

**THE EFFECT OF TEACHERS' USE OF
DEVELOPMENTAL PROFILING TO GUIDE
INSTRUCTION IN TWO AT-RISK SCHOOLS ON
STUDENT ACHIEVEMENT AS MEASURED BY MAP
ASSESSMENT: TOWARD A MODEL FOR
PROFESSIONAL DEVELOPMENT**

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One size does not fit all...

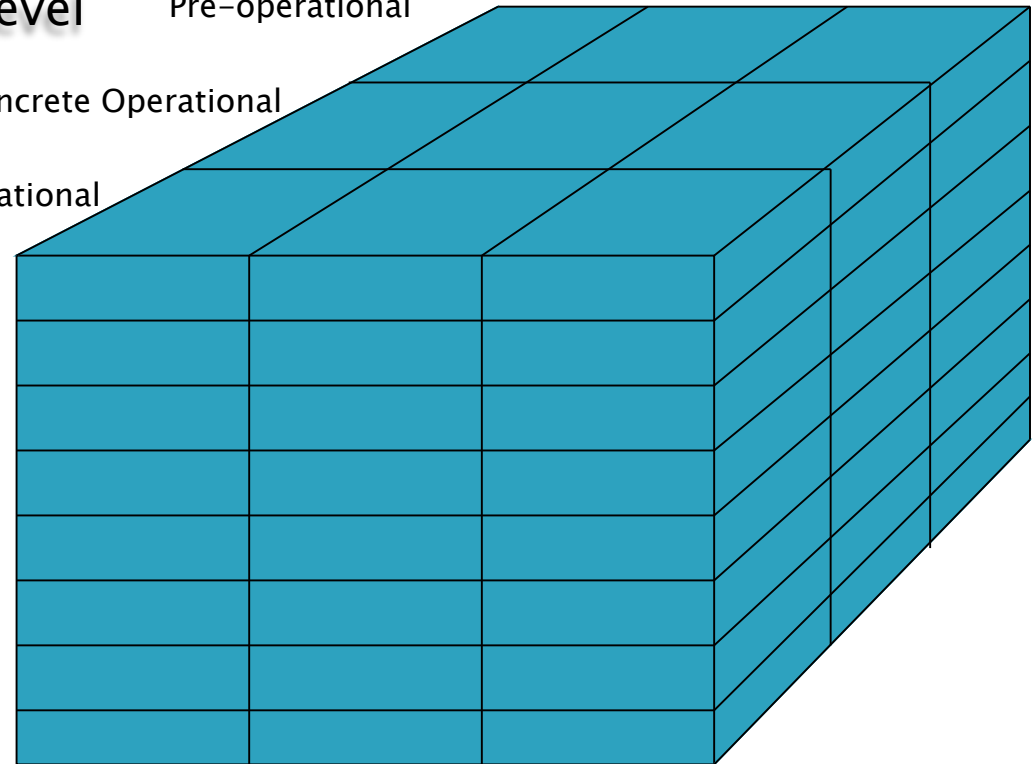
- ▶ Children differ from one another in several key ways
 - How they think and process information (Klahr & MacWhitney, 1998; Piaget, 1969, 1976)
 - How they prefer to receive information (Armstrong, 1993, 1994; Dunn, 1984; Gardner, 1983)
 - How and why they relate to one another and adults in the ways they do (Erikson, 1963, Kohlberg 1976)

To be effective, teaching must be responsive

- ▶ Teachers are more effective when they respond to student uniqueness
 - Developmentally appropriate practice (Bredekamp, 1987)
 - Differentiation of instruction (Tomlinson, 2000)
 - Noting and responding to student differences is widely considered to be good teaching practice (Bain, Lintz, and Word, 1989; Brophy and Good, 1986; Corno and Snow, 1986; Dunn, 1984; Metcalf and Cruickshank, 1991; Slavin, 1994; Wang, Haertel and Walberg, 1993/1994)

