

# **Lessons from the Yeti: Unpacking the learnability of risk perception**

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# **Disclosure Statement**

We have no relevant financial interests.

# Today's Session

1. Warm-up Activity
2. Conceptualizing risk perception and risk pedagogy (*why talk matters and why adult ESL classrooms are ideal sites for cultivating risk talk and researching risk pedagogy*)
3. “Learners as Interpreters” Framework and Classroom Examples
4. Implications for health literacy practice and public health research

# Essential characteristics of high-quality health literacy learning environments

- Sustained **interactions with others** about health topics that matter to us
- Focused interactions on the **language** we use to talk about health
- Opportunities to **play with language** – hear, see, read, write, say, embody it, imagine, **problem-solve**
- **Safe spaces** to play with languages



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# Adult learners in the ABE system

- Working Poor or Those Looking for Work
- Immigrants, refugee
- Parents
- Youth
  - Have dropped out of school
  - Limited, Interrupted, Formal Education (SLIFE)
- “literacy level” (‘zero’ level)
  - Low Educated Second Language & Literacy Acquisition (LESLLA)

*<https://www.worlded.org/WEInternet/us/adult-ed-facts.cfm>*

*[leslla.org](http://leslla.org)*

# What's missing from current health literacy definitions?

- Health literacy as malleable process (Pleasant, et al, 2016)
- Health literacy and risk perceptions as dynamic learning systems

*Languaging*

*Translanguaging*

*Grammaring*

Larsen-Freeman, 2003; Otheguy, García, & Reid, 2018; Swain 2006

# What's missing from current intervention design approaches?

**Social context** - our risk perceptions are shaped by the influencers around us

*“My friends are all ok after having their babies, I’ll be ok too”*

**Social risk perceptions**- we also have ways to think of collective risk but these are not usually specified in our discussions (but they might be)

*“We have made it here from our tough lives in Mexico- we are not as susceptible to diseases as other people are”*

**Risk talk**- Individuals’ perceptions and their interpersonal communication about a risk event, or risk talk, can play a significant role in the formation of societal responses to risks.

*“I heard someone’s daughter was in the hospital after she got the HPV vaccine- the vaccine is probably not that effective anyway “*



# Application to health issues: beyond the clinic

## Recent and planned work

**Goal:** Reducing type 2 diabetes risk factors among post-partum Latina women who have recently had gestational diabetes and increasing healthy behaviors at the same time.

**Challenge:** this group of women are 9 times more likely to develop diabetes in the next 1-5 years than other women. They often have low risk perceptions and often face many barriers in their daily life and thus are not deeply engaged in risk reduction activities –

**Goal:** Increase the uptake of HPV vaccine (targeted at adolescent girls primarily, for which Latinas have particularly low adoption rates), by engaging their mothers in vaccine adoption oriented health promotion interventions.

**Challenge:** this group of mothers are often 'outside' healthcare and may be reluctant to make healthcare decisions outside of peer/family social context –Have low risk perception re their daughter's lifetime cancer risk

# What do we mean by risk perception?

Definitions	Example
<p>1. <b>Deliberative risk perceptions</b> are logical, rule-based judgments concerning the likelihood of developing a disease or illness</p>	<p><i>"What is the chance (e.g. 1 out of X), that you will get diabetes in the next year?"</i></p>
<p>2. <b>Affective risk perceptions</b> refer to the valence (positive vs. negative) and associated arousal (high vs. low) of affective responses to the possibility of developing a disease or illness--often involve worry or fear</p>	<p><i>"How worried are you that you will get the flu if you don't get vaccinated?"</i></p>
<p>3. <b>Experiential risk perceptions</b> are rapid, heuristic-based judgments that involve "gut-level reactions"</p>	<p><i>"If someone close to you got diabetes, is your first reaction, I'm next?"</i></p>

