

Interactive Experience and Local Cultural Integration: A Study on Creation Strategies for Children's¹ Picture Books Based on Needs and Preferences

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Research on original children's picture books that are already existing has not yet been completely explored formally. When it comes to the locally produced picture books, they do not match the young children's cognitive level, and also the interaction is not deep enough. Also there are still few researches related to the ones based on regional culture pictures book. The authors choose parents with kids under 12 from Shanxi Province to investigate the present situation of integrating interactive picture books with local culture in Shanxi. This study explores different aspects such as children's reading behavior, mode of interaction preference, and the preference for picture book content and theme, so as to discover the true need and creativity direction of children's picture book in Shanxi. It can be seen from the results that children prefer interactive forms that involve doing things themselves as well as stories which are interesting and full of make believe. From those, it is hoped that this paper could give some practical advice and directions for the creation of homegrown Chinese children's picture books (Zhou, 2025).

Keywords: children's picture books, interactive experience

Over the past few years, China's picture books have been booming; more and more researchers have turned their focus on how to create and develop more original children's picture books. However, several issues remain. Most existing studies concentrate on the education function of picture books and its effect on children's psychology. Local picture books tend not to correspond to children's cognition; they focus on imparting knowledge without being playful or creative. They are mostly in a fixed state of reading, which does not provide enough conditions for dynamic reading skills, and cannot give young children an authentic experience of sensory understanding of the picture books. In order to solve these problems, the creation of interactive picture books centered around children's own culture has come into being.

Children's interactive picture books based on local culture are a kind of creative activity in children's literature, which takes the root of local culture as the center and adopts interactive experience as the medium, combining regional culture with the interaction of picture book design. It is also useful for breaking the foreign

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¹ The term "children" in this article refers to children aged 12 and under, because they are the main audience of picture books.

picture books' dominant market position; it can make up for some developmental deficiencies that original Chinese picture book face like limited content expression (Ding, 2022). It also can improve the cultural transmission role of picture books, and let children absorb regional culture and develop a kind of cultural confidence (Li, 2025). China's Classic Red Picture Books (Stories of Young Heroes) is a typical practice that integrates local culture and interactive design, providing a reference for relevant creation. According to sociocultural theory, the role of language in individual and social development is very important (Tian & Ma, 2024). Interactive experiences correspond to children's cognitive features and they could attract kids' imagination as well as promote their cognition. Chinese scholars have realized that it is valuable to incorporate local culture and interactive experience when creating children's picture books as well. Nevertheless, studies about regional culture are still few and far between, and it's also not quite clear what kind of needs or creative direction children's picture books based on local cultures have. This study takes Shanxi Province as the research object, and investigates interactive experience design of children's picture book from two aspects: children's picture book and local culture integration, in order to understand the need and creativity of the development of children's picture book and provide a reference strategy for the creation of original children's picture book.

Basic Information of the Survey

Preparation of the Survey

I use the questionnaire investigation methods that contain 20 questions and consist of three parts including the directions, basic information on the samples, and the survey questions.

Subjects

The chosen research subjects were the parents of children under 12 years old residing in Shanxi, China, and then carried out on-site work in the picture book establishments, distributing and surveying 1,320 child samples.

Process of Doing the Survey

The survey was done at some famous picture book institutions in Shanxi Province which are favored by parents, and I handed out the questionnaire with the approval of those persons. Each family got a form and it took 40 minutes to hand out. There were no right or wrong answers to the questions.

Questionnaire Collection & Examination

Children's Reading Behavior

Children's reading behavior is all about what kids do when they get into or stop liking picture books and things like them, because of parts like pictures and little stories that make up a story, and it comes out in how kids play around and ask questions. In order to understand what kind of interactions children have when they are reading, as well as the parts of it which they enjoy and those where they lose interest, we asked five questions aimed at looking at if children take the initiative when reading (Zhou & Liu, 2021). For interaction form: The most popular is hands on exploration, then question and answer form. Among positive expressions of interest, 80.5% of children showed interest through requesting repeated reading. From the survey we can see that among the various reasons for lack of interest, 60.9% said that there were too many complicated illustrations and cluttered, and another 55.7% said that the whole story was too long or dull and uninteresting, hard to keep reading them. Among them, 28.6% of children said that the theme of the picture book was too far away from

their own life experience to evoke emotion; 16.7% lost interest because the picture book had no interactive content and too many words; 11.2%, due to unlikable or scary characters in the picture book, did not want to continue reading.

