

# Study on key elements of kids cartoon design in Min-Nam (hokkien) language

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As the global markets communicate in a swift speed, the mainstream culture has outweighed the regional cultures. As many countries have started to raise awareness for culture reservations, the crisis to pass down regional/local languages has been addressed. The most effective way to pass down cultures to next generations is have children get involved with listening and speaking from the media, especially the cartoon animations. It has played an important part in each kid's childhood and his/her development. How to create the most influential regional kids cartoon expressing its local culture is the main study topic in this article. This study is trying to work out the key element design for local kid's cartoon animations in Min-Nam language in Taiwan through professional researches and analysis on experienced audience questionnaires. It adopts methodologies of qualitative Focus Group, Delphi method along with the quantitative questionnaires and T-Test analyses to scientifically bring up the main 7 key elements for design, including 4 points under the content interface: 1. The story content should involve the basis of one's daily life. 2. The vocabularies used in the stories should be easily understood and commonly seen. 3. The story background and objects should have a connection to people's life. 4. The voice-over for the cartoon should be carried in a slow speed. Meanwhile, there are 3 points in the aspect of aesthetics should be applied: 1. The ratio of the cartoon characters should be attractive to kids. 2. The overall style should be in warm color tones. 3. The animation characters should be personified animals. The above ideas can be used for further references for animation creation and development teams.

**Keywords:** *min-nam language, kid's cartoon, animation, design elements*

## 1 Introduction

While the globalization markets transmit and improve speedily, the culture interactions and blending also become more regular. The mainstream culture in the market reflects the majority's life of modern people, thus the minority of regional cultures are gradually neglected. To reserve varied valuable culture assets and their sustainable and diverse developments, Taiwan government set up Cultural



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Heritage Preservation Act to protect and maintain tangible and intangible culture assets. Meanwhile, this strategy also corresponds to “Quality Education” and “Reduced Inequalities” in Sustainable Development Goals, SDGs in the United Nations. These are efforts made for inclusive and fair educations to reduce inequalities across the nation. With popularization of wireless internet and OTT(Over-the-top media services), the researchers start to study and research scientifically on how to apply the design of multimedia to kid’s habits watching cartoons in order to revive regional cultures successfully. Next paragraph is going to discuss the relation of animation films to regional cultures and children.

Digital Extinction implies the language English has monopolized the whole internet world. Currently, 21 languages in Europe have faced the threat of digital extinction. The languages other than mainstream languages in regional areas have a very low usage rate. This means it is difficult to pass down the culture to next generation (T.-C. Tsai, 2019). In 2019, Taiwan government published Development of National Languages Act in hopes to balance the development and help with revival of multi-languages. The government also encourages local governments, civil legal entity and enterprisers to produce information in Min-nam language which is applied as a tool to pass down local cultures. Scholars Allard and Landry also mentioned that the first step to revive a language is to step into the daily basis of family, school and social life to familiarize the language. It means that this learning pattern will input the language into the memory of children on their daily basis by listening and reading before they can pronounce the language correctly in order to build up their interest in learning the language (T.-C. Tsai, 2019; Allard, R. & Landry, R., 1992). The scholar Sahin, S., & Ilhan, V. also mentioned in 2019 that multimedia is a widely used and effective tool in all ages. In his research, he also pointed that the cartoon animation is a competition stage between the local cultures and global cultures. For children, they rely on TV platform or internet platform to familiarize themselves with foreign and local cultures. He also stressed that a country will increase the production of animation films to preserve non-material culture assets, which is a positive influence on children’s learning interests (Sahin, S., & Ilhan, V., 2019). With the evidence of those documentation, we can understand that cartoon plays an important role to regional languages and cultures. Next we are going to dig more into the current situation of Taiwan Min-nam language learning programs for kids.