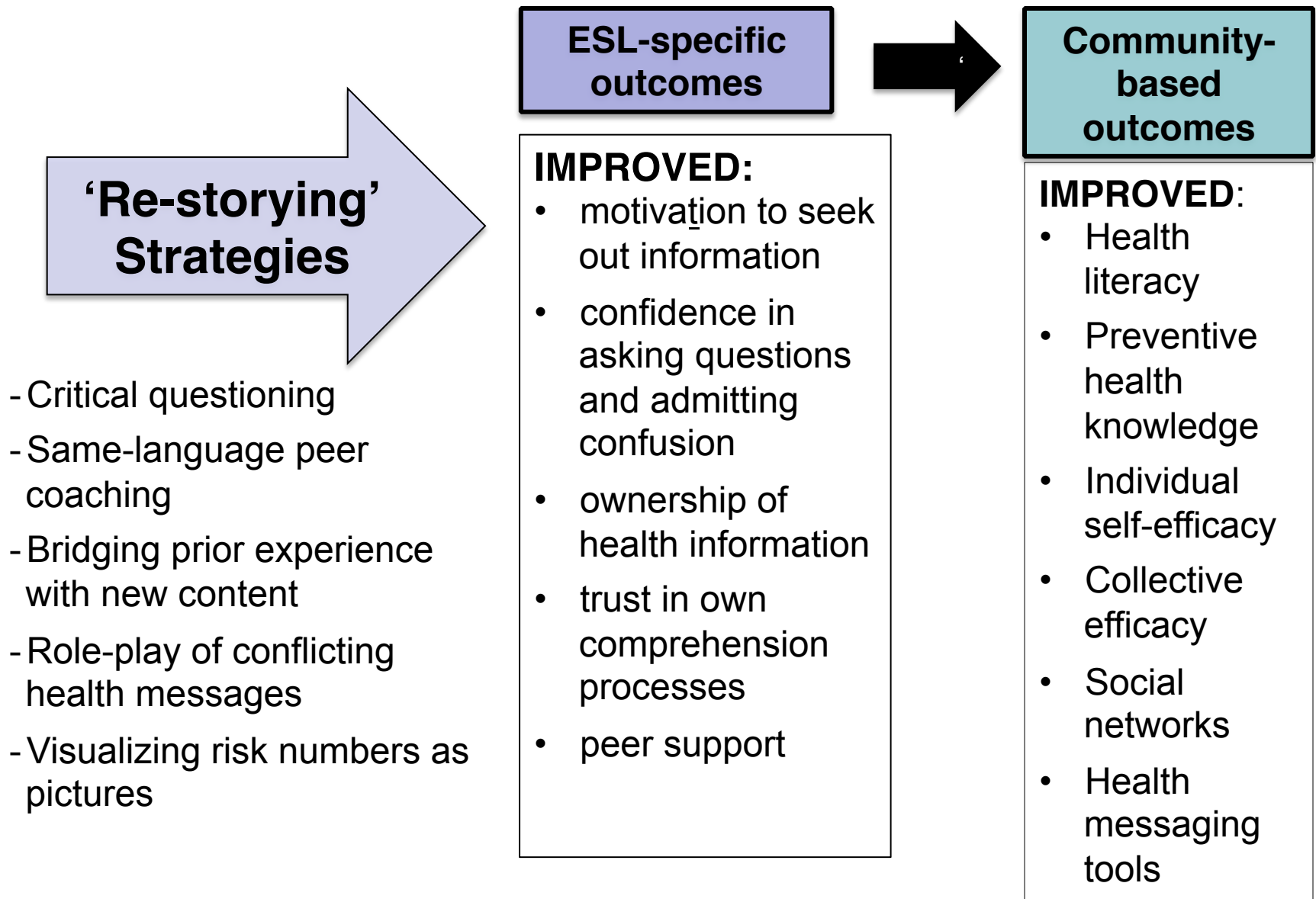
# What do we in health use information about risk perception for?

