NEXT-GEN LMS

Enhancing Tools for Ungrading, Self-Regulation and Social Learning Dynamics

Erika Ram (she/ her)

eram1@bcit.ca

Instructor in Computing & eLearning Specialist SoCAS.

Chair - Education Technology and Learning Design Committee (ETLDC)

Erika Ram

Combining the practical application of pedagogical theory and effective teaching and learning principles with information technology, program and course development, graphic and web design, and problem-solving.

Research Interests & Projects:
eLearning design practices, educational technologies, agency in technology adoption and use, STEM education, generative AI and education, student self-efficacy, self-motivation and self-regulation.

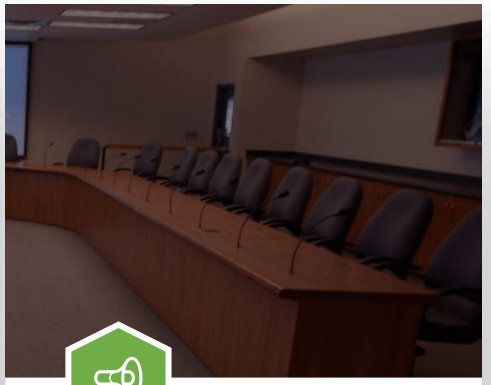
Faculty

Computing Department

- Computer Essentials
- Low-code Mobile App Development

eLearning & EdTech Champion

- Develop resources & support
- Act as a liaison & advocate for faculty needs



Chair - EDCO ETLDC

- Provide guidance, recommendations, support & engagement on Educational Technologies.

WORKSHOP GOALS

DEFINE & APPLY
Concepts of ungrading, self-regulation, and social regulation.

SHARE
Experience of integrating these concepts in traditional classrooms and LMS.

PROPOSE
Re-designing traditional LMS assignment tools to better facilitate student learning.

WHY DO WE GRADE?

Warm-up Activity:

Spend a minute thinking about the above question…

WHY DO WE GRADE?

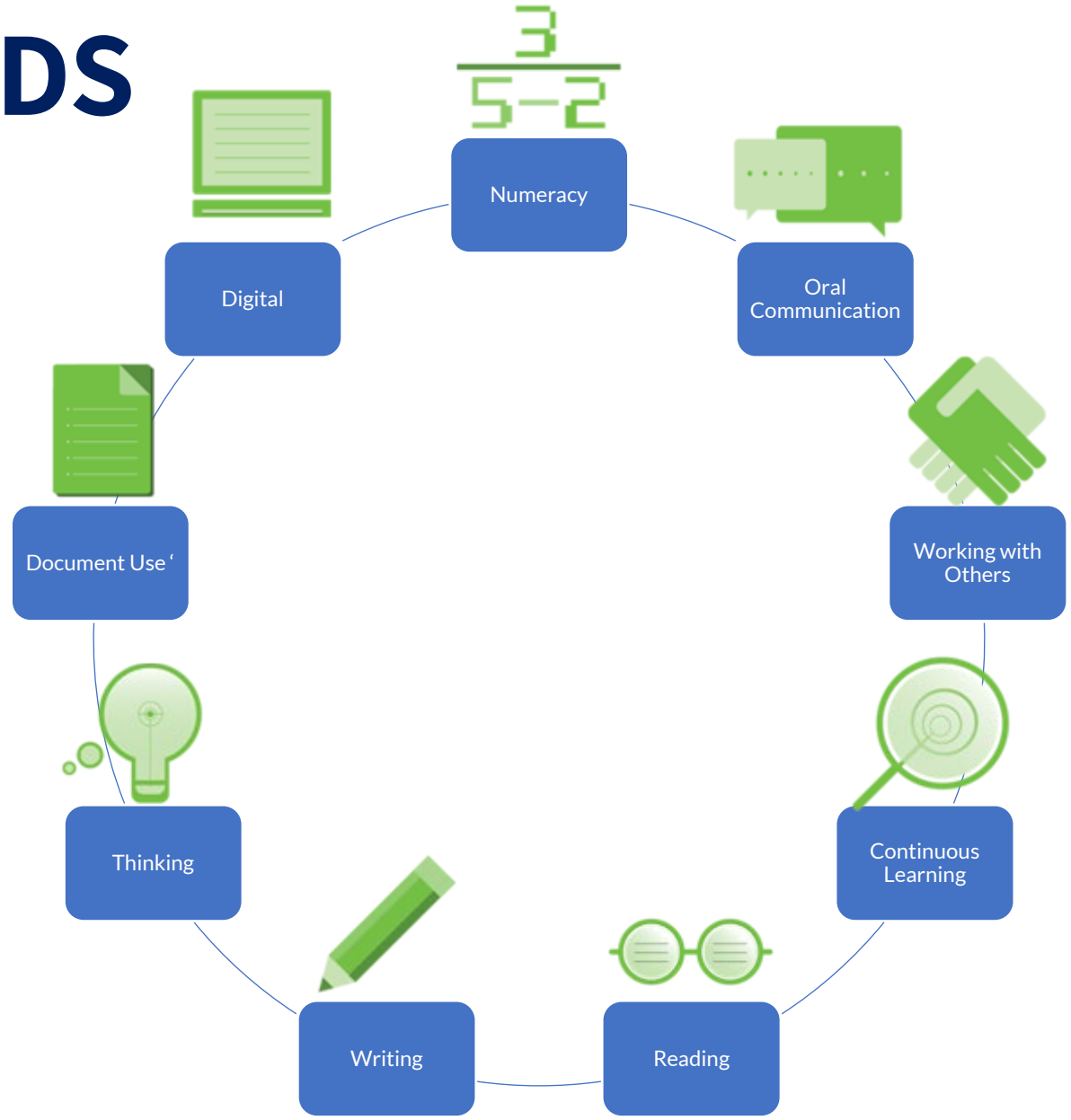
"Think about your students as people who are learning things for purposes. If they are not learning for a grade, why else are they learning?”

