METACOGNITION & FORMATIVE ASSESSMENT

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Problems with Legal Education

- Lack of formative assessment in all classes
  \[\downarrow \downarrow \downarrow \downarrow \]
- Too much focus on the product and not enough on the process
  \[\downarrow \downarrow \downarrow \downarrow \]
- Lack of focus on teaching students to become better self-regulated learners (metacognitive skills)
“[T]he essential goal of professional schools must be to form practitioners who are aware of what it takes to become competent in their chosen domain and to equip them with the reflective capacity and motivation to pursue genuine expertise. They must become ‘metacognitive’ about their own learning.”  

Proposed ABA Standards

- Standard 302(b)(3)—the learning outcomes shall include “a depth and breadth of other professional skills sufficient for effective, responsible, self-reflective and ethical participation in the legal profession.”
Proposed ABA Standards

- Interpretation 302-2—“Interviewing, counseling, negotiation, fact development and analysis, conflict resolution, organization and management of legal work, collaboration, cultural competency, and self-evaluation are among the professional skills that could fulfill Standard 302(b)(3).”
Proposed ABA Standards

- Interpretation 303-2—The courses should include “multiple opportunities for students to perform tasks with appropriate feedback and self-evaluation.”

- Interpretation 304-3—“Law schools should encourage development of one’s ability to assess his or her performance, professionalism and level of competence.”
Metacognition - what is it?

“Metacognitive strategies provide the necessary format to promote learning not just for a test, but for a lifetime...not just for recall, but for lifelong logic and reasoning.”

2 Robin Fogarty, How to Teach For Metacognitive Reflection viii (1994).
Components of Metacognition

◆ Knowledge of cognition
  ◆ Understand the task involved (cognition)
  ◆ Aware of their skills, abilities, weaknesses, strengths, and learning styles & preferences

◆ Regulation of cognition
  ◆ Planning
  ◆ Monitoring
  ◆ Evaluating
1. Knowledge of Cognition

- Aware of their own abilities
- Adult learners bring different issues to class than younger learners
- Aware of past academic experiences
- Aware of their learning style and cognitive preferences
- Aware of which skills they bring to the table
- Aware of skills required of a lawyer
2. Regulation of Learning

◆ **Planning**
  - Understand goals
  - Matching the task demands and personal resources
  - Selecting strategies
  - Identifying obstacles

◆ **Monitoring**
  - Following a learning plan
  - Evaluating whether the strategies are working
  - Modifying the strategies
  - Understanding what the person does and does not understand

◆ **Evaluating**
  - Did steps result in successful learning?
  - Were obstacles avoided or managed?
  - Were goals met?
### Cognitive vs. Metacognitive Skills

<table>
<thead>
<tr>
<th>COGNITIVE SKILL</th>
<th>METACOGNITIVE SKILL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finding a case using Lexis</td>
<td>Determining when your research is finished</td>
</tr>
<tr>
<td>Briefing a case</td>
<td>Knowing when to develop a broad holding or a narrow holding from a case</td>
</tr>
<tr>
<td>Organizing a memo using IRAC or CREAC</td>
<td>Knowing when to deviate from using IRAC or CREAC.</td>
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</tbody>
</table>
Assessment

- “The primary goal is to help students learn to think about their own thinking so they can use the standards of the discipline or profession to recognize shortcomings and correct their reasoning as they go.”

Assessment

- **Summative Assessment**
  - Evaluates whether student met the learning objectives of the course
  - In most law schools, it is the final exam or paper
  - Usually provides little or no feedback

- **Formative Assessment**
  - Tools to assess a student’s progress throughout the course
  - Focus is on providing feedback on learning to help students adjust or modify their learning
  - Helps professors to make adjustments in their teaching
“Assessment should be understood as a coordinated set of formative practices that, by providing important information about the students’ progress in learning to both students and faculty, can strengthen law schools’ capacity to develop competent and responsible lawyers.”