<b>Determining who identifies with risk/does not – to understand behaviors that affect health and predict who might engage in preventive behaviors</b>	<b>Tailoring Health Communication using LLC</b>
<p>What proportion of pregnant women with gestational diabetes see themselves as likely to develop type-2 diabetes in the next year?</p> <p>Will women with higher deliberative or higher experiential risk perceptions for getting cancer, vaccinate their children for HPV?</p>	<p>‘Risk stories’ that include scenarios women identify with and values they want to protect by engaging in prevention</p> <p>What stories worked for women who were early adopters to vaccinate their teenage daughters?</p>

# What do we in health use information about risk perception for?

Designing Interventions	Can we include socially oriented theories to harness the group's support?
Does providing 1:1 peer coaching to address risk perception-related barriers increase diabetes prevention behaviors among at risk women?	Motivational interviewing techniques derived from 1:1 individual focused behavior change counselling theories, but can include peer modeling
Does group re-storying vaccine barriers adequately address the social context of decision making? Are women more likely change their perceived risk perceptions doing this work when among socially similar groups of women (e.g. in ESL) than women given individual coaching?	Cross-disciplinary theoretical approaches align structural and social factors affecting perceptions of risk and decision-making, so that social realms are present

# OUR “LEARNERS AS INTERPRETERS” MODEL



# PART 1:

## AT THE PLAYGROUND

Hola Rosa, Hola Lucha!



Rosa, I wanted to ask you about the sugar test.



You did not take this test yet?



No, too busy. New job, no time...



## Giving Advice

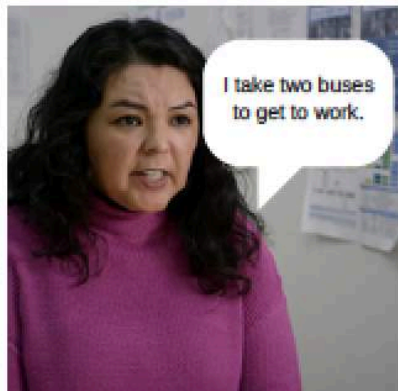
Lola says...



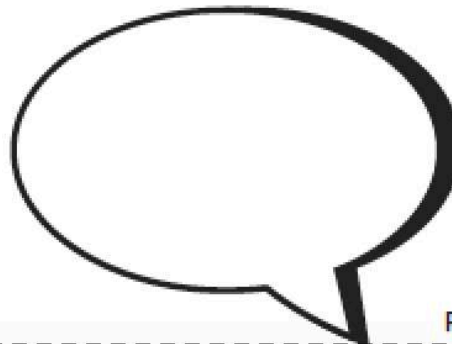
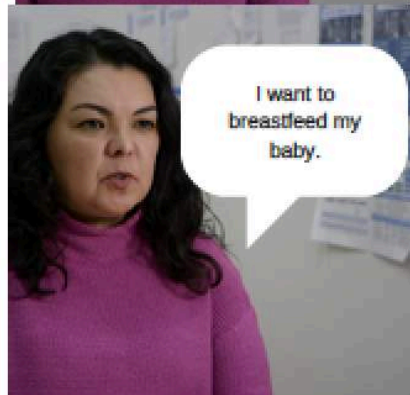
What can Lola's friend say?



What can Lola's health coach say?



What can Lola's family say?



# Using language to tell new stories

## 7. Talk and write.

What did you cook or eat **before** in your home country?

What do you cook or eat in the U.S **now**?

Talk to your partner. Use English or your native language.  
Use your ideas to write new sentences.

Before in your country	Now in the U.S.
1. I used to	But now I
2. I used to	But now I
3. I used to	But now I
4. I used to	But now I