In Taiwan, compared to Hakka and aboriginal languages, Min-nam language was promoted a bit late. This study sampled 2 months Taiwanese programs of 2021 in PTS (Public Television Service) for observations. Among 61 display period of time, there was a total of 40 programs, in which only 1 intelligence shows and 1 animation show was specific to children's learning materials and the others are more towards adult's preferred topics. More than half the audience group falls on the age above 35 years old (Public Television Service, 2021). From above, we learned that the Min-nam spoken TV program design has less attraction to children. It’s not easy to create an influential film on TV. Therefore our research team tried to increase the opportunities for children to get exposed to such films on the internet. The internet media is highly popular nowadays and very easy to access. As mobile phones and tablets become popular in the markets, the majority of parents also allow their children to watch videos on the internet etc. The English children’s song, “Baby Shark” has over 8.4 billion views, which shows that kids video can be reached and circulated very quickly to a big population (Schreiber, T. T. V. et al., 2020). The scholar Lowe (2004) acknowledged that animation films helps people with their recognitions and sensations with a further approach to stay focused on study and build a positive connection with culture (Lowe, R. K., 2003). Irina & Ekaterina (2019) also

mentioned that children are the most susceptible audience to the media. The core media is children cartoon, which occupies most of the time and it impacts the life entertainment, also children's development education from day to day (Kyshtymova, I., & Kyshtymova, E., 2019). Cartoon animation can easily build a connection with children's life experience and life style. Children will project themselves in one of the cartoon characters and imitate. Sometimes the cartoon characters can reflect a lot of things in reality. Besides, cartoon forms the shared memories for everyone in childhood in each generation, which shows how influential it is for the children who spend a long time watching cartoon (Y.-J. Chen, & L.-T., Wang, 2015; M.-H. Wei, & Y.-W. Su, 2013). To conclude the data and research results, we can understand that most TV and internet media all focus on mainstream cultures, and it lacks the related programs promoting local cultures and languages, especially Min-nam language that targets the children as audience. There is a slim picking list for Taiwan Min-nam programs, even slimmer than Hakka and aboriginal languages. Under this nature of multimedia environment, creating kid's cartoon animations in Min-nam language to increase the popularity of Min-nam language among children to improve their familiarity with Min-nam language since childhood from listening and reading in their memory will be the optimal goal for developing local Min-nam kid's animation programs.

As everyone knows, designing animation films requires high intensity of labour and incurs a great deal of costs. An objective research and a thorough investigation done by the study team before the production will possibly reduce the risk of failure. In the process of design, most designers design based on their perspectives on aesthetics and experience, which lacks the objective analyses and might involve higher market risks (C.-F. Liou et al., 2020). Before design, if scientific research can be used as a basis, the design elements can be analyzed objectively and the risk for development will be reduced while improving the interests of the audience. This study now discusses the interfaces of story content, style, colors and characters in Min-nam animations as a reference for future Min-nam animation design team and enterprisers. This study adopts the qualitative Delphi method to engage interviews with professionals, combined with the quantitative questionnaires to verify the audience's involvement in high quality animation blended in Min-nam languages. The purpose is to provide the advice for creating the design elements for children animations in Min-nam language.

## **2 Method**

Due to the low production of Min-nam cartoon animation on the market compared to the mainstream animations from the US and Japan, there is not much design document for reference. Therefore, this study first adopts Focus Group to choose a sample and then undertakes interviews with 5 professionals through Delphi method to understand the design key elements through their perspectives. In the condition where the professional holds individual opinions, we can conclude an objective, agreed common view from all the professionals through Likert scale. We then create the questionnaire for design elements for audience based on the common views from professionals. We issued internet questionnaires to 200 frequent viewers on animations to get a result. Among the 200 questionnaires, 153 were returned. We selected 28 questionnaires done by the experienced viewers (are highly involved with watching animations for more than 10 years and speaking and reading fluent Min-nam). T-test is used to analyze and verify if their perspectives on design elements match those of professionals.

