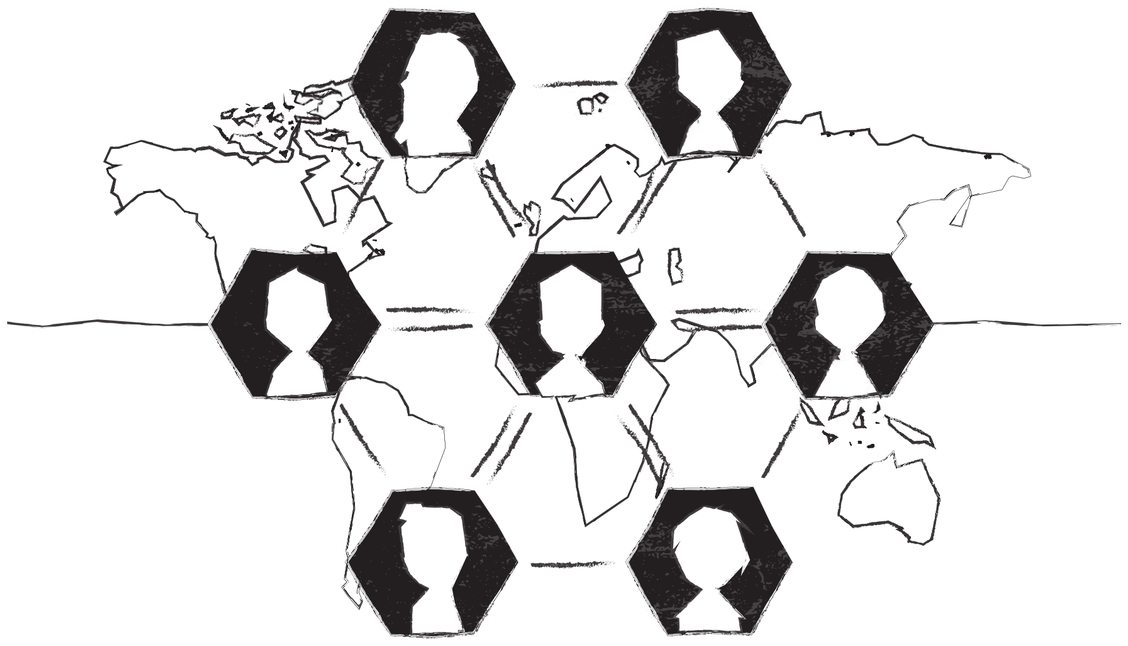
Definition

Autistic culture is culture built around the ways of speaking, thinking, and acting that come naturally to autistic people, or which have been created in Autistic communities.

Description

Autistic culture is the culture created by and for autistics. Much of it has been developed in the Autistic community, while other parts of it have developed as a result of interactions outside of it. Autistic culture has been studied by cultural anthropologists.

Autistic culture has developed its own customs, traditions, and approaches to expression and social interaction. There are also events that are both a product of the culture as well as a venue to participate in it. It also includes distinctively Autistic art, writing, and idioms and vocabulary.



Autistic culture started developing in small pockets across the world in the 1990s, and, with the growth of the Internet, has become a world-wide phenomenon also known as the Autism rights movement (ARM) https://en.wikipedia.org/wiki/Autism_rights_movement.

HERE ARE SOME ADDITIONAL LINKS THAT YOU MAY FIND INTERESTING:

General Etiquette and other thoughts:
https://www.wikihow.com/Experience-Autistic-Culture

Autism Culture video:
https://www.autismspectrumexplained.com/culture-of-autism.html

The best "cure" for this is advocacy on both sides – simply ask for clarification. If we seem upset or angry, because of our "tone" or what we're saying, ask us! If you sense that someone, autistic or not, is confused by abstract or implied communication, try adding a sentence or two that is more direct, and see if that is helpful. I've found that the most useful thing I can say when I'm confused is, "Could you please say that again another way?"

Communication

Karla Fisher, an autistic advocate, (www.facebook.com/pg/Karlas-ASD-Page-1553698212041 41/) describes autistic people as leaning in the direction of being "literal communicators" while neurotypical people lean in the direction of being "abstract communicators," with a range of communication styles in-between the extremes. This means that many autistic students will be more literal in both their interpretations of others' communication and in what they say to others. Our literal input, spoken without subtext, can often come across as blunt or rude, depending on the culture of your particular community.

One factor that plays a big role in this is the different way we handle non-verbal communication. For many of us, we simply don't recognize it, or don't recognize it in many situations. Since non-verbal communication covers a lot of ground, including implied meaning, this can leave us confused and misinterpreting meaning frequently. This is a two-way street, though, as neurotypical people frequently misinterpret our meaning and are confused by our communication.

Disability and Myths

One of the biggest myths about autism is that it is purely a social disorder, and that with proper social skills instruction or mentoring, students can "fit in." If it were that simple, then education and employment rates would be much higher. What's true is that autism can affect a person across many areas.

Another myth is that autism is over-diagnosed. If anything, the reverse is true, particularly in certain populations, including adults, women, and marginalized populations. Bellevue College's Autism Spectrum Navigators program recently moved out from under the Disability Center and under the Center for Career Connections in part so that we could include those who, for a myriad of reasons, could not get a formal autism diagnosis, and identified as autistic. Autism is classified as a Pervasive Developmental Disorder, and rightly so. Although the diagnostic criteria only looks at three areas that are behavior-based, autistic people can be affected by a number of co-occurring neurological and physical



disabilities. Some research is examining autism as a movement disorder, for example: www.ncbi.nlm.nih.gov/pmc/articles/PMC3556589/

While not all autistic people are affected in all the below areas, many are affected in several, and it's worth looking into when a student is experiencing difficulty in the classroom setting.

Possible Co-occurring Features

- Anxiety
- Auditory processing disorder
- Depression
- Difficulty with Prosody (tone of voice)
- Disorder of Written Expression / Dysgraphia
- Dyscalculia
- Dyspraxia
- Executive Functioning difficulties
- Non-verbal Learning Disability
  (an argument could be made that all autistic people have this)
- Obsessive Compulsive Behaviors
  (not necessarily rising to the level of OCD)
- Prosopagnosia or face-blindness
- Sleep disorders
- Slower Processing Speed
- Visual processing disorder

Other Myths

The Asperger's Genius – the truth is that a diagnosis of Asperger's includes people with average to above-average intelligence quotients, and autistic people have similar ranges of intelligence quotients to the general population, particularly when appropriate measures are given.

Autistic Savants – not all autistic people are savants, and not all savants are autistic. One in ten autistic people exhibit some savant skills, however, these skills are typically not the inordinate types of skills exhibited in the popular movie "Rain Man."

Meltdowns and Violence – research has shown that violence and autism are not linked, and meltdowns are not a result of an autistic person trying to get their way. Typically, a meltdown, when and if it does happen, is the result of sensory overload, or extreme overwhelm, and it is most often experienced by the individual as fear and an inability to control their body. For many autistic people, meltdowns become manageable by adulthood. Sometimes, though, particularly as a college student is in a transition state, or experiencing sensory overload, a meltdown can happen on campus. Typically, the student will need a quiet, safe space to gather themselves before they can interact and problem-solve. More on this topic in an upcoming post!

Unfeeling Autistics – although autistic people do generally show their feelings differently than neurotypical people, we do have feelings and we do care about others. Many autistics consider themselves to be empaths – meaning that they absorb the emotions of those around them, often to their own detriment.

