

SS-GEN: A Social Story Generation Framework with Large Language Models

(Technical Appendix)

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Background: Why should we explore to generate Social Stories automatically?

Autism Spectrum Disorder (ASD) is a lifelong neurodevelopmental disorder characterized by impairments in social interaction, communication, and restricted or repetitive behaviors. These challenges affect approximately 1% of children worldwide (Zeidan et al. 2022), totaling over 75 million people, with the number continuously growing.¹ Early intervention plays a crucial role in supporting essential development and enhancing the life quality for autistic individuals (Lynn Kern Koegel and Bradshaw 2014).

Social dysfunction is a universal, defining impairment for individuals with ASD (Hyman et al. 2020). They often misunderstand or fail to pick up on social cues such as body language, facial expressions, gestures, and eye contact, which others typically notice. Social Story™, pioneered by educational consultant and former teacher Carol Gray in 1993 (Gray and Garand 1993), aims to empower children and older people with ASD by enhancing their understanding of social situations and encounters in their lives, and thereby supporting their ability to be active participants in life's routines and activities (Gray 1998). Social Story™ has shown promise in improving overall social skills, enabling children with ASD to understand and face situations that trigger stress and anxiety (Capperucci, Piccioli et al. 2020), make friends, regulate responses, and exhibit fewer inappropriate behaviors (Balakrishnan and Alias 2017; Aldabas 2019). To be effective, Social Stories must be written following strict guidelines (Gray 2010), customized for the specific child, and used at the appropriate time.

Caregivers, such as parents (Green et al. 2006; Hess et al. 2008) and special education teachers (Smith and Gillon 2004; Hsieh, Lynch, and Madison 2018), are the primary practitioners of the Social Story™ intervention method. They often refer to resources like *The New Social Story* (Gray 2010) or utilize online websites to learn how to craft new Social Stories. Sometimes, they seek assistance from

therapists, such as psychologists and speech pathologists, to develop or customize existing Social Stories. However, their active participation (Rios and Scharoun Benson 2020) in interventions is often constrained by financial limitations and restricted access to necessary services and resources (Rogge and Janssen 2019; Zhao et al. 2024), which can impede the implementation and effectiveness of Social Stories for children with ASD.

There is a growing emphasis on digital support for ASD interventions, aiming to reduce costs while increasing accessibility, user-friendliness, and effectiveness. The SOFA application (Constantin et al. 2017), designed through human-computer interaction, helps caregivers and children with autism use manually written Social Stories. In contrast, our approach provides digital support by helping caregivers automatically generate effective Social Stories using simpler instructions and smaller language models.

Implementation Details

Querying the GPT-4o API

We use different sets of hyper-parameters when querying GPT-4 API for different purposes. These hyper-parameters are found to work well with the GPT-4 model ("GPT-4o" engine). We listed them in Table 1. For GPT-4o, OpenAI charges \$0.005 per 1000 tokens for input and \$0.015 per 1000 tokens for output as of May 2024. The generation of our entire dataset cost around \$200.

Parameters for SFT and Inference

To compare results from various models of different scales (2B, 7B, 8B), we use the same Title-to-Story prompt as shown in Figure 1. This prompt is designed to enhance the models' ability to complete the story based on a given title within simple but crucial constraints.

Additionally, we report the hyper-parameters used in all SFT and inference experiments in Table 2. These hyper-parameters include the learning rate, the LORA settings, the inference settings that are crucial for replicating our results and understanding the performance differences we have observed between the models.

¹ According to the US CDC (<https://www.cdc.gov/ncbddd/autism/data.html>), about 1 in 36 children in the US has received an ASD diagnosis, with boys being four times more likely to be identified with autism than girls. While autism is common in many low- and middle-income countries, its exact prevalence remains unknown.

Table 1: Hyper-parameters for querying OpenAI API in different experiments.

Experiments	Temp.	Top_P	Freq.	Pres.	Beam	Max Length	Stop Sequences
			Penalty	Penalty	Size		
Explain Chapters	1	0.95	0	0	1	100	None (default)
Expand Chapters	0.7	0.5	0	2	1	1024	"\n\n", "\n16", "16.", "16."
Generate Titles	0.7	1	0	2	1	1024	"\n\n", "\n16", "16.", "16."
Generate Stories	0.7	1	0	2	1	1024	"Autistic", "autistic", "Autism", "autism", "You", "you"
Evaluate Models	0	0	0	0	0	1024	None (default)

Table 2: The hyper-parameters we use respectively for Supervised Fine-tuning (SFT) and Inference.

	num_train_epochs	learning_rate	lora_alpha	lora_dropout	lora_rank	target_modules
SFT	5	5e ⁻⁵	16	0	8	v_proj, q_proj
	max_new_tokens	top_p	temperature	num_beams	repetition_penalty	length_penalty
Inference	1024	0.7	0.95	1	1	1

Title-to-Story for SSGen

Develop a concise, clear, straightforward, positive and supportive Social Story titled "{title}" for children and teens with autism, 200-300 words, that promotes their social understanding and boosts their participation in daily activities, fostering independence and confidence.