-Susan Blum

OUR STUDENT NEEDS

Teach our students how to learn through:

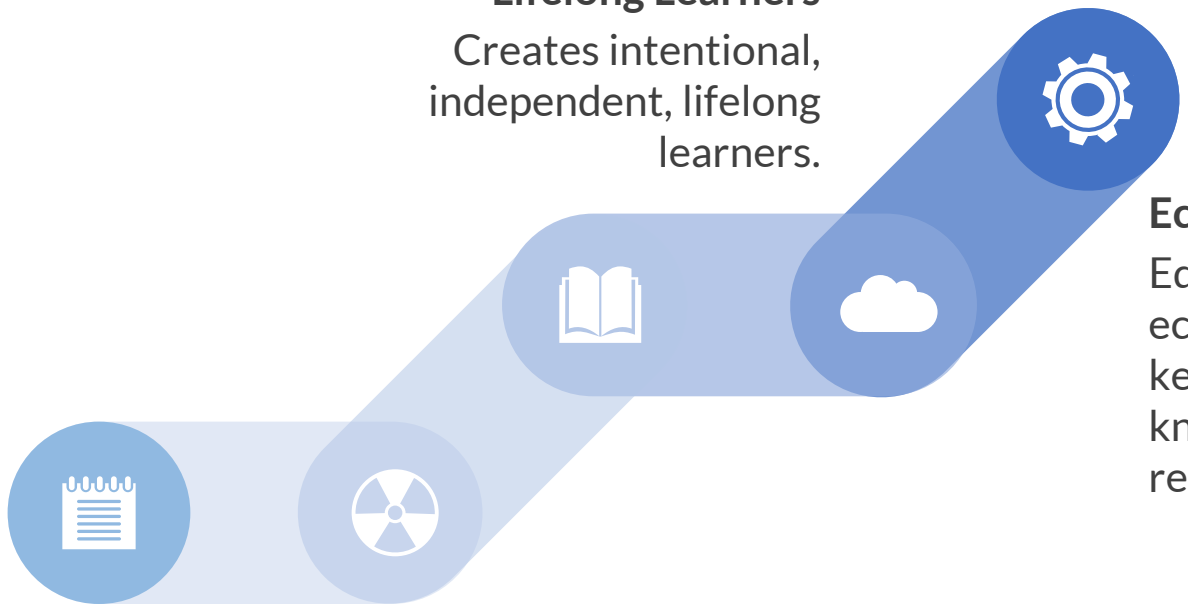
- Self awareness & assessment
- Self-regulate
- Self-motivate



OUR STUDENT NEEDS

Lifelong Learners

Creates intentional, independent, lifelong learners.



Economic Survival Skills

Equips graduates with economic survival skills to keep up with the growth of knowledge and changing requirements in their career.

Student Success

Helps student succeed within current courses and programs.

CONCEPT: SELF-REGULATION

Self-regulation is the control of oneself (thoughts and action), by oneself.