Table 1

Children's Picture Book Interaction Preferences

| Interaction type | Selection frequency | Percentage (%) | Sort |
|----------------------------|---------------------|----------------|------|
| Hands-on exploratory | 689 | 68.9 | 1 |
| Interactive Q&A | 551 | 55.1 | 2 |
| Focus listening type | 532 | 53.2 | 3 |
| Self-directed reading type | 423 | 42.3 | 4 |
| Character browsing type | 212 | 21.2 | 5 |

Table 2

Analysis of Children's Interest in Picture Books and Reasons for Decline (Multiple Choice)

| Project | Specific manifestations/reasons | Percentage (%) |
|-------------------------------|--|----------------|
| Active expression of interest | Require repeated reading | 80.5 |
| | Actively go to the bookshelf and take it | 65.4 |
| | Mentioning content/characters from books in daily life | 31.6 |
| | Try to "tell" a story by looking at pictures yourself | 26.4 |

From the perspective of cognitive development, children at this stage are still thinking mainly in concrete and tangible terms, but their ability to think logically is just beginning to develop. They start to use language and symbols in their thinking, and their thinking is characterized by symbolism and intuition. Basically speaking, request repeated reading reflects that children are in need of strengthening their own comprehension by repeating it several times and also repeatedly obtaining safety, which is in line with the psychological needs of kids at this age. On the contrary, if it's complicated illustration or monotonous picture which exceeds children's capacity physically and mentally as well, it will be lost for enjoyment.

Picture Book Contents and Theme Preferences

This part looks into what kind of stories kids like, with three questions about where their interests lie. When it comes to what kind of story they like, humorous and funny made up 40.3%, while adventure and fantasy was at 33.9%, which together add up to 74.2%—this is way higher than any other kinds.

Table 3

Distribution of Story Types Preferred by Children

| Story type | Percentage (%) | Sort |
|--------------------------------|----------------|------|
| Humorous and funny type | 40.3 | 1 |
| Adventure and fantasy type | 33.9 | 2 |
| Cognitive exploratory | 12.1 | 3 |
| Everyday stories close to life | 7.3 | 4 |
| Warm and healing type | 6.4 | 5 |

From the survey we know that children love funny, laughable stories as well as adventurous fantasies. It is due to their curiosity, the fact that they have lots of energy and love new exciting things. The acceptance of traditional culture and local culture by children shows the mutual impact of "cultural confidence" and a child's

way of thinking. We wish to promote local culture through the transmission of picture books so that children can have an understanding of their own culture. In terms of local elements like Shanxi's ancient buildings and tales about the Shanxi merchants, these are all very familiar to kids, so they can easily feel close to them.

Artistic Style and Format Preference

In this part we look at the illustration type, trimming size and interactivity in picture books with three questions examining what a parent and child would need from sensory experience and practical use. Regarding the aspect of color and illustration form, 38.2% of children chose cartoon-style drawings with bright and attractive colors while 29.2% of them were for soft, delicate, and warm watercolour or hand-drawn forms which both accounted for 67.4%. Regarding the preferred trim size, 50.3% of people like standard-sized trim, which is easy to store and has a good reading experience. As for their liking of interactive designs, the activity books like mazes, finding something or lift the flap and die-cut type books along with touch & feel books were more than 65%. The top three were all kinds of sound books, toy books, and scratch-and-sniff books.

Table 4

Distribution of Picture Book Art Styles and Format Preferences

| Preference dimension | Specific options | Percentage (%) |
|----------------------|---|----------------|
| Drawing style | Bright colors, cute cartoon style | 38.2 |
| | Soft, delicate, and warm watercolor or hand-drawn style | 29.2 |
| | Simple, modern style with plenty of white space | 13.1 |
| | Retro, textured print or collage style | 12.6 |
| | Realistic, lifelike style | 6.9 |
| Format size | Regular size (easy to store, balanced experience) | 50.3 |
| | Small format (easy to hold and carry) | 30.2 |
| | Large format/irregular-shaped book | 19.5 |

From the survey, it is clear that what illustrations kids like is basically linked to how they see things. Because children's vision is still developing and not fully grown, cartoon-style pictures that are bright in color and full of attractive characters, as well as the softer, warmer feeling from watercolors or hand drawings can easily grab a child's attention. In terms of trim size, practicality comes first. Standard trim sizes have become the main trend. Small trim size caters to the children who want to handle independently; larger trim sizes and/or shaped books fulfill some parents' desire for collectibles and novelty (Guo, 2025). These different preferences show that picture books are used in many different contexts: The main necessities of interactive design are very near to Piaget's theory on cognization (Li, 2025). In preoperational stage, children need some real objects which can be touched to interact with the world. Activity books or lift the flap books make reading more about exploring; it also lengthens kids' focus time—80.5% of kids keep reading those picture books that they like over and over again, and they also get to “play” while learning.

