Self-Regulation and the Underachieving Gifted Learner

Alicia Welch & Jen Roth, PhD

A little about us…

- **Alicia M. Welch**
- Ph.D. student – Applied Cognition & Development at the University of Georgia
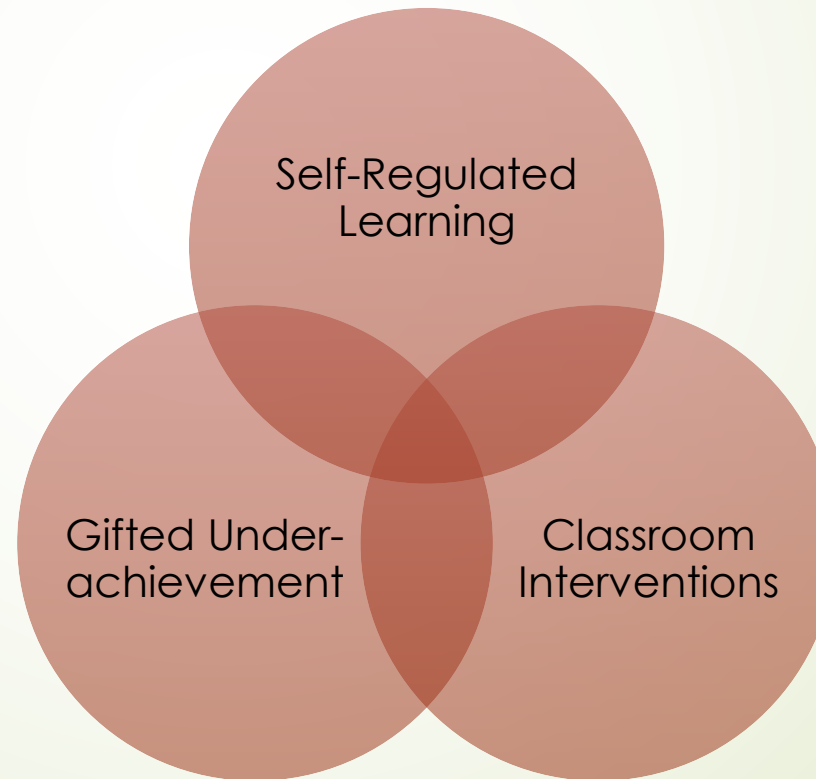- Academic Advisor – University of West Georgia

- **Jennifer L. Roth, Ph.D.**
- High School Mathematics Teacher – Monroe Area High School

Webinar Overview

The interplay between gifted underachievement, self-regulated learning, motivation, and what we can do to encourage better self-regulated learning skills.
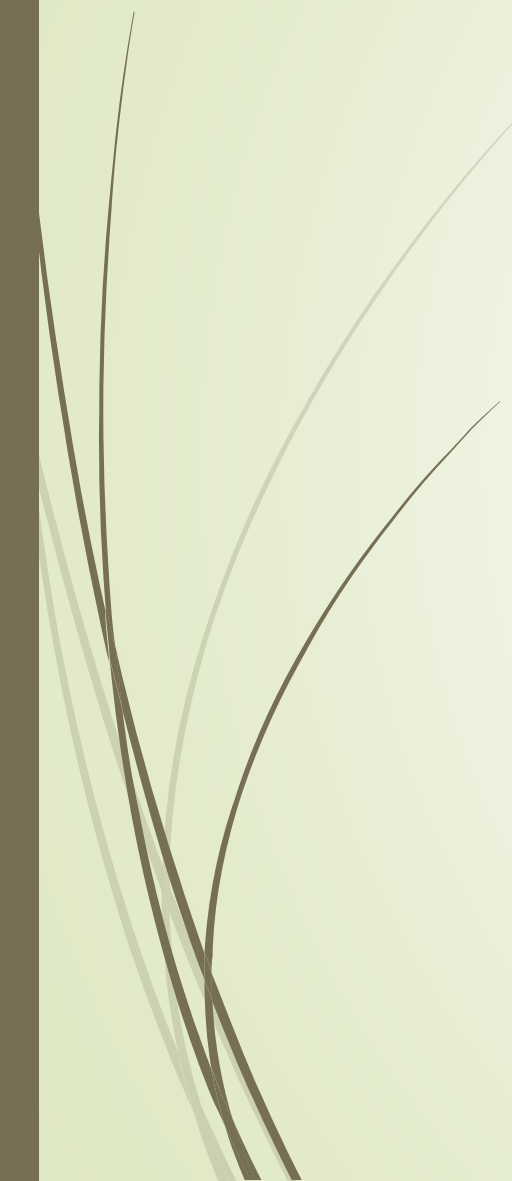
What is underachievement?