In the context of learning, self-regulation is the conscious planning, monitoring, evaluation, and ultimately control of one's learning in order to maximize it.

"self-regulation of learning involves more than detailed knowledge of a skill; it involves the self-awareness, self-motivation, and behavioral skill to implement that knowledge appropriately." (Zimmerman, 2002 p. 66)

CONCEPT: SELF-MOTIVATION

Intrinsic Motivation	Extrinsic Motivation
Doing something because we want to do it….	**Doing something because we have to do it…**
Characterized by a deep-seated interest in a topic and an understanding of its relevance. Students are motivated to learn or achieve by personal interest or desire for growth.	Characterized by factors that are external to the self. Student are motivated to learn by a desire to achieve a desired grade, please others by meeting expectations set by parents, teachers, or factors.

Self-Regulation and Motivation increase with experience.

Novice Characteristics

- fails to engage in high-quality forethought
- attempts to self-regulate their learning reactively
- fails to set specific goals or to self-monitor systematically
- tends to rely on comparisons with the performance of others to judge their learning effectiveness or direct feedback
- frames performance in relation to ability attributions rather then strategy/ method attributions

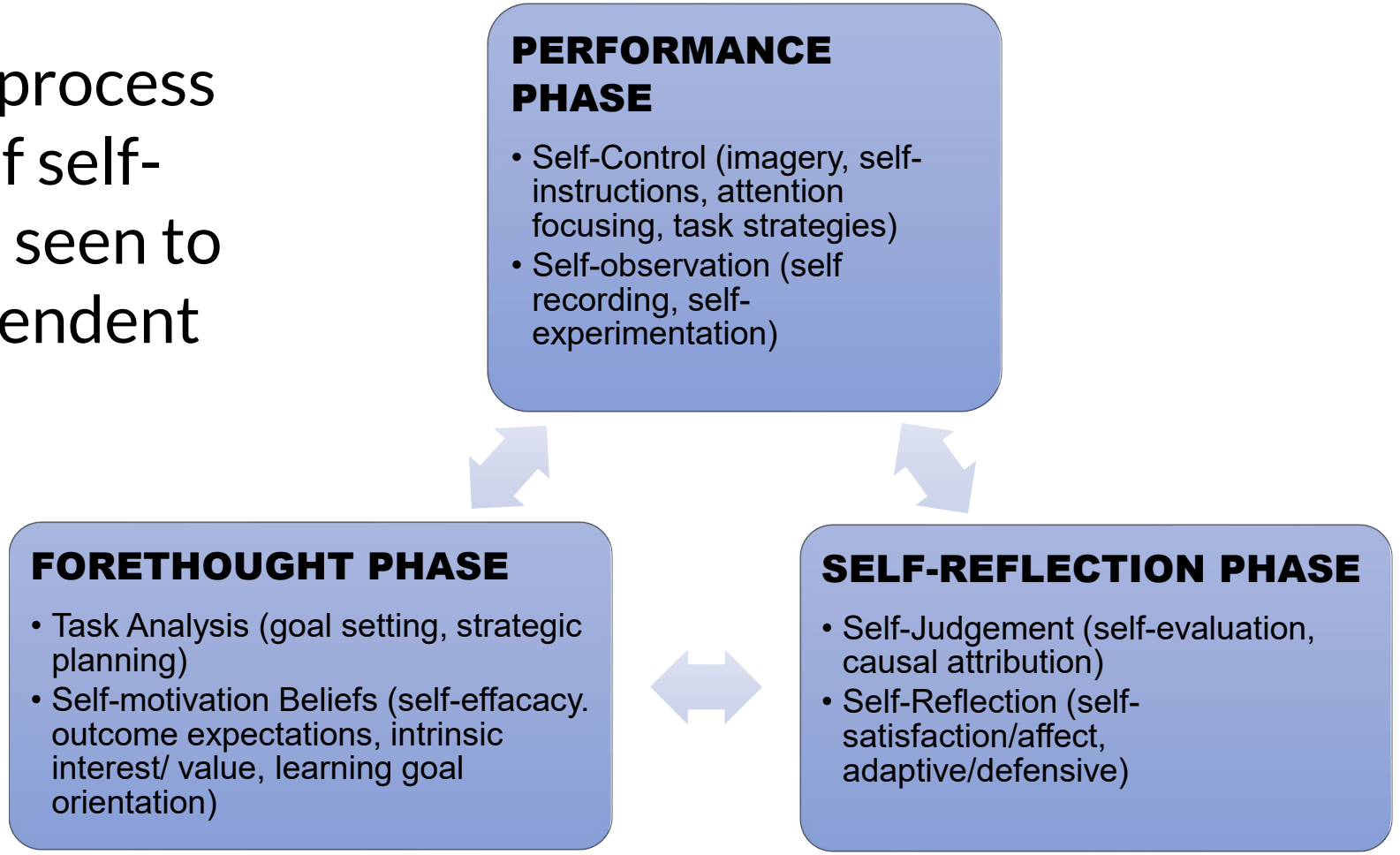
Expert Characteristics

- display high levels of self-motivation and set hierarchical goals for themselves.
- plan learning efforts using powerful strategies and self-observe their effects
- self-evaluate their performance against their personal goals rather than other learners performance
- frame performance in relation to strategy/ method attributions rather then ability attributions

Zimmerman, 2002

PHASES OF SELF-REGULATION

When considering the process and component skills of self-regulation, they can be seen to fall into three interdependent phases



EXAMPLES OF QUESTIONS TO ADDRESS

Forethought Phase	Performance Phase	Self-Reflection Phase
What kind of a task is this? What is my goal and how will I know I have reached it? How motivated am I to perform the task, and how can I increase my motivation if it's low? How much time and resources will be necessary?	Am I sure I know what I am doing? Does my approach to the task make sense? How well are my strategies working? Am I making good progress toward my goal?	How well did I achieve my goal? How well did I avoid sources of interference and stay on task? What approach or strategy worked well or didn't work? Should I change anything next time? What were the most important points I learned? What am I still having trouble understanding?

FROM INDIVIDUAL TO SOCIAL LEARNING

Learning takes place beyond the confines of the individual mind; it involves social and environmental influences.

FROM INDIVIDUAL TO SOCIAL LEARNING

Self-regulated learning