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3 CARNEGIE REPORT 171.
Effective Formative Assessment

1. Helps clarify what **constitutes good performance**
2. Delivers **high quality information**
3. Helps **close the gap** between current and desired performance
4. Encourages a **dialogue** between the student and teacher
5. Facilitates the development of **self-assessment**
6. Provides **information to the teacher** to help shape teaching
7. Encourages **positive** motivational beliefs
Principle One—clear goals

- Good formative assessment helps clarify what constitutes good performance.
- Provide students with enough information to make correct assumptions and understand the goals:
  - Grading rubrics
  - Score sheets
  - Thorough discussions in class about what each requirement means
  - Peer assessment
  - Self-assessment forms—given during the assignment
  - Activities that check the students’ understanding of the goals.
Principle Two—Quality Information

- Effective formative assessment delivers high quality information.
- It should help students troubleshoot their own performance and help them self-correct.
- It must be tied to the goals and expectations.
- It should provide corrective advice.
- It should prioritize areas for improvement.
- It should offer the students opportunities to reflect on the feedback.
Principle Three—Closes Gap

- Effective formative assessment helps close the gap between current and desired performance.
- Check to see if the feedback actually changed behavior.
- Professor should plan conferences where the student is asked to discuss the performance changes and show examples of the actual changes.
Principle Four—Encourages a dialogue

- Effective formative assessment encourages and fosters a dialogue between the student and teacher.
- The feedback should not be one-sided.
- Use self-assessment forms before, during, and after assignments.
- Allow the student to insert comments and questions into the assignment.
Principle Five—Self-assessment

- Effective formative assessment facilitates the development of self-assessment.
- The preceding principles require the student to constantly self-assess and engage in metacognition.
- Allow many opportunities for students to explicitly self-assess, such as:
  - Portfolios
  - Self-assessment forms before, during, and after assignments.
  - Conferences
  - Feedback sessions
Principle Six—Info to the Teacher

- Effective formative assessment provides professors information to help shape their teaching.
- Assessment helps modify your teaching, assessment tools, and assignments.
- It offers opportunities to make adjustments about the delivery or the substance of your teaching.
Principle Seven—Positive Motivation

- Effective formative assessment encourages positive motivational beliefs.
- Students will accept criticism better if they believe you are invested in their learning.
- If they see a connection between their self-assessment and your feedback, their metacognitive abilities are affirmed and strengthened.
Self-Assessment Questions

After Draft 1

- List at least three skills you thought this assignment tested.
- What do you think you mastered the most?
- List three areas where you think you need to improve?
- If you could ask the professor three questions about the assignment, what would they be? You must ask three questions.
Self Assessment Questions

- **Right Before Receiving Critique**
  - After re-reading your paper, list the three most significant mistakes you made in your paper.
  - After re-reading your paper, list the three strongest parts of your paper.
Self Assessment Questions

After Assignment Returned with Critique

After reading the critique of your paper, what do you now consider to be the three most important areas that need improvement?

What steps will take you to address these areas that need improvement?

After reading the critique of your paper, what do you consider to be the strongest part of your paper? Why?

What do you want to ask the professor about the critique of your paper or the course in general?
Feedback Sessions
Trial Memo 1

“Thinking About Writing”

Feedback Session
Prof. Duhart
Most Difficult Part of Memo 1

- Analogies
- Persuasive Writing
- Getting Started

[Bar chart showing difficulty levels]
Strongest Feature of Memo 1

- Rule Explanation
- Synthesized Rule
- CREAC
How many hours did you take to complete this assignment?

3 Hours

11.5 Hours

27 Hours
One extra week?
Difficulty Range?
Favorite Quote

“Easy reading is damn hard writing.”

