

Exploring a Framework for Reflection

Kate Whalen
Steve Mattucci

Introduction to Self-Reflection
Fireball Academy





Agenda

Intros and Reflection Pre-Assessment

Motivation

Background and Theory

Reflection Workshop

Discussion/Q&A



Icebreaker

What does reflection mean to you?

go to www.menti.com and enter the code:

75 67 31



Participant Introductions & Reflection Pre-Assessment

What is your experience with reflection?

→ In the classroom or personally?

Why are you attending this workshop?

Or what are you hoping to learn?



Motivation

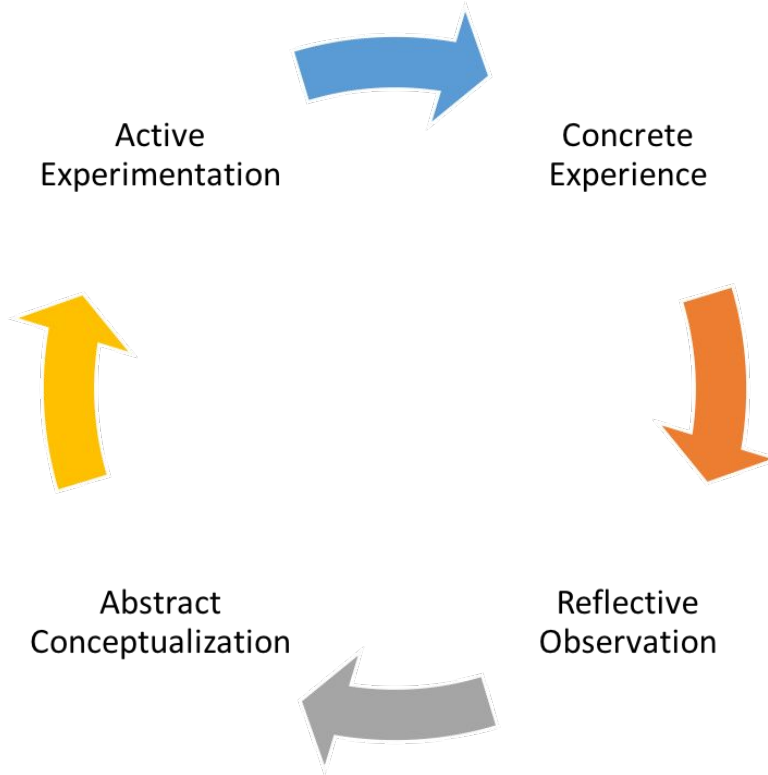
Why was the RLF developed?



Learning Objectives

1. *Describe* RLF components, and how they align with cognitive processes outlined by Bloom's Taxonomy.
2. *Apply* the RLF components to produce a personal reflection.
3. *Demonstrate* higher-level cognitive processes - extending beyond common superficial reflection approaches.
4. *** What are YOU hoping to learn?*