Potential ≠ Performance

- Potential?
  - Extracurricular activities/interests, precociousness, creativity, witty sense of humor, or exceptional standardized test scores

- Performance?
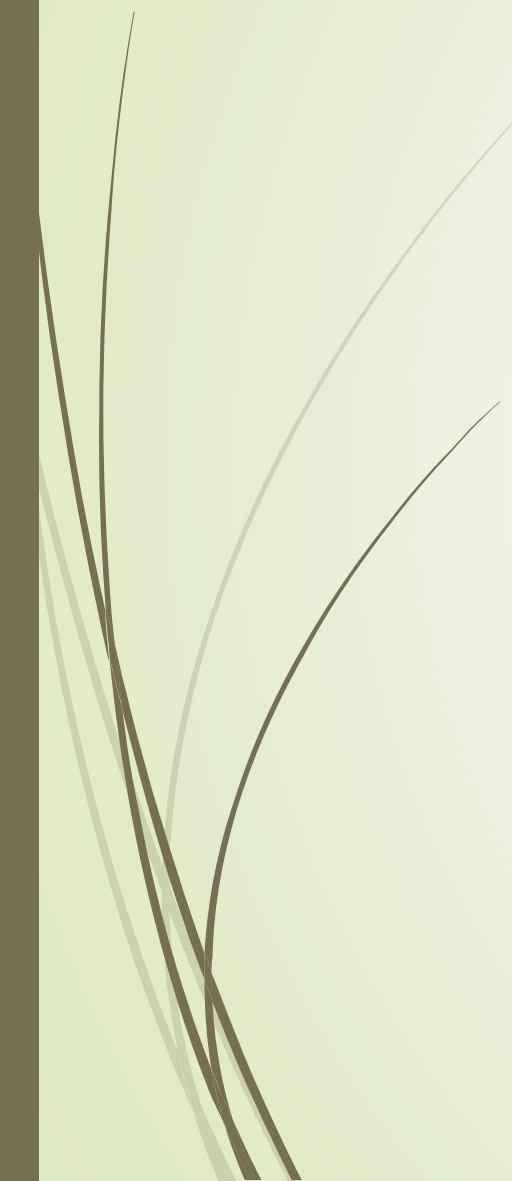 - Good grades, high academic motivation, retention

How Common is Gifted Underachievement?

- More widespread than commonly thought
- Some estimates suggest up to a quarter of high school dropouts are gifted underachievers
- Difficulties in proper identification of giftedness/potential inhibit reliable estimations of underachievement

Some traits of the Underachieving Gifted Student

- Lower self-efficacy
- May not see themselves as gifted
- Test anxiety
- May be unable to set appropriate academic goals
- Underdeveloped or lack of study skills
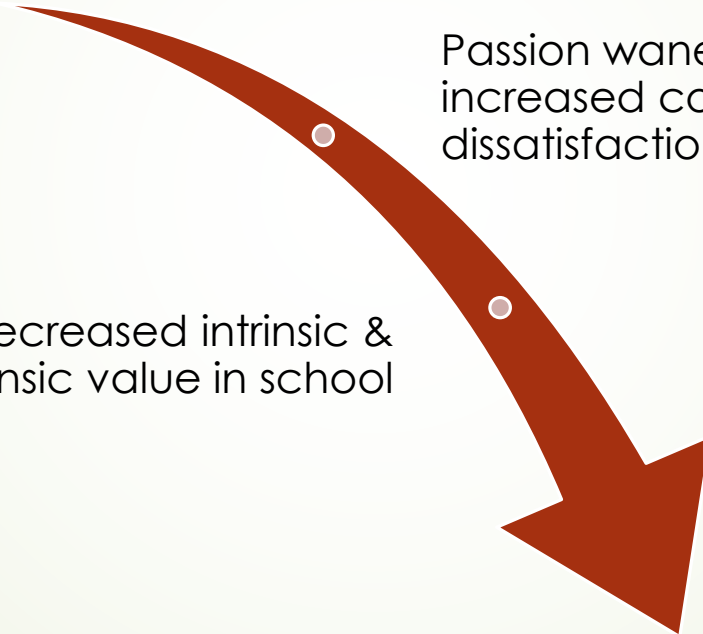- May believe that ability is innate and inflexible