Theory of Mind – closely related to the unfeeling autistic myth, the "Theory of Mind" myth states that autistic people lack a theory of mind and are unable to imagine what others are thinking. Research has shown that it is closer to the truth to say that both autistics

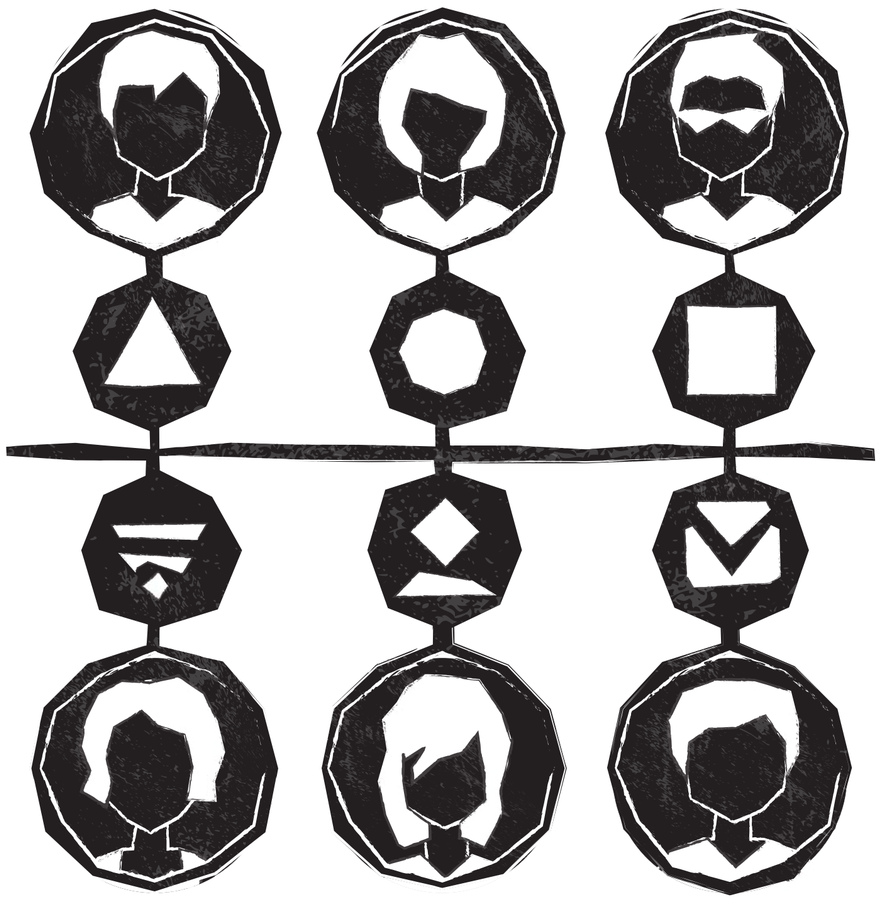
and neurotypicals find it difficult to imagine what the other is thinking, even to the point that neurotypicals reject autistic people prior to even meeting them. www.nature.com/articles/srep40700

Ableism

Much as racism is part of daily life for people of color, ableism is part of daily life for disabled people, including autistic people. This includes internalized ableism or feeling as if we should be doing better at "fitting in;" not needing accommodations or support; not being disabled.

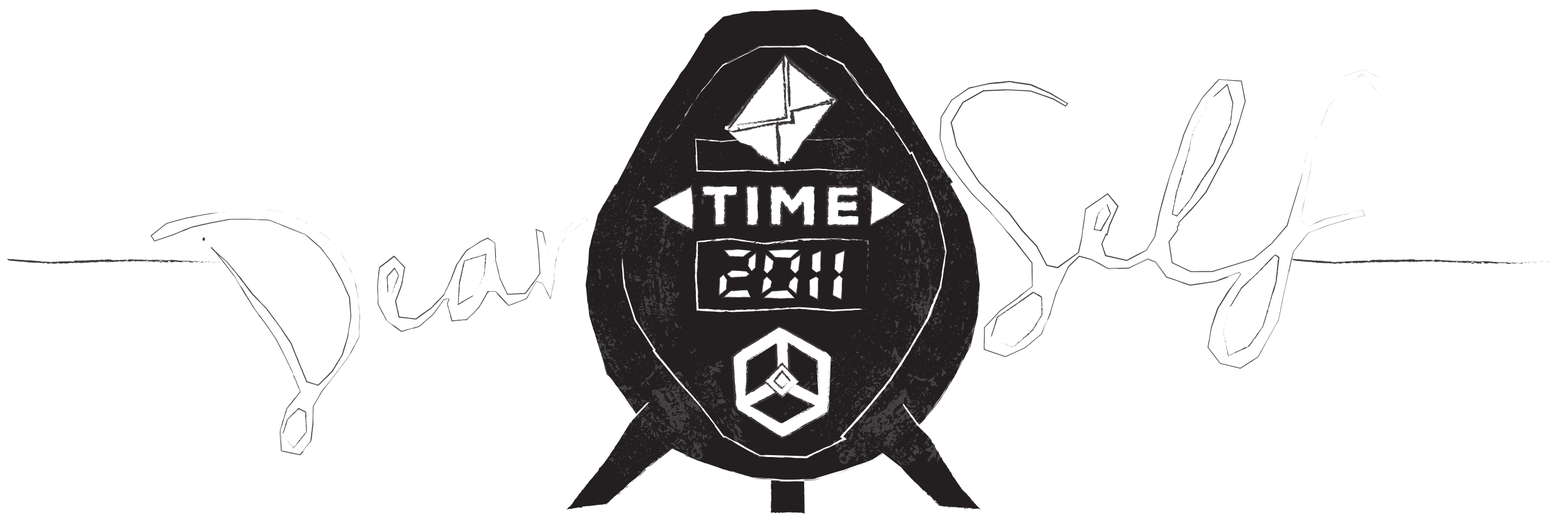
Ableism can take the form of microaggression in the form of "compliments" such as "you don't seem autistic to me!" or "you must be high-functioning!" or even, "you're so inspiring" and "so articulate." (If these seem far-fetched, all these and more are said on a fairly regular basis to both myself and my students.)

Ableism is also experienced as over-helping, or even passing a student who hasn't met the outcomes for a course. In the long run this is harmful to the autistic student, who isn't given the opportunity to learn the course material, to their classmates who are given a wrong impression of their autistic peer, and, to the institution as well, because it is sending unqualified people into the workplace.



Even more overt forms of ableism can be missed by instructors. These can include neurotypical students refusing to include autistic students in projects and study groups, rolling their eyes, whispering about autistic students, or even moving their chairs away when an autistic student sits near them. It can be simply ignoring the autistic student. And there is outright bullying, including "hazing" for laughs and physical violence that happens also.

The good news is that as an instructor, you can make a big difference in the lives of all your students, and you've already started by reading about autism cultural responsiveness! You can learn even more by reading the many posts on STS and elsewhere written by autistic advocates and activists.



Letter to My Former Self

by Justin Robbins

Dear Justin Robbins (2011),

Hello! It's good to finally talk with you. I've wanted to do this for years now. How are you doing? You don't have to say "good" or anything else like that unless you mean it. It's kind of odd how we (society) ask that question but there's only one acceptable answer.

You're just getting into Doctor Who, right? Isn't that show amazing?! Speaking of shows, I don't remember if we have HBO, but Game of Thrones is just starting and trust me, you want to get on that hype train. It's quite graphic, but it's one of the greatest shows ever made. Remind me: how into Magic: The Gathering are we at this point? Because the new set, Innistrad, is considered the greatest set of all time. I never got to draft it, but it's supposed to have been wonderful. Find the local gaming store and play a few rounds!

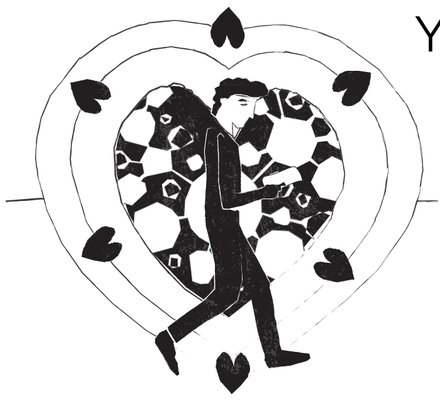
Of course, that's not the only reason I want you to draft Innistrad.

This year wasn't good to us. It hurt; I remember that. I remember how dark things got, like everything was collapsing in slow motion. I remember the… questioning, about who the hell we were, and whether… whether we should continue.

You're autistic.

I wish we knew that earlier; I wish we'd been told years earlier. I wish Mom and Dad were more accepting of the possibility. I wish that psychologist they took us to in 2000 did a more thorough analysis than seeing if we could talk and smile. But we couldn't control those things, even if we always were autistic.

Let's break down what that means.



You're passionate, more passionate than most people can imagine. Let me be clear: that's a gift. Your passions will lead you to opportunities that will change your life for the better. You always had strong self-confidence; I don't need to encourage that. You know not to surrender who you are just because it's not normal or popular.

You're also not good at socializing. This is the part of autism that can hurt. I know you can catch specific incidents, but it's a system-ic thing. I know how hard it is for you to make and keep friends. I know how hard it is at this point in your life. It's something I struggle with even now. Maybe I could try to help you?