-- Nathaniel Hawthorne
Student Expression

“The issue is always getting started. It ranges from having too many ideas, to not having any, to having ideas that inevitably lead to nothing. Writing is easy and enjoyable, but getting started is the part I hate.”
Commerce Clause IRAC

Feedback Session
Identify the Issue
State Rule Clearly and Completely

1. Power
2. Limit
3. Relevant Exceptions
Choose the Right Word
Focus on the Constitution
• The End
Teaching for Life-long Learning
Self-Assessments, Portfolios & Feedback Sessions

What are the goals and objectives for this workshop?
After this workshop, participants will be able to:
  o Articulate the basic principles of metacognition
  o Identify at least three principles of effective formative assessment
  o Design a self-assessment plan for a course
  o Conceptualize successful portfolio management or feedback sessions
  o Create self-assessments that
    ✓ Increase student engagement
    ✓ Help students improve self-reflection skills
    ✓ Help students identify and regulate cognitive skills

How do we teach for life-long learning?
We build heavily on the principles of metacognition. Generally, metacognition refers to both awareness and control over one’s learning and thinking. Do you “know what you know”? (And do you know what you don’t know?) These traits contribute to success in the classroom and in the practice of law.

How can we incorporate life-long learning techniques into our classes?
- Explicit Teaching
- Self-assessment tools
- Portfolios
- Feedback Sessions

Presented at Summer Conference of the Institute for Law Teaching and Learning
By Professor Olympia Duhart & Anthony Niedwiecki
Of Nova Southeastern University and The John Marshall Law School
New York Law School, June 1-3, 2011
I. Metacognition

- **Knowledge of cognition**
  - Understand the task involved (cognition)
  - Aware of their skills, abilities, weaknesses, strengths, and learning styles & preferences

- **Regulation of Cognition**
  - **Planning**
    - Understand goals
    - Matching the task demands and personal resources
    - Selecting strategies
    - Identifying obstacles
  - **Monitoring**
    - Following a learning plan
    - Evaluating whether the strategies are working
    - Modifying the strategies
    - Understanding what the person does and does not understand
  - **Evaluating**
    - Did steps result in successful learning?
    - Were obstacles avoided or managed?
    - Were goals met?

II. Seven Principles of Effective Formative Assessment

1. Helps clarify what **constitutes good performance**
2. Delivers **high quality information** to students about their learning
3. Helps **close the gap** between current and desired performance
4. Encourages a **dialogue** between student and teacher
5. Facilitates the development of **self-assessment**
6. Provides **information to teacher** to help shape teaching
7. Encourages **positive** motivational beliefs

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The Differences between Cognition and Metacognition

1. Think about the cognitive skills you want your students to learn in your class. List those skills in the table below under "Cognitive Skills."
2. What would be the corresponding metacognitive skills you want your students to develop or improve? Place them in the table next to the corresponding cognitive skill.

<table>
<thead>
<tr>
<th>Cognitive Skills</th>
<th>Metacognitive Skill</th>
</tr>
</thead>
</table>
| Ex. *Using KeyCite on Westlaw to verify if a case is still good law.* | ➢ Ask themselves: "What should I do if I find that a case has a yellow flag next to it?"
|                  | ➢ Decide which cases to review to determine if they are helpful to our analysis. |
| 1.               |                     |
| 2.               |                     |
| 3.               |                     |
| 4.               |                     |
| 5.               |                     |
It’s official, you have much more experience, expertise and baggage connected to teaching and learning than the average person. Let’s answer some question to unpack your relationship with teaching and learning.

Which skills contribute to your own ability to learn new material?
_________________________________________________________

_________________________________________________________________________

How do the skills identified above contribute to your abilities as a teacher?
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________

Think about the last course you taught. What are you most proud of regarding that class?
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________

What could you have done to make that course more effective?
_________________________________________________________________________
_________________________________________________________________________

Identify two concrete steps you can take to improve your skills in this area.
_________________________________________________________________________
_________________________________________________________________________
Commerce Clause Question

“Thinking about Your Approach to Hypotheticals”

You just submitted your first Constitutional Law practice problem. What do you think is the strongest feature of your IRAC? (Be specific)

______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________

What did you struggle with most as you attempted to complete this assignment?

______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________

How many hours did you take to complete this assignment?

