

Creating Integrous Classrooms in the GenAI Era

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TRITONS

choose integrity...

Promoting learning at

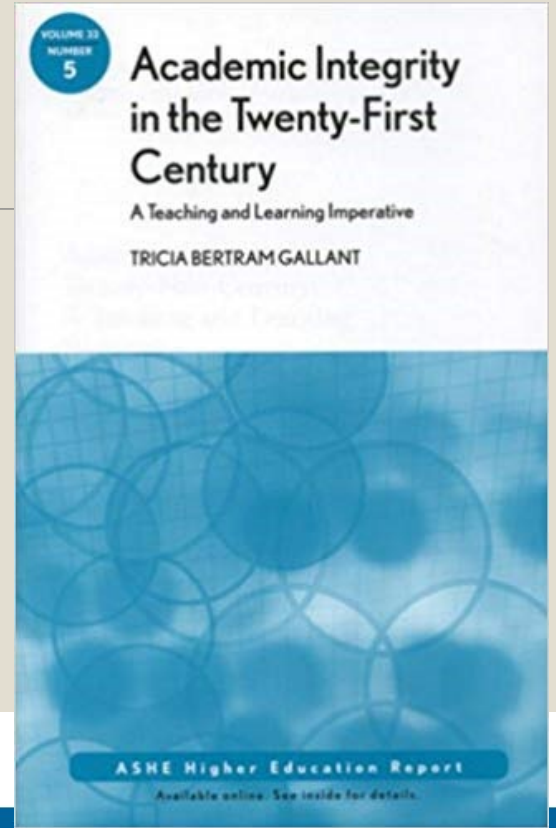
Cheating Academic Integrity

LESSONS FROM 30 YEARS OF RESEARCH

EDITED BY DAVID A. RETTINGER TRICIA BERTRAM GALLANT

ity in order to reinforce quality teaching and

TRITON TESTING



Welcome to the Triton Testing Center!

A Panel Discussion: How Can Educators Maintain Academic Integrity in the Age of GenAI?

Written by *Tricia Bertram Gallant*
July 30, 2023

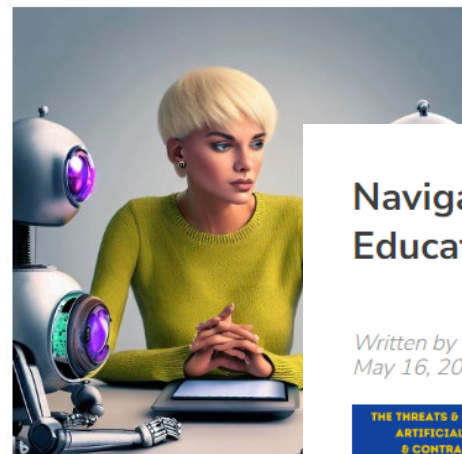


Image Generated by Bing using the prompt: "an image of a human female pixie cut, having a conversation with a robot head." (Note: The image shows a woman with a blonde pixie cut sitting at a desk with a robot head, which is a slight deviation from the prompt description.)

(Editor's Note: This blogpost was created using Bard, ChatGPT-4, and Bing. The only content created by the human was my own responses as a panelist. I gave Bard the following prompt and then acted as the...

Navigating the Era of Outsourcing: Rethinking Higher Education in the Age of GenAI and Contract Cheating

Written by *Tricia Bertram Gallant*
May 16, 2023



This blog post is a written version of my opening remarks for UC San Diego's Virtual Symposium on "The Threat & Opportunities of Artificial Intelligence and Contract Cheating: Charting a Teaching & Learning Path Forward". Since this is a post, in part, about GenAI, I decided to try an experiment. I pasted my PPT notes into ChatGPT4 and asked it to generate this blog post for me. The content is mine, but ChatGPT4 gave it a

title, put it into sections with headers and connected some of the dots normal in a blog post but not necessarily in PPT notes. I edited it and updated it with some new thoughts and adjusted some things for clarity. Did it save me any time using ChatGPT4? I don't think so. But, I do think it took on the drudgery work of formatting, which freed up my time to think. And this is a good thing, I believe.

Klara, the Sun, and our GenAI Future

Written by *Tricia Bertram Gallant*
June 5, 2023



When you live in San Diego California, especially when you were raised with cold Ontario winters, you hate to complain about the weather (or, at least, you hate to complain too loudly). After all, San Diego has a reputation of always being Sunny and always with the perfect 20-24°C or 70-75°F air temp. But, it's a lie. San Diego isn't perfect, isn't always Sunny, and isn't always the perfect temp, and especially wasn't this year. We have been colder, wetter, and greyer than I've experienced in my 23 years of living here. And it's been this way for months. So, when we hit our normal and expected "May Grey" and "June Gloom" weather, it wasn't a refreshing or even palatable change from the winter Sunshine and warmer temperatures; it was just more of the same. Dull, drizzly, and uninspiring.

