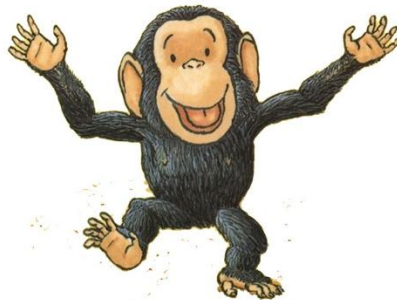
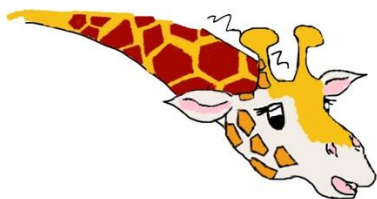


AN EDUCATOR'S RESOURCE FOR



HARVARD PROFESSOR GROUP



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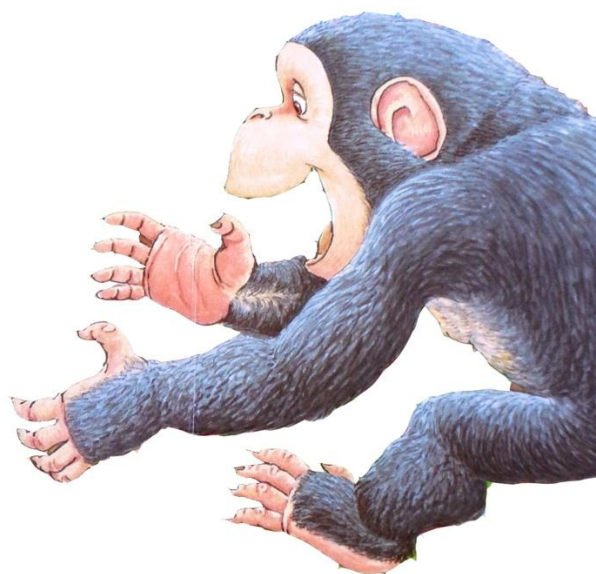
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**The Cross-disciplines / Cross language (CDCL) Instructional Framework:
A Prototypical Unit using the Picture Book ‘HUG’**

**Preliminary Draft Form, August 24, 2017, in preparation for
Goldian/Harvard (HGSE) Professors Group Seminar (In Kunshan, 9/9)**

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The Cross-disciplines / Cross language (CDCL) Instructional Framework: A Prototypical Unit using the Picture Book ‘HUG’

I. Overview of the CDCL Framework

- The Cross-disciplines / Cross-language (CDCL) Instructional Framework is a conceptual model supplemented by a set of instructional strategies and curriculum activities that address the six “content and skills” domains of early childhood development as specified by The Chinese Ministry of Education (i.e., health, social, math, language, art, science—see Figure 1). In a bilingual classroom (i.e., Chinese and English), the CDCL framework suggests that each of the six domains be taught as a set of skills in both languages – with social skills (and social awareness) featured in a primary role because of their central place in very young children’s lives. The framework uses stories, and story-telling to ground the curriculum and to provide reference points for all the children to understand and be able to talk about with each other. That means that through story telling children always have the social relationships in the story as something they need to pay attention to together and engage their interest, as the social world is the most important domain to the children themselves. Then they can learn about the content and practice the skills of the other five areas. (See Figure 2 for the initial version of the CL/CD framework, focused on two languages (Chinese /English,) and two aspects of the world in which young children live, the language of the social world and the language of the scientific world. For example, some children may be engaged in a story because they love trucks or motor-cycles. However, their interest in this mechanical/scientific world topic is important to them because

they see trucks and buses as extensions of their own sense of agency, security, and identity. That is, they want to know what makes the trucks move, and whether they, themselves are able to move them (agency), while still being safe (safety), and still having the support of their parents (identity). These are the social foundations of human development

- **Why highlight social skills and the language of the social world in early childhood education?**

Social development in early childhood lays the basic foundation for ethical and civic behavior later in life. Social skills always need to be integrated across all the other five domains, not only through the management of the social interactions in the classroom, but also in the formal curriculum. Among other important purposes, children develop language to accomplish social goals (making connections with others, directing others' attention, giving and receiving help). As young children develop their language skills, they also develop a more nuanced and better articulated set of social goals for themselves (and for others) through the words they use to communicate with others. Language provides a powerful tool for children to play with a friend, ask for a toy, or tell someone how they feel. Thus, social competencies develop hand in hand with language skills and social linguistic competences. Learning oral language is requisite for social development, especially early communication skills. Furthermore, in a curriculum such as this, that emphasizes the importance of story-telling, social relationships can always be “read into” the curriculum content in all the other domain areas upon which the story focuses (Selman, 2017; Snow, 2002).

- **How do we best teach children to be bilingual?**

Research evidence suggests that the most efficient condition for second language learning is initial exposure to the same stories / information/ themes vocabulary words in the native language. Therefore, one approach is to start the content instruction in children’s native language. Once the background information becomes familiar and students approach mastery, they can be immersed in the second language context (Snow, 2017).¹

- **About the Unit**

This prototype unit, anchored in the picture book *Hug*, by Jez Alborough, is designed for children from 2 to 5 years old in bilingual kindergartens in China. Each session is organized as a variety of instructional activities, including warm-up, discover the story, discussion, explore beyond the story, and family engagement.

Each unit contains suggestions for achieving each of the four fundamental pedagogical principles of the CDCL Framework:

- Find engaging stories, activities and materials
- Identify the social language world of the child as one “anchor” for all units
- Build in discussion-oriented activities to promote competence in oral language
- Design units to include parent involvement activities

¹ (On the other hand, a standard approach in Chinese “international schools” is often actually the opposite – to start with 100% immersion in the second language and slowly increase the amount of time in native language up to 50%. There are pros and cons with both approaches bilingual classrooms.)