How Underachievement Develops

Great
Enthusiasm

Passion wanes with
increased competition &
dissatisfaction

Decreased intrinsic &
extrinsic value in school

Put forth less effort,
rebel against teachers

Some of the *Many* Causes:

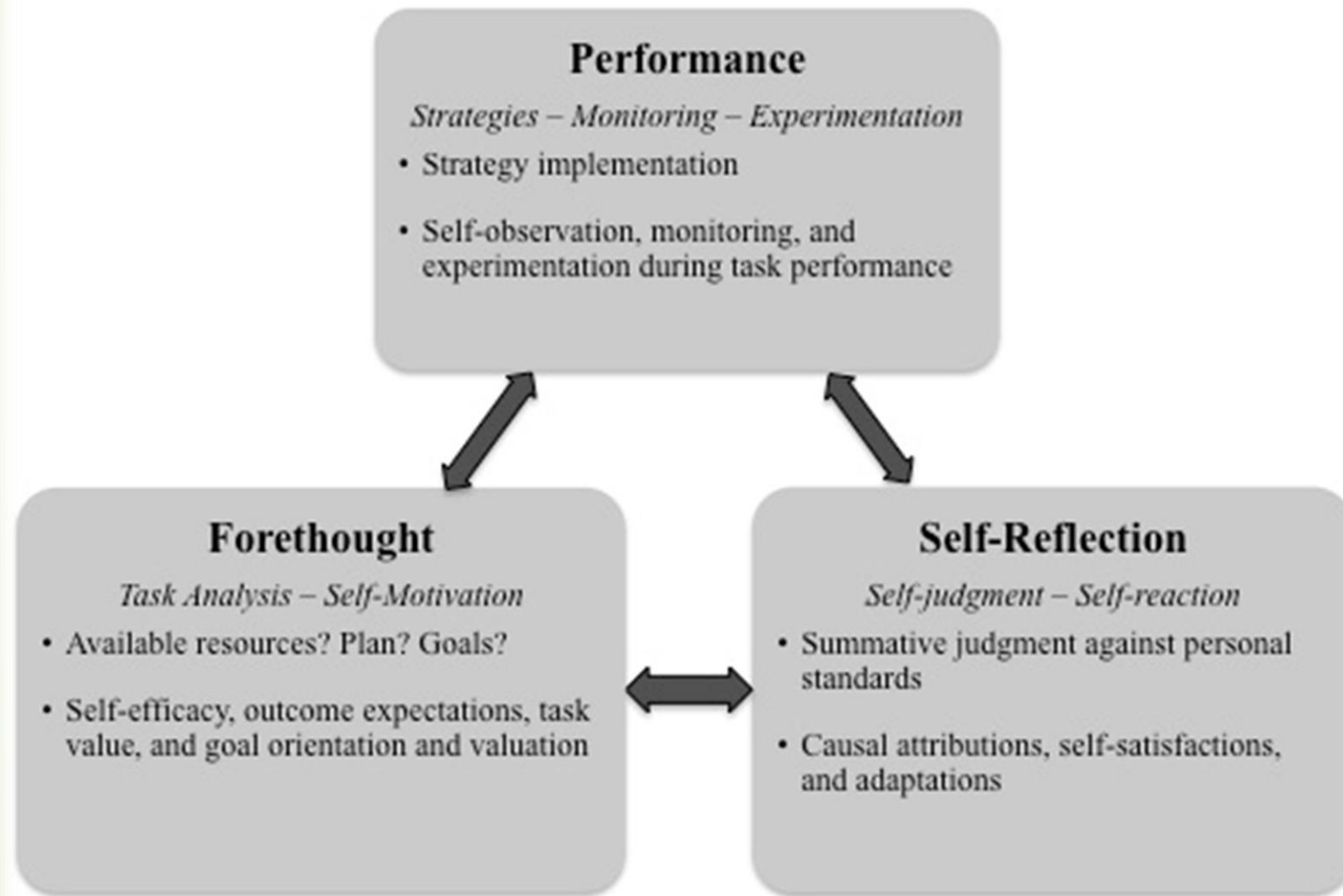| Emotional	Regulatory Skills	Beliefs About Learning
• Lower self-efficacy • Test anxiety	• Weaker ability to set appropriate goals • Less effective study skills	• Ability is innate and inflexible • Maladaptive attributions