Title: {title}

Figure 1: The prompt is designed to enhance the language model’s ability to complete the Social Story content given the Social Story title.

Constraint-Driven STARSOW

The proposed Social Story dataset for SS-GEN, constructed using the refined strategy STARSOW, relies on various prompting templates to elicit the generations from Large Language Models. Here we provide our detailed prompt templates for each stage of the constraint-driven strategy STARSOW. Specifically, these include templates for explaining chapters (Figure 3) and expanding chapters (Figure 4) in **Taking Root**, generating diverse titles (Figure 6) in **Branching Out**, and completing qualified stories (Figure 9) in **Bearing Star Fruits**.

{ Base Contextual Setting }

Imagine a Social Story book designed as an effective and meaningful approach to help children with Autism Spectrum Disorder (ASD) understand and navigate various social situations through stories. The ultimate and deeper goal is to empower children and older people by enhancing their understanding of social situations and social encounters in their lives, and thereby supporting their ability to be active participants in life’s routines and activities.

The book contains chapters on different themes that are crucial for social interaction, emotional understanding, and so on.

Figure 2: Base contextual setting within STARSOW.

Prompt for the Chapter Explanation

{ Base Contextual Setting }

Given a chapter and story titles in the chapter as below:

[‘Chapter’: {chapter}, ‘Social Story Titles in the Chapter’: {title list in the chapter}]

Please use one concise sentence (beginning with a verb) to explain the chapter’s focus, which highlights how the chapter supports ASD children in developing corresponding critical skills and understandings. You must just give the explanation without any other outputs.

The Explanation:

Figure 3: Template for chapter explanation in **Taking Root** of STARSOW.

Prompt for the Chapter Generation

{ Base Contextual Setting }

Please come up with a series of Chapters for this book, along with Explanations about the chapter’s focus, which highlight how the chapter supports ASD children in developing corresponding critical skills and understandings. Note: non-repeating and in the format of [chapter]:[explanation].

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1. *{chapter}*: {explanation}
2. *{chapter}*: {explanation}
...
8. *{chapter}*: {explanation}
9.

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Figure 4: Template for chapter node expansion in **Taking Root** of STARSOW.

Title Generation Example

Chapter: {chapter}
Chapter Explanation: {explanation}
Social Story Titles in the Chapter:

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1. {title}
2. {title}
...
15. {title}

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Figure 5: Template for the in-context title-generation examples in **Branching Out** of STARSOW.

Prompt for the Title Generation

{ Base Contextual Setting }

Please come up with or complete a series of potential Social Story titles given a chapter and its corresponding explanation. You must just give the Social Story Titles in the chapter without any other outputs.

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{Title Generation Example 1}
{Title Generation Example 2}
...
{Title Generation Example 8}