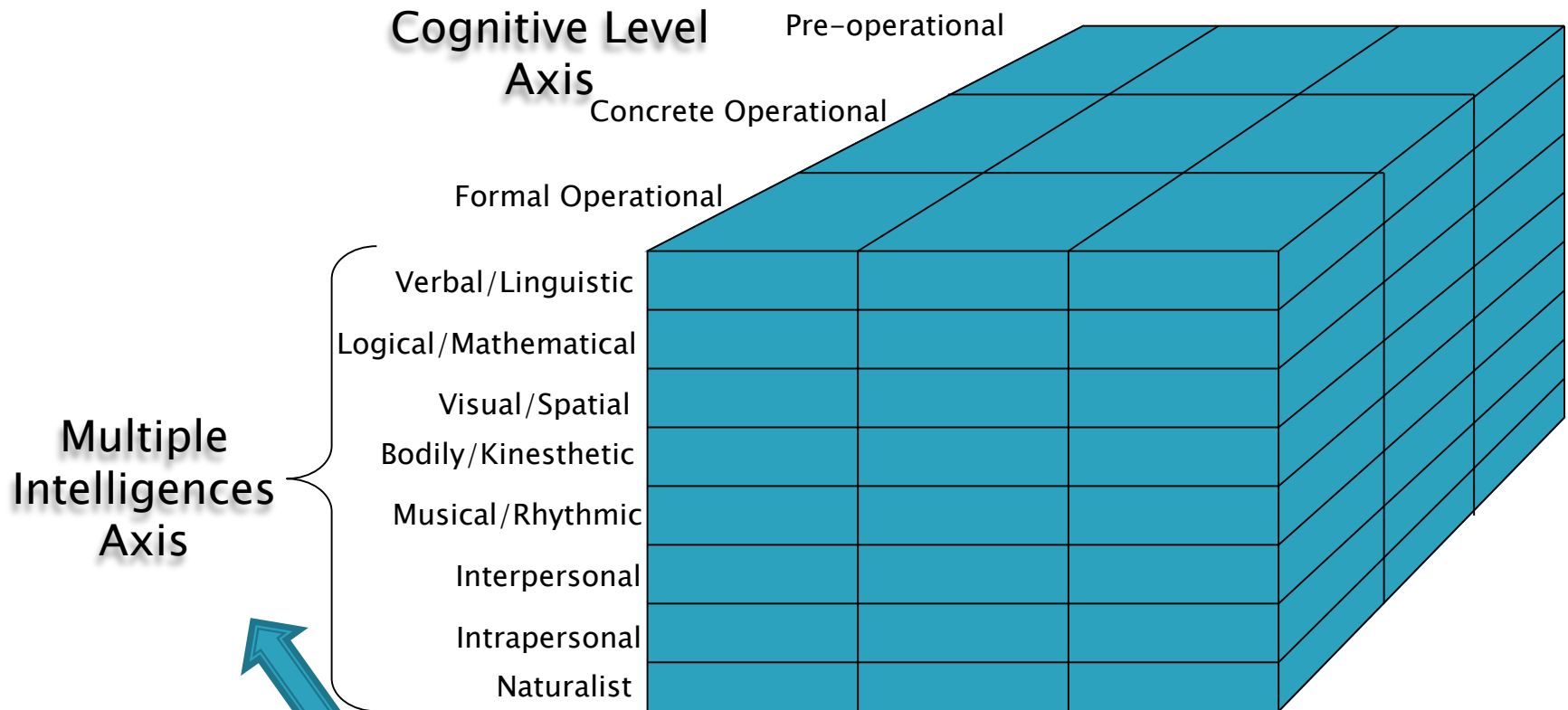
The profiling process for this study

Cognitive Level
Axis
Pre-operational
Concrete Operational
Formal Operational