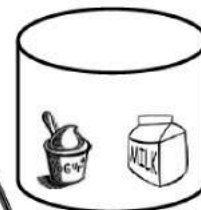
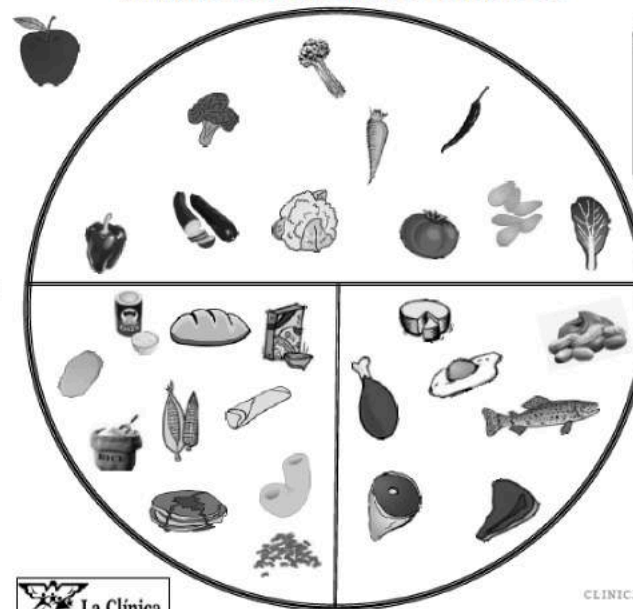




**Members of the Spring 2017 ESL Class**

*When we make these dishes, we feel energized, motivated, and proud!*

**EL METODO DEL PLATO (Diabetes)**



**Que elegiria?**

- Fruta
- Vegetales
- Almidón
- Proteína
- Lácteo



CLINICAL HEALTH EDUCATION

# Camila's Smoothie

## Recipe

1 whole green apple  
1/2 celery  
1 handful of spinach  
1 slice of pineapple  
1 1/2 handfuls of parsley  
1 cup of water

## Picture



When I drink this smoothie

I feel motivated and strong.

## Jazz Chant: Camila's Smoothie

Who made a smoothie?

Camila made a smoothie!

Who made a smoothie?

I did.

I made a smoothie!

Who made a smoothie?

She did.

Camila made a smoothie!

How'd she make it?

Apple, celery, spinach

Apple, celery, spinach

Pineapple, parsley, water

Pineapple, parsley, water

Mmmm! Mmmm!

Mmmm! Mmmm!

Camila, how do you feel?

When I drink it, I feel motivated!

Who feels motivated?

I feel motivated!

Who feels motivated?

She feels motivated!

Camila feels motivated!

# WHAT YOU CAN SAY

If you are talking to someone who is fighting diabetes...

You can ask:

- Have you visited the doctor?
- Have you checked your sugar?
- Would you like to go to the park?

You can say:

- You can be strong!
- You can set health goals.

If you are talking to your doctor or health coach...

You can ask:

- What medications do I need to take?
- How can I maintain healthy habits?
- How can I improve my food choices?
- How can I reduce my stress?