Self-Regulated Learning

Self-Regulated Learning: Forethought

All about goals & choosing strategies

- Task Analysis
  - Available resources?
  - Abilities?
  - Goals and necessary steps to reach them

- Self-Motivation
  - Goal orientation & valuation
  - Outcome expectations
  - Task Value

Self-Regulated Learning: Forethought

- � May not know how to effectively plan or set reasonable academic goals.
    - ➤ Teachers & parents often provide initial guidance
        - ➤ Convincing that they *need* a plan!
        - ➤ Organizing necessary steps
        - ➤ Find task relevance
        - ➤ Encouragement to offset negative self-efficacy

Self-Regulated Learning: Forethought

- Some goals are linked to beliefs about the nature of intelligence

Mastery
vs.
Performance Orientation

Forethought Interventions

- Students set short-term, specific, and mastery oriented goals

- Students Record Self-efficacy

- Teacher emphasizes importance of using strategies

- Students record strategies used to meet goals
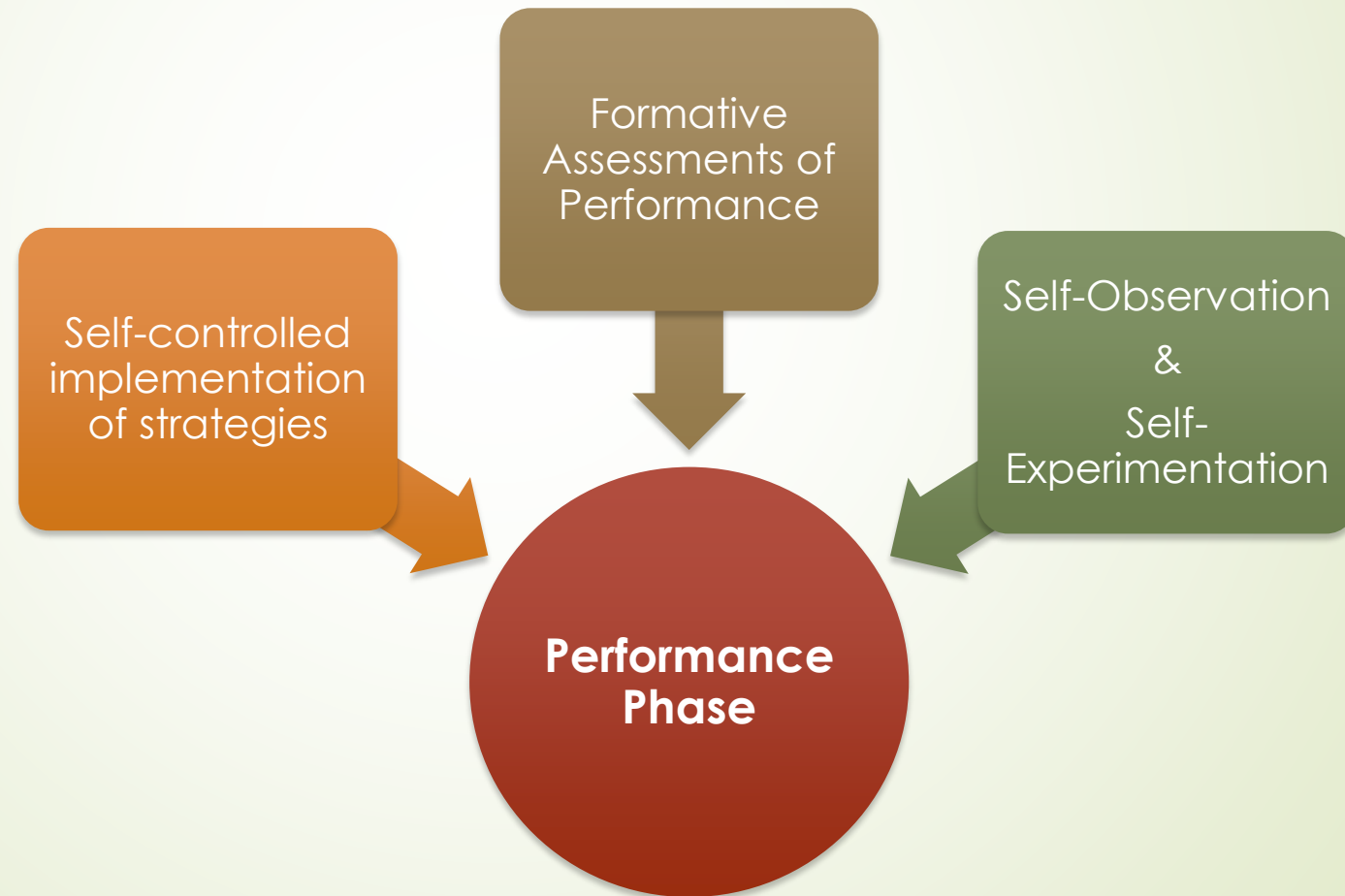
Possible Student Strategies