Each unit selects key vocabulary words for students to learn in each language. For example, to go along with the book Hug, even though it has no words in print/text, here are some vocabulary words that can be taught and learned, depending on the age of the student:

- 森林 forest
- 草原 grassland
- 长颈 giraffe
- 河马 hippo
- 变色龙 chameleon

- **About the book**

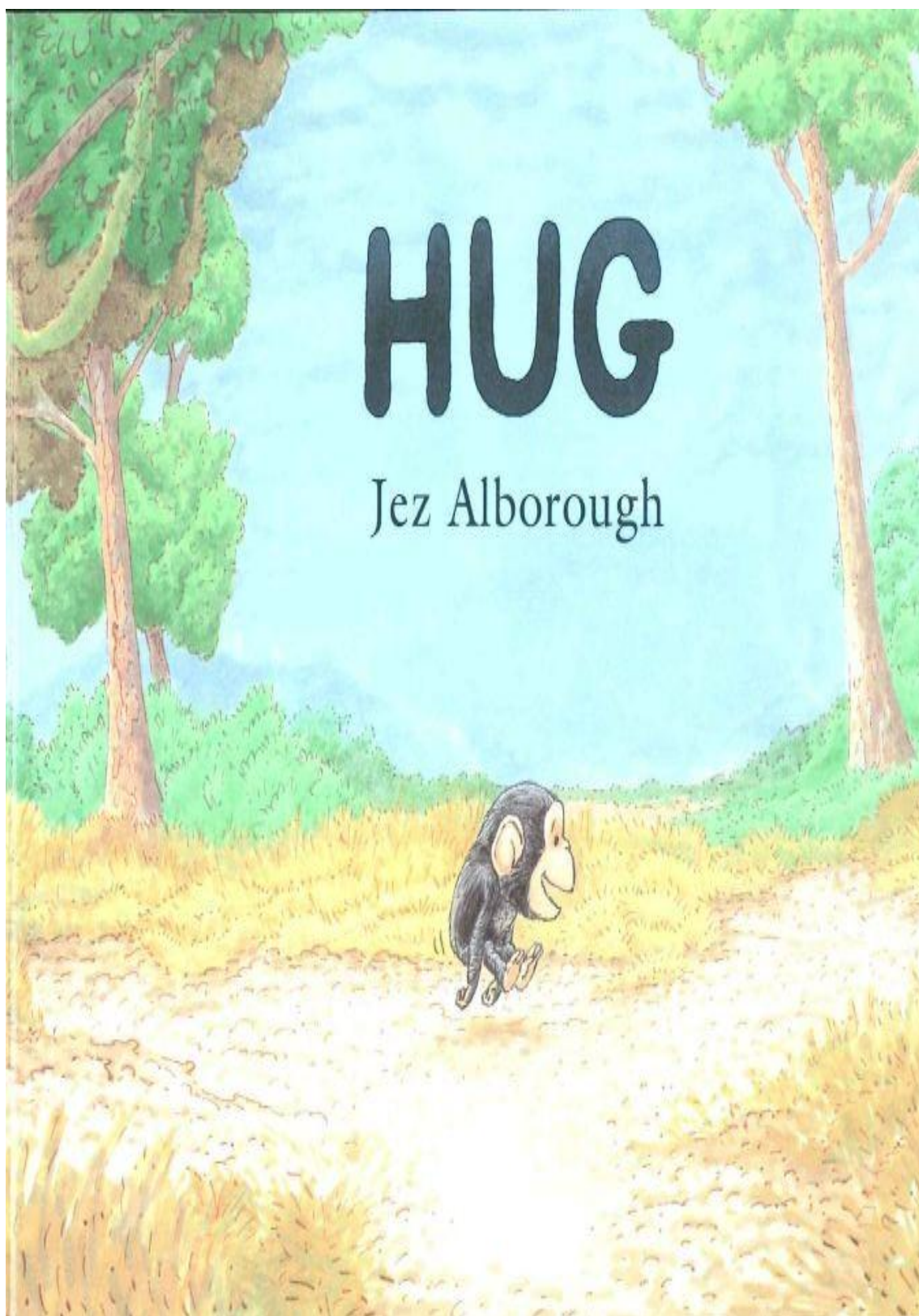
Bobo, a young chimp, happily sets about alone to take a walk in the jungle. (See picture below.) As he meets different kinds of animals, he notices that in each pair within a species, the adult animal and its offspring are hugging one another. Seeing his jungle friends cuddling and snuggling with their parents, from time to time, Bobo implores, "Hug", first quietly, and then with greater agitation. Eventually, Bobo sees his mother and they hug in joyful reunion, following which he happily revisits all the other animals with hugs.

Although this widely loved book contains only three words, it conveys an intriguing and engaging story about love and attachment. Most importantly, it can be interpreted from various points of view. Children can discuss the social world of primary attachments and cross species friendship through language, and better understand the material, physical, logical, and aesthetic world in which Bobo (and we) live through their study of math, art, science and health.

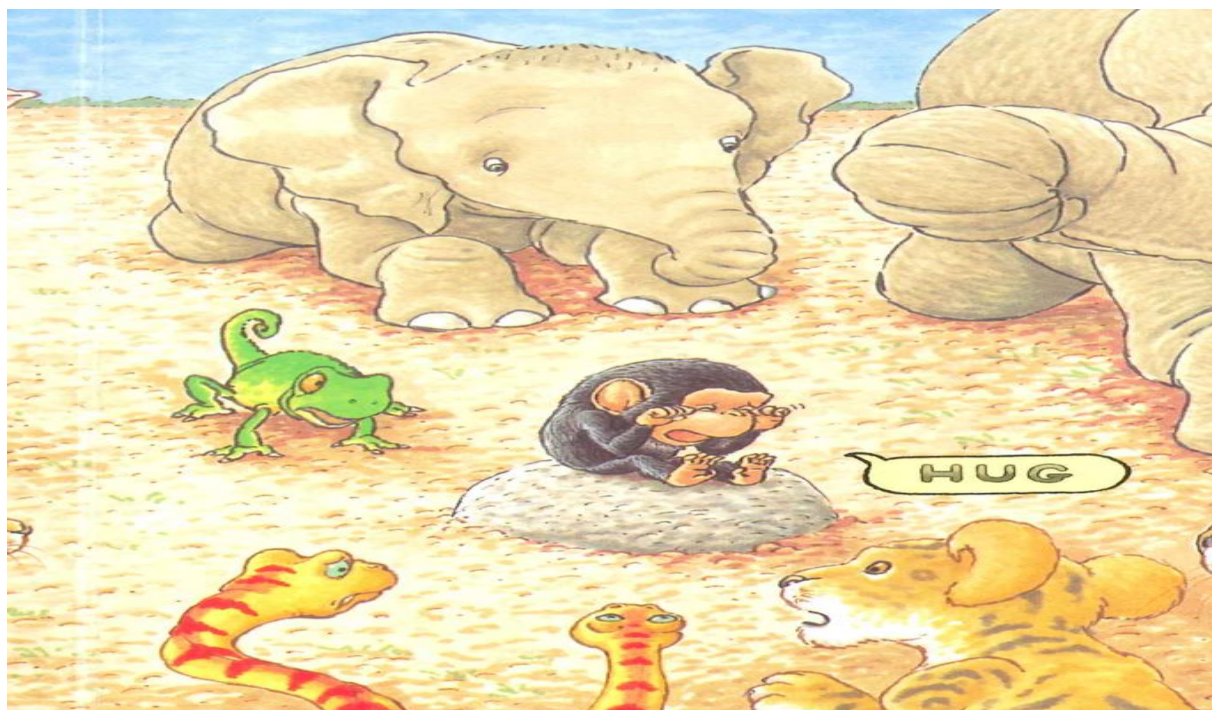
For example, to the sophisticated “reader” of this story, it may seem clear that at the start of his walk through the jungle, Bobo is simply pointing out that in the first mother/child dyad, the two elephants are hugging. However, as he continues to walk, the picture which depicts Bobo’s emotions suggest that Bobo may now be feeling sadder and lonely (see Picture 1) —until when he has become most upset, he and his mother see one another, and his expression, mood, and feelings change dramatically (as signified by the large print/font size and smiling faces in Picture 2).