Friendships are supposed to be reciprocal; both sides are supposed to benefit. You are not obliged to be in friendships that provide no emotional benefit to you. As autistics, we're taught, implicitly and sometimes explicitly, that our needs and wants should be wholly suppressed for the sake of others. That's not what friendship is; you deserve to be more than tolerated. If your friendships are parasitic, you have the right to try and change things or walk away. You also have a right to emotional honesty from your friends. It's important to note that your fellow students are still-maturing human beings just like yourself, but maybe you should sit down and calmly tell some of them how you feel.



Socializing comes in many different forms, from formal interviews to hanging out with "friends." In all cases, it is an extremely difficult but learnable and practicable skill. The only reason this isn't universally acknowledged is because it comes naturally to neurotypicals. You are also being held to unfair standards. Your passions are no less valid than other's interests, but you're the minority here. That means others' interests are ok to talk about ad nauseam, but yours aren't. I don't think that's fair. I still haven't mastered that happy medium between my interests and others, but you're at a social disadvantage because of your interests that's no one's fault, including your own.

Which leads me back to Innistrad, and why I want you to go to your local game store. If you go to a Magic: The Gathering event, the people there also really love Magic: The Gathering. Now you have something to connect over, and talking lots about it isn't considered bad. Social norms exist in context, and you can do things to change the context.

The most important lesson I can impart is that there is no neurotypical you. There is no different, better version of you. There is only you. You are the only version that ever was, and ever will be. Self-improvement is important, especially for people like us, but we will never be another person. I know who you are, and it's something to be proud of. High school will end; you'll have good memories and bad ones. And while I can't promise bliss, there's a bright shining light at the end of that tunnel. I'll see you then.

Love,
Justin Robbins (2018)



The Documentation Dilemma: Finding Support When a Formal Diagnosis is Unavailable

by Elinore Alms

Many autistic students lack access to official diagnoses. I'm one of those students, and I'm really interested in making programs accessible to students within and without DSO services.

When I was younger, I was a gifted student and I had a lot of social problems. I mean, I couldn't find a single friend until high school, when I met one friend who was with me until very recently. I had a rough time in high school and a couple years after graduating, I was homeless. Fast forward about a year and a half, and I had moved to central California and found a job working with autistic children. You should have seen me when I met these children; I bet my entire body lit up like a light bulb. I could see every one of my quirks in these children! Eureka! My obsessive research shifted from the mental disorders I was interested in after my parents were both diagnosed with bipolar disorder, to autism and neurodiversity in general. I know my dad has actually received an ADHD diagnosis since I began working as a behavior tech, so our family is clearly more neurodiverse than we first understood.

All of these developments really affected my desire to study autism and neurology, and that's why I'm currently a biology student at my local community college. Along this ride, I've come to accept my stims and other more visible traits but there are some issues I wish I had more help with, particularly co-occurring conditions which, of course, are more common with individuals on the spectrum. My wrists and other joints have been painful my entire life and I develop wrist ganglion cysts every year or two.

Unfortunately, I don't have access to healthcare, so I lack both an autism diagnosis and management for my wrist problems. Additionally, since I have no documented need for Disabilities Services Office (DSO) support,

I cannot use DSO services to help me get access to documentation of needs. Due to my inadequate information processing, it's incredibly difficult to get through paperwork, confusing goose chases around different departments, and the frustration that quick-ly builds up while I'm attempting to complete these tasks.

As a matter of fact, I attempted to go to college three times before succeeding last semester. Each time, it was always something like the FAFSA application, the assessments, or simply trying to navigate the school's online application process. To succeed this time around, I had to simply continue picking it up, getting one or two items filled out, and setting it back down over the course of about a year. When it came to assessment time, I pretty much just cried for two days straight, waiting for people to help me from step to step, building to building. And then, bam! I was enrolled in a college for the first time.

Dear lord, I never want another hidden autistic student to go through that again. So, I want to make some changes at my college and see where it goes. In "Autism 101 - Autism Cultural Responsiveness for Improved Interactions," Sara Sanders Gardner mentions that her school's autism program is no longer housed in Disability Services but instead in the Center for Career Connections. STS contributor Justin Robbins founded Coalition for Autism Support at Tufts University (CAST), which has made incredible changes for their autistic population. I want to combine these two qualities and make my community college truly accessible to people with autism and/or information processing disabilities.

My initial idea is to begin a club for neurodivergent students. I want to know if it's possible for us to set up one-stop accessible application workshops featur-ing peer-to-peer assistance. I will actually be meeting with our DSO director in October 2018 to learn more about accommodations and where we might begin to branch autism supports away from disability services.

When we talk about folding autistic and differently abled students into community colleges and STEM careers, what we're really talking about is best practices for everyone. It follows that when our most disadvantaged students' needs are met, we are leveling the playing field for all, with or without a "documented need." Thank you for believing in students like me.



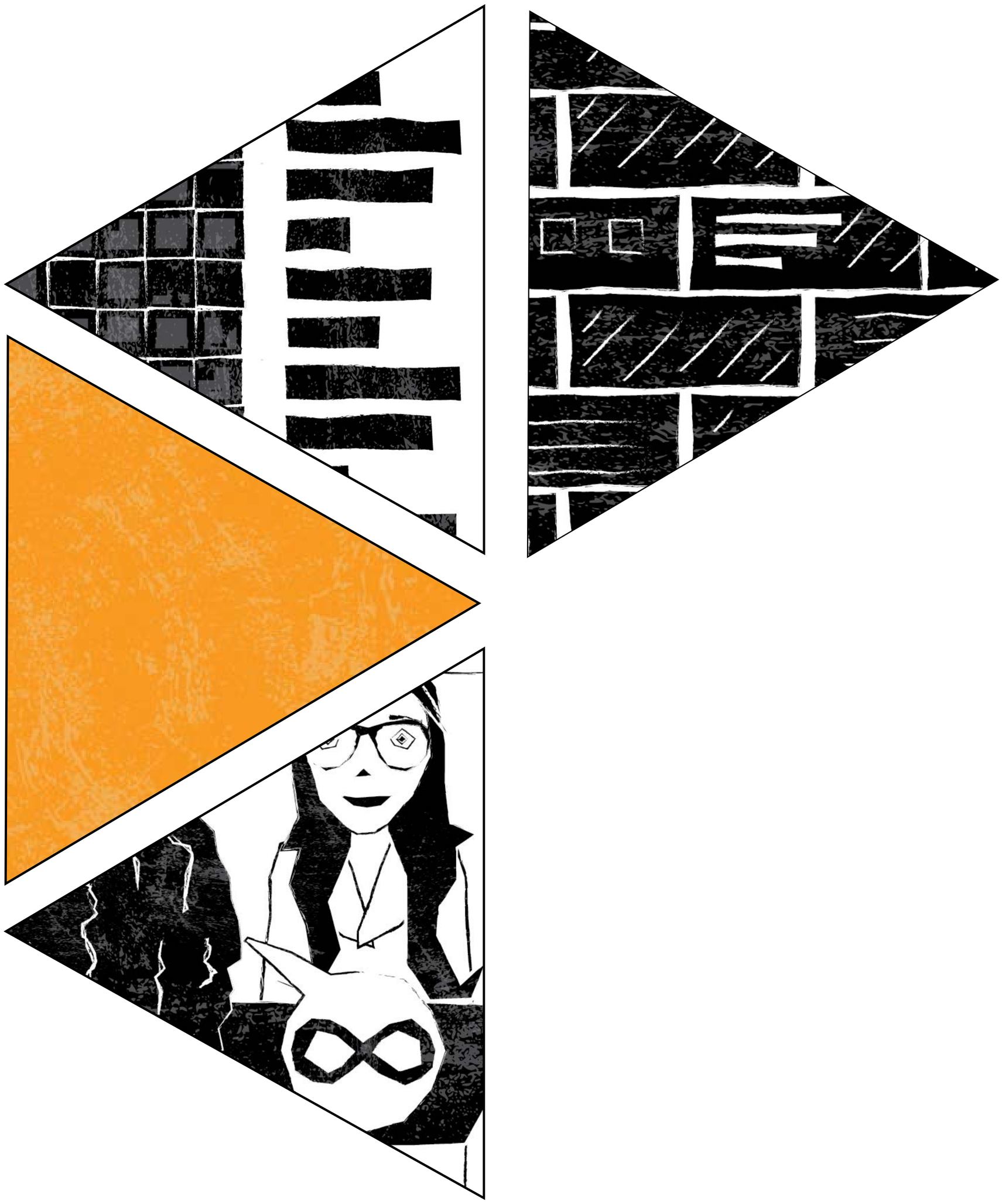
Journey Into STEM and Finding My Academic Voice

by Laura Gilmour

Graduate student Laura Gilmour shares how she became a Ph.D. candidate in psychology at the University of Alberta, where she is currently conducting research. Laura talks about many of the important steps she took to find this path, including switching majors in order to find a passion that fit with her scholarly strengths. Her self-assessment skills allowed her to see that some early goals would be particularly tough to achieve. Her persistence and confidence allowed Laura to keep seeking an academic fit where she could excel, as well as supportive mentors who would guide and challenge her.