Chapter: {chapter}
Chapter Explanation: {explanation}
Social Story Titles in the Chapter:
1.

```

Figure 6: Template for title generation in **Branching Out** of STARSOW.

Story Generation Example

[Book Chapter]: The Chapter {chapter} which {explanation}.
[Social Story]:
1. # Title #:
{title}
2. # Introduction #:
{introduction}
3. # Main Body #:
{main body}
4. # Conclusion #:
{conclusion}

Figure 7: Template for the in-context story-generation example in **Bearing Star Fruits** of STARSOW.

Social Story Quality Assessment

We incorporate the Quality Assessment Criteria we proposed in the main paper into both GPT-4 and human evaluations.

Prompt Strategy for GPT Evaluation Here we provide prompt templates for GPT-4 evaluation on the dimensions of Coherence (Figure 10), Descriptiveness (Figure 13), Empathy (Figure 14), Grammaticality (Figure 11) and Relevance (Figure 12). Each template is designed to prompt GPT-4 to consider whether the generated stories meet the checklist questions for each respective dimension, enabling a thorough and comprehensive evaluation.

User-friendly Evaluation Website To standardize expert evaluations and improve efficiency, we develop a user-friendly internal website which is used in the above human evaluation.

The evaluation process is straightforward and organized as follows:

(1) Homepage (Figure 15): Users can register and log in, selecting either the role of an administrator or a user. This ensures that access and functionalities are appropriately assigned based on the user’s role.

(2) Story Management (Figure 16): Administrators manage model-generated texts. This includes adding new data, deleting outdated or incorrect entries, updating existing information, and viewing specific data batches to ensure accurate and up-to-date management of the content.

(3) Task Distribution (Figure 17): Administrators assign data evaluation tasks to selected users. This distribution process ensures that tasks are automatically and evenly allocated to the selected group of users.

(4) Task Viewing (Figure 18): Users can view the specific evaluation tasks assigned by administrators. This page provides detailed information about the tasks, enabling users to understand the progress of their evaluations.

(5) Evaluation and Annotation (Figure 19): Users score and annotate Social Stories generated by different models according to the predefined Quality Assessment Criteria. This page also collects user preference rankings for the generated texts, providing valuable feedback.

Story Generation Criteria

Criterion 1 (Defined Process and Goal): The Social Story should accurately describe a context, skill, or achievement (e.g., dinner time, bath time, waiting in line) to help the ASD child better understand what is happening during a specific situation that they might find confusing and/or distressing. It must be in a format that is safe, descriptive, and meaningful. Avoid any self-deprecating or negative references about the audience.

Criterion 2 (Audience Understanding and Topic Identification): Utilize relevant information to improve the understanding of the audience in relation to the situation, skill, or concept. Identify the specific topic and focus on the most critical information. Celebrate achievements where possible.

Criterion 3 (Structure and Format): Each story should have a clear #Title#, an #Introduction# that identifies the topic in a positive way, a detailed #Main body# describing the issue of the situation that has been identified as the focus of the story, and a #Conclusion# that reinforces the main information and trying to end on a positive note. Tailor the format to the individual abilities, attention span, learning style, and interests of the audience.

Criterion 4 (Voice, Tone, and Vocabulary): Maintain a positive and patient tone, and ensure the language is literally accurate and clear, make the ASD child audience feel safe and accepted. Be cautious not to misrepresent the audience's experiences. Never blame the bad behaviors, but say it in a positive way, e.g., "I will try to wait in line. My mom and dad will be proud of me."

Criterion 5 (Guiding Questions): The story should try to answer relevant 'WH' questions (Where, When, Who, What, How, Why) to provide context.

Criterion 6 (Literal Accuracy and Verb Precision): The story should provide literally accurate information and use verbs accurately. Never guess the ASD audience reaction (eg: never write that "I will have fun from it" because the guess may not be accurate and be hurtful.)

Criterion 7 (Ensure Descriptiveness): The Story should ensure that the number of descriptive sentences is more than twice the number of coaching sentences, the more the better. Descriptive sentences are sentences that describe the facts relating to the situation clearly and objectively, whilst coaching sentences are sentences that describe or suggest responses or actions. While ensuring descriptiveness, this story can incorporate a mix of descriptive, perspective, coaching, self-coaching, team-coaching, affirmative, and partial sentences.

Criterion 8 (Narrative Perspective): The Story must be written from the First and/or third-person perspective. Never use the second to avoid aggression. If you need to explain negative behaviors you can only use the third person (eg, "Sometimes children find it difficult to share their toys.")

