

Social Stories

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Social stories were created by Carol Gray to help Autistic students and those who support them (parents, teachers, therapists, etc) with specific behaviours (such as using the washroom, lining up, going to a restaurant, etc.). They are designed to be specific and personal, and include relevant personal history and future projections (Gray, 2011). Each social story is written in a positive way of what behaviours are desired in a particular situation. For example, I might write, “I put my hands under the faucet to turn on the water” in a social story about using the washroom at school.

Gray defines several factors for the writing of social stories:

1. **Goal:** Why am I writing a social story?
2. **Discovery:** What is the student doing? What might help?
3. **Three parts and title:** Like a typical story with a beginning, middle, and end.
4. **Format:** Must be able to be interpreted literally (ie. no idioms).
5. **Voice and vocabulary:** 1st or 3rd person (never 2nd person); includes past experiences and future outcomes; accurate portrayals of people and situations (ie. no magical thinking); non-judgemental and positive wording, ie. not saying “don’t do this” or “doing this is bad.”
6. **'Wh' questions** are answered. Be specific! Limit social stories to one location or issue.

New baby in the home? This can be a social story about when I need to be quiet, when Mom and Dad need my help, and why babies cry.

Struggling with car safety? The social story can discuss why we use a seatbelt, why we can’t yell at the driver, how to get in and out safely, and what to do when we’re bored.

As Gray states, “story is the common thread of human culture and communication that, regardless of topic or purpose, supports us as we interpret, learn, share and organise our experiences” (p. 152).

Reference:

Gray, C. (2011). Social Stories™. In C. Goode (Ed.), *Sensitive stories: Teaching children with autism spectrum disorders to understand, self-regulate and avoid social missteps* (pp. 151–158). Jessica Kingsley Publishers.

*Please note that Carol Gray owns the trademark to “Social Stories”



EDITOR AND TEACHER

Social Stories: Where to Start

First, you need a goal or purpose for the Social Story. Is the student anxious to use the bathroom at school? Are they struggling to honour the personal space of others? Keep the goal singular and simple - don't try to tackle everything in one story! **What do you want the student to do?**

Second, remember that social stories should be positive and discuss the wanted behaviours, not the unwanted behaviours. Words like "don't" or "inappropriate" are not the right fit.

Third, start writing! I use Google Slides for writing so that I can easily add pictures or photos. It's easy to edit and share from there. Once the first draft is done, I send the story to the rest of the team and/or family for feedback.

Fourth, print and share! I tend to print two pages per sheet, then laminate and put on a ring. But you could do it any way that works for your context.

Fifth, Social Stories are not discipline tools or punishments. They should be used as positive, encouraging tools.

Social Stories are an inexpensive and personalized way to support socio-emotional goals (Wright et al, 2024)

I get a special cape to wear
so that the cut hair falls
on to the floor.



The hairdresser will use a
comb, scissors, and a buzzer.
BZZZZZZ



These pages are part of a social story on getting a haircut. Images were created with Adobe Firefly.

USING ARTIFICIAL INTELLIGENCE: HOW TO START CREATING IMAGES

Wondering what images to use? I suggest using photos of the child and those in the child's life whenever possible! Kids love seeing themselves and their people in the book. A picture of the child doing the desired behaviour is best.

For example, I could write "I always wear a helmet and sunglasses when I ride my bike. My helmet is blue because blue is my favourite colour! Let's stay safe!"



Using the above photo of myself as a composition reference in Firefly, I prompted "a cartoon woman wearing sunglasses and a blue bicycle helmet." Firefly automatically did an outdoor background for this photo but if it hadn't, I would prompt it with "outdoors" or "outside" or "in a park."

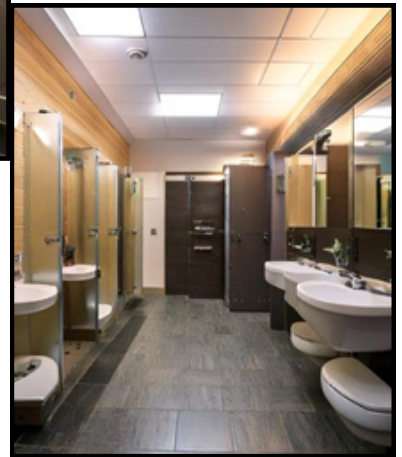
In my experience, Adobe Firefly defaults to blonde-haired fair-skinned people unless prompted otherwise.

USING ARTIFICIAL INTELLIGENCE: WHY WE STILL NEED HUMANS

In some cases, using AI has proven to be difficult. When I asked for “3 bathroom stalls with doors,” the image to the right was returned. AI doesn’t have the background knowledge that you and I have!