https://www.youtube.com/watch?v=wz4LM_rfTJE&t=20s

STRATEGIES FOR ACADEMIC SUCCESS



In these posts, you'll hear from two of our best experts on time management and organization—so crucial for academic success! You'll also hear from a lecturer who helps demystify the sometimes-intimidating prospect of approaching your professors. One of the realizations that emerges from this section is that setting up a schedule and organizing your semester takes some effort, and it should be done as early as possible in the semester. However, taking that time and following these steps can make a significant positive impact in student success.



Autism and Understanding Hidden Curriculum, Part One: The Syllabus

by Katie Matthews

We call this series of posts "Hidden Curriculum" because the resources that we're carefully unpacking and explaining here often have implicit expectations that accompany explicit instructions and directions. These posts will support your better understanding of the resources at your disposal and help you make use of them more fully.

It's your first college semester. Whoop, whoop! You've been accepted to a school or program, paid your fees, bought a new laptop, and signed up for your first class. You're probably thinking, "Okay, now what?" Sometimes knowing what to expect from a certain professor or class can be hard to figure out. Fortunately, a course syllabus is often available for you to read before your class even meets for the first time.

So, what exactly is a course syllabus?

A syllabus is a document that serves as a guideline for the entire course. A syllabus will:

- ***include*** important information about the instructor or instructors, such as their email and office hours
- ***communicate*** what, when, where, and how students will learn
- ***outline*** what students need to do to be successful, through resources such as reading material lists and grading systems
- ***convey*** clear expectations in terms of student responsibilities
- ***explain*** any applicable administrative and/or disciplinary policies regarding things like absences, plagiarism, and class behavior

It will be your job as a student to make sure you obtain a syllabus, read it over, and keep it in your records. Some professors will email the syllabus to all the students or have it available online (usually available online via Blackboard, D2L, or another online classroom platform). Print out a copy if your professor does not hand out a hard copy in class. Keep the syllabus with your class notes and

assignments. You will refer back to it many times throughout the semester because it contains many pieces of important information such as the instructor's contact information, the course goals and learning outcomes, the required texts, major assignments, grading structure, course calendar, and any pertinent disciplinary policies. Since every professor is unique, these sections will differ from class to class and from college to college.

! Hidden Curriculum Alert: ***Not all professors will explain the whole syllabus to the class during the first week of class, but this does not mean you're off the hook for the rules, policies, and materials they choose not to discuss or emphasize. Some instructors will walk you through every minute detail (sometimes excruciating detail!) in their syllabus, but others will just say, "Read this outside of class. It's important, and I expect you to know the policies and abide by its rules." You might be tempted to think that instructors who don't spend a lot of time covering the syllabus don't think it's important, but they're just as likely to hold you to the rules as other instructors.***

Instructor and Course Information

This is often the first information on the syllabus, along with the course title and number, and it's where you will find your instructor's email address and office address, which will come in handy later in the semester if you need to get in contact with them. This beginning section might also include ***meeting time, meeting location***, and ***additional meeting times*** such as lectures occurring outside of regular class time, lab sessions, or online modules.

The course number sometimes starts with letters that relate to a school in the university or a certain area of study. For example, EN might refer to English. BS might refer to Biostatistics. The numbers following the letters will be unique to the individual course you've signed up for. Typically, the lower the number, the more introductory the class level is. For example, EN101 might be the most basic English class offered at a college.

The course number is typically followed by a restating of the ***description of the course*** that you may have read online or in the course catalog before signing up. Now is a good time to check that this is the class you want or need to fill your graduation requirement! Another thing to check in this area is the prerequisites, which are the courses you should have already taken to enroll in this course. If you see something that you have not completed, you might not yet be eligible to attend this class, and should speak with a counselor.

Course Goals or Learning Outcomes

The "Course Goals" are often listed towards the beginning of the syllabus. These might come back as major themes for papers, projects, and finals. ***The Course Goals or Learning Outcomes are what the professor has highlighted to be the most important concepts for students to learn.*** In other words, the professor will use assignments to check for understanding in these areas.

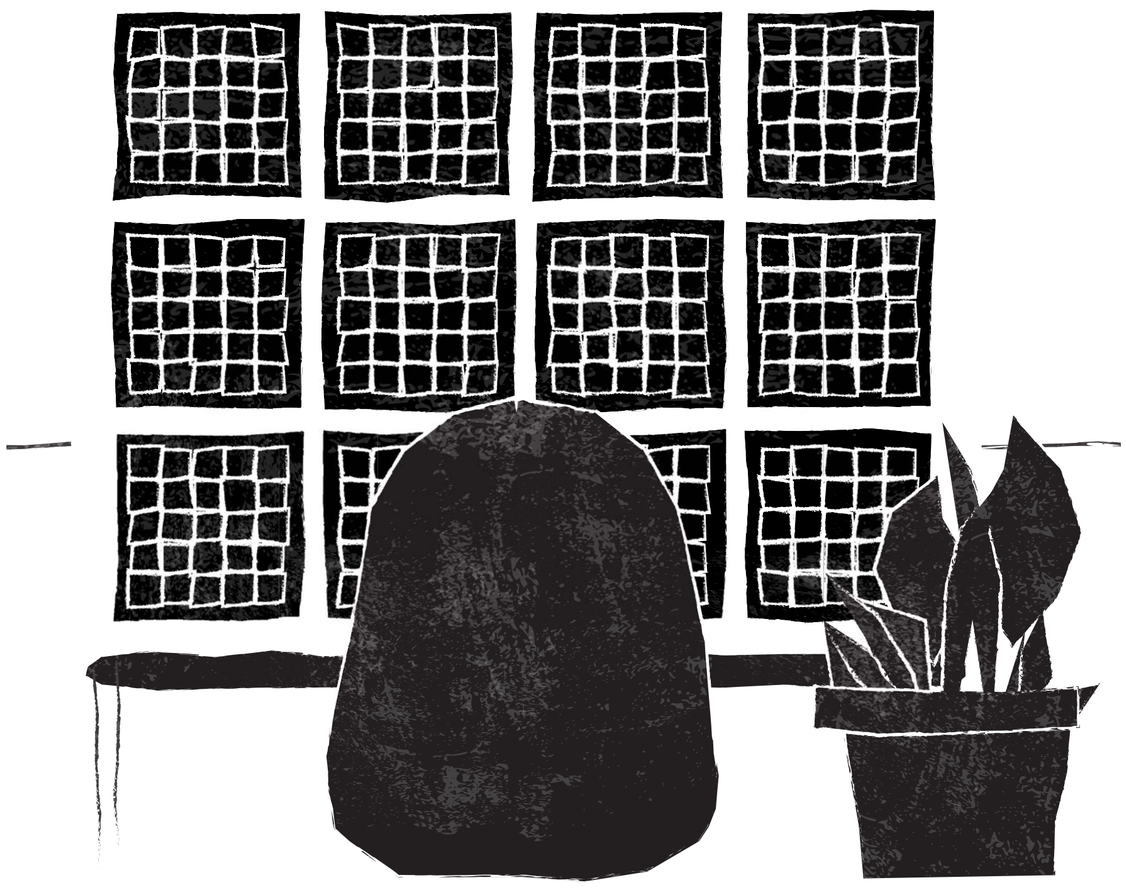
Tip: ***look back at course goals and learning outcomes when working on any large assignment or studying for a big test. They can help you focus on the most important information the teacher will be looking for in a project, paper, or test. If you can prove that you have a mastery of the learning outcomes by the final, you have been studying the right information!***

Course Texts

These are the books and written documents that the professor will expect students to have, read, and refer to during the semester. The professor will give certain pages or sections as assignments to read for homework. Other times, course texts are given as reference materials and can be checked out of a library or bought for a later assignment. Your professor might indicate whether these materials can be accessed or bought electronically as well. Either way, it is helpful to procure these books as soon as possible, in case shipping takes longer than expected, there is a wait list to order, or there are difficulties with downloading or opening the text on your computer or tablet. Sometimes on the first day of class, a professor will specify which texts are the most important to own versus rent, which can save money. Your professor may also differentiate between required texts and those which are supplemental.