## 2.1 Sampling

Stage 1: It used Focus Group to discuss the selected samples, including 3 experienced animation viewers, 3 Min-nam frequent users and 1 researcher in a total of 7 members. This is to collect and select the experiment samples in order to discuss if similarity of results match, which includes the film content interfaces: vocabulary, plots, learning goal, design colors, theme topic and background. In final, we sampled the films that won the Golden Bell Award: "My Little Boys (2019)", "Katz Fun (2012)" and YouTube original creation "Taiwanese Cuisine Rescue Team". The introduction to the three episodes in each animation is as follows:

### 2.1.1 Sample animation A: My little boys

- Colors: High color saturation and primary colors.
- Main body: Simple character style, Hand drawing style.
- Objects: Simple background colors, inconsistent perspectives.
- Content: Description of interesting Taiwan family stories.

A01 (Swimming): The plots described that when the little boy tried to learn swimming, he was very scared. The father yelled at him and wanted him to overcome the fear of water with his strong demand. It didn't succeed at the end of day. Later he found that his son put water in the bath tub and train himself to put his head under the water. Learning content: 1. Swimming, asking for rescue, plight, ocean animal vocabulary. 2. Parents self-reviewing on high pressure parenting method to push children grow.

A02 (Midnight Devouring Dinosaur): The plot described that the father has dream walking symptoms at night and he would keep putting all the food in his mouth. The son is worried about his father and wanted to stop him. After the father heard his son's idea, he pretended he was dream walking, and the son tried to stop his father seriously. The learning content: 1. Vocabularies of eating, being sick and dream walking. 2. Children's love for his father.

A03 (Fortunate Cockroach). The plot summary: When the father sees the cockroach, he feels disgusted and wants to kill it. When the son sees the cockroach, he finds it adorable and wants to keep it as a pet. Learning content: 1. Vocabularies of observation, insects or adjectives to describe animals. 2. Life equality.

### 2.1.2 Sample animation B: Legend if Katz

- Colors: High color saturation, the shadow tone is grayish.
- Main body: Simple character style, small ratio between the head and body. Chinese drawing style.
- Object: Complex background with a similar color style as the main body.
- Content: Based on the storyline of legends and adventures to encourage children to be brave and adventurous.

B01 (The legend of Katz). The plot: The main character's grandfather told the main character a legend. He embarked his adventure to seek the treasure in the legend and encountered a lot of problems caused by the bad people. Learning content: 1. Treasure, simple verbs. 2. Spirit of adventure and bravery.

B02 (Big belly frog returning the favor). Plot: The main character’s friend saved the frog. On the way home, the front met a bad guy, who turned the frog into a monster that attacked people. The frog recognized the main character and didn’t want to attack him. Learning content: 1. Common slang, daily conversations. 2. Returning the favor.

B03 (Courage testing for Bishi). Plot: The bad guy scared the timid main character. A bunch of friends helped the main character regain his confidence. Learning content: 1. Vocabularies of scare and night mare. 2. Bravery training.

### 2.1.3 Sample Animation C: Taiwanese Cuisine Rescue Team

- Colors: Lower color saturation.
- Main body: Simple character style, personified animals, thick drawing frame lines.
- Objects: Simple background with blocks of color in low color saturation.
- Content: Save Taiwanese local cuisine culture with Taiwanese Cuisine Rescue Team.

C01 (Rescue Team comes! Delicious Savory Rice Pudding). Plot: Delicious cuisine brings happiness but it was taken advantage of by bad people for bad things. Therefore Taiwanese Cuisine Rescue Team was formed to protect the local cuisine culture. Learning content: 1. Slangs of food taste and flavor. 2. Protect cuisine culture.

C02 (Guarding the smell of Chinese Pork Stew). Plot: There are many types of pork cuisines in Taiwan with its own feature. The “mouse boss” wanted to destroy the pork stew this time. How do the Taiwanese Cuisine Rescue Team solve this problem? Learning content: Vocabulary of meat cuisine and taste. 2. Protect traditional cuisines.

C03 (Chase the mouse boss’s food truck selling meatballs). Plot: Look, it was the mouse boss driving a food truck selling meatballs. Will Taiwanese Cuisine Rescue Team eating night supper find out their scam? Learning content: 1. Vocabularies of bad smell. 2. Issues of food safety at the street vendors.



