
Course Design and CITE integration

Veronica & Jessica

Context/Background



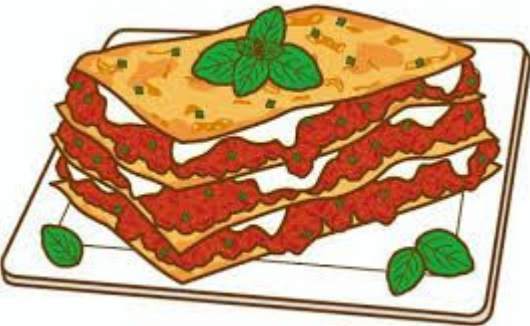
Course + collaborative course design

1. Undergrad course for future teachers.
 - a. purpose of the course is to have students familiarize themselves with emergent bilingual student populations
 - b. we wanted our students to think more deeply about language, their relationship to language and language ideologies.
2. CDLs key vocabulary in relation to design processes
 - a. pop-up paper engineering
 - b. podcast episode.



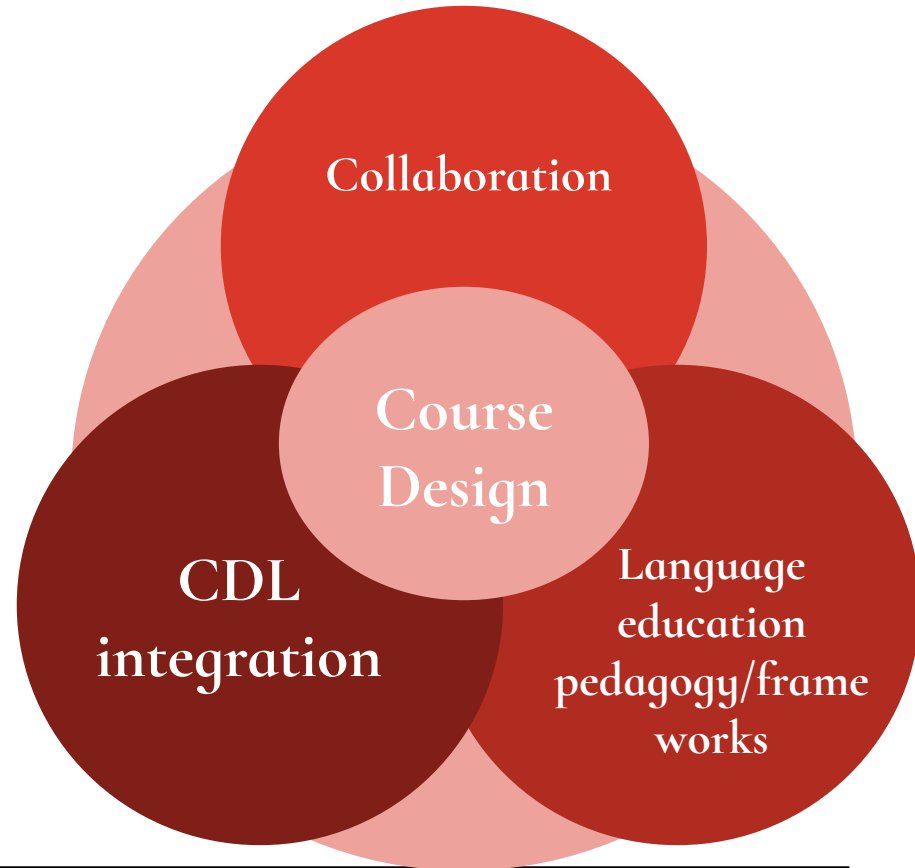
Research Questions

1. How is our collaboration informing and shaping pedagogical approaches and curricular decision-making processes?
 - a. How are we, as teacher-educators and researchers, defining and conceptualizing collaboration?
 - b. How do our language ideologies, positionalities, and pedagogical practices affect our curricular decision-making processes?
2. How are teachers and teacher candidates drawing on computational and digital literacies to make sense of their emerging conceptualizations about language?



