Seeing What Teachers See….  
Learning what Teachers Know

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Outline

• Academic Background

• Teaching Experience

• Overview of PhD Project

• Pilot Study (March/April)
Academic Background

• BA: Linguistics & Anthropology/Education

• MA: TESOL (Second Language Acquisition)

• MSc: CADES (Anthropology: Cultures & Dev.)
Academic Background

TC:

Second Language Acquisition:

A Matter of Time: what is the role and relevance of temporal concepts in second language acquisition?

Second Language Assessment:

ILET (Introductory Level English Test: Literacy) for Students With Interrupted Formal Education

KUL

The Cautionary Tale of Rural Development: a critical view of agricultural knowledge and extension praxis
Teaching Experience

- NYC: 6th, 7th, 8th Grade ESL at MS 45

- Peace Corps: Agro-forestry, Literacy Skills, Environmental Education, HIV/AIDS Awareness, Community Development…

- Berlitz, International Refugee Center of Albany, LVA, Missoula Continuing Education…
Research Project

Transition and Its Impact on Teachers’ Expertise Development

• **Study 1**: How do teachers at various stages in their career and various levels of deliberate practice describe classroom management?

• **Study 2**: How do teachers at various stages in their career and various levels of deliberate practice describe their own classroom management?

• **Study 3**: How do teachers who actively engage in improving their professional competencies develop their classroom management skills over the course of their career? How do they differ from teachers who do not have such professional goals?
Pilot Study

Seeing what teachers see: exploring the use of eye tracking in teacher expertise studies

- Eye tracker comparison: HED v. RED
- Visual perception & attention
- Cognitive processes & knowledge structures
- Differences between expert/novice teachers
Classroom Scene

Let’s have a look at a classroom video:

- What do you notice?
- What seems relevant in terms of classroom management?
Classroom Scene

Experts

- tend to analyze and generate multiple hypotheses in the process of recognizing and solving discipline problems
- Can scan the classroom while simultaneously noting individual S behavior
- Strategies employed depend on the specific problem
- recognize the importance of T-S and S-S interactions during instruction

Novices

- tend to represent discipline problems in terms of the solution and seem unable to elaborate on the underlying causes
- Lack the ability to even recognize many discipline problems
- Often focus on only one student rather than considering the class(room) as a whole
- Concentrate more on the actions of the T rather than interactions between the T-S or S-S
Research Questions

What are the comparative advantages and challenges to using either a mobile eye tracker during a classroom situation or a remote eye tracker viewing a classroom situation to investigate covert processes of teachers?

<table>
<thead>
<tr>
<th>MOBILE EYE-TRACKER (HED)</th>
<th>REMOTE EYE-TRACKER 250 (RED)</th>
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<tbody>
<tr>
<td><img src="images/mobile-track.jpg" alt="Mobile Eye-Tracker" /></td>
<td><img src="images/remote-track.jpg" alt="Remote Eye-Tracker" /></td>
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Research Questions

- To what extent can each data collection setting capture:
  - cognitive processes?
  - perceptual processes?
  - overt behavior

- Can these data types be compared across experts and novices?

- What is the acceptance level of the teachers for each method?

- What are the conclusions for the ecological validity of each method?
To be continued…

Thank you for time and attention!