Exprgram: A Language Learning Interface for Mastering Pragmatic Competence

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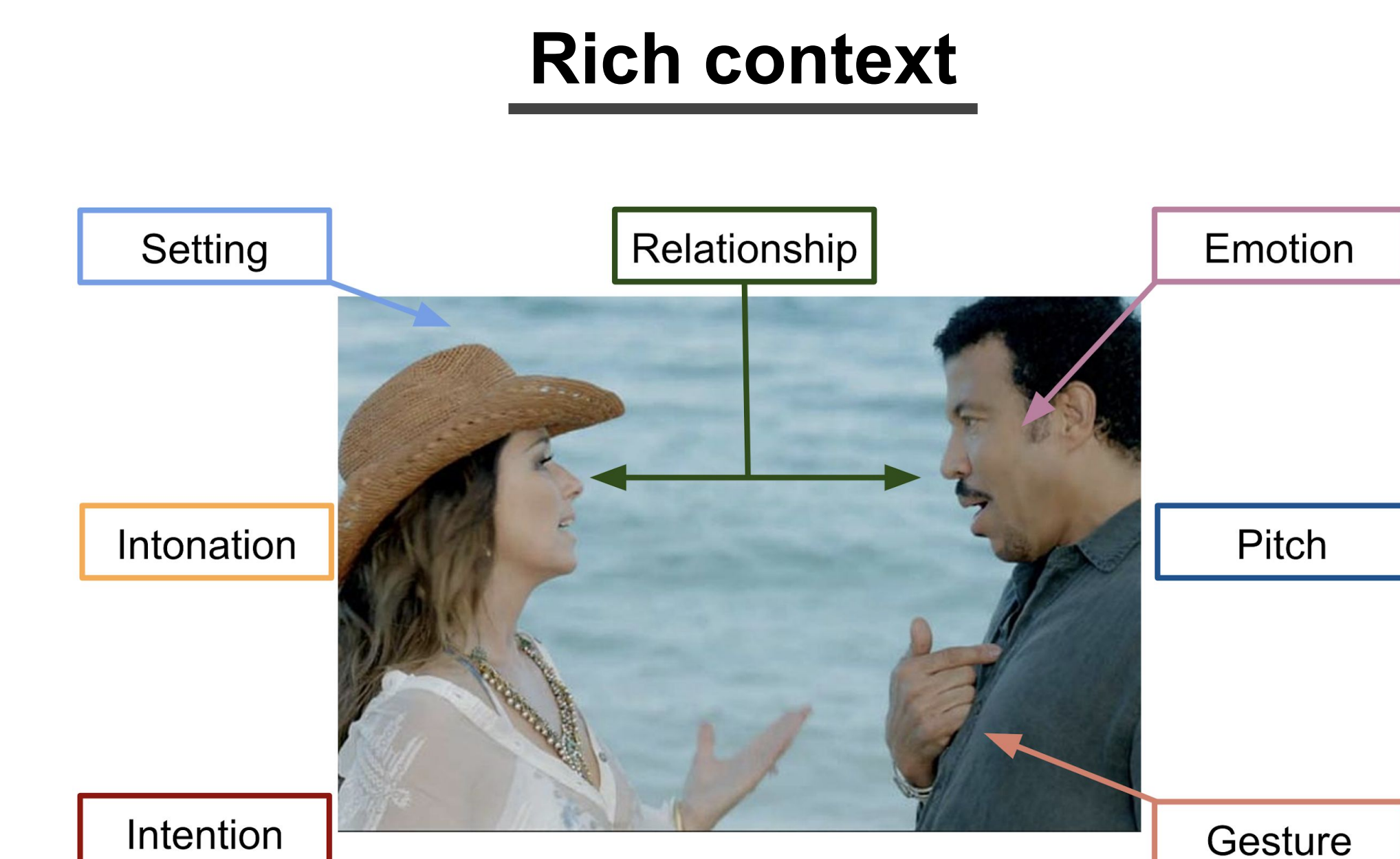
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KAIST   kixlab
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"***Pragmatic competence*** is an ability to comprehend and use language in a contextually appropriate manner"

Motivation

Oh my God,
What can I say
in this context?