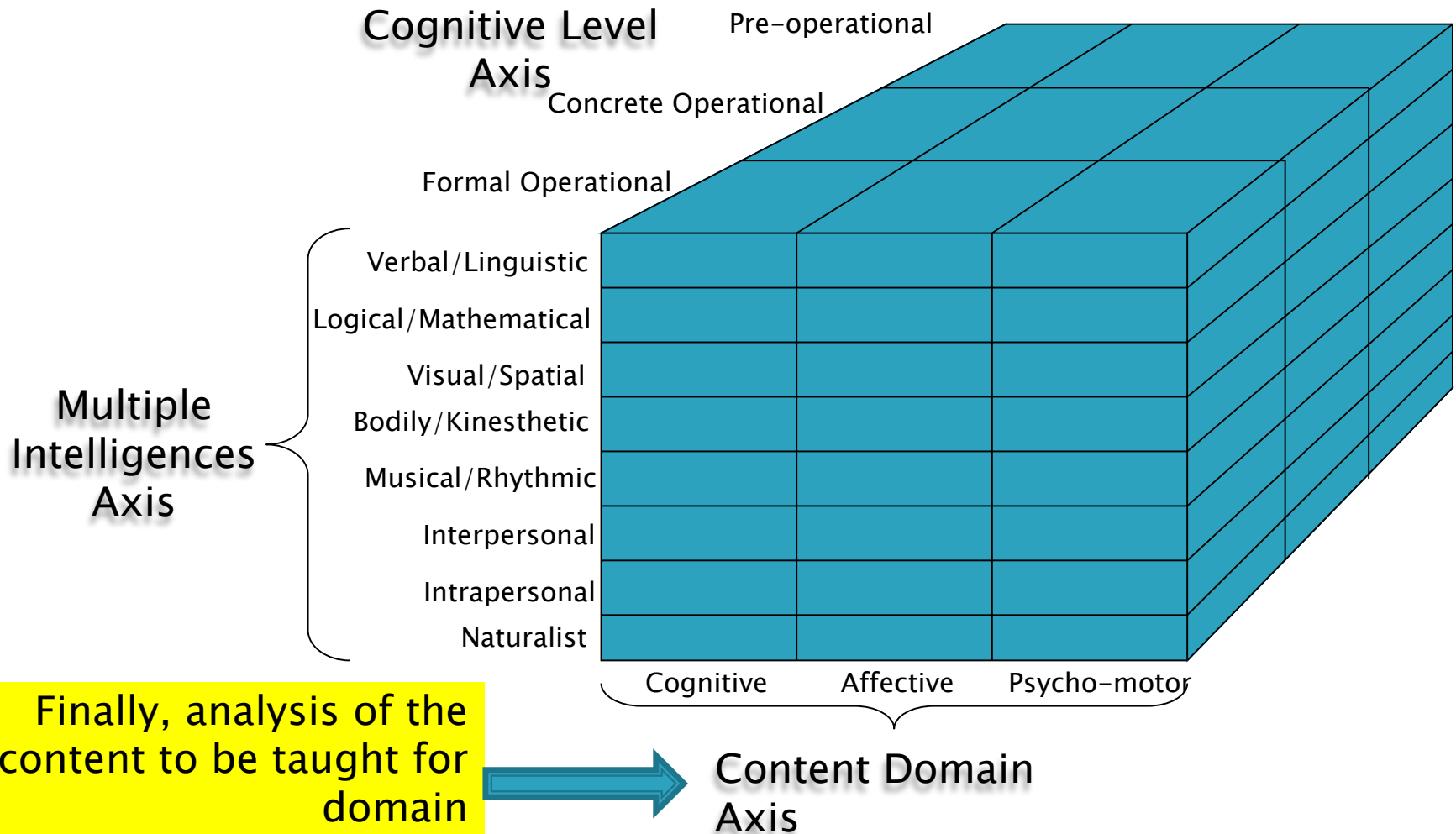
Teachers performed Piagetian tasks with their students to measure student cognitive levels. This provided constraints for content presentation.