Figure 8: Template for strict criteria of Social Stories.

Prompt for the Story Generation

I want you to act as a Social Story writer for SLPs who take care of children with Autism Spectrum Disorder (ASD). You are now writing a Social Story book to provide ASD children with socially meaningful information that is accurate and presented in a positive and reassuring manner. The book contains different Chapters and each Chapter has different specific Social Stories. The stories must be brief, clear, and directly relevant to the intended audience, particularly individuals with autism.

Given the information about the [Book Chapter] where the Social Story to be generated is situated, and given a [Social Story] #Title# under the given [Book Chapter], your task is to complete the [Social Story] with only three parts #Introduction#, #Main body#, #Conclusion#.

Your Social Story Completion process should follow the below Criteria:

{ Story Generation Criteria }

{ Story Generation Example 1 }

{ Story Generation Example 2 }

{ Story Generation Example 3 }

{ Story Generation Example 4 }

NOTE:

The total word count of the generated #Introduction#, #Main body#, #Conclusion# must not exceed 400 words.

Try to repeat the #Title# in the #Introduction# and #Conclusion# to reinforce the main message. Additionally, Social Story often uses parallelism to make itself catchy, and key information can be emphasized through the use of parallel structures and a call-and-response approach.

Feel free to conceive and pen down a vivid and engaging backstory, delving into the experiences you imagine for the audience from their past, present, or future, which enriches the context when elucidating a concept or item. And It's best to include past tense, present tense, and future tense in the Story. For instance: "Last year, the people brought wrapped gifts. Hunter and I are hoping they will do that again! I told Grandpa Hill that I wish they wouldn't wrap the gifts. He says many people like to wrap gifts, so his guess is that they will wrap them this year, too."

[Book Chapter]: Chapter {chapter} which {explanation}.

[Social Story]:

1. # Title #:

{title}

2.

Figure 9: Template for story generation in **Bearing Star Fruits** of STARSOW.

<p>Coherence Evaluation (CH.)</p> <p>As an expert in Autism Spectrum Disorder (ASD) education, please evaluate the Coherence of the generated Social Story, and provide a rating from 1 to 5 (1 being the worst, 5 the best). Consider the following questions during your evaluation:</p> <ul style="list-style-type: none"> - Does the story have a clear beginning, middle, and end? - Q1: Does the social story have a clear structure, including a title, introduction, body, and conclusion? - Are the transitions between structural parts smooth, and is the story content reasonable and easy to understand? - Q1: Is the introduction related to the body? - Q2: Is the body related to the conclusion? - Q3: Is the conclusion related to the introduction? <p>Social Story Title: {title}</p> <p>Social Story Content: {story content}</p> <p>Please rate the Coherence (1-5). Directly output the score in the first line, and provide feedback explanation in the second line (no more than 100 words).</p>
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Figure 10: Template for coherence (CH.) evaluation using the GPT-4o engine.

<p>Grammaticality Evaluation (GA.)</p> <p>As an expert in Autism Spectrum Disorder (ASD) education, please evaluate the Grammaticality of the generated Social Story, and provide a rating from 1 to 5 (1 being the worst, 5 the best). Consider the following questions during your evaluation:</p> <ul style="list-style-type: none"> - Are there any grammatical or spelling errors in the story? - Does the story use appropriate punctuation and sentence structure? <p>Social Story Title: {title}</p> <p>Social Story Content: {story content}</p> <p>Please rate the Grammaticality (1-5). Directly output the score in the first line, and provide feedback explanation in the second line (no more than 100 words).</p>
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Figure 11: Template for grammaticality (GA.) evaluation using the GPT-4o engine.

<p>Relevance Evaluation (RE.)</p> <p>As an expert in Autism Spectrum Disorder (ASD) education, please evaluate the Relevance of the generated Social Story, and provide a rating from 1 to 5 (1 being the worst, 5 the best). Consider the following questions during your evaluation:</p> <ul style="list-style-type: none"> - Does the generated story clearly revolve around the scenario or intervention goal described in the title? - Are the details in the story consistent with the theme of the title (the goal of intervention)? <p>Social Story Title: {title}</p> <p>Social Story Content: {story content}</p> <p>Please rate the Relevance (1-5). Directly output the score in the first line, and provide feedback explanation in the second line (no more than 100 words).</p>

Figure 12: Template for relevance (RE.) evaluation using the GPT-4o engine.