These feelings are universal, not only in all humans, but across most, if not all of the animal kingdom. Although there are few words in the picture book and text, there are many words that can be used to complete the picture, and tell Bobo’s story. It is this aesthetic device that we, as educators, can use to promote cross language/ cross domain development, both of skills and knowledge, and across educational, ethical, and aesthetic development of young children. These are the devices that will help young children become sophisticated readers, and sophisticated story tellers.

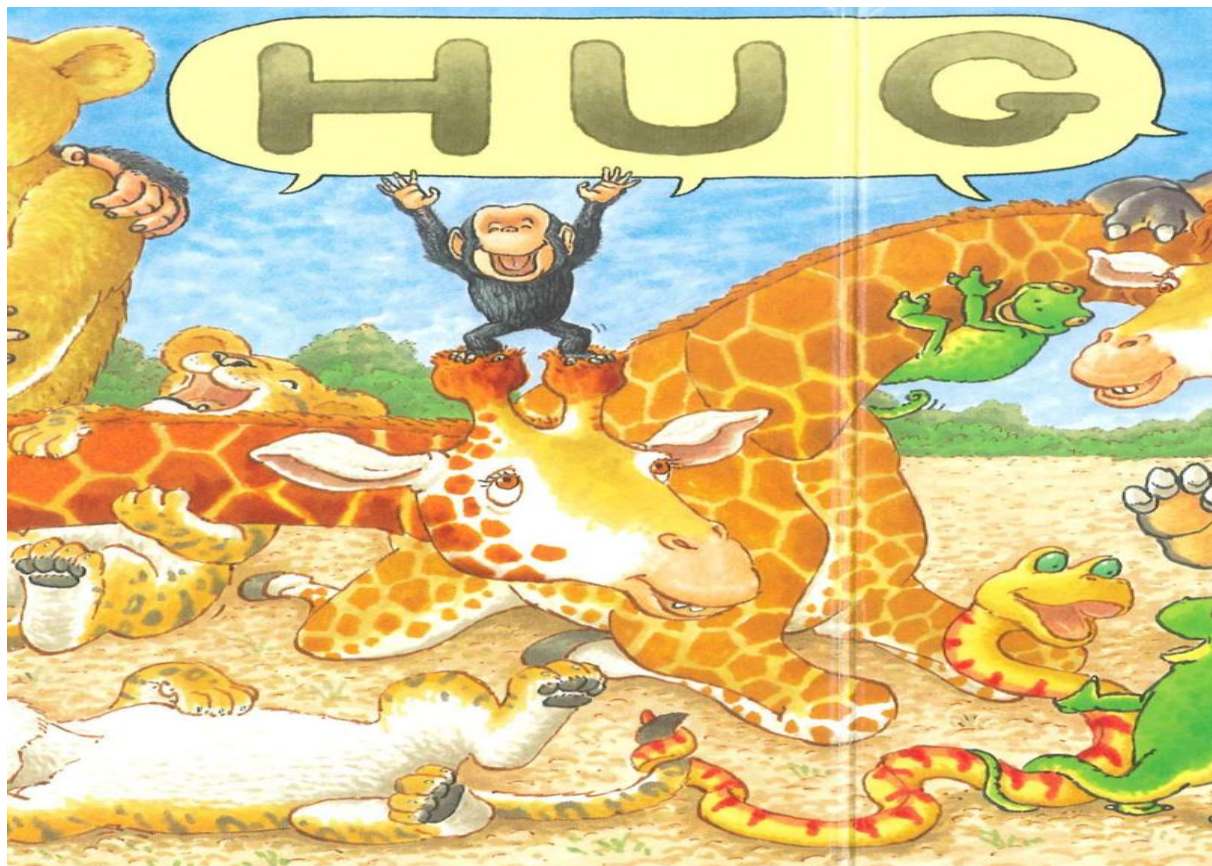
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Picture 1



Picture 2



II. The Cross Language/ Cross Discipline Instructional Model: Suggestions for Educators:

- **How to distribute the instructional time**

This prototype doesn't provide time limit for different themes. We suggest that the educator start with 15-minutes because it is approximately the amount of time that most 2- or 3-year-olds can concentrate. Instructors can then adjust the length of sessions according to the needs of individuals and groups.

- **How to create a language enriching classroom/home**

- Instructors are encouraged to ask open-ended questions of children; to be open to their responses and always remember that there are not always right or wrong answers, but there are always better or less good answers.

- Parental engagement is another important factor in building an enriching language/literacy environment for children.

- **How to present age-appropriate teaching materials**

- A variety of activities are provided in this unit. Instructors may address the content/instruments/order of the activities based on their best understanding of their students' developmental levels.

- It is critical to integrate 'play' into the learning process.