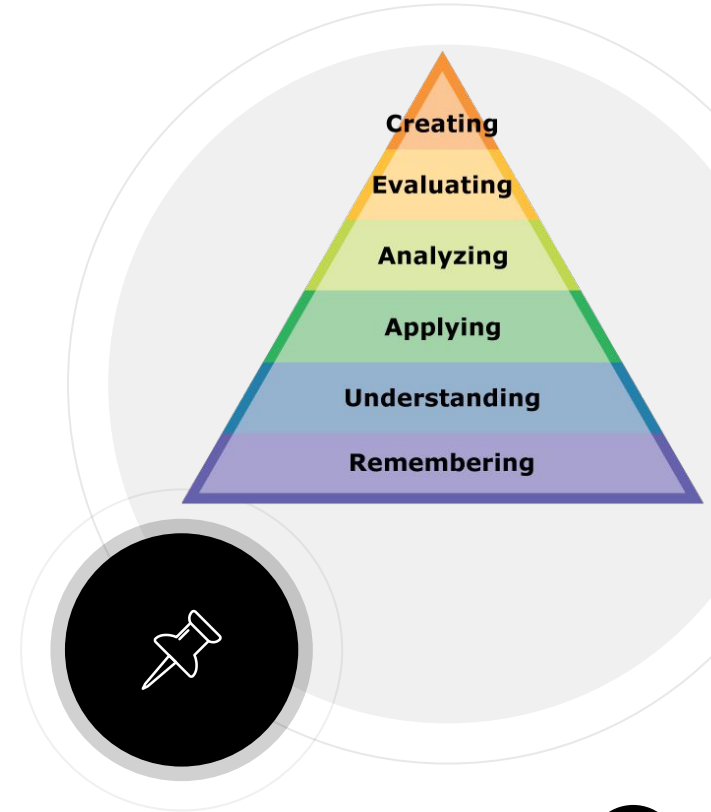
Kolb's Experiential Learning Cycle



The act of reflection is the important first step in drawing meaning from an experience, and in guiding the learner to establish new ideas and to engage in new learning experiences.²

Bloom's Taxonomy

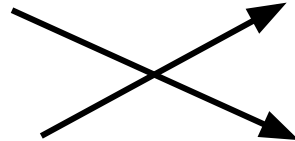
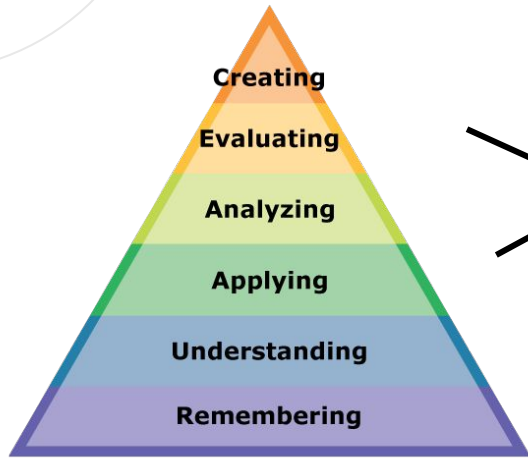
- Reflective Learning Framework is based on Bloom's Taxonomy,³ which has six categories of cognitive processes.
- Categories higher on the triangle are more complex.



➤ Each category is broken down into specific cognitive processes ⁴

➤ Organization of RLF roughly based on levels of cognitive complexity

Higher Order Thinking Skills



Categories and Cognitive Processes of Bloom's Taxonomy

1. Remember

- 1.1 Recognizing
- 1.2 Recalling

2. Understand

- 2.1 Interpreting
- 2.2 Exemplifying
- 2.3 Classifying
- 2.4 Summarizing
- 2.5 Inferring
- 2.6 Comparing
- 2.7 Explaining

