Funds of Knowledge/Cognitive Linguistic Control:

Empowering Students’ Written Expression

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Presentation Agenda

I. Introduction
II. Diversity Education: Issues
   A. CAHSEE: An example
III. Factors: Student Beliefs
IV. Solutions?
V. Presentation’s Purpose
VI. Results/How do we know?
VII. Framework
VIII. Why did students improve?
    A. Research Supporting Methods Taught
    B. Methods Taught: Examples
    C. Other reasons for success.
The Problem: CAHSEE Example

Per program evaluations (2009;2010) of the California High School Exit Exam (CAHSEE), California high school students learning English as a second language have (in comparison to other age mates)

- A higher drop out rate
- A higher number that believe they will not get a high school diploma. (HumRRO, 2009; HumRRO, 2010)

Factors – Skills, Belief, or??

Teachers reported that students having difficulty lacked

- prerequisite skills
- motivation
- materials of interest
- materials at appropriate reading levels

ELL students reported that test content did not match that of classroom instruction.
Solutions?

- CAHSEE program evaluators state that

  “Some recent research suggests the importance of psychological as well as academic preparation for the CAHSEE. Students must believe that, with appropriate effort, they can master the required skills and pass the CAHSEE…… ensuring ‘Yes, we can’ beliefs.” (HumRRO, 2009, p. Xiii)

Solutions?

- Schleppegrell (2011), in the AERA newsletter on English Language Learning, writes

  “A focus on academic language does not mean devaluing the language students use outside of school…it means recognizing the challenge students face in adding new registers to their repertoires and bridging from the language they bring into the academic language they need to develop……(p. 8)
Education’s Dilemma

- HOW ...

........in this time of increasingly diverse communities, do we teach a diversity of students with a diversity of skills
.....in such a way ..........................
that students capitalize on their own oral literacies AND build confidence in their own academic abilities?

Presentation Purpose

- To discuss the results, research, and rationale of a pilot program for high school students learning English that evidenced an increase in student
  - Independent essay writing skills
  - Use of their own oral literacies
  - Confidence in abilities
  - Expression and support of opinions in their regular classes
How do we know?

The students told us....

How do we know?

› The teachers told us...
How do we know?

- Pre and post test scores proved it....

### Student Progress Report: TW Workshop
Barstow, California, Pilot

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### Results Summary

- Students
  - Improved essay
    - Organization: An average of 6.5 points (of 10 total)
    - Development: An average of 5.3 points (of 10 total)

  - Rated program methods/training with ‘4’s and ‘5’s (on a scale of 1 –not helpful, to 5-very helpful)

  - Reportedly (by an administrator from a staff meeting) expressed opinions more in class and supported these opinions with examples, etc.
Results Summary

- Students
  - Used their oral literacies to perform academic tasks
  - Demonstrated increased confidence
  - Demonstrated independent use of skills taught
  - Increased their expression of personal beliefs and support of these in their daily classes

The Study

- Population: 9 of 12 female high school students in English language learning programs (above CELDT 3)
  - Received English class credit/grade for class
- Community: Barstow: 42.8% Hispanic
  - 30% unemployment
- Teacher & aide:
  - Hispanic, Bilingual
  - Attended weekly training.
  - Used scripted program.
- Talk/Write Method Implementation
  - Run as an afterschool program 4 days/week
  - Goals: Teach essay writing skills
    - Promote independent function.
  - Priority: Fluency, organization, development
Data Collection

- Pre and post tested persuasive essay writing skills
  - Week 1 and Week 6, after instruction in different essay types
- Student attitude surveys: Week 7
- Classroom teachers’ surveys: Week 7
- Obtained copies of most work in student binders

Theoretical Framework

- An extension of previous work:
  
  Borrowed from 4 paradigms: social psychology, brain based educational research, strategy instruction, and funds of knowledge.
Theoretical Framework

- **Social psychology**: Study of the impact of student prior grades on future aspirations and grades

- Suggested that skill acquisition impacts student goal setting and academic success. (Zimmerman, Bandura, & Martinez-Pons, 1992)

- **Issue**: Is success a motivator?

TF: Social Psychology

- Zimmerman, Bandura, & Martinez-Pons (1992)
TF: Brain Based Education

- Erupted in the late 1990’s (Jensen, 2008)
- Used neurological research on cognitive function
- Set up instructional activities that promoted multi-modality learning, i.e. that activated motor, linguistic, sensory pathways

- Example: Whole brain teaching: [http://www.youtube.com/watch?v=eBeWEgvGm2Y](http://www.youtube.com/watch?v=eBeWEgvGm2Y)

WHY: Cognitive Skills Taught

- Chomsky: Cognitive embedding of grammatical forms (Anisfeld, 1984)

- Research on discourse rules (pragmatics), grammar, and semantics suggests that children build underlying networks both semantic and pragmatic via everyday interactions