- **How to coordinate between the Chinese and English lessons**

-
- We suggest that for each unit, teachers teach the same lessons in two languages, in Mandarin first and English later. Educators are encouraged to use Mandarin and English at separate times, for example, teaching a language session in Mandarin on Monday, and teaching the same content in English on Wednesday. We teach Mandarin first so that children can understand the content deeply in their mother tongue, before learning the English words/structures to discuss the same content. Also, schedules should leave a certain amount of time as an interval between Mandarin and English classes on any given topic.
 - We suggest that the content knowledge for the two classes remain the same but teachers choose different activities in the two lessons.
 - Teachers who use this prototype could choose the activities which they like and suit their class best, making modifications as needed, while the overall teaching goal remains the same.
- **Additional Suggestions**
 - Considering the children's ages and that this book doesn't have a lot of words, teachers are encouraged to describe the story at the very beginning. However, be straightforward with the children; let them know that it is just teachers' own understanding and that children are perfectly welcome to have their own thoughts and understandings.
 - At the end of each session children will benefit from retelling the story, with scaffolding, if needed, from the instructor. Instructors can encourage their students to develop their own interpretations of the story content and to learn to understand and appreciate one another's understandings. (Supporting theory: Robert Selman on Social Perspective Taking skills)

- We encourage teachers to involve ‘play’ as much as possible in the process of learning, as play is children’s nature. Children learn in playing. (Supporting theory: Vygotsky’s theory of play).
- As one of the four primary principles in our pedagogical framework, we always include a design for family engagement activities, as at the end of this prototype. We think that family engagement is important in children development. (Supporting theory: J. Bowlby’s attachment theory).

Figure 1: Below is a description of the Chinese Ministry Framework for Preschool Education

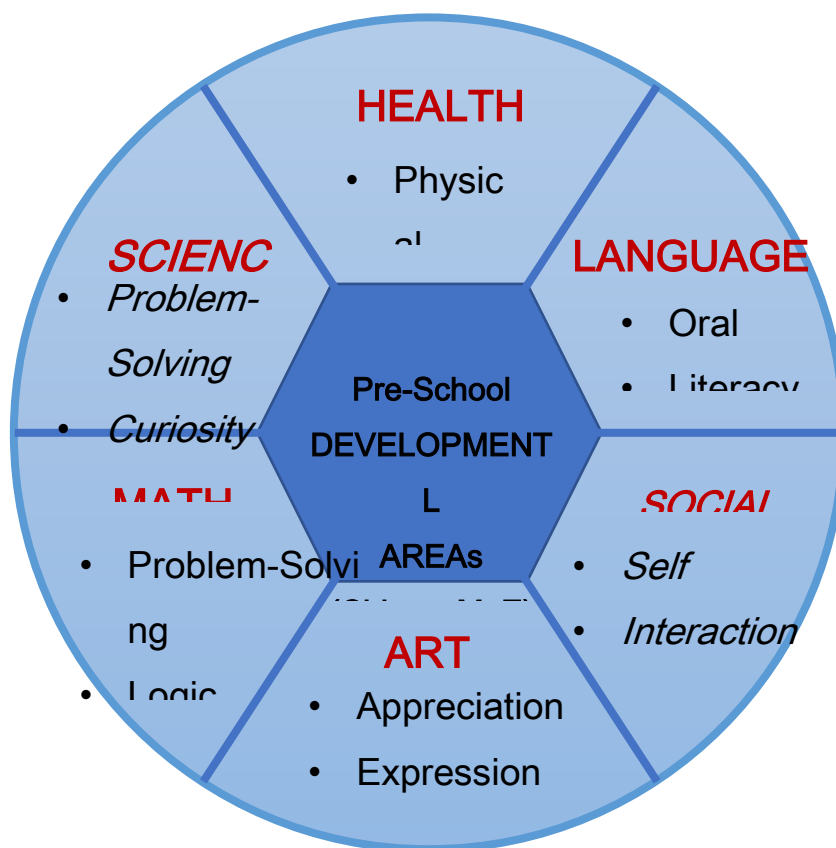


Figure 1

Figure 2: Initial Conceptual Framework:

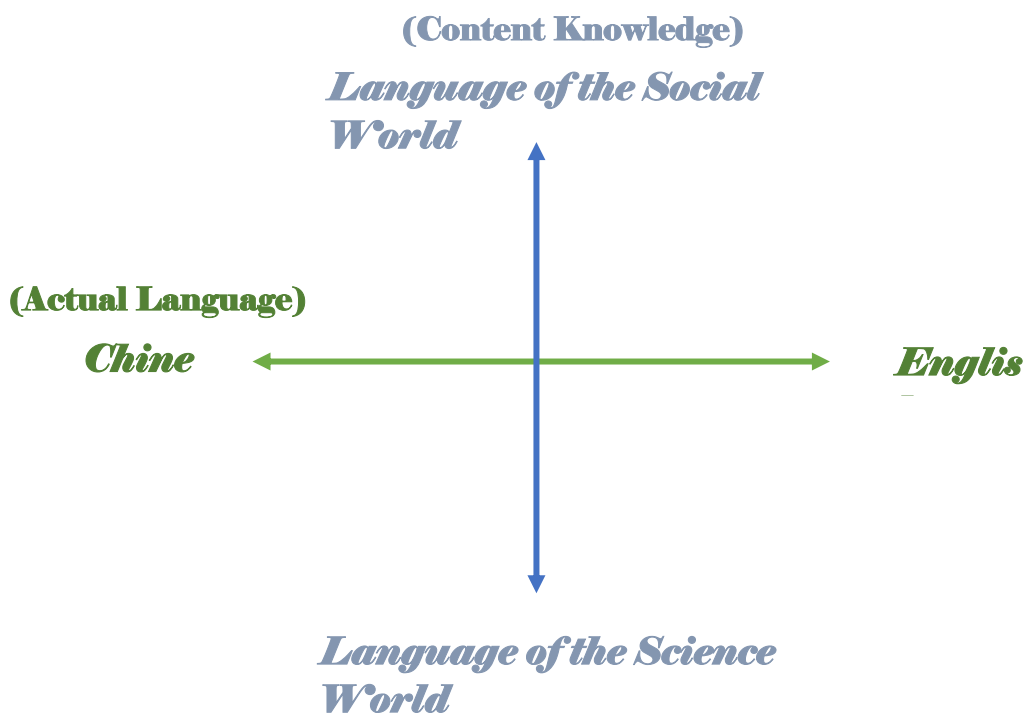


Figure 2

Summary: The Chinese Ministry of Education Framework for Preschool Education is meant to serve as a set of standards for all educational programs adopted by Chinese preschools. This model requires educational programs to address six areas of children's learning and development in Figure 2. We are taking three steps in our design of an innovative, evidence-based bilingual preschool curriculum that makes direct reference to and is guided by the model. Over the past 8 months, we have completed two (of three) steps.