3. Apply

- 3.1 Executing
- 3.2 Implementing

4. Analyze

- 4.1 Differentiating
- 4.2 Organizing
- 4.3 Attributing

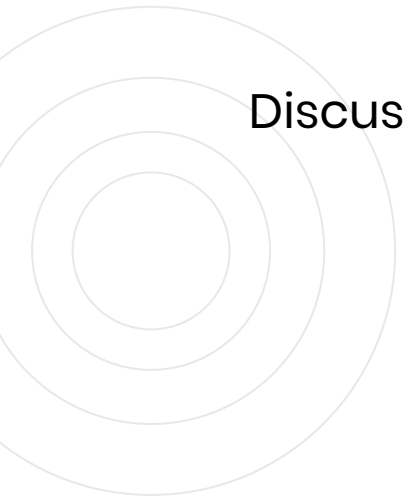
5. Evaluate

- 5.1 Checking
- 5.2 Critiquing

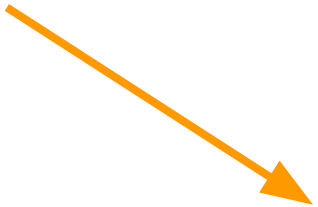
6. Create

- 6.1 Generating
- 6.2 Planning
- 6.3 Producing

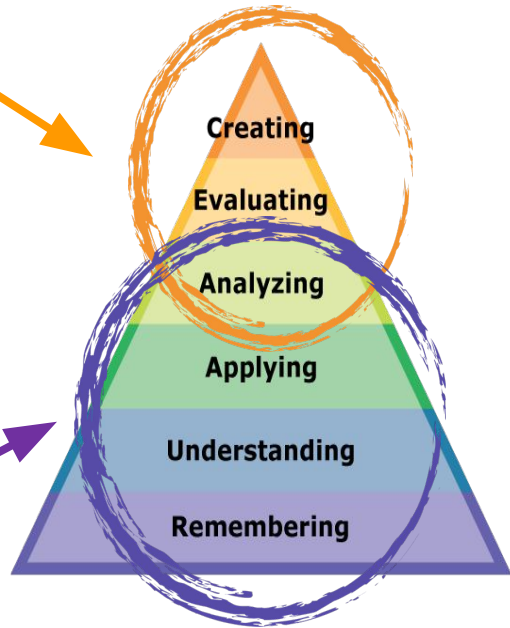
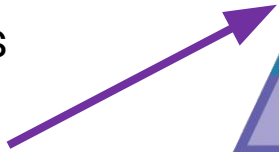
Higher Order Thinking Skills



Discussion categories



Recount categories



More Complex



Less Complex



The Reflective Learning Framework

Recount

1. Temporal Progression
2. Important Aspects of the Experience
3. Connection to Academic Theory

Discussion

4. Relating to Other Contexts
5. Personal Thoughts and Feelings
6. Cause-and-Effect Relationship
7. Other Possible Responses
8. Planning and Future Practices



Bloom's Taxonomy

1. Remember

- 1.1 Recognizing
- 1.2 Recalling

2. Understand

- 2.1 Interpreting
- 2.2 Exemplifying
- 2.3 Classifying
- 2.4 Summarizing
- 2.5 Inferring
- 2.6 Comparing
- 2.7 Explaining

3. Apply

- 3.1 Executing
- 3.2 Implementing

4. Analyze

- 4.1 Differentiating
- 4.2 Organizing
- 4.3 Attributing

5. Evaluate

- 5.1 Checking
- 5.2 Critiquing

6. Create

- 6.1 Generating
- 6.2 Planning
- 6.3 Producing

A graphic consisting of four concentric circles of varying diameters, centered on the left side of the page. The circles are light gray and overlap each other.

Meditate.



Meditation prompts

- think back to Friday March 13th
- as you were anticipating and preparing for the events to come...
- the questions and concerns you had...
- the various events that took place...
- the interactions you had...
- the challenges you faced...
- the accomplishments you had...
- up until where we are today...

Additional reflection prompts

- Something that surprised you,
- Your biggest take-away,
- A challenge you've overcome,
- A adversity you're still struggling with,
- A silver lining, or
- Something you're most grateful for.



Theme



RLF
Categories,
Components,
& Criteria



“

No two thoughts are ever the same, since experience always intervenes” – David Kolb



Temporal Progression


Relevance

- Reflection is an experience at a point in time- impacted by past experience, culture, current events.
- Time and temporal order of events help provide context and relevance of experiences within the learning cycle.



Assessment

- **Recall** relevant information from memory.
- **Organize** the information within the reflection.
- TIP: include the full date when writing, then you can use “yesterday”, “last week”, or “next Tuesday” when referencing major events.



Important Aspects of the Experience



Relevance

- Important aspects include events, interactions, thoughts, realizations, and/or feelings that contribute to learning.



Assessment

- ***Differentiate*** and ***distinguish*** important parts of the experience.
- ***Summarize*** main points and key themes including why and how the particular events are relevant to one's own learning.





Connecting to Academic Theory



Relevance

- Connecting theory and practice enhances understanding and promotes knowledge transfer.



Assessment

- **Compare** concepts from theory and experience by detecting similarities and differences.
- **Infer** by abstracting concepts or principles evident in both theory and practice.