- Make outline, concept map, flashcards, etc.
- Go to library or internet
- Ask for help
- Read over notes, complete practice problems, etc.
- Reduce distractions
- Set regular study time and place
- Take notes
- Self-reward
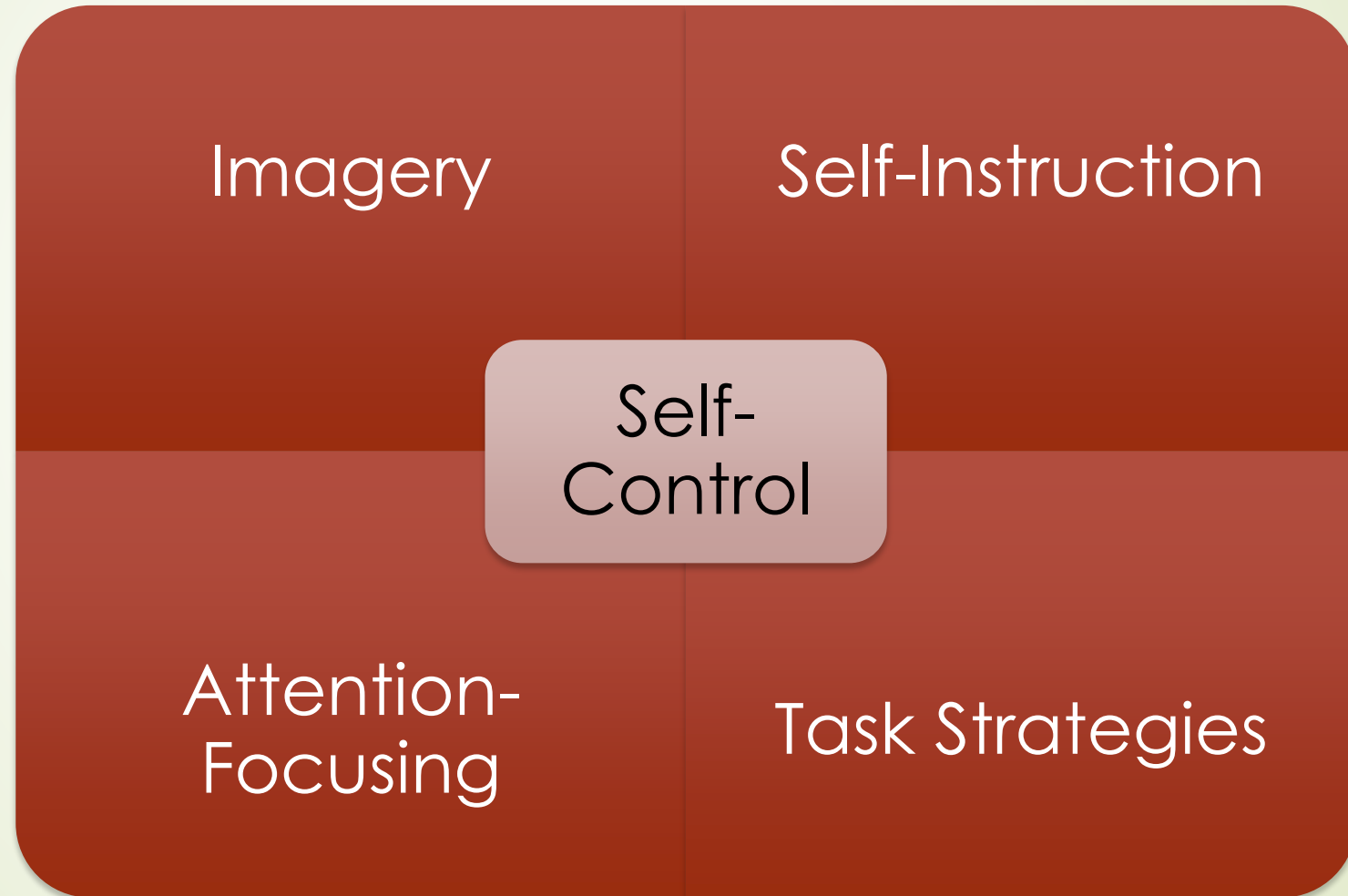- Check over work and analyze errors