______________________________________________________________________

If you had one extra week to complete this assignment, what (if anything) would you change?

______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
You received several comments on your first, formal writing assignment. The grade is important, but the goal is to make improvements based on identified strengths and weaknesses. Please complete the following, using your edited (graded) memo assignment as a guide.

1. Read the comments written on the margins and borders of your paper.
2. Please see me if you don't understand any of the comments. I will start seeing students next Friday, Sept. 29, to discuss the memorandum.
3. Take a moment to record below the comments listed on your paper. This is a graded assignment, and is due COMPLETED at the start of class Friday, Sept. 29.

According to the comments listed, what are your primary strengths?

____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

What, based on the comments, are your writing weaknesses? (Include organization, content & grammar)

____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

What, specifically, will you need to improve as you prepare for Memo #2?
Post Memo 1 Self-Assessment

Name: ___________________________

Answer Questions 1 and 2 before reading the critique of your assignment. Answer the remaining questions after you read and analyze the critique of your assignment.

1. After re-reading your paper, list the three most significant mistakes you made in your paper.
   a. The area that needs most improvement is my analysis in the application paragraphs of my memo.
   b. I need better transitions between one idea to the next.
   c. I need to be more concise with my language.

2. After re-reading your paper, list the three strongest parts of your paper.
   a. I covered the general rules well.
   b. My use of parentheticals worked well. I now know when and how to use them.
   c. I think I compared the cases well. I discussed the facts of our case and how they were similar to the cited case.

3. After reading the critique of your paper, what do you now consider to be the three most important areas that need improvement?
   a. My factual analysis is incomplete. I make too many assumptions without explaining them to the reader.
   b. I am way too wordy with some of my sentences. I need to get to the point more quickly.

4. What steps will take you to address these areas that need improvement?
   In my conference, I need to work with the professor to focus and develop my factual analysis better. I either over-analyzed or under-analyzed. I need to determine why I am making this mistake. I have to work on ways to communicate my message better and more clearly. To make more writing more concise, I will need to finish my assignment a few days before it is due and set it aside for a bit. Then I can edit it more clearly.

Professor’s Critique

You seem to fully understand the law, but the application section is not properly developed. You need to completely and thoroughly discuss your factual analysis before you compare the cases. You seem to just list a series of facts without tying them to the law. You then go straight to the case comparison. You need to first give a detailed analysis of the facts and draw a conclusion before you get to the factual comparisons between the cases. When comparing cases, you need to explicitly state the factual detail(s) that are similar or different from a specific fact or facts of our case. Don’t just repeat the case example.
CREATING YOUR OWN SELF-ASSESSMENT TOOLS

I. Mapping Out an Effective Assessment Tool

<table>
<thead>
<tr>
<th>Name of Course</th>
<th>Goal/Objective</th>
<th>Cognitive Skill(s) Required</th>
<th>Metacognitive Skill(s) Required</th>
</tr>
</thead>
</table>
| Example: Torts | Student will be able to identify the relevant legal issue and facts in a hypothetical fact pattern and predict an outcome | o Accurate articulation of a relevant rule of law  
  o Application of rule in a novel scenario | o Student is able to decide which facts connect to relevant legal doctrines  
  o Student can make judgments about most likely legal outcomes |

II. Your Assessment

List three skills you thought this assignment tested:

1. ____________________________________________
2. ____________________________________________
3. ____________________________________________

III. Your Prediction

List two skills that students typically struggle with as they attempt to complete assignments:

1. ____________________________________________
2. ____________________________________________
IV. **Putting It All Together**

Create five questions you would like students to answer in connection with this assignment. Think about both the cognitive and metacognitive skills required.

1. __________________________________________________________________________
2. __________________________________________________________________________
3. __________________________________________________________________________
4. __________________________________________________________________________
5. __________________________________________________________________________

V. **Feedback**

Think about the student assessment tool you are creating. Once students have been surveyed and the response collected, think of ways you can offer effective feedback.

*Brainstorm for two minutes and write your ideas here.*
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