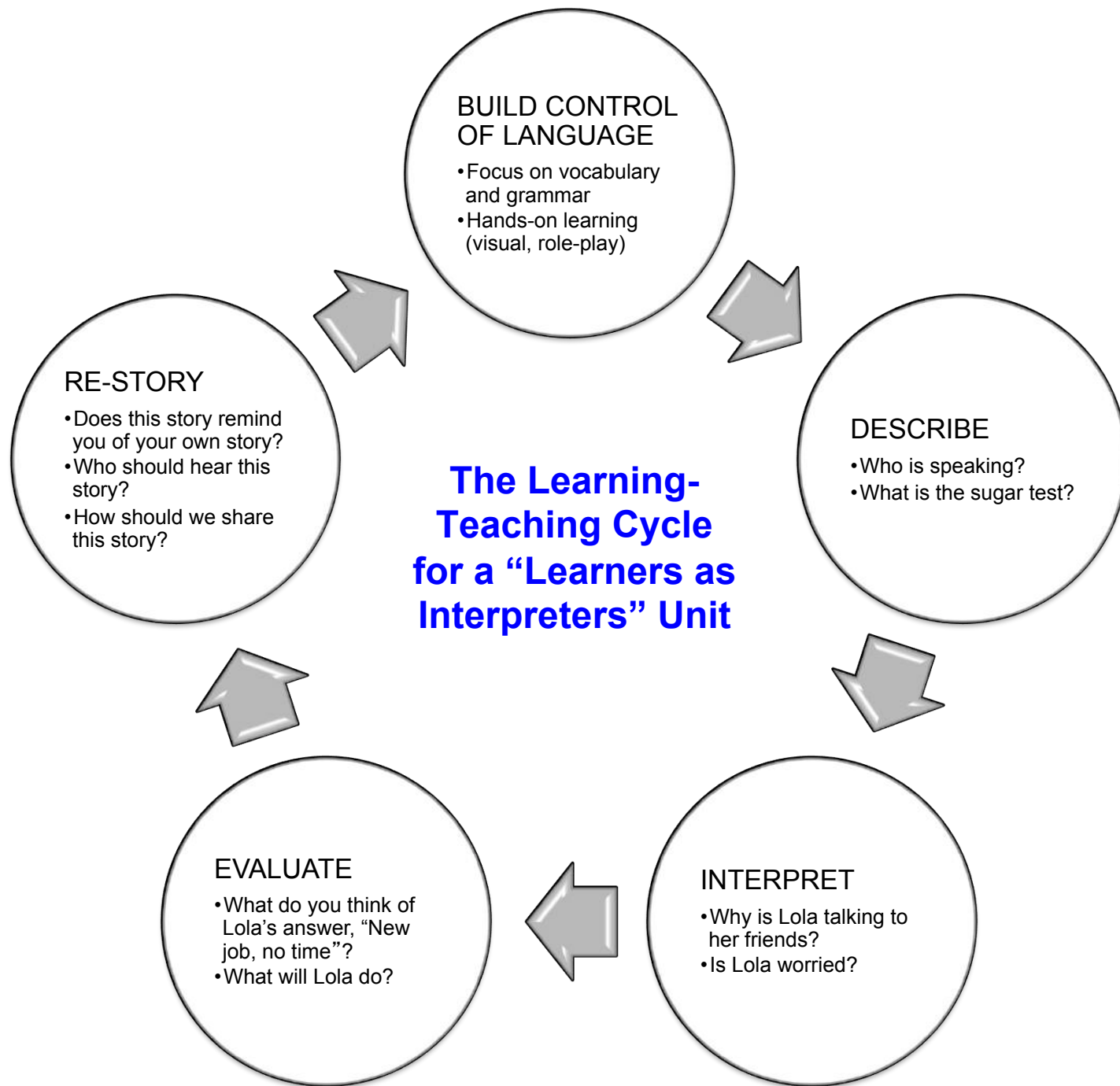
You can say:

- I would like to check my sugar.
- I would like to make an action plan to set health goals.

Write my own questions here:

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# ‘Seeing’ risk talk in beginning-level adult ESL classrooms

- |    |                   |   |   |
|----|-------------------|---|---|
| 1  | <b>Fleur:</b>     | <i>[reading]</i> what are some causes of lung disease?  |   |
| 2  | <b>Lucy:</b>      | uh huh, so this is a little bit different, what are some CAUSES, some REASONS, of LUNG DISEASE? these are your lungs <i>[gesturing]</i> | <i>T scaffolds learning of "causes" and "lungs"</i> |
| 3  | <b>Murielle:</b>  | mm huh mm huh   |   |
| 4  | <b>Lucy:</b>      | what causes, lung disease?  | <i>T repeats question</i>                           |
| 5  | <b>Josephine:</b> | <u>fimen</u> , smoking.   | <i>S1 displays multilingual competence</i>          |
| 6  | <b>Lucy:</b>      | smoking is one.   |   |
| 7  | <b>Murielle:</b>  | cancer  |   |
| 8  | <b>Lucy:</b>      | what?   | <i>Ss and T repeat utterances</i>                   |
| 9  | <b>Murielle:</b>  | cancer, cancer  | <i>T invites S2 to clarify</i>                      |
| 10 | <b>Lucy:</b>      | cancer  | <i>Ss repeat and extend utterances</i>              |
| 11 | <b>Murielle:</b>  | cancer stomach  |   |
| 12 | <b>Josephine:</b> | no  | <i>S1 corrects S2</i>                               |
| 13 | <b>Murielle:</b>  | cancer  |   |
| 14 | <b>Josephine:</b> | cancer lungs. lungs.  | <i>S1 repeat utterances</i>                         |
| 15 | <b>Murielle:</b>  | kòman ou di (unclear) poumon  | <i>S2 uses L1 to clarify meaning</i>                |
| 16 | <b>Josephine:</b> | lungs   | <i>S2 in 'teacher role'</i>                         |
| 17 | <b>Voices</b>     | lungs   |   |