efficacy
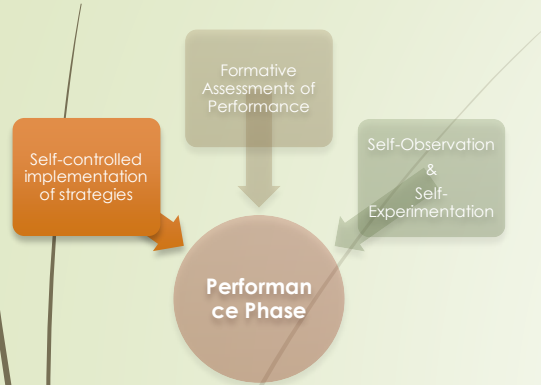monitoring
learn education mentoring
regulation gifted
peer teacher hope student motivation
INTERVENTION
social future achievement
classroom
achieve attributions goals self

Self-Regulated Learning: Performance

All about monitoring performance

Formative Assessments of Performance

Self-controlled implementation of strategies

Self-Observation & Self-Experimentation

Performance Phase

Self-Regulated Learning: Performance

Formative Assessments of Performance

Self-controlled implementation of strategies

Self-Observation & Self-Experimentation

Performance Phase

Imagery

Self-Instruction

Self-Control

Attention-Focusing

Task Strategies

Self-Regulated Learning: Performance

Formative assessments of performance

Formative
Assessments of
Performance

Self-controlled
implementation of
strategies

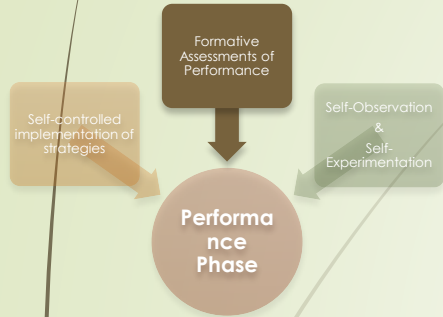Self-Observation
&
Self-
Experimentation

Performa
nce
Phase

Social Comparisons

• Improved performance by modeling others' successful behaviors

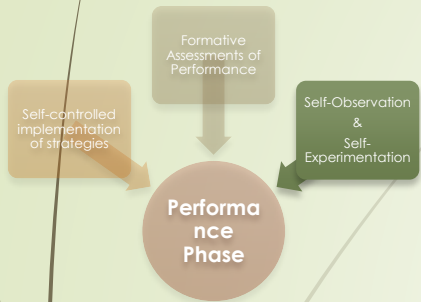• Others' reactions to own performance help guide self-assessments

Self-Observations

• Monitoring own performance for patterns & efficiency

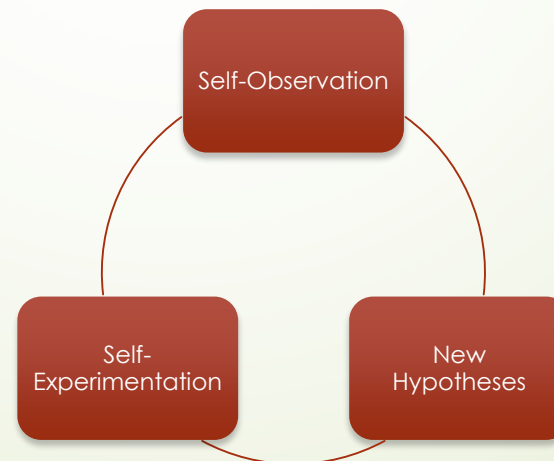• Recognizing strategies implemented and their outcomes