Figure 1. “My Little Boys”, “Katz Fun” and “Taiwanese Cuisine Rescue Team” (From left to the right).

## 2.2 Research on professional design elements and adjustments

Stage 2 used Delphi method. Through the first time open questionnaire and feedbacks from 5 professionals (Table 1), the information of Min-nam animation styles was collected. Meanwhile, the topic range has been adjusted and refocused. The feedbacks specific to first time repeated design key elements can be used for the second time questions for professionals to conclude the priority level for professionals when it comes to choosing a design key element. Later, the previous two interviews with professionals can be summarized and analyzed for result. The third interview with professionals can sum up a common view between all the professionals. Lastly, the important elements to design Min-nam animations in the samples can be discussed and organized.

Table 1. 5 professionals' occupations and seniority

	Occupation	Years of experience
a	Animation director and professor	9
b	Animation Arts professor	12
c	Min-nam Multi-Media workers	10
d	Children Cartoon Animators	8
e	Children Cartoon Animators	15

Table 2. Delphi method working principles

	Purpose	Question summary
<b>1<sup>st</sup> interview</b>	<ol style="list-style-type: none"> <li>1. Open questionnaire.</li> <li>2. Find out the key elements of Min-nam language applied in the animations.</li> <li>3. Content interfaces: vocabulary, plots, learning goal, aesthetics interfaces: colors, main body and objects, and background etc., good points and bad points.</li> </ol>	<ol style="list-style-type: none"> <li>1. The elements that impress people and its reason.</li> <li>2. If it's a proper manner for performance.</li> <li>3. If it's easier for children to understand.</li> </ol>
<b>2<sup>nd</sup> interview</b>	<ol style="list-style-type: none"> <li>1. Research and adjust the content interface and aesthetics interfaces.</li> <li>2. Understand and adjust the priority of each design elements.</li> </ol>	5-Point Likert Scale is used to investigate the plot, style, drama, colors, characters and context meet the requirements of Min-nam learning design elements based on the 1st interview results.
<b>3<sup>rd</sup> interview</b>	<ol style="list-style-type: none"> <li>1. Reach the common view of professionals</li> <li>2. Summarize professional 's stressed interfaces</li> <li>3. Organize key design elements.</li> </ol>	Based on the 2nd interview result, adjust the higher scored questions and use the 5-Point Likert Scale for another investigation to confirm the important design key elements.

Stage 1 of Delphi method: Under the situation where 5 professionals don't affect each other opinions, they watched animation A, B, C for 3 series and answer the questions in the open questionnaire. The questions are as below in Table 3. The final result was concluded as shown in Table 4 after information gathered from last two questionnaires.

Table 3. Delphi method open questions in the questionnaire

Questions (requested professionals to answer each question in details)	
Content	<ol style="list-style-type: none"> <li>1. Is the teaching materials from the video easy for children to understand?</li> <li>2. Is Min-nam language appropriate to use in the story content in the animation videos?</li> <li>3. Is there an impressive feature in the animation applied to Min-nam teaching?</li> <li>4. Is there a feature from animation style suitable for applying for Min-nam teaching?</li> </ol>
Aesthetics	<ol style="list-style-type: none"> <li>5. Is the color applied in the videos attractive to children?</li> <li>6. Is color used in video suitable for Min-nam teaching animations?</li> <li>7. Is the main character in the film a suitable character for Min-nam teaching animation?</li> <li>8. Are the objects (background) displayed properly for Min-nam animation?</li> </ol>