Individual learners taking metacognitive control of cognitive, behavioral, motivational, and emotional conditions/states through iterative processes of planning, monitoring, evaluation, and change.

Socially shared regulation

Groups taking metacognitive control of the task together through negotiated, iterative fine-tuning of cognitive, behavioral, motivational, and emotional conditions/states as needed.

Co-regulation

Dynamic metacognitive processes through which self-regulation and shared regulation of cognition, behavior, motivation, and emotions are transitionally and flexibly supported and thwarted.

CONVENTIONAL GRADING SYSTEMS

- Inconsistent Meaning of Grades
- Desire for Feedback & Communication
- Side Effects and Unintended Consequences

THE INCENTIVE TO CHEAT

- Extrinsic motivation to achieve a good grade > the intrinsic motivation to learn
- + stress + anxiety
- + easy access to untraceable AI content

- = ????

UNGRADING

An educational approach that emphasizes learning, understanding, and personal growth over numerical grades.

It’s classroom paradigm shift that places the focus of education back on what is being learned and why, rather than what is being produced
and for whom.

MY APPROACH #1

1. Community of Learning & Support
    1. Metacognition Modules
    2. Learning & Development Plan
    3. Study Skill Inventory
2. Reinforce Self-Regulation, Motivation & Student Progress
    1. Assignment Change Logs
    2. Lab Portfolios

MY FINDINGS - STUDENTS

“I really appreciate your style of instruction and assessment”.

“I like the format and style of the labs. They make me want to improve.”

“I appreciate the chance to fix my problems and learn from them.”

Instructional Surveys went up!

- Methods of evaluating student work were fair and appropriate.
- Sufficient time to cover the amount of material
- Feedback on progress

Increased metacognition skills throughout the course.

APPROACH #2

1. Peer Review Strategies
    1. Reduce workload
    2. Increase social and co-regulation
2. New forms of Technology
    1. Clearer for students
    2. Reduce Workload
    3. Focus on skill building

NEXT GEN LMS

Feedback Indicators:

- Instead of grades, indicators for if feedback has been left, if there are suggestions for changes, and if approved.
  - Student Side: Pending, Reviewed, Endorsed
  - Instructor Side: Pending, Submitted, Resubmitted, Finalized

Incorporation of exercises in metacognition and self-regulation

- Forethought Phase Questions:
  - Customizable and may include: What is my goal for this assignment, what steps will you take, and how will you know you've reached it? What time and resources will you use? What challenges or unhelpful habits will you avoid?
- Self-Reflection Phase Questions:
  - Customizable and may include: What approach or strategy worked well or didn't work? Should you change anything next time? What were the most important points you learned? What are you still having trouble understanding?