The profiling process for this study

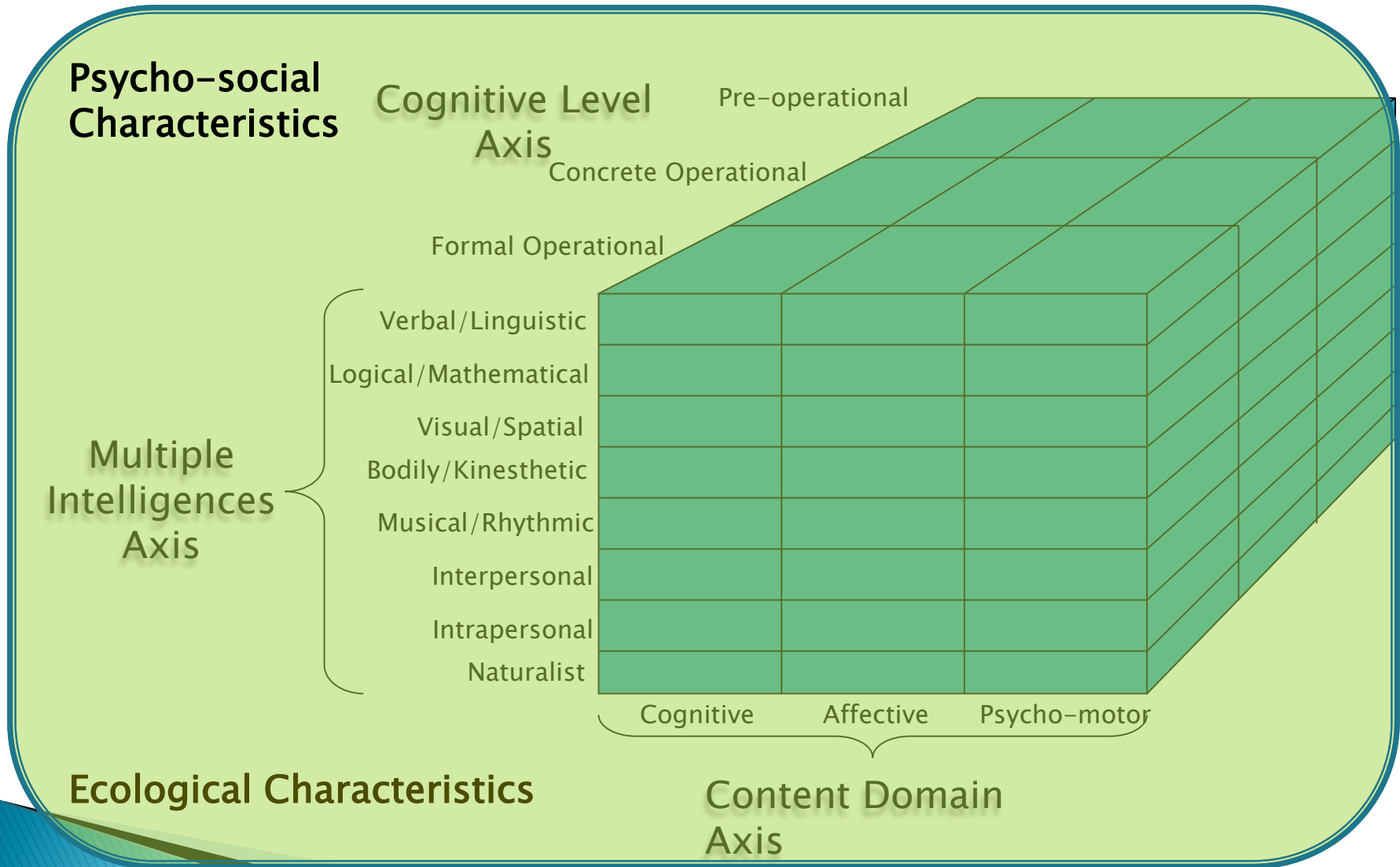


Teachers then administered age appropriate Multiple Intelligence inventories to students and created a graph of their results