Table 4. Delphi method for design professional's weighing

	Design elements	Average score
<b>Content</b>	X1. The story content is close to everyone's life experience on the daily basis.	5
	X2. The vocabularies used in the story are easy to understand.	5
	X3. The characters in the story relate to the children in Taiwan.	4.8
	X4. The background and objects in the story should respond to the daily life.	4.8
	X5. The talking speed of voice over the characters should be slow.	5
	X6. The story content should be drama animation.	4.2
	X7. The captions should be amended in the way that audience expect.	3.2
	X8. The voice over should be conducted appropriately for the drama.	2.4
<b>Aesthetics</b>	Y1. The proportion of character design between body and head should be attractive to kids.	5
	Y2. The background of animation should be simple and clean.	5
	Y3. The overall style of animation should be a hand drawing style.	5
	Y4. The overall tone should be warm.	5
	Y5. The overall coloring should make the characters stand out from the background.	5
	Y6. Characters should be personified animals.	4.8
	Y7. Characters should be children.	4.8
	Y8. The overall coloring and style should avoid overload of excitement.	2.8

### 2.3 Comparison among experienced viewer questionnaire

The questionnaire was issued for the experienced viewers of animations in the early stage 3. The internet questionnaires were issued to 200 viewers in two parts. Part one was to investigate the viewers' seniority of watching animation films and their level of understanding Min-nam with some details adjusted for the purpose of finding the target audience in order to provide correct advice.

Part two was to investigate Item X1 to X8 and Y1 to Y8 in Table 4 for the importance level of design elements, which was still conducted with 5-Point Likert Scaling chart. At the end, 153 questionnaires were returned. Among the 153 viewers, we selected 86 viewers who have over 10 years of experience watching animations. Among the 86 viewers, we selected 28 viewers who speak and comprehend fluent Min-nam language. Compared to 28 viewers for questionnaires, there was only 5 professionals being interviewed. Due to the uneven number, we used the average value of professional's opinions as a benchmark. We used One-Sample t-test to compare the questionnaire results from experienced viewers in 16 directions of design elements, divided by content and aesthetics to discuss if professional perspectives match audience's for design elements.

We conducted this research method due to the lack of sufficient documentaries to support Min-nam animation cartoon development. Therefore, we only can provide the qualitative opinions from professionals. On the other hand, audience is still the end consumers of markets even though professionals' perspectives present authority. Those professional ideas are probably from individual

background experience, which don't necessarily corresponding to public audience's ideas to satisfy the needs of the market. Therefore, the quantitative data verification at stage 2 can provide an objective perspective to show the similarity and difference of opinions between the professionals and general audience, as shown by the data in Table 5 and Table 6.

Table 5. Comparison of design elements in the aspect of content between professionals and audience's opinions. \* $P < 0.05$ .

	X1		X2		X3		X4	
	Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D
<b>Professionals</b>	5	±0.00	5	±0.00	4.8	±0.45	4.8	±0.45
<b>Viewers</b>	4.93	±0.26	4.93	±0.26	4.5	±0.64	4.75	±0.44
<b>P-value</b>	0.161		0.161		0.019*		0.554	
	X5		X6		X7		X8	
	Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D
<b>Professionals</b>	5	±0.00	4.2	±0.45	3.2	±0.84	2.4	±0.55
<b>Viewers</b>	4.79	±0.57	4.86	±0.36	4.96	±0.19	4.82	±0.48
<b>P-value</b>	0.56		0.000*		0.000*		0.000*	

Table 6. Comparison of design elements in the aspect of aesthetics between professional and audience's opinions. \* $P < 0.05$ .

	Y1		Y2		Y3		Y4	
	Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D
<b>Professionals</b>	5	±0.00	5	±0.00	5	±0.00	5	±0.00
<b>Viewers</b>	4.96	±0.19	4.79	±0.50	4.46	±0.69	4.89	±0.31
<b>P-value</b>	0.326		0.031*		0.000*		0.083	
	Y5		Y6		Y7		Y8	
	Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D
<b>Professionals</b>	5	±0.00	4.8	±0.45	4.4	±0.55	2.8	±0.45
<b>Viewers</b>	4.57	±0.74	4.79	±0.42	3.42	±0.96	4.79	±0.63
<b>P-value</b>	0.005*		0.858		0.000*		0.000*	