“Public bathroom with stalls and sinks” did a little better. However, things are still placed oddly.

Experimenting with a variety of prompts is helpful. Sometimes it doesn’t make sense as to why one prompt works over another. Practicing with your AI tool is the best way to learn it!



There is excellent advice on prompting AI at [this site](#). It was on this site that I learned that I can give other AI tools (such as Google Gemini) an article about what I want it to do. For example I could have it read an article on writing fiction for children when I prompt it to write a short story. However, the richness of the story is lacking greatly in comparison to a well-written children’s book.

“Generative AI text generators like ChatGPT, (...) cannot craft writing purposefully for an audience; the capacity to know, empathise with and desire to influence audiences is rapidly emerging as an essential human quality that may future-proof the need for human writers.” (McKnight and Gannon, 2024).

Reference:

McKnight, L., & Gannon, S. (2024). Hive writing: A post-pandemic, audience and AI-aware manifesto for writing pedagogies. *English in Education*, 58(1), 74–88.

USING ARTIFICIAL INTELLIGENCE:

ISSUES WITH SKIN COLOUR AND RACE



To make images of children with darker skin, I prompt Firefly with “a cute 4 year old cartoon girl with dark skin wearing purple clothes, putting on boots.” I have had success with “brown skin,” “light brown skin” or “black girl.”

When asking for a “family of Indian (or Chinese) descent” Firefly may add the country’s flag and will dress people in stereotypical clothing. I have noticed improvement in this a little bit but Firefly continues to default to images like the ones below, where the families are in stereotypical clothing and the background is what one might see in a poorly researched movie.



USING ARTIFICIAL INTELLIGENCE: FINE TUNING IMAGES

Creating the right image may be the most challenging part of making a social story! AI can be tricky to prompt and it has been important for me to remember that I'm not 'teaching' it, and it doesn't remember what I did yesterday. Images can be used as references but by doing that it may just keep the clothes or the position the same, rather than keeping the same character.



The above image was created with the prompt "a small boy with brown skin holding hands with a white woman with blonde hair" to represent a student and his teacher. AI tends to struggle with hands and feet.



I created the above image in Adobe Firefly with the prompt "a cartoon woman wearing glasses with blonde hair waving." On the first try, the woman's hand was detached!

I like using "cartoon" or "cute cartoon" when using AI as I find that when I don't use those, the images look like a real person who the child doesn't know, and this could create difficulty for the child.



Prompting Firefly with “a young cartoon boy with dark skin putting on a shoe” returned these two photos. Note the odd position of the boy’s left leg in the left photo. If you look closely at the cover of the magazine, you’ll see unusual feet and legs on the image. I haven’t yet found a work-around for these distortions so I try to reword the prompt repeatedly, adding positions or background. Remember that in using a program like Firefly, you’re not teaching AI, you’re learning how to prompt it to get what you want.



This image came from the prompt “a young cartoon girl putting on a green t-shirt in her bedroom.” I don’t like how the shirt is shown as it looks like she’s holding a second shirt.

It takes some practice and patience to work with Artificial Intelligence. In trying to fix the image on the left, I prompted “a young cartoon girl wearing a white tank top, pulling a green t-shirt over her head” but it made things worse and her left arm appears to be in two pieces.



Again, by asking for a “cartoon girl,” the returned image is of a Caucasian girl.

Troubleshooting



Using the image on the left as a 'style reference,' I prompted "a cartoon boy playing with a toy train." Note the odd position of his legs in the middle image. Trying again by adding a t-shirt colour brought the image on the right, which created very odd feet.



By changing the prompt to "a cartoon boy sitting on the floor, playing with a toy train on a train track," I was able to get a more appropriate image.

A quick Google search will give good advice on how to use AI to create images, but I find that practicing with it is the best way.

Please note that I have a paid subscription to Adobe Firefly. This allows me to create more images than I would be able to for free.

RESEARCH ON ARTIFICIAL INTELLIGENCE IN EDUCATION: THINGS TO THINK ABOUT AS YOU USE AI

Many educators worry about the loss of critical thinking and the use of Artificial Intelligence (AI). Kong, Lee, and Tsang (2024) looked at students using AI for academic writing and found it can be a component of teaching and learning provided that students are using critical thinking and reflection.

Noting that students are already using AI systems when they use social media, DiPaola, Payne and Breazeal (2022) stress the importance that our students not only be aware of AI but also be “ethical designers” of it. They helped students to participate in machine learning that trains AI.