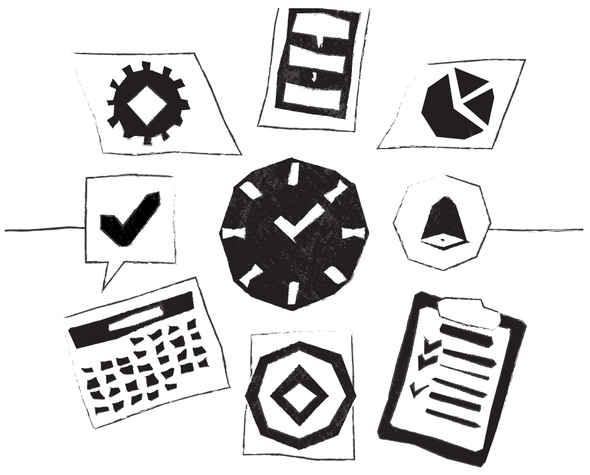
! Hidden Curriculum Alert: If your professor says you should buy or rent certain books and bring them to class, do it! Following directions and being prepared to use resources matter to your success. You may see some of your peers who don't do this, but not having your books communicates to the teacher that you're unprepared, unable to participate in related class activities, and less committed to learning the material than **some of your classmates—whether or not that's true!**

We will continue reviewing additional syllabi sections such as the course calendar, and common idioms and phrases used in course syllabi in future posts!



Strategies for Autistic Students Around Exam and Paper Due Dates

by Katie Matthews



Does an important due date ever loom in your future, causing you stress? You can see it on your calendar but aren't sure what to do to start or when to begin? Sometimes taking the first step in planning for a due date can be the hardest part about getting an assignment finished or feeling confident before a test.

The first step—and one of the most important—is to fill out a calendar for the entire semester including due dates, test dates, and any meetings you must attend in addition to class time. (See my post "Autism and Understanding 'Hidden Curriculum': Part Three, the Course Calendar" as well as Patrick Dwyer's "Use Lists, Schedules, and Calendars" for tips on making your calendar work for you.) Now, how do you know which assignments will take a full week of work, and which ones can be done in one day? Which tests will require an outline, study group, and hours of studying, vs. which will be simple to review for? Good news, there are clues:

- ***what*** the teacher says in class
- ***how*** weighted the assignment or test is on the syllabus
- ***whether*** the topic is listed on the syllabus as being core course information

Networking with classmates can also be a major factor in helping navigate these tricky situations.

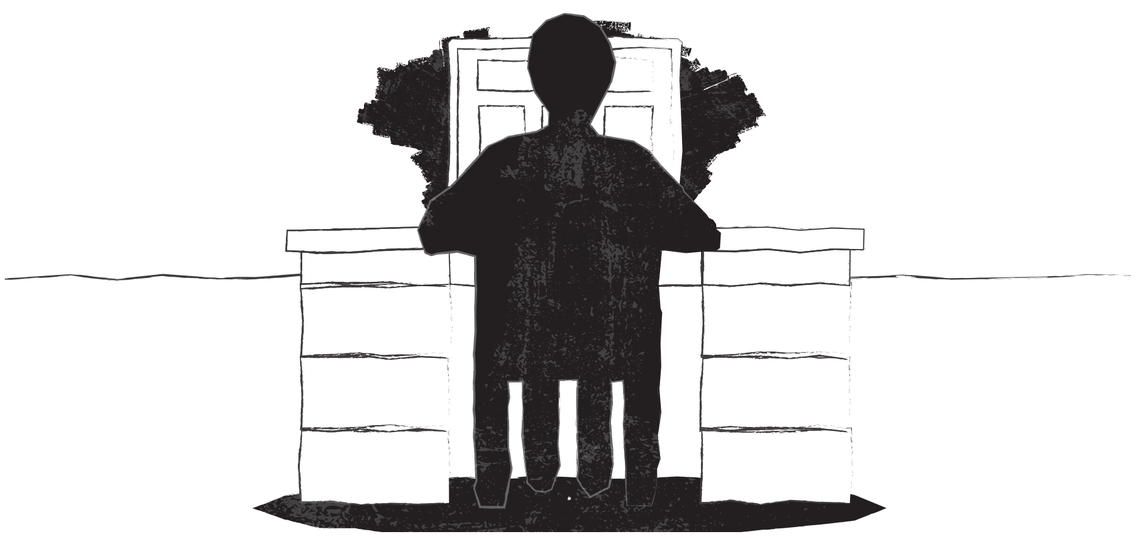
Unlike in high school, college teachers and professors will rarely explicitly review time-management and study skills with their students. If this is an area that you believe is especially difficult for you in general or is becoming challenging during a specific class, getting a tutor that has taken the class before or has managed their time well in college is a really savvy step. If you're not sure about how to find a tutor, there will be a tutoring center on your campus, and you can set up an appointment to explain your needs and be matched with a peer who can support your learning.

Studying for Class and Exams

In general, students are expected to study for two hours for every hour that they attend class, and sometimes three. That means if you meet for algebra class Mondays and Wednesdays from 1:00 p.m. to 2:00 p.m., you should plan on studying or working on problem sets for 4-6 hours additionally outside of this time.

Since everyone works and studies at their own pace, be prepared for this to fluctuate from week to week and to increase before a major test or for more difficult chapters. ***The best way to prepare for this increase in study time is to schedule it into your calendar.*** If you do not carve out time to commit to each class to study, you jeopardize falling behind and having to cram and lose sleep right before a big test. Taking a

test with a tired brain is not a great recipe for success! You can add permanent time chunks into your weekly schedule such as studying from 9:00 a.m. to 11:00 a.m. before a class, or 7:00 p.m. to 9:00 p.m. at night. Holding yourself accountable will increase the likelihood of you actually getting down to studying and not wasting time/getting sidetracked. Make sure that you give yourself nights off for other events such as social commitments, family dinners, and general relaxation time. Some students find that if they study all night Wednesday, they will look forward to a night off for video games on Thursday and therefore be more motivated to study during their studying chunk.



Think about what type of studying usually works best for you. If you have felt well prepared for a test by reviewing flashcards, then you can begin making the flash cards as review after each lecture. By test week, you will have a deck of cards ready to be flipped through! Some students learn better through rewriting notes that were taken during a class PowerPoint or typing up handwritten notes. Again, this can take place after each class meeting to really internalize the material. These study techniques can also be started immediately after each lecture, and then reviewed closer to the test date. This will make you feel confident in having acquired information through study and review over the course of the semester, rather than thinking "I ***NEED*** to study for 5 hours for this exam!"

Some students benefit from reading notes or flashcards aloud, or listening to lectures again that they recorded in class. Sometimes making and taking a practice test can be an efficient way to practice problem-set material. You definitely do not want to leave course reading assignments until right before the test! ***The week of the test should be about reviewing the material, learning anything that is still unclear, and studying with a tutor or study group.*** If you have used time each week to review the material presented in class and read as outside material, then you won't have to worry about putting in 10 hours at once for any given test or cramming. Plus, ***"research shows that spacing learning over time produces substantial learning benefits"*** (Thalheimer, 2006).

Another consideration is ***WHERE*** and ***WITH WHOM*** to study. Finding a place that does not have distractions, is motivating, and allows for some breaks can be a major factor in the quality of your study sessions. Find a study partner who you can bounce ideas off of—someone you can ask questions of but who does not distract you from being efficient.