Bunning (2014)





# Kate Singleton's ESL Pictures Stories “Stressed out!”



**Norovirus**  
(Norovirus)



**STD 4-Pack**



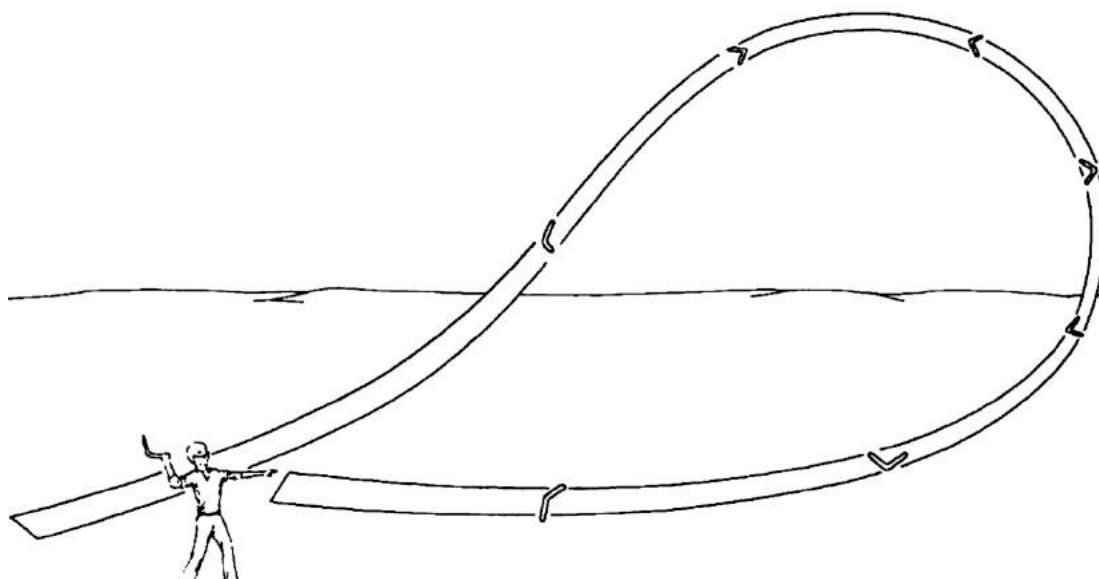
# Implications for risk pedagogy

- How do we support 'dialogic interaction' with risk information?
- In what ways are adult literacy classrooms essential contexts for encouraging 'language play' with the language of risk?



# **“throwing a metaphorical language boomerang” (Martin-Beltran, 2009)**

Learner language - “a tool that is launched into a new space and then return to the senders with new, deeper understanding”