Step 1:

We first designed a preliminary conceptual framework which provides guidelines for Chinese-English bilingual education focusing on narrative story-telling and sharing (We use *The Seesaw* story as our example). In this step, we demonstrate how we emphasize the curricular (domain) focus on the social world of the child, and how a focus on how the education of the child

through the language of the social world can be integrated with each of the other domains (where the language domain is conceptualized as both a universal medium of communication, and as particular and specific domain of knowledge. To create our first cross domain prototype, we used the read aloud book *Seesaw* with its strong emphasis on the social domain (needing friends to play, how to solve social problems with friends and classmates) and in this case example, a contrasting strong emphasis on the language of the physical world (in this case an emphasis on the physical sciences) as shown in Figure 1

Step 2:

In the 2017 summer, we then designed a prototype of a comprehensive cross domain/cross language approach using the book *HUG*. As noted above, this expanded model takes the Chinese Ministry of Education framework that comprises six developmental areas (health, social, math, language, art, science) and suggests how each of the six domains be thought of as a set of activities and a set of skills. (See figure 3).

For instance, each of the 6 activities/skills/knowledge domains listed across the top row correspond to examples of the primary skills (e.g. dialogic reading) and content knowledge (e.g., learning about animals) that the Chinese Ministry of Education identify in the first column on the right as the domains that must be covered by a preschool educational curriculum. Using the story *HUG*, the check marks under each of the six columns represents the **primary** content and skills that will be presented in each the curriculum units we have designed into our prototype in Part III below. The reason there are check marks across all units for the social domain is that this domain anchors the prototype. Note also, that we have include both the field trip unit and the parent involvement unit in this summary figure. We suggest for children at the younger preschool ages, that

all domains can be explored using a carefully selected and high quality story book. This can be accomplished through story-telling and story-sharing, as well as through activities, both in school, and on field trips (e.g. a class visit to the zoo, i.e. going to the zoo, in the fourth of the skills and content columns).

Figure 3. Activities (Skills, and Domain Knowledge) in each column that emphasize each of the Ministry Developmental Areas (in each of the rows).

CHECKMARKS (√) indicates which developmental area(s) that each activity is meant to emphasize.

6 domains based activities/skills	Dialogic Reading, Learning Vocabulary Words	Learning about animals: habitats and habits	Compare animals' sizes/ Counting Comparing	Colors of the animals, Sounds of the animals	Learn health words and lessons about bonding	Field trip (Going to the zoo)	Parent involvement
Social	√	√	√	√	√	√	√
Language						√	√
Math			√			√	√
Science		√				√	√
Art				√		√	√
Health (including Mental					√	√	√

Health)							
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Figure 3. Activities and Domains

Figure 4, below describes the application of this framework to the prototype curriculum in Part III of this report.

Figure 4: From ministry pre-school developmental areas to actual curriculum design to specific activities (content knowledge domains and skills: A hierarchical model:



Figure 4. Extension of Figure 3

Figure 4 serves as an extension of Figure 3. This figure describes the hierarchical structure of the prototype as it aligns with the guiding thoughts of the Ministry policy and how we adapt them into specific course arrangements. The first column from the left side lists the six pre-school developmental areas defined by Chinese Ministry of Education. The second column generally includes two learning approaches: the promotion of knowledge or content development (in ellipse frame) and the promotion of skills development (in rectangle frame). Specific in-class activities recommended for each part are indicated in the third column. Instead of being isolated, the activities are designed to be related to each other. These activities also involve secondary skills and knowledge other than those identified as primary in the second column. These secondary skills and knowledge are listed in the last column.

The major contribution of this model is to transform the six key developmental areas into everyday practices and units to be enjoyed as they are comprehended by young children. As a bilingual curriculum, every unit is taught in both Chinese and English, as we note in the overview.

Future Directions: Next Steps

The picture books that we have chosen for steps 1 and 2 of our prototype, *The Seesaw Story* and *HUG*, have only a few words and are targeted at younger children, 2-3 years old, in the preschool period of development. As the third step in our first year of work (September through December, 2017), we will find books that are most likely to place a heavier emphasis on one of the six domains in the Ministry developmental areas framework, and so have themes, topics, vocabulary words (content) and skills that fall within that area.

For example, a story about a trip to the symphony or the theater will emphasize the developmental area (domain) of art, including music and drama. As such,

both the story selected and the activities that are constructed will focus on both appreciation of art (knowledge of art) and artistic expression (artistic skills). A trip to the doctor's office, will emphasize knowledge about health, for example, why it is important to wash our hands before eating, and skills (how to brush one's teeth). In addition, the health stories will also focus on mental health, that is knowledge about ways to stay happy, engaged, alert, as well as the skills one can use (for example, sharing with parents one's worries).

While any story we choose will be able to touch upon each and all of the six domains, we recommend as children grow older, improve upon their oral language, begin the task of reading comprehension, and engage in the world outside their families as social beings, to have a "specific developmental area approach". For instance, if the class of five year olds seems to be having challenges with sharing or teasing, stories told bilingually for these topics are very appropriate. Words are very important for these issues, so a bilingual program will want to help children be conversant with these topics in both languages.



And, of course, one can revisit previous stories which will have new meanings to children as they grow older. As an example, we can revisit the Seesaw story we used earlier to help children learn basic words about their social world and their science world. At age four or five, we can retell the story to include themes and topics that may now be in the child's experience, for example,

feeling left out, or feeling different (after all Giraffe is rather taller than all giraffe's friends.

Summary of our Approach

Our unique approach will be to:

- Locate social relationships as an important focus of each story
- Identify language, in both Chinese and English as a cross domain skill, as well as a content domain of its own. This means we will supply key vocabulary words for each story. And, we will have a specific story that emphasizes the importance of language as a developmental area, for example, a story that focuses on reading by telling a tale/adventure about a young child's visit to the library.
- Continue to research the best methods of practice to encourage strong learning in the child's native language (here Chinese) and in the child's second language, in this case English.