NEXT GEN LMS

Threaded Commenting

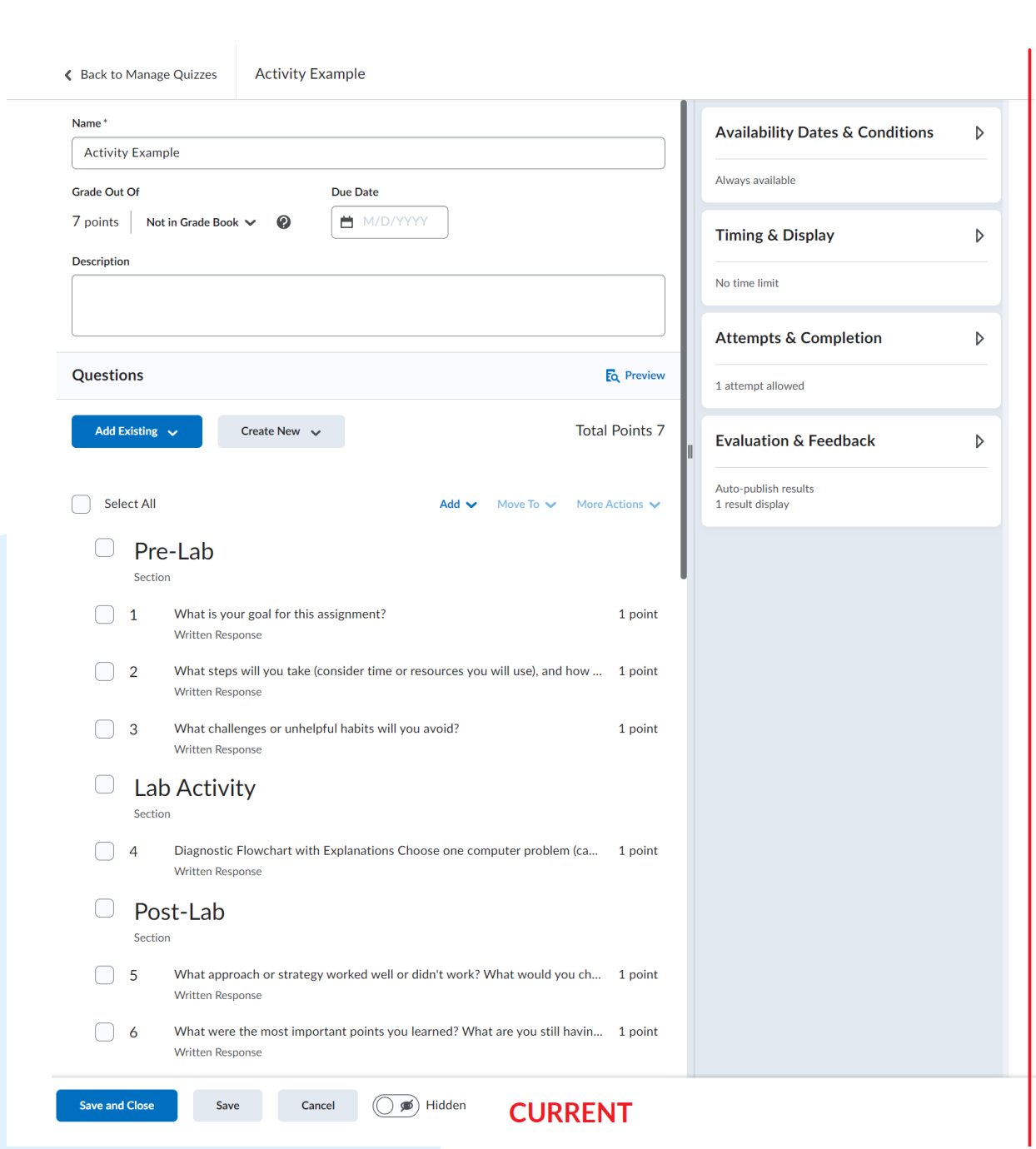
- On submissions, threaded commenting to provide students an opportunity to respond and help track progress.

Mark for Peer Review

- Allow other students to view and provide comments
  - All students, assign specific students, or assign random students.