Relating to Other Contexts

Relevance

- Relating one context to another will support knowledge transfer and the ability to reason by analogy.⁴
- Detaching the concepts from the situation allows the individual to see their thoughts and feelings as objects to reflect on.



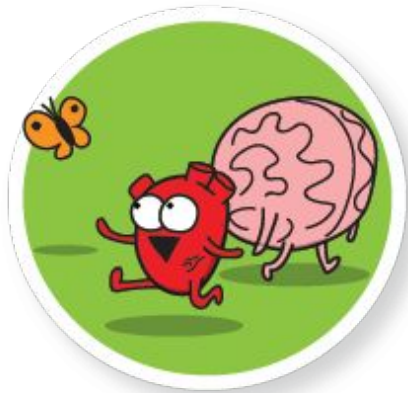
Assessment

- Provide specific **examples** of the general concept or principle from another situation
- **Differentiate** and distinguish relevant aspects.
- **Compare** ideas and detect similarities / differences.

Personal Thoughts and Feelings

Relevance

- Our thoughts and feelings are impacted by our personal values and beliefs.
- Recognizing how our thoughts and feelings are shaped when reflecting on them as events will support critical reflection and help derive meaning from the overall experience.



Assessment

- **Attribute** the point of view, biases, values, and/or intentions that underlie the personal thought or feeling
- **Organize** the information within the reflection.
- **Summarize** the information, including how the particular events are relevant to one's own learning

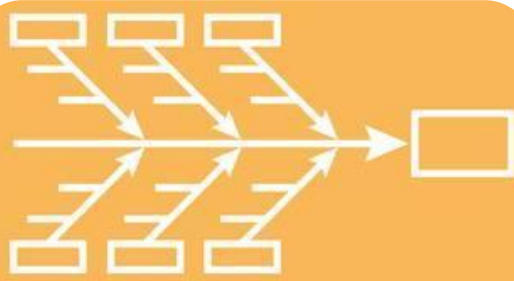
Cause-and-Effect Relationship

Relevance

- If a certain action caused a certain response, desirable or undesirable, reflecting on this relationship will help create meaning and support knowledge transfer.

Assessment

- **Differentiate** and distinguish important parts of the experience.
- **Explain** by constructing a cause-and-effect model, including major parts in the system.
- **Critique** or judge the outcome of the relationship, based on personal criteria and standards.





Other Possible Responses



Relevance

- Reflecting on events and reframing the problem will help create alternative responses and support creative thinking to find new ways of doing things.



Assessment

- ***Differentiate*** and distinguish the issue being addressed
- ***Generate*** an alternative response that meets personal criteria.
- ***Critique*** or judge the possible outcome of the response.





Planning and Future Practices



Relevance

- Developing ideas and creating plans and next steps for future practices will support continued learning through new experiences.
- Evaluating the anticipated outcomes will support knowledge translation between past and future experiences.



Assessment

- **Generate** ideas for solutions and/or for future practices.
- Develop a **plan** for solving the problem and/or to continue the learning process.
- **Check** for possible benefits and/or challenges including how challenges could be overcome.



Thanks



Parking lot

- critical thinking and metacognition
- learning from mistakes
- personal awareness
- theory to practice



Use

- Some students have experience. Challenging to implement correctly. Large resource. Right level for a first-year course. Base model and scaffolding
- Diary, math, academically and personally.
- Use RLF for courses and grand challenges. Second year inquiry and struggle with the correct 'level'.
- Reflecting on team experiences. How to integrate into first year.
- Students struggle with peer review, without self-reflection and awareness
- Encourage students to reflect informally, looking to use it more formally.
- Been using, want to enhance and expand across department. Enhance learning of students
- Give them information on cognition enhanced reflection from superficial to deep
- Reflect on teamwork experience. How to education first year students about 'how' to reflect
- Used personally, but not in teaching. Used in health/medicine and hear about the benefits.
- Use with grad students. Lifelong skills. Want to learn more
- Reflections based on failures. Tool to recover from failure.
- Large classes (300+) and how to teach TAs how to support/assess

A graphic consisting of several concentric circles of varying diameters, centered on the left side of the slide. The text 'Word cloud' is written in a bold, black, sans-serif font, with 'Word' on the top line and 'cloud' on the bottom line, positioned within the circles.