Theoretical Framework

- Collaborative course design
- Integration of CDLs in a course
- Iterative course design



Data Collected

- Student artifacts (assignments, classwork, discussions, reflections)
 - Interviews
 - Focus Group
 - Course materials (syllabus, assignments, rubrics, etc.)
 - Research team co-designing sessions
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Methods

- Collaborative process: course design, data analysis collaboration
 - Descriptive
 - Process
 - Values

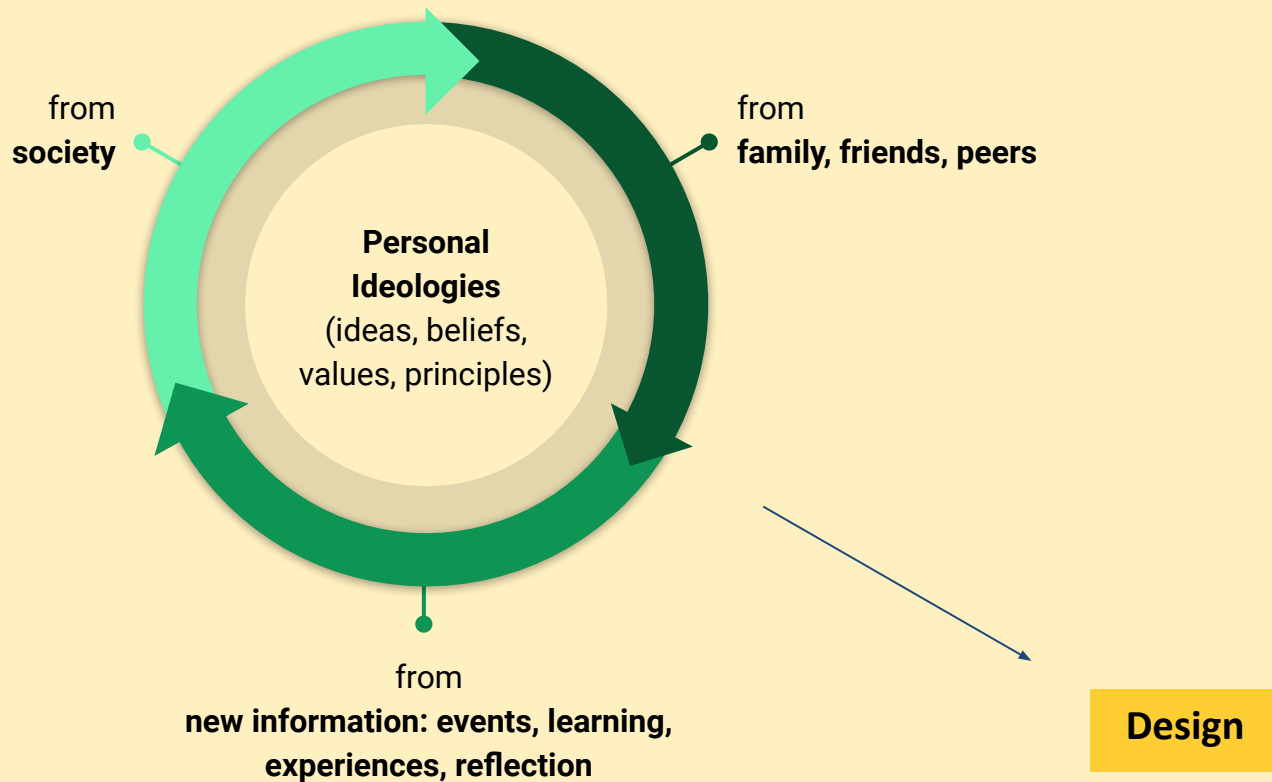


Thank
You

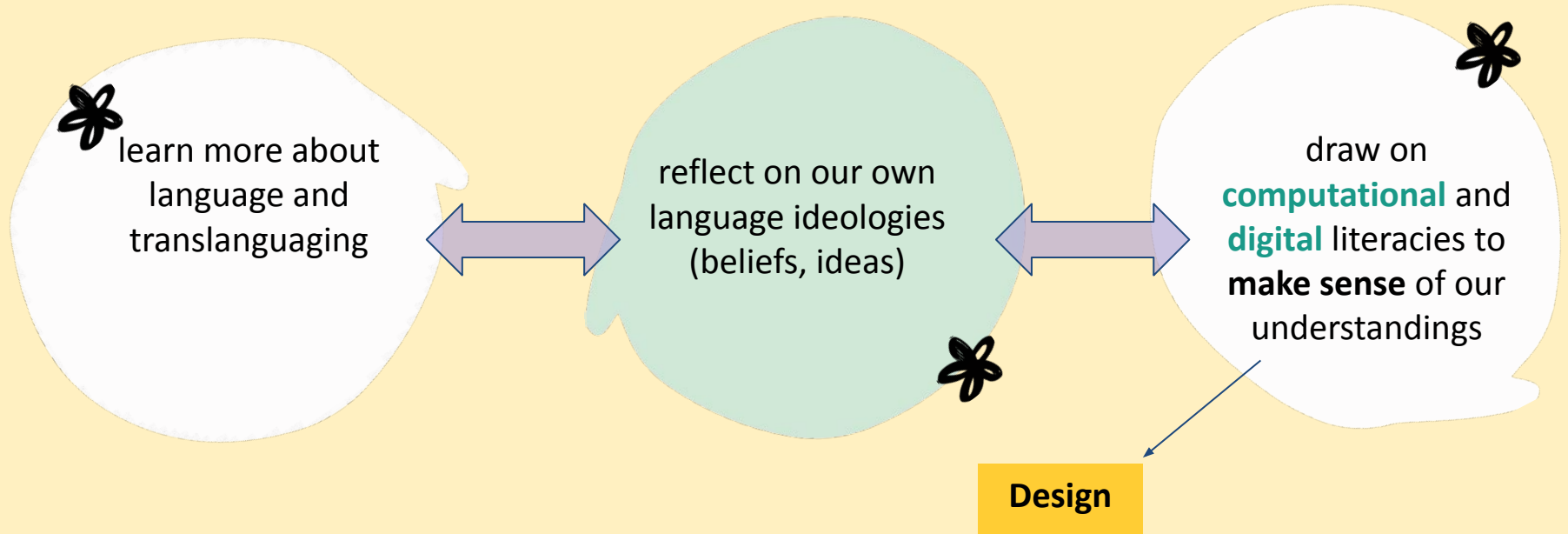
A handwritten-style graphic of the words "Thank You" in a cursive font, surrounded by short, radiating lines that create a sunburst or starburst effect.



Connections



To help us deeply think about language as teachers we are going to...



Design and Computational Thinking



We design by using...

- **Abstraction:** cognitive process that involves simplifying complex information, identifying essential elements, and creating generalized models or concept
- **Decomposition:** problem-solving technique that involves breaking down complex systems or problems into smaller, more manageable parts or components.
- **Programming:** to *design* algorithms (instructions) and debug them when needed
- **Algorithms:** set of commands for design
- **Pattern recognition:** repetition, connections across different ideas/symbols
- **Experimentation:** trying new things to see if they work. Creating new items
- **Debugging:** fixing issues in set of instructions and/or recognizing and fixing/improving programming that is faulty, not appropriate, or irrelevant
- **Iteration:** trying and try again same design for different results, or improvements

Examples

- **Abstraction:** coming up with a lesson objective, you see all 100 standards (too much!), and decide to focus only or 1-2 —cut the noise