Writing Papers

When it comes to writing papers, you can never be too far ahead of the game. As soon as the assignment is announced, begin brainstorming topic ideas that seem to pop out as interesting to you. ***Look at the due date, and look backwards in your schedule to see what you want to accomplish each week.***

For example, you will want a final draft completed at least a day or two before the due date so you have time to review it with fresh eyes before handing it in. Give yourself a few days before that to have the rough draft done so that you have time for grammatical and referential editing. A week before that, you will want 75% of it complete, then 50%, then 25%, etc. The first week or two after a paper is assigned should be about doing research to gather resources, stopping by the library, and creating an outline. These time lines will of course vary by total time given to complete an assignment. If a teacher just gives a few nights to write a 2-3 page paper, they won't have as many expectations regarding citations, length, and grammatical complexity. Another clue for how long to work on a paper is how weighted the assignment is. For example, if the paper is going to make up 5% of your total course grade, you should not be putting in 80% of your study time that week into it. Likewise, if a final paper is 30% of your total grade, you should expect to use a good chunk of your time in the weeks leading up to the due date to help create the best piece of work possible. This principle will apply to tests as well. A weekly quiz that is worth a few percentage points won't require the same diligence and planning as a final exam or midterm.

People Resources

A great resource available on any college campus is the librarian. ***University librarians are trained to help students time manage around assignments and they have the resources and search engines available that are the most up to date and efficient to use!***

Don't forget to check your course syllabus and the assignment grading rubric for additional information regarding what is expected for each assignment. The easiest way to underperform on a writing assignment is forgetting to include a mandatory section or resource. Sharon Sorenson, author of *How to Write Research Papers,* has additional helpful tips to consider when writing a college paper beyond planning for the timing here: https://www.petersons.com/blog/writing-a-research-paper-at-colleges-and-universities/

Lastly, as mentioned earlier, never forget to write to your professor or see your TA with any questions before a test or about a reading assignment. Professors generally want to see students succeed, and will often offer study tips or help guide you to the area most pertinent to review. An important clue that material will resurface again on an exam is when professors repeat it often in class, put in bold or italics on a PowerPoint, or ask students questions about it. When you review the course syllabus for the core pieces of information that are expected learning outcomes, these will be the areas most likely to be tested on and written about in the semester. These can be clues for what to include in your assignments and studying and help guide you towards success.

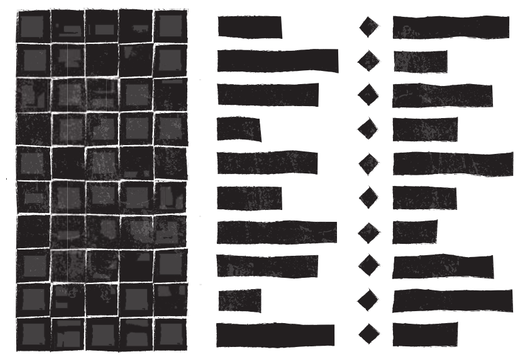
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The Ultimate College Guide: Lists, Schedules, and Calendars for Autistic Students

by Patrick Dwyer



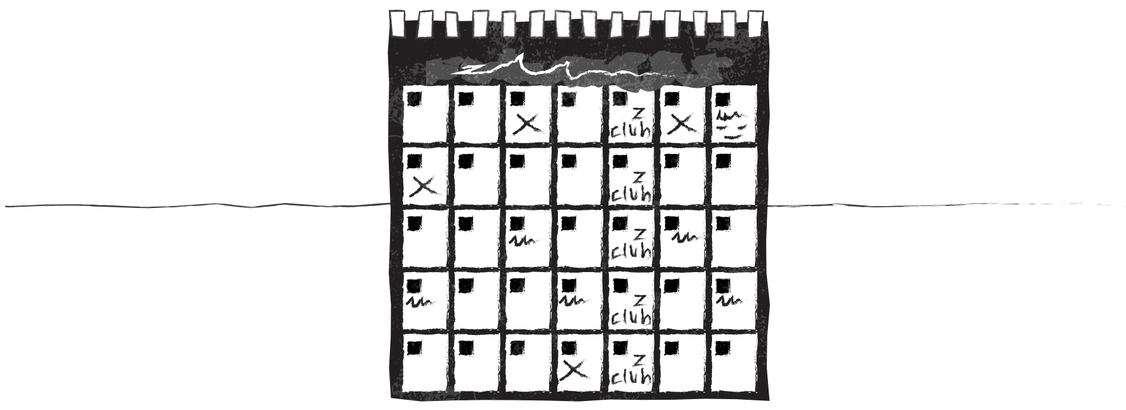
You may already have read my "pontification" about the importance of using lists, schedules, and calendars. If you didn't, I argued that using lists, schedules, and calendars is a relatively straightforward way of not only increasing your grades, but also decreasing the stress you'd be dealing with if you were always having to finish assignments and study for tests in last-minute rushes. Scheduling your time well is one of the simplest and most effective strategies to achieving success at college!

But how can we schedule our time well?

Using Calendars

When I think about time management, I think about the nature of time as a dimension. As humans, we exist in a four-dimensional space-time. Three of these four dimensions are very accessible to our sensory perception. I can look to the left and the right, I can look up and down, and I can look forwards and backwards, and in every direction, I see the world stretching out before me. If I'm walking towards an obstacle, I can see the obstacle and I can change course to walk around it.

I can't perceive time this way. I can't look into the future or the past and see it stretching out ahead of me. I can't directly observe obstacles ahead and prepare for them. Instead of ***perceiving*** the future, we ***prospect*** into the future. We use prospection to imagine what the future might be like, and then we can use these imaginings to prepare for the future. But this imagining is all happening in your mind! In a college setting, where there are a lot of things to imagine and prepare for over the course of a semester, it's easy to overtax your prospective abilities and forget something. (And it certainly doesn't help matters that there's a part of us that ***wants*** to forget so we can go and do fun things instead of studying...)



To help our poor overwhelmed prospective mind, we need to convert time into a dimension we can easily perceive: a spatial dimension. This is what a calendar does. Suddenly, with a calendar, we can clearly see the obstacles and barriers ahead of us: obstacles and barriers that had previously existed only as dim ideas in our prospective imaginings.

At the beginning of the semester, in each of your college classes, you should receive a syllabus. This document will contain a list of all the assignments you'll be asked to complete as part of the course. As soon as you have the syllabus, you should read it. Look for all the information about assignments. When is each

assignment due? How much of your grade is it worth? Look at the requirements of the assignment – are there any intermediate steps?

As you gather this information, you can copy it onto some kind of calendar that allows you to visually see the semester sweeping ahead of you. This could be a nice big physical wall calendar, or it could be an app like Google Calendar that allows you to zoom out to a monthly view. I suppose you could even use something a little different, like a visual time line, as long as it visually shows you that broad sweep of time. When you copy the assignments, make sure to give yourself a sense of how important the assignment is. When you add each assignment to the calendar, include a note indicating what percentage of your grade it represents, and do something to highlight the biggest assignments.

If you like, I suppose you could also add readings to your calendar (or time line), although you don't want to make it too crowded.

Once you are finished with your calendar (or time line), you'll be able to see the semester unfolding ahead of you. For example, you might suddenly be able to see clearly that Week 7 has three midterms right after one another, and that you had better start studying well in advance to avoid a last-minute rush. You'll be able to see that the really big term paper in such-and-such a class is coming up in a few weeks, and that you really ought to be starting your research for the paper so that you aren't rushing to come up with a topic idea later. You won't be accidentally overlooking obstacles, and you won't be able to trick yourself into forgetting them either.

But even if we can see the work ahead of us, how do we hold ourselves to account and make sure that we do our work on a day-to-day basis? Even if we can't deny that the obstacles in the future exist when we are actually looking at the calendar, it's very easy to get distracted. To hold ourselves accountable on a daily basis, we need another tool.

Using Lists and Schedules

To hold ourselves to account, we need to break down this giant calendar (or time line) and give ourselves smaller day-to-day goals. We don't want to do this at the beginning of the semester, because new things we hadn't anticipated will "come up" and we don't want to be constantly modifying and redoing our daily schedules and to-do lists, but we can plan out the days immediately ahead of us.