Easy to Access History and Changes

- At simplest, all submissions are viewable on one page.
- Even better! Highlighted changes or document tracking.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Activity Example
Name *
Activity Example
Grade Out Of
7 points
Not in Grade Book
Due Date
M/D/YYYY
Description
Availability Dates & Conditions
Always available
Timing & Display
No time limit
Attempts & Completion
1 attempt allowed
Evaluation & Feedback
Auto-publish results
1 result display
Questions
Preview
Add Existing
Create New
Total Points 7
Select All
Add
Move To
More Actions
Pre-Lab
Section
1 What is your goal for this assignment? 1 point
Written Response
2 What steps will you take (consider time or resources you will use), and how ... 1 point
Written Response
3 What challenges or unhelpful habits will you avoid? 1 point
Written Response
Lab Activity
Section
4 Diagnostic Flowchart with Explanations Choose one computer problem (ca... 1 point
Written Response
Post-Lab
Section
5 What approach or strategy worked well or didn't work? What would you ch... 1 point
Written Response
6 What were the most important points you learned? What are you still havin... 1 point
Written Response
Save and Close
Save
Cancel
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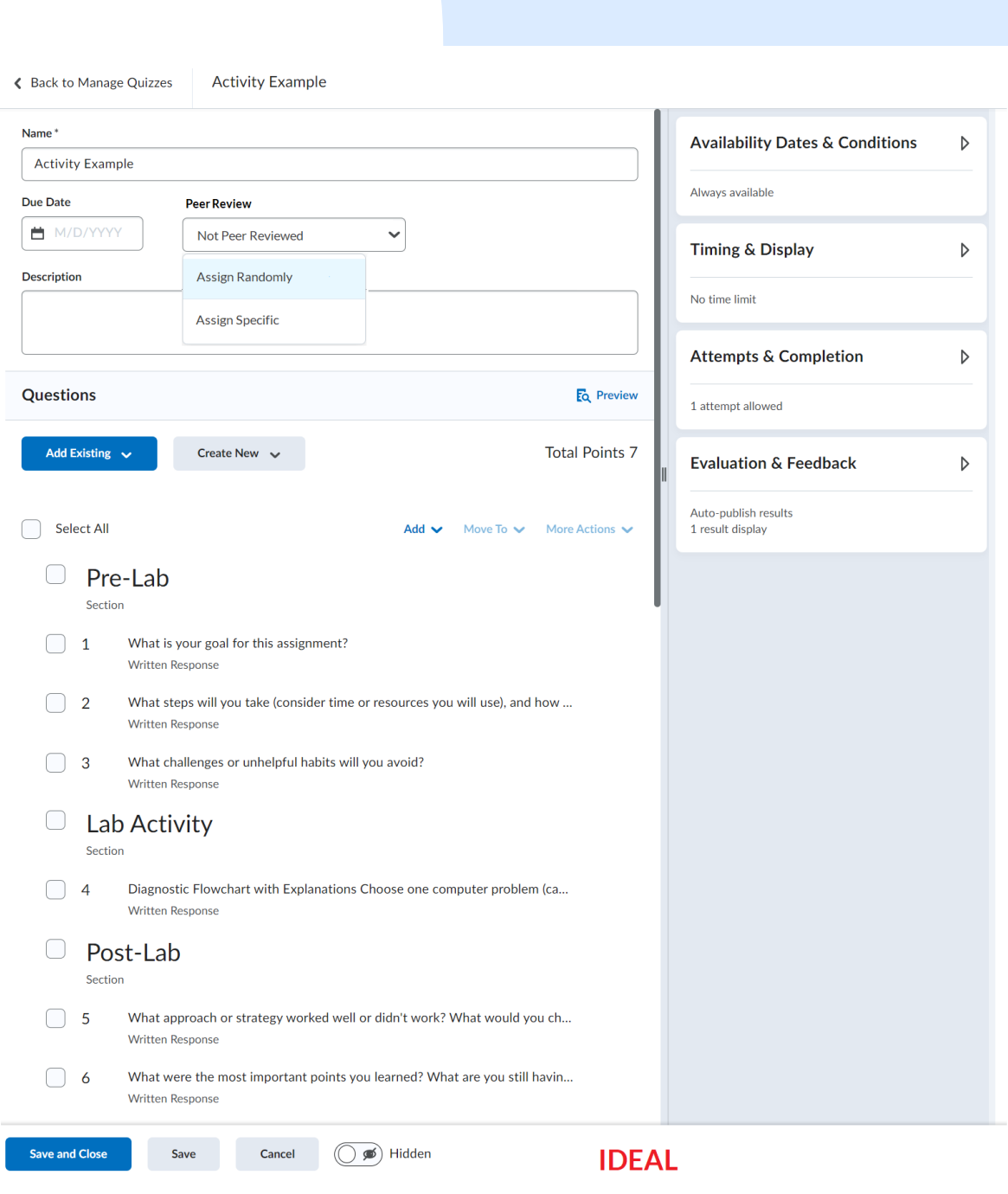
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Activity Example
Name *
Activity Example
Due Date
M/D/YYYY
Peer Review
Not Peer Reviewed
Assign Randomly
Assign Specific
Description
Availability Dates & Conditions
Always available
Timing & Display
No time limit
Attempts & Completion
1 attempt allowed
Evaluation & Feedback
Auto-publish results
1 result display
Questions
Preview
Add Existing
Create New
Total Points 7
Select All
Add
Move To
More Actions
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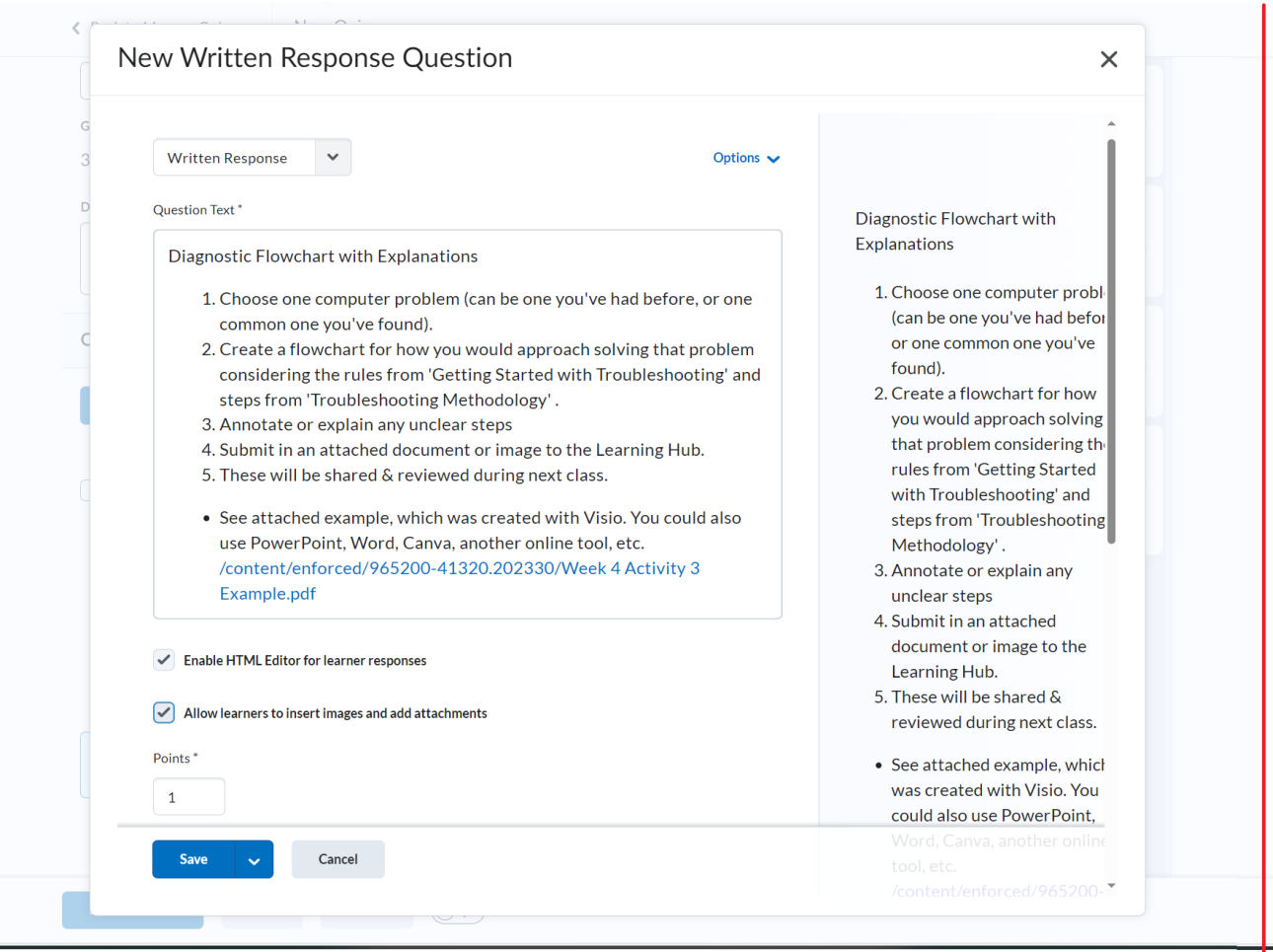
IDEAL