How to Effectively Localize Interactive Picture Books

Multiple Channel Immersive Experience

Based on the characteristics of children's multi-sense processing, it recreates scenes of culture in Shanxi through various sensory means like seeing, hearing, touching etc., so that children can understand and leave a deep impression on the local culture by combining different feelings. Bright cartoon style colors/warm watercolor hand drawn styles can also bring the scenes such as old villages of Shanxi, traditional Shanxi merchants'

courtyards to life; these bright vivid and attractive images/forms meet what kids see aesthetically/what they think about, so they will easily catch your attention. As for texture, we could use different types of paper to simulate the feeling of historical buildings and traditional fabric, turning intangible cultural symbols into tangible, touchable ones. During this time, children make associations between the picture book and life while reading it, transforming the intangible content of the picture book into tangible, participatory experiences.

Gamification Mechanism and Open-Ended Narrative

Gamification mechanisms also can be used for cultural transmission by employing the forms that children like—such as workbooks with activity, lift-the-flap books, die-cuts—to incorporate culture in game tasks/rewards naturally. It lets kids become accustomed to cultural signs around them as they search for and discover them one by one, which means it can pass on culture. In terms of this kind of interactive design it turns the reading into exploring with different mechanisms, texture, and game.

Open ended narrative fosters culture creativity. Based on the design ideas of open-ended storyline, which adds culture related choices and chance for free speech in every picture book, every answer will take you to different kind of culture knowledge contents and narratives. This also satisfies children's wish to explore independently and helps kids build their own understanding of local culture actively and improve their ability to express and create cultural things.

Also gamification mechanism differs by various age group. For kids from 3-6 years old it's mostly simple forms of participation like clicking, dragging, and collage that they use for the game. Children aged 7-9 years old will do challenge based games and puzzles for more knowledge and understanding. Picture books for 10-12 year olds could have an "exploration booklet", maybe with some activities that involve looking for stuff, sharing your own ideas.

To Fit Every Single One Exactly

From the perspective of age, children at various ages have different cognitive levels as well as different needs for reading. Children between ages 3-6 are at the preoperational phase, and their thinking is symbolized by intuition; they have to deal with concrete and tangible things for them to know about the world. Therefore, when creating picture books for this age group, we mainly consider tactile stimulation and simple interaction, choosing local cultural elements with vivid colors, attractive characters, regional characteristics. These elements can be combined with simple cultural explanations, and the story rhythm should be short and lively; it's better not to have complicated stories and long texts.

Children aged 7-9 have even more growth in cognition. And in creating picture books for this group, the interactive features must be more difficult and informative, including a lot more cultural knowledge about the stories of Shanxi merchants or how the old structures are built. In this way, it broadens and enriches the scope of culture. It conveys cultural values like integrity and diligence through its story.

Kids from 10-12 year old are just starting to form their own cultural identity and they're accepting more of what's local all the time. And for them, it would be pictures that explore culture and are more critical with contents on history, cultural meanings of things in the area. Open-ended talks about how local culture links up with today's life can be put into some of the picture books, so kids could write down what they think about topics like the energy of Shanxi merchants or save old buildings. And this can also help people get to know culture better and develop their thinking.

Gender: There is a difference in the types of picture book formats and topics that boys and girls prefer.

Taking into account that boys usually prefer hardcover picture books and the theme of exploration, when creating, we could use local culture and content with characteristics of exploration and logic, such as Shanxi merchants' trading activities, ancient architecture construction, traditional handicrafts, and have building, puzzle, role-playing interactions. The covers and inside pages of picture books should have bolder line drawings with more bright colors. According to what girls like softcover picture books and sweet stories, we can choose content accordingly and draw on gentle and beautiful folk elements from Shanxi's culture—clothing, embroidery, eating habits, etc., to make stories full of narratives and emotions. These cultural and emotional expressions can be conveyed through decorative design, handcrafting, and emotional presentation, using warm and delicate watercolor illustrations to represent local culture and sentiments.

Regionally, the ways we present culture will differ from place to place and also depend on the children. In terms of making picture books for children in Shanxi, we need to delve deeply into the details of local culture and incorporate distinctive cultural characteristics of different regions across Shanxi and increase the feeling of resonance with local life scenarios. Dialect based voice interaction can also help with strengthening of regional culture and extension guidance for parents about local culture, so that they can take part in the local folk activities along with their kids. This will enhance the reading experience. When making picture books for kids from outside of Shanxi, it's important to combine local culture with more general cultural ideas. When choosing representative cultural symbols about the topic of cultural exploration, we can simplify the complicated background of local culture but also show its appeal and visual effects. Cultural comparison aspects could also enter into the interaction design; children might get used to different kinds of regions on top of what he or she is accustomed too which would promote more cultures around the world.

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