We can take the grand calendar with the entire semester and supplement it with a daily schedule. This daily schedule doesn't just have to show your studying, but can also show you when you have to be in class, when you have to be volunteering or working, or any other commitments on your time. This will not only remind us when we have to be going to places, but it also tells us how much time we will have available to study. There are many different day-to-day schedules we could try. We could use a calendar app, like Google Calendar. (I don't think you want to clutter up your grand calendar and daily schedule by mixing them together, but Google Calendar should allow you to create additional calendars, so you could keep them separate.) You could also use a weekly or daily timetable from a schedule book. I sometimes use the low-tech option of writing to-do lists

in a Word document, which can be effective, although it has the disadvantage of not visually showing how much time each commitment will consume over the day. Whatever tool you choose, you can use it to write down daily goals. For example, on the particular day I am writing this post, I have the following daily goals: write the post you are reading now, pick up a couple of books at the library, attend three meetings, finish some graphs I'm preparing for an analysis, send some emails, do a logistic regression analysis (don't ask), and download some articles. Should you fail to complete all of your daily goals, you can simply move any incomplete goals to the following day. (If you start to get a giant pile-up of incomplete goals, that's bad: you're falling behind.)

Giving yourself daily goals like this also allows you to hold yourself to account. Think of some rewards you can give yourself for good behavior, and if you finish everything you planned in a day, reward yourself! If you have a good and legitimate reason for not finishing everything, reward yourself for your effort. One good reward can be leisure computer time. (You might also try rewards on a shorter time frame, like 10 minutes leisure computing for every 50 minutes of studying.)

Setting Goals

But how do we set our goals in the first place? Well, that's where the grand calendar comes in. We can generate our daily goals by looking at the grand calendar, reminding ourselves of the work that lies before us, and determining what we need to do today in order to finish our work on time. That means figuring out how long it will take to finish each of the tasks ahead of us and starting our work early enough that we will finish by the due date. Unfortunately, humans aren't good goal generators. There's something called the "planning fallacy": we underestimate how long we need to get stuff done (Buehler et al., 1994). It's a known psychological phenomenon. You see, we can easily forget about some step or another in a project, or we can fail to anticipate some complications that will end up arising. We can also forget that we need to spend time doing things like eating, errands, and so forth. As a result, we invariably end up taking longer to get things done than we assumed, and we can have last-minute rushes.





How, then, do we accurately estimate how long it will take to do something? Well, the best approach is to think of something similar you did in the past and remember how long that similar thing took. If the two projects are more or less equivalent, then it's reasonable to assume the current project will take about as long as the previous one did. Again, I repeat: this analogical method is the most reliable way of estimating how long it will take to complete most tasks.

If you don't have any similar examples to draw on yet, you can try guessing, but it's good to make it a conservative guess. Add on some extra time to deal with unanticipated problems.

Here's one resource you shouldn't rely on too much when estimating how long a task will take: other students. Don't trust other students if they tell you not to worry about a project yet. It's quite likely that they should already be doing the project and that they'll end up having a stressful last-minute rush.

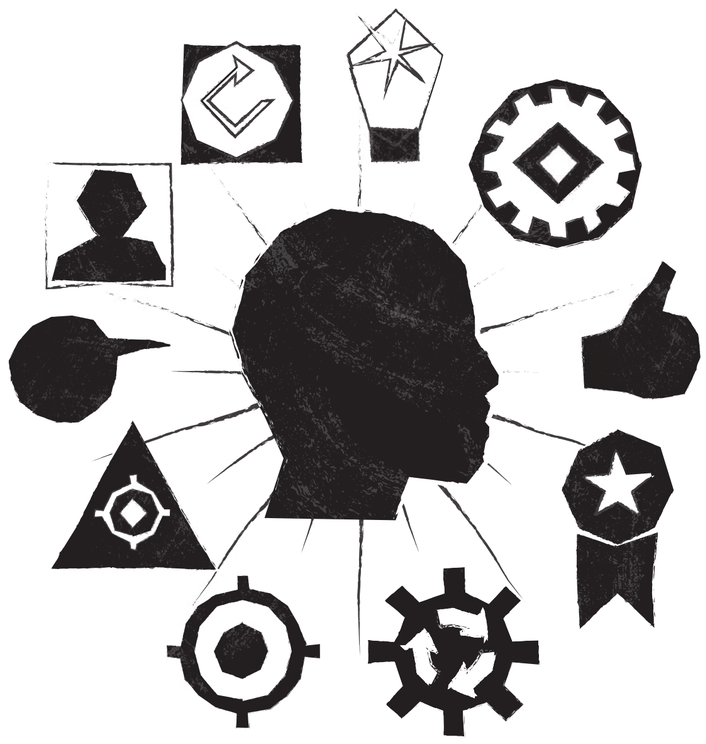
You might also hear the general rule that you should spend two or three hours studying for each hour you spend in lecture. This is probably true on average, but I wouldn't necessarily try to apply this to specific contexts. The amount of time you should be studying will depend a lot on the general demands of the class relative to other classes, the amount of background knowledge you have about the material, and whether you have any specific projects or tests coming up in the class.

Of course, when you're guessing how long it will take to do something, you'll have to take into account the nature of the project. Readings are pretty straightforward: you read them around the time that the instructor assigned them, and you can get a sense of how long it will take from the page count, the density of the text, etc. (But I do have a confession to make here: If I wouldn't be quizzed on a reading in class, I would sometimes do the reading after class instead of before class, since it can sometimes be easier to understand the reading after hearing the instructor speak about it.)

Studying is a bit more complicated. Generally, you want to understand the concepts behind the material. You don't want to study by memorizing a bunch of random facts. You also want to spread out your studying, because having a bunch of shorter, well-spaced-out practice sessions results in better learning than having a long last-minute cramming session (Cepeda et al., 2006).

Finally, when it comes to papers and larger projects, the paper's required length and its proportion of your final grade will tell you something about the amount of time you'll need to spend on it. Even after you block off time for researching and draft-writing, you will still want to leave lots of time for review and revision. Not only is it a good idea to spend about as much time editing and revising your paper as you did writing the initial draft, but you'll want to leave gaps between writing and revision, so you can approach the draft again with fresh eyes. (Here are some other hints about papers: if you are choosing a topic for your paper, go to office hours and discuss the topic with your instructor. Also, unless you have a take-home exam, you are usually allowed to ask other people for feedback on your paper.)

This sounds like a lot of information, I know, but once you've been at college for a while, it will get easier to accurately calculate how early you should start working on any given project. This is partly due to the reliability of that analogical estimation method: the



reliability of estimating how long things will take based on how long similar things have taken before. As you gain college experience, you'll have more past projects to draw on.

Putting it All Together

Now, once you have an idea of approximately how long a given task or project will take, you can look at your grand calendar, see the task or project approaching, and generate goals to ensure that you have it done in time. Each time you meet a goal, cross it off your list. Crossing tasks off a list can be a very satisfying feeling. And whenever you finish all your tasks on time, give yourself a reward.

If you adopt this approach and implement it well, you will not only find yourself avoiding last-minute rushes and doing better on your assignments, but you'll also find yourself avoiding the stress and anxiety that comes along with those last-minute rushes. You'll be able to sleep soundly knowing that you have everything under control.

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Tips for Autistic Students: How and When to Meet with a Professor

by Katie Matthews



Have you ever had a comprehension question about material you've been reading for class, a concern about the way a test was scored, or uncertainty about which topic to choose for a writing assignment?

Most of the time, the professor or course instructor/teaching assistant (TA) is the most knowledgeable and most direct resource available to you to help unpack and solve these problems. Unfortunately, sometimes it can be confusing to figure out how to approach a professor and when the best time to reach out is.

Luckily, there are some general guidelines that teachers and professors expect when communicating with students.

1. Check the Syllabus

Many teachers explicitly write office hour times and locations on the course syllabus. This may also be found on their course website if they have one. Office hours are generally the best time to schedule a talk with your professor. If you know that office hours become very busy, you can reach out via email or stop by after class to see if there is a better meeting time for you both.

Tip: Try saying or writing something like this: "I know that many students stop by during office hours and it can be difficult to talk privately. Do you have any time after class or on another day where we could arrange to meet one on one to talk about X?"

2. Know What You Want to Talk About and Come Prepared

This seems straight-forward, but often a student may be upset about a test grade or unhappy with the score they received on a problem set and won't have a direct question to ask the professor. Professors do not want students coming to their offices to complain about a grade. The best thing you can do is review the test or material and come up with a specific type of problem that you are unclear about or a specific question number that you believe might have an error on an exam.

If you cannot pinpoint a certain area of difficulty, it might be better to email a TA or meet with the TA to help them go over the assignment with you. Often the TA will have more time to spend looking over the whole test or assignment with you than the professor. If you have work to show how you got to a certain answer or evidence behind something you wrote, bring it with you!