<p>Descriptiveness Evaluation (DC.)</p> <p>As an expert in Autism Spectrum Disorder (ASD) education, please evaluate the Descriptiveness of the generated Social Story, and provide a rating from 1 to 5 (1 being the worst, 5 the best). Consider the following questions during your evaluation:</p> <ul style="list-style-type: none"> - Are there more descriptive sentences than directive sentences in the story? - Q1: Do the descriptive sentences accurately describe interactions or events, and explain the reasons behind people's thoughts, words, or actions, including perspectives and affirmative sentences? - Q2: Do the directive sentences gently guide behavior? Are the directive sentences moderate and clear? - Q3: According to the GR-Eight formula, are there more than twice as many descriptive sentences as directive sentences? <p>Social Story Title: {title}</p> <p>Social Story Content: {story content}</p> <p>Please rate the Descriptiveness (1-5). Directly output the score in the first line, and provide feedback explanation in the second line (no more than 100 words).</p>
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Figure 13: Template for descriptiveness (DC.) evaluation using the GPT-4o engine.

<p>Empathy Evaluation (EM.)</p> <p>As an expert in Autism Spectrum Disorder (ASD) education, please evaluate the Empathy of the generated Social Story, and provide a rating from 1 to 5 (1 being the worst, 5 the best). Consider the following questions during your evaluation:</p> <ul style="list-style-type: none"> - Does the story use an appropriate narrative perspective that resonates with individuals with ASD? - Q1: Does the social story avoid using the second-person perspective to prevent being too direct? - Q2: When describing negative behaviors, does it avoid using the first-person perspective to maintain the dignity and self-esteem of the audience? - Does the story consistently convey a positive and patient supportive tone? - Is the story's expression clear and accurate? Does it use language that is easy to understand? - Does the story use appropriate vocabulary? - Q1: Does it use positive verbs and pay attention to the different meanings of verbs? - Q2: Does it avoid words that might trigger strong emotions in ASD readers? <p>Social Story Title: {title}</p> <p>Social Story Content: {story content}</p> <p>Please rate the Empathy (1-5). Directly output the score in the first line, and provide feedback explanation in the second line (no more than 100 words).</p>

Figure 14: Template for empathy (EM.) evaluation using GPT-4o.

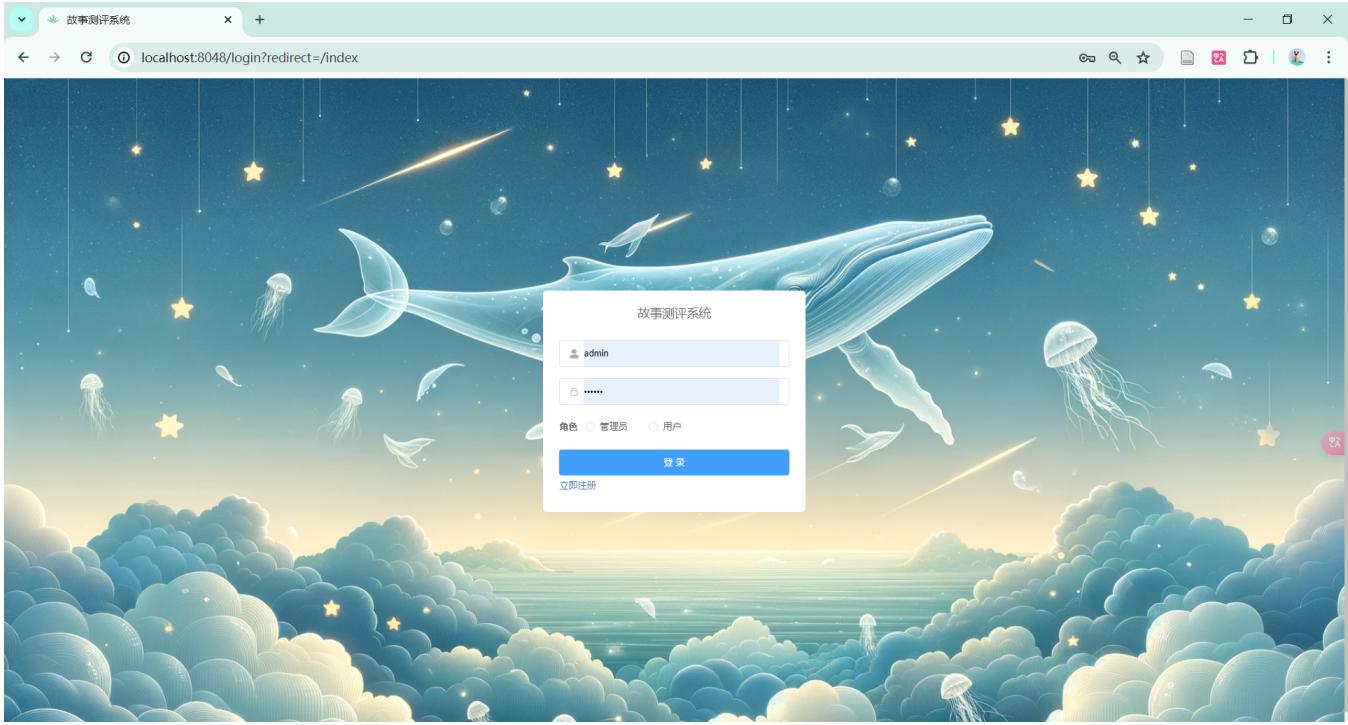


Figure 15: The homepage of the evaluation website offers the option to register new users and provides the roles of ‘administrator’ or ‘user’ to log in.

批次号	model	序号	title	chapter	explanation	操作
批次618	gemma7b-sft	1773	Growing with every story	Learning with stories	Empowers ASD children by leveraging narrative-based learning to enhance their social interaction and emotional comprehension skills.	修改 删除
批次618	gemma7b-sft	4839	Contributing to the food bank	community participation	encourages active participation and engagement within the community for children with asd, promoting inclusivity, cooperation, and a sense of belonging through meaningful interactions and contributions.	修改 删除
批次618	gemma7b-sft	4979	The importance of empathy in social interactions	emotions and expressions	focuses on helping children with asd recognize, understand, and appropriately express a wide range of emotions, fostering empathy and effective communication in social interactions.	修改 删除
批次618	gemma2b-sft	1773	Growing with every story	Learning with stories	Empowers ASD children by leveraging narrative-based learning to enhance their social interaction and emotional comprehension skills.	修改 删除
批次618	gemma2b-sft	4839	Contributing to the food bank	community participation	encourages active participation and engagement within the community for children with asd, promoting inclusivity, cooperation, and a sense of belonging through meaningful interactions and contributions.	修改 删除
批次618	gemma7b-sft	1965	The funniest mistake ever made	Mistakes	Explores the concept of mistakes, showing children with Autism Spectrum Disorder that errors are natural and educational, thereby encouraging resilience and a positive attitude towards learning.	修改 删除

Figure 16: The page is used by the administrator for managing model generated texts uploaded in various batches, including adding, deleting, updating and viewing specific data.

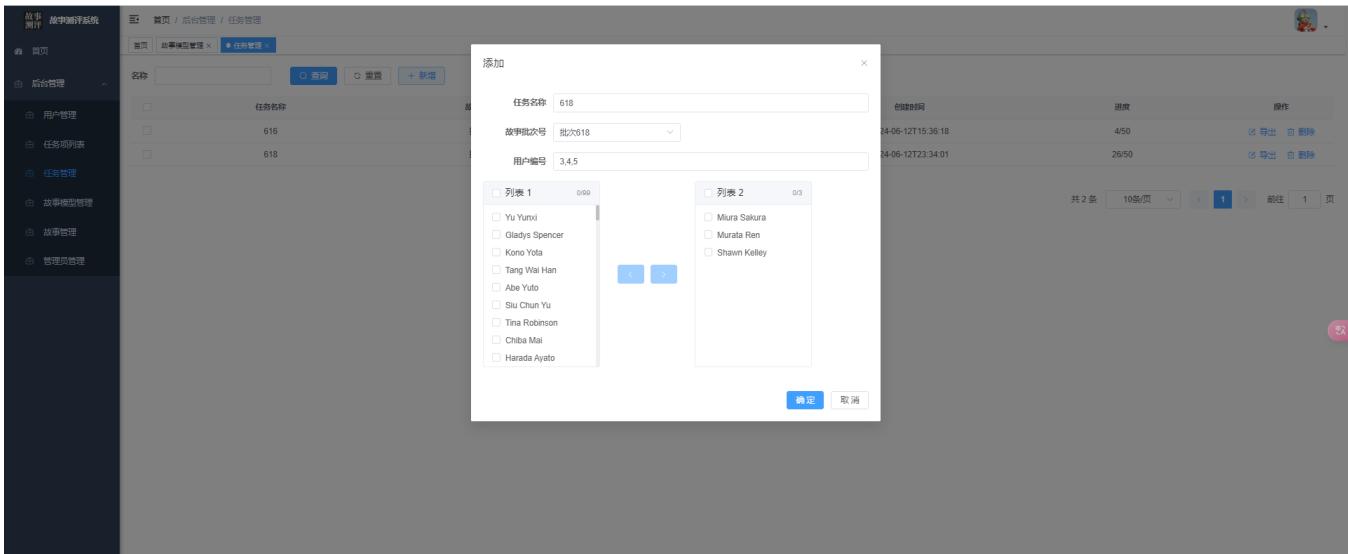


Figure 17: The page used by the administrator to distribute the data evaluation tasks to the selected users.

Figure 18: The page is used by users to view specific evaluation tasks assigned by the administrator.

618

批次号: 批次618 序号: 1773

Title	Chapter	Explanation
Growing with every story	Learning with stories	Empowers ASD children by leveraging narrative-based learning to enhance their social interaction and emotional comprehension skills.

点击对模型进行评测；拖动可进行排序

M1 > M2 > M3 > M4
提交任务

Introduction

Hi, my name is Lily. I love stories! Every time I read a story or hear one from someone else, I learn something new.

Main body

Stories can teach me about feelings and how to handle them. They can show me how to make friends and be kind to others. Stories can also help me understand things that might be confusing or scary, like going to the doctor or starting a new school year.

When I listen to a story, I use my imagination to picture what's happening in my mind. Sometimes, I even act out parts of the story with my toys or stuffed animals. This helps me remember the story better and apply its lessons to real life situations.

I can also create my own stories by drawing pictures or writing down ideas. It's fun to come up with characters and settings and see where the story takes me!