Word cloud

- critical thinking and metacognition
- learning from mistakes
- personal awareness
- theory to practice

Questions?



References

- ¹ Kolb, A. Y., & Kolb, D. A. (2009). The Learning Way: Meta-cognitive Aspects of Experiential Learning. *Simulation & Gaming*, 40(3), 297-327. doi:10.1177/1046878108325713
- ² Kolb, D. A. (2015). *Experiential Learning: Experience as the Source of Learning and Development* (Second ed.). New Jersey: Pearson Education, Inc.
- ³ Anderson, L. W., Krathwohl, D. R., Airasian, P. W., Cruikshank, K. A., Mayer, R. E., Pintrich, P. R., . . . Wittrock, M. C. (2001). *A Taxonomy for Learning Teaching and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives* (Abridged Edition ed.). New York: Addison, Wesley Longman, Inc.
- ⁴ Vanderbilt University, C. f. T. (2018). Bloom's Taxonomy. Retrieved from <https://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy/>

Image Sources:

<https://rule13learning.com>

<https://www.kqed.org>

<http://blog.datumbox.com>

theawkwardyeti.com

[Freepik.com](http://freepik.com)



Logistics

- Flexible 2,000 words (1,500–2,000)
- Do not assess for spelling, grammar, flow
- Provide all resources (guide, handout, video, rubric, example) to students
- Run an in-person workshop 1 week prior to due date.
- Use short weekly reflections to practice. Make use of prompts here,.
- Theory from class and other



REFLECTIVE LEARNING FRAMEWORK



TEMPORAL PROGRESSION /3

- **Recall** relevant information from memory
- **Organize** information, including the temporal order of events



IMPORTANT ASPECTS OF THE EXPERIENCE /3

- **Distinguish** important aspects of the experience
- **Summarize** the main points and key themes



CONNECTION TO ACADEMIC THEORY /3

- **Compare** concepts from theory and from experience
- **Infer** by abstracting concepts or principles evident in both theory and practice



RELATING TO OTHER CONTEXTS /6

- Provide one or more specific **examples** of the general concept or principle from another situation
- **Distinguish** relevant aspects relating the ideas and/or events
- **Compare** ideas and/or events and detect similarities and/or differences



PERSONAL THOUGHTS AND FEELINGS /6

- **Attribute** the point of view, biases, values, and/or intentions that underlie the personal thought or feeling
- **Organize** the information within the reflection
- **Summarize** the information, including how the particular events are relevant to one's own learning



CAUSE-AND-EFFECT RELATIONSHIP /6

- **Distinguish** important parts of the experience
- **Explain** by constructing a cause-and-effect model, including major parts in the system
- **Critique** or judge the outcome of the relationship, based on personal criteria and standards



OTHER POSSIBLE RESPONSES /6

- **Distinguish** the issue being addressed
- **Generate** an alternative response that meets personal criteria
- **Critique** or judge the possible outcome of the response



PLANNING AND FUTURE PRACTICES /6

- **Generate** ideas for solutions and/or for future practices
- Develop a **plan** for solving the problem and/or to continue the learning process
- **Check** for possible benefits and/or challenges including how challenges could be overcome

Total: /39

1. Temporal Progression



2. Important Aspects of the Experience



3. Connection to Academic Theory



Recount

Discussion

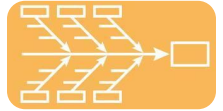
4. Relating to Other Contexts



5. Personal Thoughts and Feelings



6. Cause-and-Effect Relationship



7. Other Possible Responses



8. Planning and Future Practices



Background: Experiential Learning

- The role of experience in the learning process can be easily understood by reflecting on some common real-life examples.
- Experiences are the basis for reflections, which can then lead to new experiences.¹
- Through experience, ideas are formed and re-formed.¹
- Reflection can help extract meaning from these experiences.¹