# Cultivating spaces for ‘risk talk’ *boomerangs*



**“Tell me more”** (Santos & Shandor, 2011; Qing, etal, 2018)

**“How do you say that in your language?”** (Martin-Beltran, 2009; Walqui, 2006)

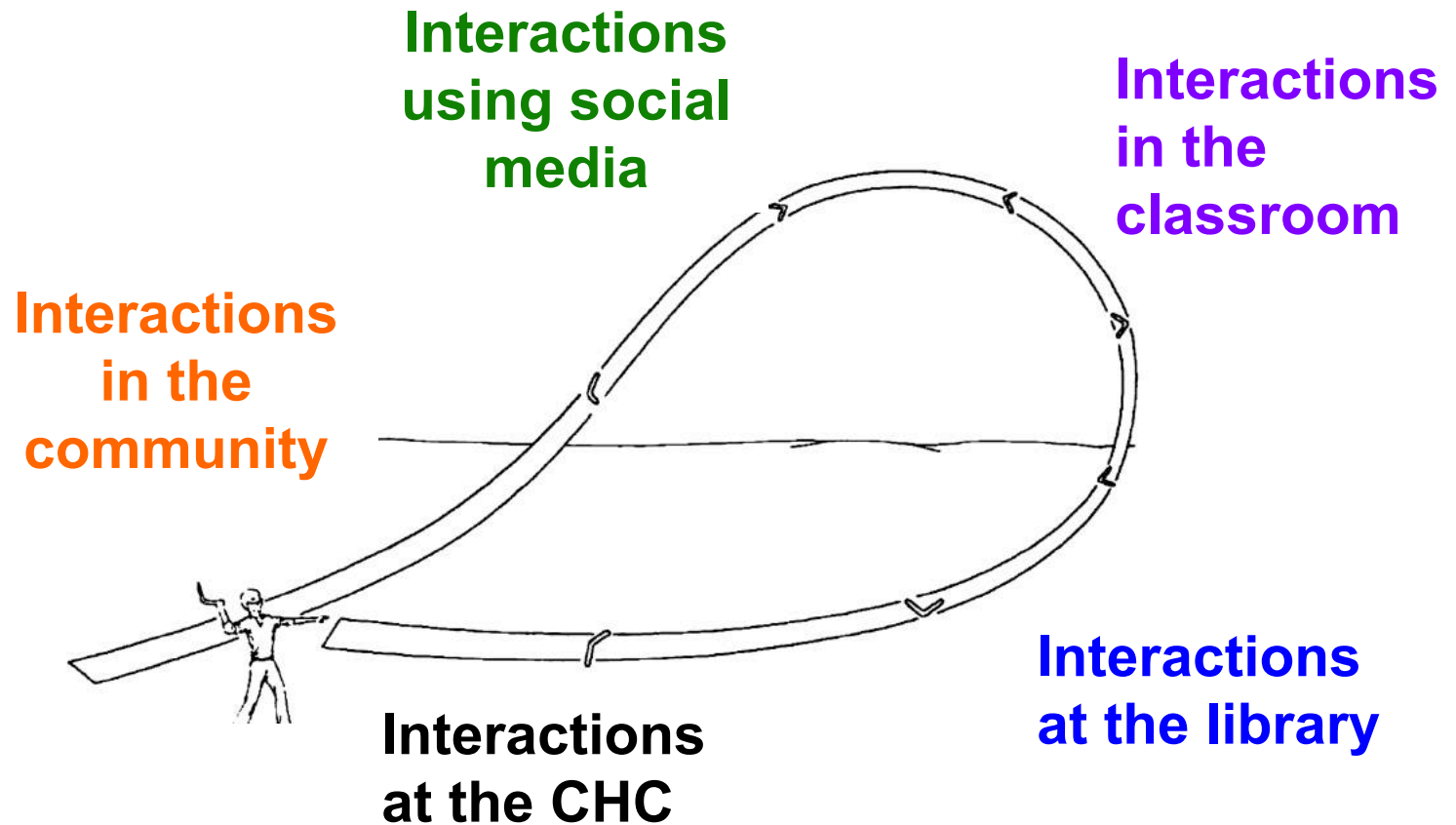
# Summary points

1. Cultivating spaces for ***dialogic interaction*** is essential for adult ESL learners to develop sophisticated language and literacy practices while simultaneously gaining knowledge about health risks and the preventive health care system.
2. The adult ESL classroom provides a ***unique space for working across languages, across modalities***, for enhanced language pedagogy and risk pedagogy. No trade offs.

# Summary Points

3. “**Boomerang interactions**” (Martin-Beltran, 2006) and the “**sum of all interactions**” (Wolf, 2018) as important **units of analysis** in health literacy research on risk pedagogy
4. Practitioners in isolation – whether in adult ed or health care – cannot provide the wide range of experiences learners need to develop their interactional competence in health care.  
***Interdisciplinary partnerships with public health*** are critical.

# Cultivating health literacy boomerangs through multi-site partnerships



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**Full list of references and selected resources to be provided at IHA.**