Conclusion

Every story I read or hear helps me grow and learn more about myself and the world around me. With every story, I become a little bit wiser and a little bit stronger.

文本内容

Growing with every story **Have you ever wondered how stories can change?

** They can take us to new places, introduce us to new friends, and teach us new things.

But stories can also help us understand ourselves and the world around us.

*Every story we hear is like a seed.

** It grows in our minds and helps us learn new things.

We can learn about feelings, friendships, and even how to solve problems.

**When we share stories, we learn from each other.

** We can see things from different perspectives and understand how people feel in different situations.

This helps us to communicate better and build stronger relationships.

*Remember, every story is a journey.

** There will be happy stories and sad stories, stories that make us laugh and stories that make us think.

But every story is important because it helps us grow.

**So let's keep reading stories together!

** Let's share our own stories and learn from each other.

With every story we hear, we'll learn something new about ourselves and the world.

**We can grow with every story!

类型

结构清晰程度

关联：介绍—主体

关联：主体—结论

关联：介绍—结论

描述句 / 指导句 0 / 0

故事内容不存在第二人称

第一人称不关联否定词语

语调平和、耐心、支持性

表达清晰、用语直白不抽象

用词准确、动词准确等

保存

Figure 19: The page is used by users to score and annotate Social Stories generated from different models according to the Quality Assessment Criteria we summarized before. After scoring, this page then collects the information of the user preference ranking for generated texts.

Case Study Presentation

In this section, we conduct two additional randomly sampled case studies on the overall best-performing 2B and 7B models on both traditional evaluations and GPT-4 evaluations, which are fine-tuned Gemma (2B/7B) and zero-shot Gemma-1.1-Instruct (2B/7B). Figure 20 shows the Social Stories generated by models under the chapter theme “Communication Skills” with the specific title “Speaking clearly helps people understand me.”. Figure 21 shows the Social Stories generated by models under the chapter theme ”Independence and Decision-Making” with the specific title ”How to make a good choice?”.

In each case, the chapter, title, and label are generated by invoking GPT-4o using the STARSOW strategy. From these two randomly cases, we can see that the themes and the corresponding explanations in the chapter nodes we constructed in the dataset are reasonable, and the titles are highly relevant to the chapters. Moreover, the Social Story labels generated by GPT-4o demonstrate notable performance in terms of length, content arrangement, and the adherence to the three main characteristics of Social Stories: structural clarity, descriptive orientation, and situational safety. This also indirectly reflects the rationality and effectiveness of using GPT-4o data to fine-tune smaller models.

Both Figure 21, 21 show that the stories generated by those fine-tuned models through SFT better meet the hard constraints of situational safety. For example, in all zero-shot scenarios, regardless of whether the model is 2B or 7B, we can find second-person expressions like “your” or “you” in the generated story texts. This is not conducive to help children with autism adopt a first-person perspective, which is essential for effectively conveying social concepts through Social Stories. Such issues are much less likely to occur in the fine-tuned models through SFT.

Besides, the SFT 7B model outperforms the SFT 2B model in terms of text length, quality, and descriptive richness. The SFT 7B model also uses language more cautiously, avoiding absolute statements like those generated by the gemma-2b-sft model shown in Figure 21, such as ”make sure” and ”I don’t need to use big words or complicated sentences.” Such absolute descriptions are less appropriate. A better approach is to use phrases like ”I will try to do something good” instead of ”I don’t do something bad.” This helps protect the self-esteem of children with autism and supports them in building confidence.

Finally, although the stories generated by the 2B model are generally simpler than those by the 7B model, this simplicity may be more suitable for children with more severe autism. This suggests that in future research, we can generate social stories tailored to the needs of children with varying degrees of autism based on the size of the model.

Chapter:	Communication Skills
Explanation:	Enhances communication abilities in children with asd by focusing on effective verbal and non-verbal communication strategies, active listening, and expressing thoughts and feelings clearly to facilitate successful interactions.
Title:	Speaking clearly helps people understand me