### 3 Analyses and discussions

After stage 2 Delphi method, we concluded the design elements for Min-nam animations. The professionals brought up X1 to X8 aspects of content and Y1 to Y8 aspects of aesthetics. Stage 3 used T-Test to analyze experienced viewers on the 16 aspects through questionnaires with the benchmark of average score of professional evaluation on the 16 aspects to yield the result that there was a significant difference between aspect X3, X6, X7, X8, Y2, Y3, Y5, Y7 and Y8. It indicates that the common agreed opinion hasn't been reached on those aspects between two parties. Particularly, X7, X8 and Y8 had a rather low score in professionals questionnaires which fell on 3.2 (X7), 2.4 (X8), and



2.8 (Y8), but on other hand, they had a good score of above 4.7 in the general audience questionnaires. We can see that there is an extremely big difference on the 3 aspects between professionals and general audience's opinions. However, X3, X6, Y2, Y5, and Y6 had a significant difference on P-value using T-test with a similar average score. Therefore, both parties haven't reached a common opinion.

On the other hand, there wasn't any significant difference on the 7 aspects X1, X2, X4, X5, Y1, Y4, and Y6 between 2 parties with a similar average high score between 4.8 and 5.0 From the research results, we know the key elements in the Content for designing Min-nam kids cartoon animation are as follows:

1. The story content should be close to everyone's life experience on a daily basis.
2. The vocabularies used in the story should be easy to understand.
3. The background and objects in the story should respond to the daily life.
4. The talking speed of voice over the characters should be slow.

The key points addressed in the aspect of Aesthetics are as follows:

5. The ratio of character figure should be attractive to kids, especially in cute images.
6. The overall style should be in warm color tones.
7. Personified animals should be used for characters.

From the common views between professionals and experienced viewers, we can identify the key elements for cartoon design from content interfaces, which are: 1. Storyline should have a relation to daily life experience; 3. The story background and objects should respond to one's daily life. As Hosany et al. (2020) brought up: The story adapted from human daily life usually can connect people to their own experiences and feelings (Hosany et al., 2020). When people's life, environment and cultures are brought into the cartoons, people also grow with them as the plots develop with scenes which helps with values and cultures conservation, as indicated by other researches (Sahin, S., & Ilhan, V., 2019; Z.-W. Lin et al. 2021). These two design key elements in the animated films don't only serve as a language teaching function but also help children learn about our land, culture and lifestyle. Our life is inseparable from languages as it works hand in hand with each other for language learning process. The children linguistic education research also indicates that the scenario dialogs is better than teacher's narrative teaching, which saves time of explaining the scenarios. It also facilitates memorizing the commands of language and grammar structures for learners from animation films and scenarios. This helps learners adapt languages naturally and correctly (Y.-Y. Chen, 2012).

Additionally, the two key elements, "2. The storylines and vocabularies should be easy to understand", and "4. The voice-over speed should be slow" are crucial to primary level of language learning as they should focus on an easy process for comprehension. As far as the children viewing films, for children from age 3 to 5, they start to understand vocabularies, short sentences. From age 6, they can grasp basic grammar; from age 8 to 10 above, they start to understand more difficult sentences. This research also compares the kids TV commercials among countries of the US, Australia, Singapore and Taiwan. Taiwan kids TV commercials select more simple word choices (Yi Hsu et al., 2011) without including other complicate affecting factors in other countries. However this is enough to prove that simple vocabularies and slow speaking tone are more suitable for Taiwan children for film watching as the local cartoon serves an important function of language teaching.