We are guided by the words of ELEANOR ROOSEVELT, in her remarks at presentation of booklet on human rights, *In Your Hands*, to the United Nations Commission on Human Rights, United Nations, New York, March 27, 1958. United Nation:

“Where, after all, do universal human rights begin? In small places, close to home - so close and so small that they cannot be seen on any maps of the world. Yet they are the world of the individual person; the neighborhood he lives in; the school or college he attends; the factory, farm, or office where he works. Such are the places where every man, woman, and child seeks equal justice, equal opportunity, equal dignity without discrimination. Unless these rights have meaning there, they have little meaning anywhere. Without concerted citizen action to uphold them close to home, we shall look in vain

for progress in the larger world.”

III. Examples of activities to promote skills and knowledge in each of the six domains (developmental areas), using the story HUG as our case study of a narrative.

Language:

❖ Object:

1). To help children develop oral language skills via interactional classroom communication.

2). To learn high-utility words to express their feelings

❖ Keywords:

感觉	想要	看见	想念	听见
Feel	Want	See	Miss	Hear
拥抱	眼睛	心	耳朵	
Hug	Eye	Heart	Ear	

❖ **Instrument:** video player

❖ **Activity:**

● **Warm-up game: Song**

Teacher teaches children a short song including the keywords “hug,” “feel,” “want,” “see,” “miss,” and “hear” with certain gestures.

Lyrics:

(English) Seeing with eyes/ hearing with ears/ feeling with hearts/ I miss my mommy/ I miss my mommy/ I want a hug.

(Chinese) 眼睛看/耳朵听/用心去感受/我想妈妈/我想妈妈/ 我们抱一抱。

Melody:

Use the music of the video from this website:

<https://www.youtube.com/watch?v=DPIDWnfzxhQ>

❖ **Discover the story:**

Dialogic reading: Kids sit in a circle with the teacher in the middle. Teacher shows children pictures in the story book “HUG” and asks them step-by-step questions, for example: “What do you see in the picture?” “Why is the baby chimpanzee crying?” “What does the baby chimpanzee want?” and “What would you do if you missed your mother?” and encourages children to explore the hug story themselves with the vocabulary repeated and emphasized.

According to an experienced educational practitioner (Ms. Anne Selman), preschool kids may not be able to describe a complete story independently. Therefore, “scaffolding,” asking kids question step-by-step, may be an efficient pedagogy for helping preschool kids to develop a relatively complete understanding about the story.

❖ **Activities**

Option 1.

Passing Secret:

The classroom teacher divides children into different groups and asks them to line up. The teacher will do a gesture and describe his/her gesture in words (for example: I see with my eyes.) to the first child of each group. The first child then repeats the gesture and the words from the teacher to the next child. The last child of each group needs to perform the gesture in front of the classroom and give his/her best guess at the answer.

Science:

❖ **Object:** To help children learn the names of seven animals, their habitats and feeding.

❖ **Key Words:**

长颈鹿 giraffe	河马 hippo	变色龙 chameleon	狮子 lion	蛇 snake	大象 elephant	猩猩 chimpanzee
草原 grassland	沼泽 marshland	树木 tree	草原 grassland	湿地 wetland	森林 forest	森林 forest
草 grass	水 water	昆虫 insect	肉食 meat	肉食 meat	树叶 leave	水果 fruit

❖ **Instrument:**

Cards with animal, habitat and food pictures on them (each card has one picture, each child has their own set of cards)

❖ **Discover the story:**

Show the animals on the book to children, telling them the names of animals. Repeat the seven animal names to children by pointing to the pictures.

❖ **Explore beyond the book**

Where do the animals live in nature?

What do they eat?

Could you make a guess?

❖ **Activity:**

Option 1.

Raise your cards

Each child has a set of cards of seven animals, their habitats and their food in front of them. Instructor will randomly announce one animal's name and ask the children to pick the right card. Children should raise the cards and speak out animal's name, habitat and food at the same time.

Option 2.

Stickers counting

Prepare animals stickers for children. Teachers will announce the number of certain animals and ask students to pick the right number and counting the number aloud while sticking. For example, each animal has 10 stickers in total. Ask kids to pick out 5 chimpanzees and 7 elephants. When they finish sticking, children are asked to use their fingers pointing on each sticker while speaking out the number in sequence. This game tests children's recognition of animals as well as counting abilities.

Mathematics:

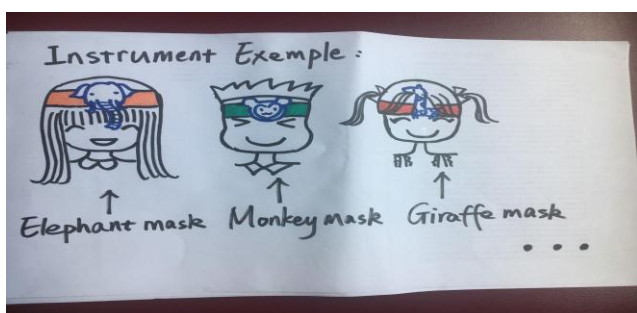
❖ Object:

- 1). The goal for children in this class is to count up to twenty in both Chinese and English...
- 2). Use various activities to help children learn about the conception of size; children are supposed to be able to distinguish big from small, tall from short, and heavy from light.
- 3). Children are expected to compare the size of different animals that appear in the book and zoo.
- 4). Children are expected to perform some simple calculations, e.g. addition

and subtraction of numbers within ten.

❖ **Instrument:**

- Masks with animal pictures on them (each mask has one animal on it; at least two masks for each kind of the animal)
- Printed pictures from book Hug, which will be used for children to count the number of animals in each picture.
- Number Cards from 1 to 10 for each kid. These cards will be used to stick



on the related pictures.

**Teachers can teach children to count the objects in front them with their fingers, so that they could feel when counting them

**Teachers could check children's understanding of numbers by asking them to list a certain number of something in front of them

❖ **Keywords:**

Warm-up:

In the beginning of the class, teacher will use the video and song to teach the children basic numbers (<https://www.youtube.com/watch?v=85M1yxIcHpw>). This video allows children not only to repeat the numbers with the rhythm of the song but also to engage in physical interactions, imitating the actions in the video like jump and clap the hands. This would help them memorize the numbers more easily.

Following are the words that are the focus of the class.

One (1)	Two (2)	Three (3)	Four (4)
Five (5)	Six (6)	Seven (7)	Eight (8)
Nine (9)	Ten (10)	Add (加)	Minus (減)
Big (大)	Small (小)	Tall (高)	Short (矮)

- In Chinese class, teacher may teach kids up to twenty.