The profiling process for this study



The profiling process for this study



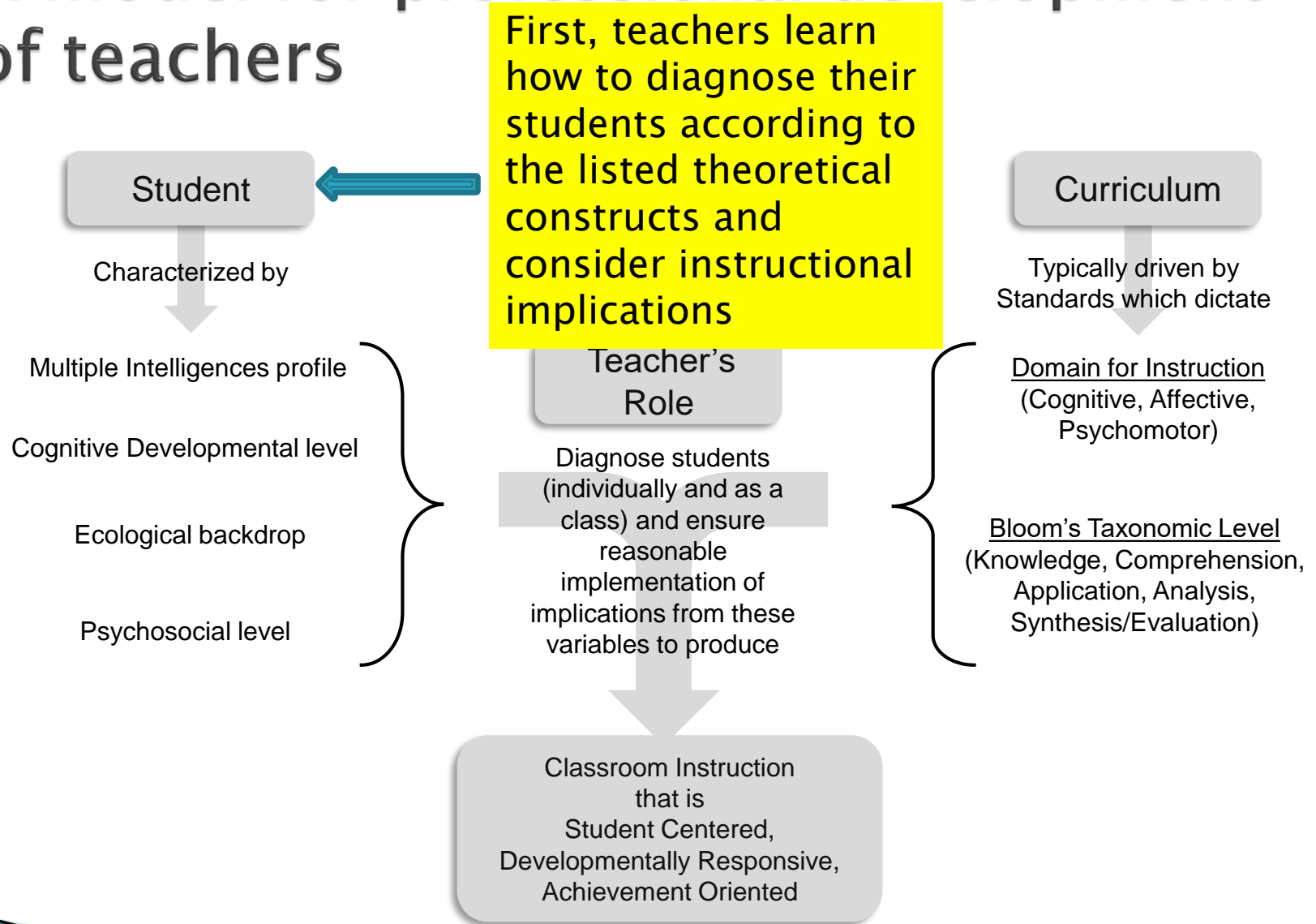
Achievement Increases from September 2008 to January 2009 for Grades 3-6 in Two Failing Schools in South Carolina (United States) as Measured by the Measures of Academic Progress Standardized Instrument

Expected / Actual Achievement Gains in RIT Scores				
Grade	Math	Reading	Language Usage	Percent Actual Gains are of Expected Gains by Grade Level
3	5.9 / 8.8	4.7 / 11	5.4 / 11	195.63% ← Smallest
4	3.6 / 9.4	3.6 / 10.9	3.9 / 8	256.34% ← Greatest
5	4.3 / 8.7	2.9 / 7.7	3.0 / 5.6	218.17%
6	3.1 / 4.6	2.2 / 5.4	2.3 / 5	203.74%

RIT Scores – Scores derived from Rauschian Item Response Theory demonstrating absolute difficulty of items correctly completed.