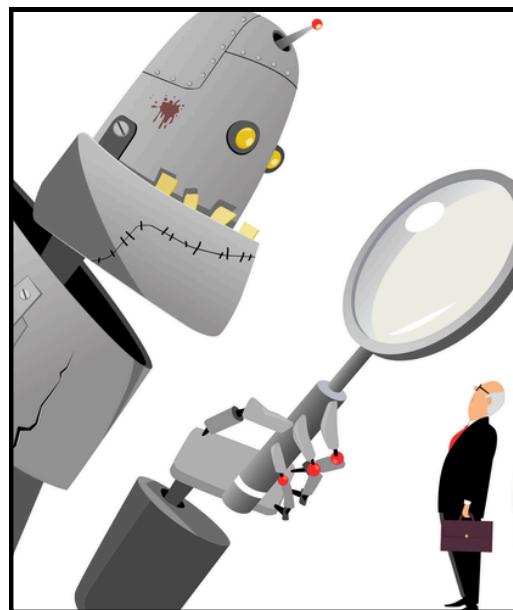


Image: <https://tutalt.com/blog/2018/05/14/ai-isnt-biased>

There is bias in Artificial Intelligence systems because of the machine learning that they were ‘trained’ on (DiPaola, Payne and Breazeal, 2022). This ‘algorithmic bias’ may go as far as identifying dark-skinned women as men due to the facial features that AI was trained on. The algorithms were generally trained on light-skinned men. Since humans have bias and humans train AI, AI will also have bias.

References

DiPaola, D., Payne, B.H., & Breazeal, C. (2022). Preparing children to be conscientious consumers and designers of AI technologies. In S.C. Kong & H. Abelson (Eds.), *Computational thinking education in K-12: Artificial intelligence literacy and physical computing* (181-205). The MIT Press.

Kong, S.-C., Lee, J. C.-K., & Tsang, O. (2024). A pedagogical design for self-regulated learning in academic writing using text-based generative artificial intelligence tools: 6-P pedagogy of plan, prompt, preview, produce, peer-review, portfolio-tracking. *Research and Practice in Technology Enhanced Learning*, 19, Article 30.

Social Stories for Gestalt Language Processors

So far we've looked at why to use Social Stories and how to generate AI images for those stories. Let's look now at how to write Social Stories for Gestalt Language Processors.

Gestalt Language Processors process language in chunks, so when writing Social Stories for them it's important to use phrases that can be broken up for a variety of uses.

Here are some examples:

Let's go to the _____!
Playing with _____ is fun!
I like _____ with you!
Let's stay safe!
Being safe helps everyone!
I can wait for my turn!
When I'm done with _____, I return it to the box.
I keep my hands on my body.
I see _____ doing _____.
Feelings are all okay!
I can ask for help.
I sit with my hands on my legs.
I use a quiet voice in the hallway.
I put my hand up when I need something.



This image was created with the prompt "a cute cartoon boy with dark skin holding hands with his mother and father while walking."

Remember to keep the language positive and literal!

Amy gets ready quickly and that means we get a fun song and dance! We're so happy!



CONCLUSION

Social Stories are a “low-cost, low burden intervention” (Wright et al, 2024). With the ease of personalizing Social Stories for any context, any child, in any language, there is really no reason to *not* write Social Stories. Wright’s research found that Social Stories had a noticeable positive impact on socio-emotional goals! They can be used digitally and in print, at home and at school. They can even be used in small or large groups.

In other research, done at the University of Alberta, Karkhaneh et al (2010) did a literature review of studies done on Social Stories. Although they stressed the need for more research, they also found overwhelmingly positive results for a variety of outcomes, including reading intervention, game playing skills, behaviour modification, and emotion recognition.

In conclusion, I hope I have convinced you to start writing Social Stories for, and with, the children and families that you support. Keep them simple: one goal at a time, and keep them short: 8-10 pages is enough. Remember to personalize everything and adjust as you go. I think you’ll be surprised at how fun they are to write and how effective they are to use.

References

- Karkhaneh, M., Clark, B., Ospina, M. B., Seida, J. C., Smith, V., & Hartling, L. (2010). Social stories to improve social skills in children with autism spectrum disorder. *Autism*, 14(6), 641–662.
- Wright, B., Blackwell, J. E., Bell, K. J., Teige, C., Mandefield, L., Wang, H. I., Welch, C., Scantlebury, A., Watson, J., McMillan, D., Standley, E., Attwell, L., Carrick, H., Taylor, A., Taylor, O., Hodkinson, R., Edwards, H., Pearson, H., Parrott, S., Marshall, D., Varley, D., Hargate, R., McLaren, A., & Hewitt, C. (2024). Autism spectrum social stories in schools trial 2 (ASSIST-2): A pragmatic randomised controlled trial of the Social Stories™ intervention to address the social and emotional health of autistic children in UK primary schools. *Child and Adolescent Mental Health*, 1-11.