- **Decomposition:** break down an assignment into steps → what should be in the introduction? what's the format (slides? written paper?)
- **Programming:** Creating a lesson plan that follows a 45-minute class period
- **Algorithms:** Creating the set of instructions for a mini-lesson...first students do, then...
- **Pattern recognition:** Noticing connections between courses (emergent bilinguals, language, UDL). Thinking of how to group students, (who works well? what supports are needed for each group?)
- **Experimentation:** Trying to create new things→ a new recipe, tinkering with a pop-up, trying a new class ritual (the first 5min...)
- **Iteration:** Today's lesson put students into random groupings. It did not work very well. Students needed more support. Changing the groupings for the next day.
- **Debugging:** Random groupings did not work, students were confused, little support. To debug, teacher notices who needs the most support and groups them for small group instruction. Co-teacher will work with other groups.

DECOMPOSITION



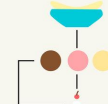
PATTERN RECOGNITION



ABSTRACTION



ALGORITHM



Super Preliminary Findings

- TC reflection facilitated by CDLs.
 - Exploration through curated design
 - CDLs, when integrated purposefully, can serve as a vehicle for expression and breaking down information.
 - 1) understanding language ideologies
 - 2) reflection on language ideologies
 - 3) connections to future pedagogical practices
 - Inadvertently engaged in design thinking
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Significance + recommendations

Iterative design → how to proactively apply it to course design in the future (Design thinking)

Cyclical relationship (iterative) → designing, prototype, feedback, revising, repeat

Practitioner-facing resource with RAs who are TCs