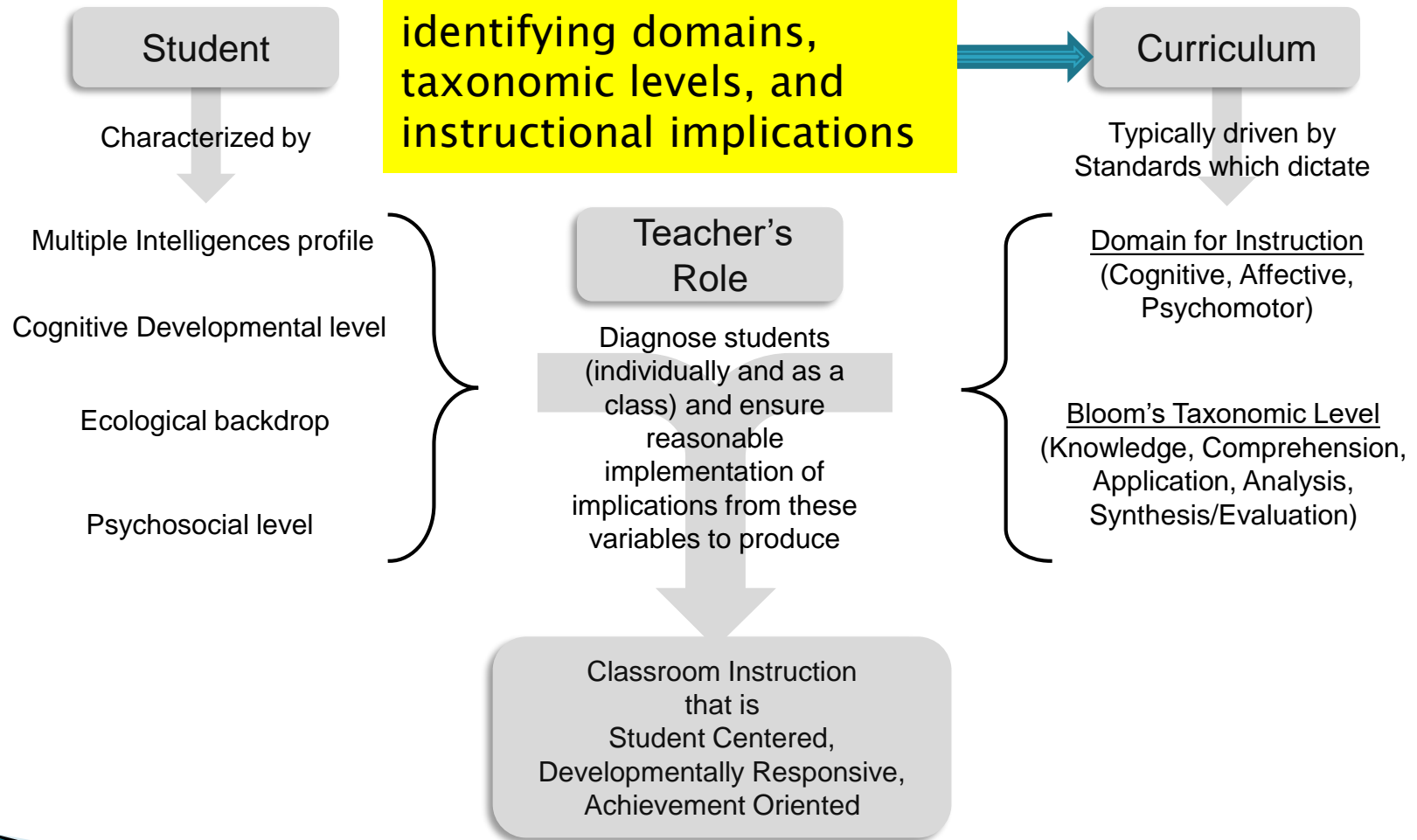
Percent Actual Gains are expressed in aggregate over all three content tests by grade level.

A model for professional development of teachers



A model for professional development of teachers

Second, teachers learn how to critically analyze their curriculum – identifying domains, taxonomic levels, and instructional implications



Summary

- ▶ Effective teaching yields observable achievement-related results
 - ▶ Among the many constraints upon teachers, selection and implementation of instructional strategies stand out as viable options
 - ▶ Implementation of instruction based upon understanding of students' preferences has resulted in increased achievement on the Measures of Academic Progress assessment.
 - ▶ One route to effective teaching is for teachers to engage in professional development that scaffolds diagnostic and prescriptive skills necessary to understand students and implement instruction that is student centered, developmentally responsive, and achievement oriented.
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