❖ Discover the story with activity

This part will mainly focus on teacher's question: how many animals are there in each page? Ask kids to stick their number cards on selected pages. Encourage children to count the number out loud.

The second question that teacher may ask students is: what are those animals?/ How many elephants are in the pictures?/ How many chimpanzees can you see in the picture?/ Are there three giraffes in the picture? if not, how many can you see? This would allow kids review the animal's' name they have learned in science class and practice the math skills.

❖ Activity

Option 1:

Let children pick one animal in the book and give them a mask of that animal. Then let teacher ask children: "I need two giraffes to hug each other; I need one giraffe and one snake to hug each other; I need two chimpanzees and two hippos to hug together, etc." After hearing the order of teachers, the

children wearing certain masks will come to the middle of the classroom and follow the instruction. Children are asked to count off the number in sequence. Teacher may repeat this activity for ten to fifteen rounds which will give children a sense of combination and enhance their language ability.

Option 2: (for older children)

Divide children into groups of three. In each group, let them hug one person at a time and ask them to tell the class how many times they have hugged in total.

Next, divide them into groups of four/five/six, and let them repeat the activity again and again and then share with the whole class about their findings. This activity is preferred to be implemented in Chinese class for older children.



Option 3: Fairness Game

Tomorrow is Bobo's birthday, and all the animals are invited to Bobo's birthday party. Each animal loves eating cakes and there is a large piece of cake in the middle of the table. How you are going to share the cake between those animals? You plan to divide this cake into how many pieces? Are you going to give each animal an equal amount of cake? What if an animal says that he/she will starve if he/she only gets a small piece of cake?

Visiting the zoo, a whole class field trip:

❖ Object:

- 1). To connect what children have learnt in classrooms to real-world observation
- 2). Children are expected to compare the size of the animals in the zoo and try to distinguish the color of the animals.
- 3). Help children review what they have learned in the previous three sessions, and be prepared for the art, health, and social sessions.
- 4). Practice children's communication skills and problem-solving skills during the field trip.

❖ Instrument:

Pencils; Painting boards; Posters with parts of the animals drew on ; Sign Sheet from parents

Examples for the Poster



❖ Activities:

Option 1.

Photo taking:

Teachers and children can take some photos while they are walking around the zoo and try to find the animals that appeared in the book. Photos can be used to remind children of their experience and share this with parents

Option 2.**Discussion:**

After arriving at the zoo, teachers can ask the following questions to remind children of their previous learning:

1. What animals do you see?
2. How many animals are there?
3. Rank the animals in terms of their size: big, small, tall, short, heavy, light.
4. What do they eat?
5. What color are their clothes?

Option 3.**Observational drawing (for children older than 4):**

Students may pick their preferred spot within a certain area where the security is ensured. Then they can begin to sketch everything that comes into their sight.

When the kids are sketching, teachers can walk around and ask children questions like: what do you see?/ What are you drawing?/ Why do you pick this animal? Kids may reserve their painting for the Art session for coloration.

Option 4.**Dotting drawing (for younger children):**

For younger kids, observational drawing is not that practical. Therefore, we design a poster with parts of those animals drew on, which functions as a prompt and will encourage children to observe animals in details for finding out the missing parts.

Art:

❖ **Object:**

- 1). Cultivate children's aesthetic appreciation
- 2). Help children learn about primary colors and how primary colors combine to create new ones.
- 3). Help children learn the color of each animal through colorization.
- 4). Promote children's appreciation of music; encourage them to express what they can tell from the music.

❖ **Keywords:**

三原色	红色	黄色	蓝色	橙色	绿色	紫色
primary colors	red	yellow	blue	orange	green	purple
音乐	高音	低音	快	慢		
music	high pitch	low pitch	fast	slow		

These words will be first presented in a short video and explained by the teacher (M. Zhao & Kou aili, 2016).

❖ **Activities:**

Option 1.

- “Color HUG”

Visual displays:

Play the video (https://www.youtube.com/watch?v=bmquqAP2w_8) about how the primary colors “hug” (combine), and create a new color.

Activity:

Teacher ask children to create those colors.

Discussion

Teacher lead the discussion on how to create color. Ask questions about how did you create these colors, what colors did you use to create them, or what colors did you create.

Instruments:

computer with video player, brushes, boards, paints (red, yellow, blue, white).

Option 2.

- Color the sketching

For older children, ask all the students to give color to the sketches they painted in the zoo. For younger children who don't have their observational sketches in the zoo, they could give colors to their dotting drawings.

Instruments: brushes, boards, paints (red, yellow, blue, white).

Option 3.

- Coloring the music

Play Music: play the kind of music with strong and obvious features. For example, happy and blue music, classical music. A list of music is

suggested as below:

-Beethoven: Symphony No.5 | 贝多芬命运交响曲

-John Strauss: The Voice of Spring Waltz | 春之声圆舞曲

-John Strauss: Radetsky | 拉德斯基进行曲

-Saint-Saens: The Swan | 天鹅

-Sicong Ma: Nostalgia | 思乡曲

-Joe Hisaishi: Summer | 菊次郎的夏天

-Zhanhao He & Gang Chen: Butterfly Love | 梁祝

Activity: Ask children to paint what they hear in the music with color crayons.

Discussion: let children discuss and explain what they hear in the music and why they paint like that.

Instruments: computer with music player, color crayons, paper

Option 4.

- **Perform Music**

Activity: Teacher give order like ‘fast’, ‘slow’, ‘happy’, ‘sad’ and etc; children play their own music with simple musical instruments according to their understanding.

Encourage children to have fun playing with music.



Instruments: a music player, several musical instruments.

❖ **Theoretical background:**

According to Zhao and Kou (2016), red and white are the top two color words that are most frequently used among all color words for children age 0~3. Human's eyes are most sensitive to the three primary colors, especially kids. Therefore, children can be easily stimulated by colors like red and yellow and thus will feel excited when pictures with such colors are presented. This is why we choose activities like "Color Hug" with three primary colors for kids at this age.

Mental health (and social communication skills):

❖ Object

- 1). Introduce simple vocabulary about emotions to children.
- 2). Help children distinguish, understand and express their own feelings.
- 3). Encourage children to describe feelings using these newly-learned words.