How are you?

I'm fine, thank
you. And you?

Do I know
you?

How are you?

Just chilling.

I'm not so
well.

Haven't seen you
for a while.

Advantages of video learning

Rich context

Setting   Relationship   Emotion
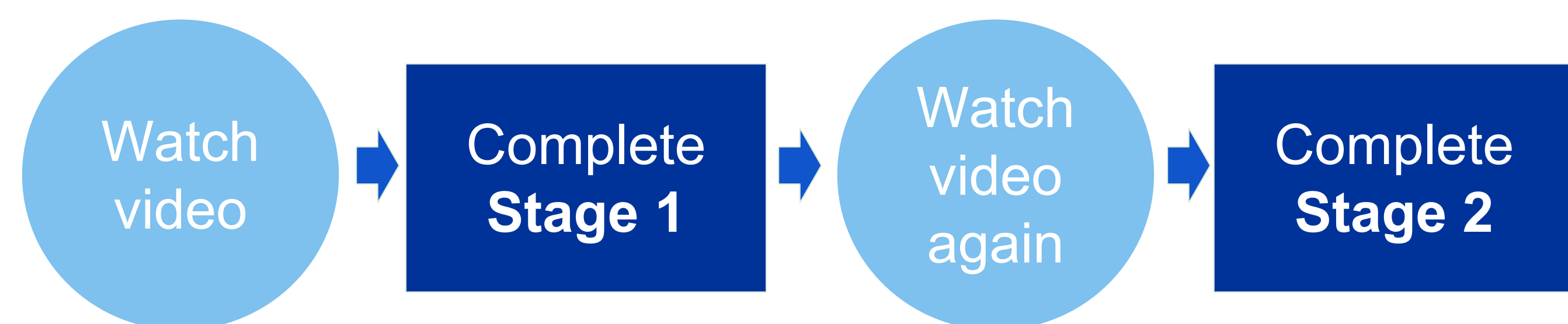
Intonation

Pitch

Intention   Gesture

Diverse situations

Provide diverse usage of expressions

Solution - Exprgram

Use videos at scale to teach pragmatic competence

Designed learning activities based on prior studies

Provides a two-stage learning to develop pragmatic competence

Raises context-awareness and provides diverse expressions

Watch
video → Complete
Stage 1 → Watch
video
again → Complete
Stage 2

Two-stage Learning

STAGE 1
Raising
context-awareness

Anger:
Disgust:
Fear:
Joy:
Surprise:
Sadness:
Emotion:

Types of speech acts:
◯ Representatives
◯ Commissives
◯ Directives
◯ Declarations
◯ Expressives
Write a word that best describes the speaker's intention.
Intention:

Responses to Intention activity
Speech Acts   Most selected   Your choice
                Representatives   Representatives
Top 3 intentions: 1. affirming   2. claiming   3. alleging
Your response: describe
Responses to Emotion activity
Type of emotions   Average   Your response
Anger   1   0
Disgust   0   0
Fear   0   0
Joy   54   60
Surprise   48   30
Sadness   0   0
Top 3 emotions: 1. amazed   2. excited   3. astonished
Your response: happy

STAGE 2
Generating &
learning
expressions

Here is the brief contextual information that may be helpful:
Most selected types of speech: Expressives
Top 3 Intention   affirming   claiming   express
Top 3 Emotion   amazed   amaze   eager
Average Emotion
Anger   Disgust   Fear   Joy   Surprise   Sadness
1   0   0   63   38   0
Write an expression that is contextually appropriate.

☐ Just watch how I win.
☐ Would you be there?
☐ So what do you think?
☐ Can you come?
☐ Would you be next to me?

Results & Conclusion

Learnersourcing workflow can enable learners to learn diverse expressions along the context.

Learners can raise their context-awareness through learning activities.

Learnersourced artifacts can be aggregated to produce accurate contextual labels.

Future Work

Evaluation on the learning effect

Develop a pipeline that utilizes learnersourced artifacts