Eight Principles for Cognitive Science-Based Adventist Education (White, 1903; Bailey, 2012)

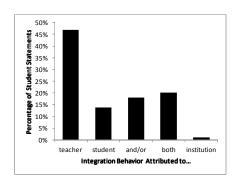
- 1. Help students find balance between unthinking memorization and self-sufficiency that is unresponsive to correction. God wants to reason with thinking beings; He wants neither unthinking, nor unresponsive students.
- 2. Explicitly teach students the four components of critical thinking: dispositions, skills, cues to transfer, metacognition. Train students to apply critical thinking to identifying practical ways that they can fulfill the Gospel Commission.
- 3. Entrain a brain: model the enthusiasm and motivations that you would have students develop towards education. The fruit of the Spirit is contagious.
- 4. Explicitly teach students that effort is a sign of learning, not a sign of failure. Praise students for their effort, not for intelligence (which they will likely view as fixed). Remember that the Gospel requires that people be able to change.
- 5. Set as a goal for all of your students the development of all of their abilities, not just their preferred abilities. A life of stewardship includes investing our natural aptitudes to develop well rounded servants to do God's bidding in every arena of service.
- 6. Teach with objectives in mind. Remember that expertise often involves learning, restructuring, and relearning. Just as Jesus kept the end goal in mind as His disciples struggled to restructure their thinking (for years!), so too must teachers balance patience with planning and assessment.
- 7. Emphasize mastery—it is easy for students to perform based on surface learning as if they understand, and much harder for them to restructure their thinking. Repeated testing helps students differentiate between surface learning and mastery; errors on tests are opportunities for learning, not evidence of failure. God has always seen His children's errors as opportunities for them to turn back to Him.
- 8. View the development of self-control and curiosity as equally important as cognitive ability. Cognitive ability is related to the amount of time and effort necessary to achieve a goal. Without curiosity, motivation to seek challenges and learn more deeply suffers. Without self-control, intelligence and curiosity can never be turned into action. Christians are people of action, and thus need to develop in all three areas.

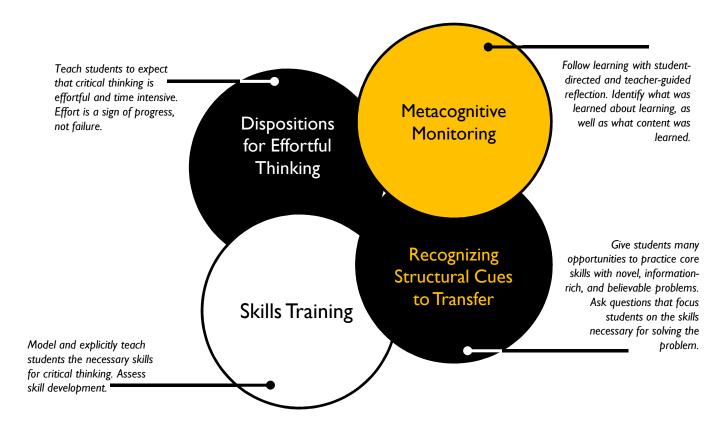
What mindset changes do I need to make for the coming year?
What mindset changes do my students need to make for the coming year?
How can I make my students more aware of my Adventist approach to learning and human nature?

Critical Thinking Through Faith Integration

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Problem: A large plurality of students consider faith-learning integration to be the task of the teacher.



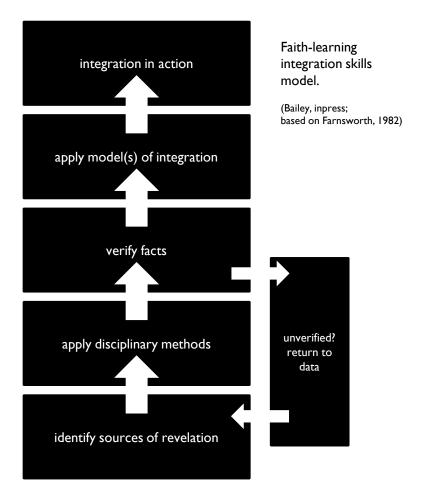


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Halpern, D. F. (1998). Teaching critical thinking for transfer across domains: Dispositions, skills, structure training, and metacognitive monitoring. *American Psychologist*, 53, 449-455. Lawrence, T.A., Burton, L. D., & Nwosu, C. C. (2005). Refocusing on the learning in "integration of

faith and learning". Journal of Research on Christian Education, 14, 17-50.



Benefits

- ★ skills are amenable to explicit instruction and modeling
- ★ skills are straightforward to assess across the curriculum
- ★ the skills model is a developmental model
- ★ the skills model lends itself to problem-based learning and other high-impact educational practices
- ★ the skills model suggests components of general education and disciplinary training the skills model integrates the tools of teaching and scholarship

Costs

- ★ skills must be explicitly taught and practiced at the expense of content-based instruction
- * students and teachers may not immediately develop a disposition towards effortful critical thinking
- ★ critical thinking and faith-learning integration require long-term commitments by teachers and schools
- ★ constructing and giving feedback on critical thinking and faith-learning integration problems are time-intensive
- ★ faculty will need protected time to practice critical thinking skills in their own work

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