Self-Regulated Learning: Performance

Self-Experimentation

• Self-Observations and Strategy Outcomes lead to new hypotheses

• New hypotheses are tested during Self-Experimentation phase

• Results of self-observations, tested hypotheses, and new observations help inform subsequent strategy choice

Self-Observation

Self-Experimentation

New Hypotheses

Formative Assessments of Performance

Self-controlled implementation of strategies

Self-Observation & Self-Experimentation

Performance Phase

Performance Interventions

- Students implement strategies

- Teacher offers opportunities for students to practice strategies

- Students and teacher offer detailed feedback

Self-Regulated Learning: Self-Reflection

Summative judgment of performance against personal standards

Self-Judgment **+** Self-Reactions **=** Self-Reflection
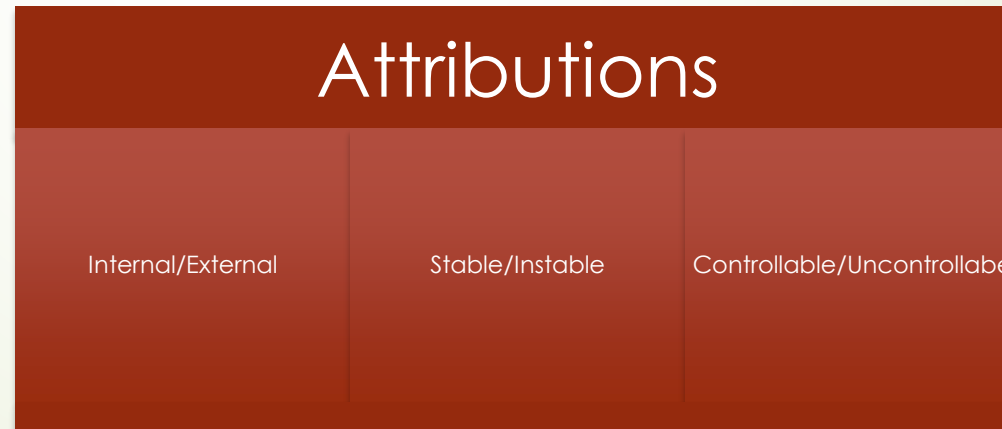
Self-Regulated Learning: Self-Reflection

- Self-Judgment
  - Comparison of final product to personal standards
  - What needs to change for next time?
  - **Attributions**

Attributions		
Internal/External	Stable/Instable	Controllable/Uncontrollabe

Self-Regulated Learning: Self-Reflection

- Self-Reactions: rewards or punishments for performance

+	—
Study Break, Movie	Hobby restriction
Fun purchase	No socializing

Self-Reflection Interventions

- Teacher offers opportunities for students to compare outcomes

- Teacher and students discuss causal attributions

- Teacher and students provide feedback in order to make improvements on choice of strategy

- Teacher shares exemplary models of strategy choice

Sample Case Studies

Harper
- Challenged by Calculus
- Believes she should make an A on every test
- Feels pressured to perform
- Has never had to complete homework in order to succeed
- Begins to give up

Steven
- Failing ninth grade literature
- Always make As and Bs in the past
- Disorganized, does not complete assignments, does not take notes or pay attention, and distracts others
- Seems surprised yet unconcerned by failure