Label:	<p>My name is Emily. I am learning how to speak clearly so that people can understand me better. When I talk, sometimes my words don't come out the way I want them to. This makes it hard for people to understand what I am saying. It's important for me to practice speaking clearly so that people can understand me better.</p> <p>One way to speak more clearly is to slow down when I talk. When I take my time and speak slowly, my words are easier to understand. Another way to speak more clearly is to make sure I am looking at the person I am talking to. This helps me focus on what I am saying and helps the other person understand me better.</p> <p>It's also important to use the right volume when I talk. If I talk too quietly, people might not be able to hear me. If I talk too loudly, it might hurt someone's ears. Speaking at a comfortable volume will help people understand me better.</p> <p>I am practicing speaking clearly so that people can understand me better. By slowing down, looking at the person I am talking to, and using the right volume, I can communicate more effectively.</p>
Gemma7b-sft:	<p>Sometimes, it can be hard for people to understand what I am saying. This can happen when I speak too softly or use words that they don't know. But there are things I can do to help people understand me better.</p> <p>One thing I can do is speak clearly. When I speak clearly, people can hear my words better. They can also understand what I am trying to say. Speaking clearly means using a loud enough voice so that people can hear me. It also means pronouncing each word clearly and slowly.</p> <p>Another thing I can do is use words that people know. If I use words that are too complicated or unfamiliar, people may not understand what I am trying to say. It's okay to use simple words and short sentences. People will appreciate it if they can understand what I am saying.</p> <p>I can also try to explain things in different ways if people still don't understand. For example, if I want to tell someone about my favorite book, I can show them the cover or read a passage from the book. This helps them understand what I am talking about better.</p> <p>Speaking clearly, using simple words, and explaining things in different ways can help people understand me better. I will try to use these strategies when I communicate with others.</p>
Gemma2b-sft:	<p>Sometimes, it can be hard to communicate with other people. They might not understand what I'm saying or they might not be able to hear me.</p> <p>But there are ways to make sure that everyone understands me better. One way is to speak clearly. This means saying words slowly and clearly so that everyone can hear them.</p> <p>When I speak clearly, it helps people understand what I'm saying. They can see my mouth moving and hear my voice. This makes it easier for them to understand what I'm saying.</p> <p>Another way to speak clearly is to use simple words. I don't need to use big words or complicated sentences. Using simple words helps people understand me better.</p> <p>Sometimes, it can be hard to speak clearly. But if I try, I can make sure that everyone understands me. By speaking clearly, I can communicate better with others and make them feel more comfortable.</p>
Gemma7b1.1it-shot0:	<p>## Speaking clearly helps people understand me</p> <p>Visual: A friendly character speaking into a microphone, sound waves radiating outwards and connecting with other characters who are smiling and nodding.</p> <p>Text: My voice is a magic tool! It helps people understand what I think and feel. When I speak clearly, the words travel far and wide, reaching everyone's hearts.</p> <p>Remember: Sometimes, my words might not be perfect, but that's okay!</p> <p>It's okay to take your time and choose the right words.</p> <p>When I speak clearly, people can understand me better and join in the fun!</p> <p>Let's practice: Listen to others speak clearly and try to imitate them. Choose words that are easy for others to understand.</p> <p>Practice, practice, practice!</p> <p>Remember: Speaking clearly is a superpower that helps me connect with others and join in all sorts of amazing things!</p>
Gemma2b1.1it-shot0:	<p>Speaking Clearly Helps People Understand Me</p> <p>Imagine feeling like a secret whisper in a crowded room. Words can seem like magical spells that unlock understanding, but for children and teens with autism, speaking clearly can feel like an uphill battle.</p> <p>This Social Story is your guide to making communication easier and more confident. Let's explore the power of clear speech and how it helps others understand you.</p> <p>Why is speaking clearly important? It helps others understand your needs and wants.</p> <p>It reduces misunderstandings and frustration. It fosters strong relationships built on trust and connection.</p> <p>Tips for speaking clearly: Use simple and direct language.</p> <p>Break down large words into smaller ones. Ask questions to clarify understanding.</p> <p>Use visual aids to support your words. Practice saying things out loud repeatedly.</p> <p>Remember: Everyone communicates differently. With practice and effort, you can become a clear and confident communicator. Your voice matters, and it can make a big difference in how others perceive you.</p> <p>Let's practice speaking clearly today! Choose a simple word or phrase to say out loud.</p> <p>Ask a question to check understanding.</p> <p>Use a picture or sign to help explain your point. Repeat what you said back to ensure understanding.</p> <p>With practice, you'll become a confident speaker, unlocking a world of understanding and connection with others.</p>

Figure 20: Case study analysis of Social Stories generated by various models previously evaluated during the human evaluation before. We take the chapter theme of “Communication Skills” with the specific title of “Speaking clearly helps people understand me” as an example.