❖ Keywords:

开心的 happy	伤心的 sad	孤独的 lonely	沮丧的 frustrat ed	害怕的 scared
哭 cry	笑 smile	眼泪 tear	焦虑的 anxious	惊讶的 surpris ed

❖ Instrument

- Cards with vocabulary related to emotions.
- Short pieces of music conveying strong emotional information (eg. cheerful music, sad music, background music of horror movies, etc.)

❖ Discover the story

- Instructors guide children to describe the story using questions as

following:

- 1) What are they doing ? (Answer: Hug)
 - 2) How do they feel when they hug each other ?
 - 3) How does Bobo feel when ...(animal names) hug each other ? (Answer: emotional vocabulary)
 - 4) How does Bobo feel when he finds his mother?
 - 5) If Bobo doesn't get a hug from his mother, will he also hug other animals? What makes you think so?
- Instructors introduce and emphasize emotional vocabularies when children are describing the story
 - Instructors teaching the keywords listed above again, and repeat them for children.

❖ **Activities**

- **Words guessing:**
 - 1) Divide children into pairs
 - 2) Give each group cards with an emotional word on it.
 - 3) One child in the group picks up one card, and act out the word written on it (eg. Pretend to cry to act out the word "cry"). The other child in the group guess what the word is according to the performance of his or her partner.

Object: Children can remember the words better by reading the written words and speaking them out when guessing. During this process, children can also learn how to distinguish and express different feelings.

PS: If instructors are not going to teach children written words, they can whisper the word to children, instead of asking children to read the cards.

- **Role playing:** ask children to pick up one favorite animal and make up an internal monologue or conversations. (What would you say if you are the animal/to the sad chimpanzee?)
- **Music Listening:** Play the music pieces prepared to children. Ask children what is in the music, how they feel when listening to the music piece? What kind of feelings do they think the music pieces want to express? When will people want to play this piece of music?
- **Teacher instruction:** Relate the emotional vocabularies taught with children's daily life by asking questions like:
 - 1) How do you feel when you miss your parents?
 - 2) Will you hug your parents when you see them?
 - 3) How do you feel when you hug others?
 - 4) Will hug make you happy? Why?
 - 5) When your friends feel sad, will you hug them?

❖ **Theoretical Support**

• **Perspective taking:** Perspective taking is “the ability to differentiate the other’s view from one’s own, and the ability to shift, balance, and evaluate both perceptual and cognitive object input, all of which is clearly cognitive”. (R. Selman, 1971). That is why we design open-ended questions for children to explore their feelings and ask them to retell the story before and after a session of class, because different people may have different understanding and interpretations.

• **Attachment theory:**

In re-examining the nature of the child’s tie to his mother, traditionally referred to as dependency, it has been found useful to regard it as the resultant of a

distinctive and in part pre-programmed set of behavior patterns which in the ordinary expectable environment develop during the early months of life and have the effect of keeping the child in more or less close proximity to his mother-figure. (J. Bowlby, 2005)

All CL/CD prototypes include a focus on Family Engagement.

Here is an example of a way to engage young children's families. It is drawn from the intersection of Language and Science:

Make the animals, habitats and foods cards with the help of parents by drawing or cutting from other materials.

Language:

❖ **Object:** Involve parents in children's learning process and help with children's literacy ability.

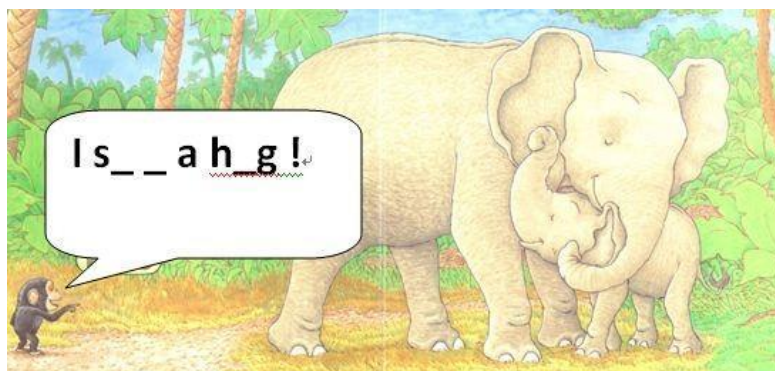
❖ **Instrument:** colorful English dotted letters; colorful markers; scissors; glues; a large poster for each family (with dotting letters randomly placed); a large poster (with the HUG story painted on and incomplete sentences)

*An example for the large poster with dotting letters





*An example for the poster with HUG painted



❖ **Activity:** Children and parents will be assigned to complete this task together. They need to line the dots into different English letters, cut them off, and paste them on the poster.

Preliminary References

Bowlby, J. (2005). A secure base: Clinical applications of attachment theory (Vol. 393). Taylor & Francis.

Children's wall art-wooden animal letters. Retrieved August 1, 2017, from Alphabet Gifts:

<http://www.alphabetgifts.co.uk/Childrens-Wall-Art/Sevi-Animal-Letters>

Jalongo, Mary Renck (2000). Early Childhood Language Arts: Meeting Diverse Literacy Needs through Collaboration with Families and Professionals [M]. Second Edition.

Numbers song let's count 1-10 new version. (2012, May 16). Retrieved August 1, 2017, from You-tube:

<https://www.youtube.com/watch?v=85M1yxIcHpw>

Primary colors song for kids/Secondary colors song for kids. (2015, April 27). Retrieved August 1, 2017, from You-tube:

https://www.youtube.com/watch?v=bmquqAP2w_8

Selman, R. (1971). Taking Another's Perspective: Role-Taking Development in Early Childhood. *Child Development*, 42(6), 1721-1734. doi:10.2307/1127580.

Selman, R. (2007) *The Promotion of Social Awareness*. Russell Sage Foundation, N.Y.C.

Snow, C. (2002). Reading for Understanding: Toward an R&D Program In Reading Comprehension. Santa Monica, CA: RAND

Wood, D., Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of child psychology and psychiatry*, 17(2), 89-100.

Zhao Minghui, Kou Aili. (2016). Analysis of Color Words Age Suitableness and Writing Strategies of Preschoolers Literature [J]. *Journal of Pingxiang University*. Vol.33. No.2.

泥娃娃. (2009, July 12). Retrieved August 1, 2017, from Youtube: <https://www.youtube.com/watch?v=DPIDWnfz>