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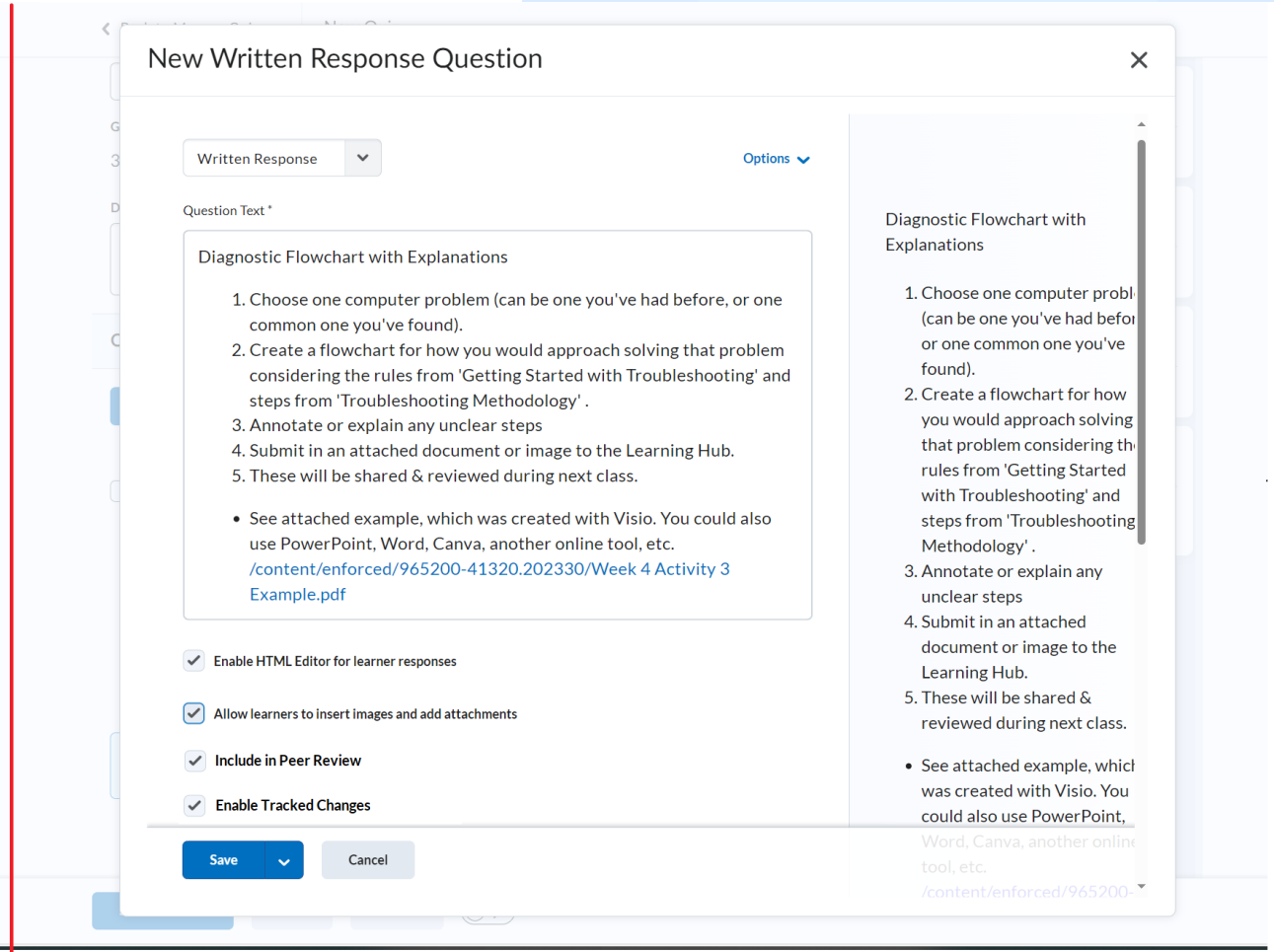

IDEAL