Chapter:	Independence and decision-making
Explanation:	Encourages independence and autonomy in children with autism spectrum disorder by guiding them through decision-making processes, problem analysis, and weighing consequences to build confidence and self-reliance.
Title:	How to make a good choice
Label:	<p>Making choices can be hard sometimes. But it's important to learn how to make good choices, because our choices affect what happens next.</p> <p>When I need to make a choice, I can follow these steps:</p> <p>Think about the options. What are my choices?</p> <p>Ask myself, "What do I want?"</p> <p>Think about what might happen if I choose each option. Will it help me or hurt me? Will it help others or hurt them?</p> <p>Choose the best option for me and others.</p> <p>Making good choices takes practice. Sometimes we may make mistakes, but that's okay. We can learn from our mistakes and try again next time.</p>
Gemma7b-sft:	<p>Sometimes, I have to make a choice. A choice is when I have to decide what to do or what not to do. It can be hard to make a good choice. But I can learn how to make good choices.</p> <p>First, I need to think about what I want. What do I really want to do? Sometimes, I might think that I want something, but when I think about it more, I realize that it's not really what I want. That's okay! It helps me make a better choice.</p> <p>Next, I need to think about what will happen if I make this choice. Will it be safe? Will it make me feel good? Will it help me learn something? These are all important questions to ask myself before making a choice.</p> <p>Finally, I need to think about how my choice might affect others. Will it hurt someone else's feelings? Will it make someone else sad? If so, then maybe it's not the best choice for me to make.</p> <p>Making a good choice takes practice. But by thinking about what I want, what will happen, and how it might affect others, I can make better choices that will help me feel good and be safe.</p>
Gemma2b-sft:	<p>Making a good choice is important. It means choosing what is best for you, not what others want you to do.</p> <p>Sometimes, it can be hard to make a good choice. There may be many different options to choose from. It can be hard to know which one is the best.</p> <p>When I am making a choice, I can ask myself some questions to help me decide. First, I can ask myself, "What do I want?" This helps me think about what I really want and not just what someone else wants me to do. Then, I can ask myself, "What will make me happy?" This helps me think about what makes me feel good and not just what others think is fun. Finally, I can ask myself, "What is the right thing to do?" This helps me think about what is right and wrong and what is kind and unkind.</p> <p>Making a good choice is not always easy, but it is important. By asking myself questions and thinking about what is best for me, I can make a good choice.</p>
Gemma7b1.1it-shot0:	<p>## How to make a good choice</p> <p>Visual: A happy face with two thumbs up</p> <p>Text: Making good choices feels good! It's like choosing a yummy treat or playing with your best friend. But sometimes, it can be hard to know what the right choice is.</p> <p>Here's how to make a good choice:</p> <p>Look at the options. There are always lots of choices to make, like what to wear or what to eat. Take a moment to look at all the options and see which one feels best.</p> <p>Think about how you feel. What choice would make you feel happy or proud? Remember, good choices make you feel good! Ask for help if you need it. Sometimes, it's okay to ask for a grown-up's help to make a good choice.</p> <p>Remember: Every choice you make is a learning experience.</p> <p>It's okay to make mistakes, just try your best!</p> <p>Good choices lead to feeling confident and independent.</p> <p>Let's choose something good together!</p>
Gemma2b1.1it-shot0:	<p>## How to make a good choice</p> <p>Imagine a big playground with tons of exciting things to do. How do you pick which ones are the best? Making good choices feels amazing! It means choosing activities that make you feel happy, energized, and connected to others. But sometimes, it can be hard to know which choices are the best.</p> <p>Here's a simple guide to making good choices:</p> <ol style="list-style-type: none"> 1.Listen to your inner voice. - Ask yourself, "Do I feel excited and happy about this choice?"- Does it align with my values and interests? 2.Think about what's best for others. - Will it be fair and respectful?- Will it help me or someone else have a good time? 3.Consider the possibilities. - What are all the options?- Which one seems most likely to be a good choice? 4.Ask for help if you need it.- Talk to a friend, family member, or teacher for advice. - Trust your gut feeling and go with your best judgment. <p>Remember, making good choices is a skill that gets better with practice. The more you try, the easier it will become!</p> <p>So next time you have a choice, take a moment to ask yourself these questions. Then, make the choice that makes you feel good and proud!</p>

Figure 21: Case study analysis of Social Stories generated by various models previously evaluated during the human evaluation before. We take the chapter theme of "Independence and Decision-Making" with the specific title of "How to make a good choice" as an example.

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