Case Study Interventions - Harper

- Encouraged to set goal of spending 30 minutes on homework per night
- Keeps a record of time spent on Homework each night
- Reflects on performance
- Sets new goal to work on homework at a set time each night at the same place to minimize distractions
- Begins to study with a friend
- Begins to understand the benefits of her effort
- After self-reflection, sets a new goal of always taking notes
- Teacher provides guided notes and class time to revise notes, make outline, flashcards, etc.
- Experiences decrease in test anxiety
- Gives reward to herself such as shopping with friends after meeting goals
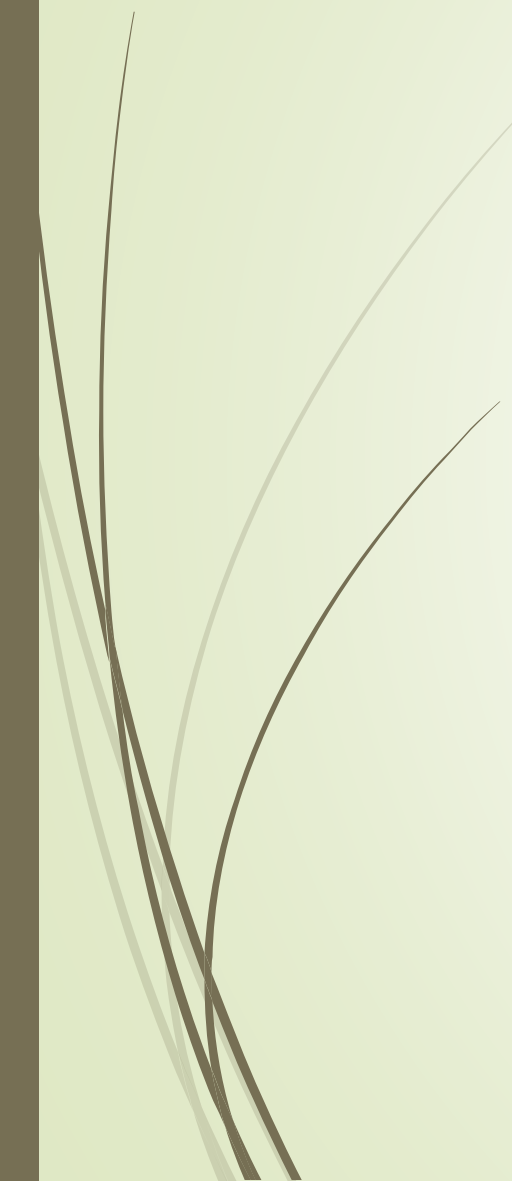
Case Study Interventions - Steven

- Sets goals of reading 30 minutes per day and writing in reflection journal 15 minutes per day

- Self-monitoring by keeping record of time spent per day

- Finds it difficult to meet goals

- Begins to see that it is his own choices keeping him from completing assignments

- New plan involves staying after school every day for additional hour until caught up on reading

- Stops making excuses

- Teacher offers choice of reading and shares exemplary papers

Conclusion

- Self-regulation plays a role in the academic achievement of gifted students

- Self-regulatory processes are teachable

- Self-regulated learning interventions should be planned as a part of unit and lesson planning

- Training in self-regulation may take time

Further Reading & Resources

1) Welch, A., Roth, J., Steiner, H.H., Carr, M.M. (2015). *Self-Regulation and the Underachieving Gifted Learner*. Washington, DC: National Association for Gifted Children.

2) Stoeger, H., Fleischmann, S., & Obergriesser, S. (2015). Self-regulated learning (SRL) and the gifted learner in primary school: The theoretical basis and empirical findings on a research program dedicated to ensuring that all students learn to regulate their own learning. *Asia Pacific Education Review, 16*, 257-267.

3) Greene, M. & Reis, S.M. (n.d.). *Self-Regulation*. Downloaded from http://www.gifted.uconn.edu/Siegle/SelfRegulation/INDEX.HTM

4) Reis, S.M. & Greene, M.J. (n.d.). *Using self-regulated learning to reverse underachievement in talented students*. Downloaded from http://www.gifted.uconn.edu/general/faculty/reis/

5) Everson, H. (n.d.). *Barry Zimmerman*. Downloaded from http://learningandtheadolescentmind.org/people_04.html

6) Reis, S. & McCoach, D. (2000). The underachievement of gifted students: What do we know and where do we go? *Gifted Child Quarterly, 44*, 152-170.

References

- Welch, A., Roth, J., Steiner, H.H., Carr, M.M. (2015). *Self-Regulation and the Underachieving Gifted Learner*. Washington, DC: National Association for Gifted Children.

- Zimmerman, B.J. (2002). Becoming a self-regulated learner: An overview. *Theory Into Practice, 41, 64-70.*