Tip: Some examples of what to say are: "I am unclear why choice B. was not the correct answer for problem number 7." Or, "What sort of evidence did you want me to include to flush out my second paragraph?"

3. Do Not be Afraid to Email the Professor but be Cautious of Over Emailing as Well.

Be conscious of the fact that professors receive ***MANY*** emails on any given day, and they might not be able to respond to all of them every night. If you have reached out via email and have not heard a response, wait a few days before checking in. In the meantime, you can always write the same question to the TA if you have not heard back from the professor. If it has been a week or more, you can safely write a follow up email to see if they forgot to respond.

Tip: You can email something like this: "Dear Professor X, I am writing to check in since I have not heard back regarding my question about using X as a resource for our upcoming assignment. Is this something that I can chat about with you via office hours?" This subtle reminder may be enough to have them send back a response, or they may prefer to meet in person.

4. Be Mindful of Your Timing

Is the test in two days? Then expecting a professor to get back to you very quickly to help guide your studying may not be realistic. In this scenario, it's better to contact a classmate or tutor with anything that you're still unclear about. If the material warrants more review or you need to do more work, you may be perceived as unprepared if you ask the professor a question so late. Also, look at what time it is at night. If you send an email at 1:00 a.m., a busy professor might not have enough time to read your email and respond before the next class. In general, it looks more professional to send emails before 9:00 at night.

5. Know Your Professor's Style.

This can be the hardest part about communicating with professors. Some enjoy helping students brainstorm ideas, whereas some just want to read the finished products.

Listen for clues in class about their communication style. Do they complain about getting small or silly questions from students, or do they continuously encourage students to stop by their office to chat? Do they hang around after class answering questions in person, or do they leave quickly right after? These clues can be hard to decipher but can make the difference between being viewed as an eager learner, or someone who is too reliant on help. Professors typically welcome giving advice but they also want to see creative independent-thinking as well. Consider ways to show you have been thinking about something yourself before asking a question.

Tip: Try something like this: "I have been very interested in writing our assignment on [this theory] because it really exemplifies what we have been discuss in class, but I am unsure if it meets all of the criteria you laid out on the rubric." This type of question shows that you have read the rubric, know the assignment well, and have been thinking about areas you are interested in ***BEFORE*** coming for help.

Lastly, remember to always be respectful and professional when corresponding with a professor or course instructor. Using "Dear" to begin emails, using the professor's last name (i.e. Professor Brown), and signing off with a "Thank you," or "Sincerely" go a long way!



Best Ways for Autistic Students to Speak with Their Professors

by Julia Leverone

Approach your teachers? That's easy for us to say! But what if you've hardly been on a college campus before, and everything is fresh, new, and maybe a little bit intimidating? Not to worry. We've invited Dr. Julia Leverone to briefly demystify the process and to provide some helpful tips, too. Thanks, Dr. Leverone!

https://www.youtube.com/watch?v=PvQOTObBqOs

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Content Creator Elinore Alms is a Registered Behavior Technician in Fresno, California. She works part time as an in-home positive behavior supports provider and is a biology major at Fresno City College. In her spare time, she watches anime and cares for her many pets.

Content Creator Julia Leverone, M.F.A., Ph.D., is a Dallas-based university lecturer of language and writing (Spanish, poery, and essays), and is a poet and translator herself. She also has community college teaching experience and tutors students one-on-one in various disciplines. Her Facebook handle is @JuliaLeverone and her website is julialeverone.com.

Content Creator Justin Robbins is a recent graduate of Tufts University, having double majored in biology and history. In addition to being an advocate for other autistic people, he enjoys modern board games, great worldbuilding, and truly awful puns.

Content Creator Katie Matthews is a part time speech and language pathologist and part time professional runner. Katie received both her Bachelor's and Master's degrees from Boston University in Speech, Hearing and Language Sciences; and Speech-Language Pathology, respectively. She also trains on the Boston Athletic Association High Performance Team. Katie has experience in public and private schools as well as private clinic settings. She works with children and young adults with a variety of disabilities, including those with Autism Spectrum Disorders. Katie loves to share executive functioning and planning tips along with the more traditional social language strategies to help students succeed.

Content Creator Laura Gilmour is a PhD candidate in educational psychology at the University of Alberta and an autistic self-advocate. Her research has centred around issues surrounding autism across the life span ranging from sexuality, online gaming, employment, and autism culture. She is actively involved in guest lectures in the Edmonton community which share both her personal and research experience.

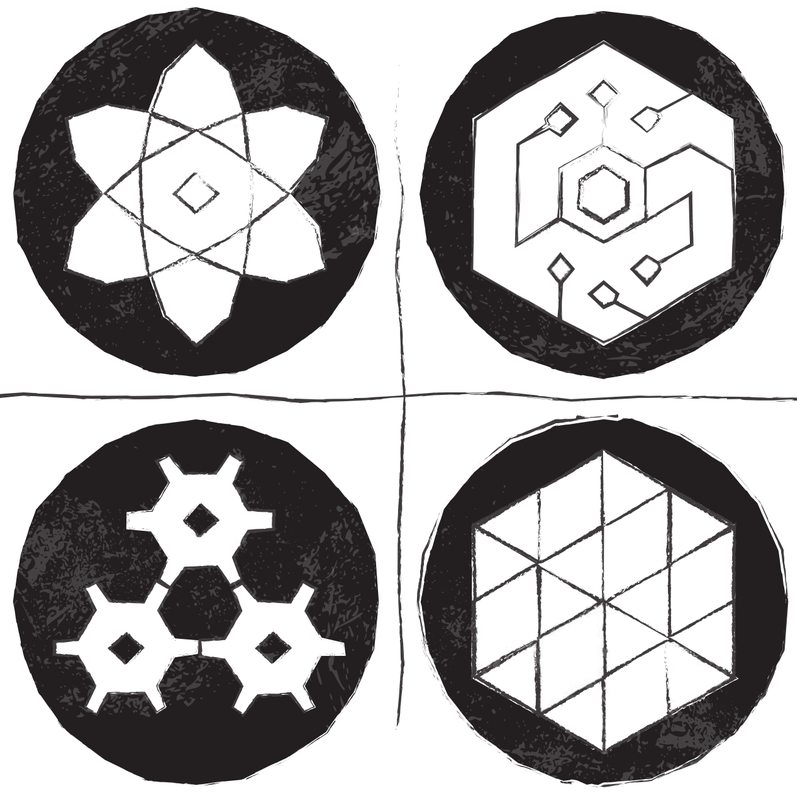
Content Creator Patrick Dwyer is an autistic graduate student in the psychology department at UC Davis with a broad interest in helping to ensure that autistic and neurodivergent people can lead fulfilling lives. He plans to use eye-tracking and electrophysiology to explore the heterogeneity of the autism spectrum and different pheno-types of autism, and is particularly interested in studying sensory processing and sensory sensitivities in autism. He has also facilitated peer-support groups for other autistic college students. You can find more of Patrick's writing on his blog at autisticscholar.com.

Editorial Board Member Sara Sanders Gardner is an autistic professional living in Redmond, Washington, near Seattle. Sara is the designer and Program Director of Bellevue College's Autism Spectrum Navigators program, now in its 8th year, serving over 200 students. Sara also consults with Microsoft's U.S. Autism Inclusive Hiring program, and leads training sessions with prospective managers and team peers of individuals hired through the program, where they discuss areas such as social justice, autism as a culture and a disability, and communication styles.

Thanks as well to the designers that contributed to the look and design of this text.
Links below for more information on their work.

Illustrations: Benjine Gerber
https://www.graphicouture.com/

Book Design: Marlene Ozel
https://www.linkedin.com/in/marlene-ozel-b7a933a8/



We hope you found these resources helpful! Since launching in August 2018, we've added more than 80 blogs, videos, interviews and other materials to the STS (www.stairwaytostem.org) website and our YouTube channel.

We hope you'll join STS. Being a member of our community means you can post on our forums, where you can start conversations and get answers to important questions from our contributors and other community members.

We also hope you'll check out our other resources, and follow us on Facebook Twitter and Instagram.

Thanks for advocating for and supporting autistic students!
Feedback on this text, STS, or any other questions or comments can be directed to: info@stairwaytostem.org



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