### DIAL foundations

**Cognitive load**
- Processing content requires cognitive energy, which is a finite resource.
- Processing language also requires cognitive energy.
- Where learners must spend energy to process language, the energy that remains to activate schema and make connections with new information is reduced.

**Linguistic patterns**
- Individuals have predictable patterns in their talk. Some patterns are productive and some are problematic.
- Identifying productive talk and filtering out problematic talk can optimize instructional language and help students allocate their energy to learning new content and making lasting connections.

**Intentional design**
- Intentional design of instructional language improves the teaching experience.
- Intentional design also positions learners to spend their cognitive energy on accessing new information and activating relevant background knowledge.

### Linguistic patterns

**Predict**
- Close your eyes and try to hear yourself teaching.
- What do you hear? Write down a brief description.

**Gather data**
- Record yourself teaching a lesson or two.

**Write it up**
- Transcribe your lesson.
- Remember: you don’t have to capture every single sound, but do include those filler words and phrases like “Okay” or “Ummm”

**Reflect**
- Are you delivering instruction like you thought you were?
- What are your ‘go to’ words, phrases, and expressions?
- Can you identify some ‘noise’ in your teaching?

**Repeat**
- Record yourself teaching an additional lesson or two and do it all over again.

### Optimize your talk

*Filter out the noise so your students don’t have to.*
First, identify language that activates prior knowledge and learning strategies. Next, identify language that communicates academic content objectives. Finally, identify language that is not relevant to prior knowledge, learning strategies or content objectives. The first and second are your message. The last is the noise. Begin to reduce, if not eliminate, the noise.

*Don’t just look at the words you’re using.*
Look at the sentences, too. Spoken language is, by nature less formal than written language. However, we still need to find a voice that is cohesive.

*Don’t just look at your words and sentences.*
Look at the flow of topics across your lesson. Is the overall flow of information coherent? Do you stay ‘on message,’ or are you seeing interruptions in the topic flow?
Dynamics of Instructional Language

Message generated

- Content Ideas
- Fidelity 100%

Message transmitted

- Content Ideas
- Fidelity 40%

Message received

- Content Ideas
- Fidelity 60%

Dynamics of Instructional Language

Extraneous Load
- What we do today, we will work with how to graph points on a coordinate plane.

Germane Load
- Graph points
- Coordinate plane

Intrinsic Load
- We will graph points on a coordinate plane using the point-plotting method.

Teacher

Learner

Extraneous Load
- How to graph points on a coordinate plane.

Germane Load
- We will graph points on a coordinate plane using the point-plotting method.

Intrinsic Load
- Coordinate plane
- Point-plotting method

Clean

Noise
- What we do today, we will work with how to graph points on a coordinate plane.