We discuss the key element for cartoon character design from the perspective of aesthetics: “1.The ratio of character figure should be “cute””, which point has been supported by many past documents (P.-H. Hung & R.-T. Lin, 2016; Sahin, S., & Ilhan, V., 2019; Dydynski, JM., & Maekivi, N., 2019; Gupta, A. et al., 2021; Dydynski, JM., & Maekivi, N., 2021). One thing worth our attentions is the same popular adjective as “cute” is “exaggerating”, which is used nearly as often as cute if not more. However this adjective is not considered as a key design element as discussed in our study this time. After Focus Group discussions with three animation specialists, we concluded that “exaggerating” is an eye catching method in performance of animation films. However, more narrative animation films with storylines are produced than comedy performance animations with exaggerating expressions . Therefore “exaggerating” is a method applied in response to the animation contents and topics but “being cute in the character figure” is the main magic to attract kids’ attentions in all aspects. “2. The overall style should be in warm tones” which is a new discovery from the past documents. The researches done for animation colors in the past pointed out that color tones changed according to the plots, emotions, time and space. Moreover kids have different recognition of color due to their living environment, race and customs. It is difficult to have a common perspective on this from past documents. Since the past researches also mentioned the relevant study on this area is lacking and insufficient (P.-C. Lin & C.-Y. Chen, 2003; M.-E. Wang et al., 2007; S.-K. Chung, 2016; P.-H. Hung & R.-T. Lin, 2016; C.-H. Liu & S.-Y. Pan, 2022), this could be the topic that needs further experiments and discussions in the future. 3. “Characters should be personified animals”, compared to the other two aesthetics key elements, this point has more clear supporting documents to prove. From here, we can see “personified animal character” has played an important part in kids cartoons (Sahin, S., & Ilhan, V., 2019; Dydynski, JM., & Maekivi, N., 2019; Kyshtymova, I. et al., 2020; Dydynski, JM., & Maekivi, N., 2021). From the documents above, we can see that the personified animal characters are extremely attractive and more influential to kids compared to other human figure characters. The characters of animals can also extend to other issue discussions, both positive and negative. For example, animal welfare, donations and animal protection etc are positive issues whereas the negative issues include excessive breeding, illegal animal trafficking and animal abandoning. Therefore when an animation designer improves the charm of an animal character, he/she has to make sure the animation doesn’t jeopardize the image of the animal itself for across-industry issues.

## 4 Conclusions

Regardless of traditional TV media or internet platform, the mainstream media market has weakened the opportunity for regional cultures to express itself. To protect the nearly-extinct non-material cultural assets, creating more relevant cartoon contents that express local cultures is a positive and effective method to bring out the interests of children in them(Sahin, S., & Ilhan, V., 2019). Producing an animation project is a highly risky move if it is solely based on a designer’s past experiences. It could also cause more damages to the industry that already has poor resources and insufficient funds. From past experience, we can learn that different types of films require different design elements. For example, a comedy needs senses of humour, exaggeration, while a scientific action film needs fantasies, technologies and machines etc. On the other hand, the Min-nam kids cartoon creation faces unknown risk for production in the future based on very little research and production done for it. Therefore, this study has undertaken the scientific research to provide objective design key elements to assist in developing and designing this type of animations.

This study adopts document researches, sampling analyses, interviews and questionnaires statistics. Through the shared views between the professionals and experienced viewer, we concluded 7 key design elements for Min-nam cartoon. We utilized the research result to create six short videos which are 3 minute long each, "Speak Taiwanese Dialect with Tu Qi". It was awarded the subsidy for 2022 Language-Friendly Environment Creation and Application "promoted by Taiwan Ministry of Culture. Through the actual production of attractive local animation, it will enhance children's audio-visual exposure to Min-nam language. It also familiarizes children with listening and reading in Min-nam language from childhood. With an attempt to increase the market of such kids cartoon films, it might reduce the risk of extinction of Min-nam language.

The animated film set up the main character as a cute personified animal figure in the tropical country Taiwan which is the kingdom of fruits. The storyline revolves around the characters visiting the orchards to pick fruits in hot summertime to make shaved ice with fruit toppings. The story plot moves along in the perspective of children in their daily life with an adoption of warm color style. Children learn Min-nam language through the vocabularies of those common fruits in terms of colors and shapes. In the future, the internet platform is going to provide free film viewing as a promotion. Through completed film production, further experiments can be conducted and the key elements for design can be tested for further improvement, which can be used as a reference for future relevant animation creations.

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