- (Paul & Norbury, 2012).
TF: Strategy Instruction

- University of Kansas, Strategic Instruction Model
- Research student use of strategies to improve performance on academic tasks, e.g. paraphrasing to retain reading material content

TF: Funds of Knowledge

- Identified ways “families obtained, generated, and distributed knowledge,” i.e. literacy practices (Gonzalez, Moll, Amanti, eds.2005) – here referred to as ‘oral literacies.’
- Encouraging students' oral literacies validates knowledge obtained in the household as well as their own beliefs and perspectives.
TF: Talk/Write Methodology

- Unlike brain–based education, does not just set up activities that promote neurological activation,

- **Proposed:** Teach students ways in which their brains work (neurological processes), and how to tap these cognitive linguistic skills for an academic task, writing

- **Hypothesis:** Brain based strategy instruction + validation of oral literacies + self evaluation skills = independent function + success = confidence
WHY: Cognitive Skills Taught

- Word meaning, grammar, sounds, and speech movement are activated via across-system connections (Burke, McKay, Worthley, Wade, 1991),
- i.e. Meanings and words are connected— one word can lead to another.
WHY: Accessing Stored Words & Sentences: Strength 1

Tell students: You know all the words and sentences you need to know to write.

All the words/sentences you say and hear every day of your life are stored in your brain. (aka Chomsky & Connectionists research)

Prove to students: Role play
Elicit Student confirmation of skills: Questions
BB technique: Talk out essays before you write.

You want to go see a new movie with your friends, but you need $5 more.

Persuade your younger brother to give you the $5 he just received, so you can pay for the movie.
WHY: Judging sentences: Strength 2

Tell students: We can tell whether our sentences make sense. When you hear a sentence or read a sentence, your brain compares the sentence you hear to the sentence stored in your brain (aka Chomsky & Connectionists research).

Prove to students: Ball the hit the boy.
The boy hit the ball

Elicit Student confirmation of skills: Questions
BB Technique: Say the sentence aloud to assess whether sentence makes sense.

WHY: Accessing stored words: Strength 3

Tell students: Words are connected in our brains. Using common words like ‘I think’ will help you pull-out words for your thesis sentence that express your opinion. (aka Chomsky & Connectionist theory\research)

Prove to students:
1. Complete phrase completion tasks: Open the _______. Bread and __________. Come______.

Give specific topics and have students use ‘I think’ to say 3 opinion sentences (theses) to partner (listener/writer). Time this (5 minutes)
Elicit Student confirmation of skills: Questions
BB Technique: Use ‘I think.’
**WHY: Own experiences are key:**

**Oral Literacies: RESEARCH**

- **Research:**
  - 1) Schema theory (Baddeley, et.al., 2009)
    
    Our experiences are stored in theoretical cognitive structures called 'schema' (Bartlett 'Ghost story retell')
  
  2) Language is most developed and complex when used to express ideas for frequently used communication functions (Fey, 1986)
    
    Basic functions: Inform, persuade, or entertain.
  
  3) Nippold (2000): Study of high school students’ essay writing. Lengthier more complex essays were persuasive in function.

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**WHY: Own experiences are key:**

**Oral Literacies**

**Tell students:** We are able to tell more about a topic when we have had some experience with that topic.

**Prove to students:** Timed naming of words for categories (sports, food, clothes, cars). List length tells area of experience.

- **Elicit Student confirmation of skills:**
  
  **Questions**

- **BB Technique:** Write about your own experiences or beliefs. You will have more to say and will be able to explain these ideas more easily.
Other Reasons For Success:

- Top-Down approach/Scaffolded program
- Gave students a method that allowed them to listen to what they’ve written (take on reader role).
- A simple graphic organizer that can be changed based on writing purpose, e.g. writing about lit.
- Consistent link to conversational functions currently in their repertoire/experience.
  - e.g. important of order to reader/listener
  - need to give reasons for reader/listener to agree with thesis.
  - need to prove that reasons are true
  - that you can persuade others through written essays

For each skill taught, students
- were taught a guideline (e.g. unity, specific, etc.) and learned to evaluate those skills independently.
- Each skills review had the student repeat, via vanishing prompts, the steps to completing an essay up to that point in the program.
- Each skill taught used the following sequence of instructional steps: Teacher modeling, collaboration, partnership practice, independent work, evaluation of others and self.
- Individual consults with students to relay strengths and weaknesses (development and grammatical/mechanical). Grouped according to needs.
Conclusion

Talk/Write Methodology =

Brain based strategy instruction + validation of oral literacies + self evaluation skills =
independent function + success =

CONFIDENCE

Thank you ...

...............for participating.

If you have further questions or would like to find out more, please contact me at:
Maria.Davis-Perkins@cgu.edu.

Also, study methods are further described at: 3deducationalssolutions.com
References

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