What I have discovered about myself this past 5 months is my

Answering the Call to Rescue Academic Integrity from the Grips of GenAI

Written by *Tricia Bertram Gallant*
May 23, 2023



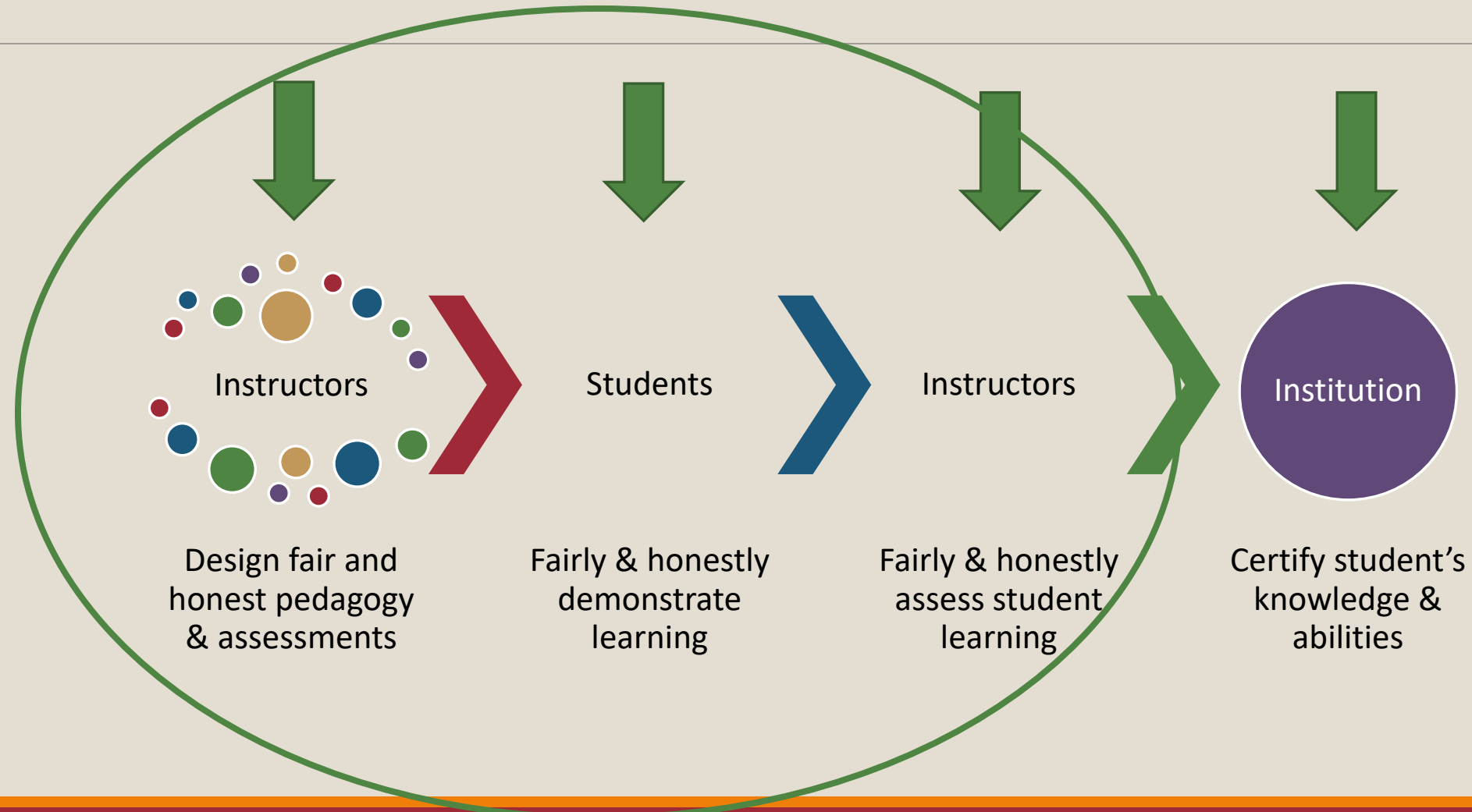
If you are an academic integrity professional, or academic integrity expert on your campus, you have likely experienced what I've experienced the last 9 months: repeated calls for help in responding to the release of GenAI tools like ChatGPT, Bing, Bard, Midjourney, and CoPilot. Maybe those calls came from your institutional leadership or maybe they came from the faculty, but they all likely sounded a lot like this – "how do we assure academic integrity when students can outsource their academic work to GenAI?"

The HE Institution-Society Social Contract



Developing the next generation of (ethical) citizens & professionals

Breakdowns in the Moral Obligation Supply Chain



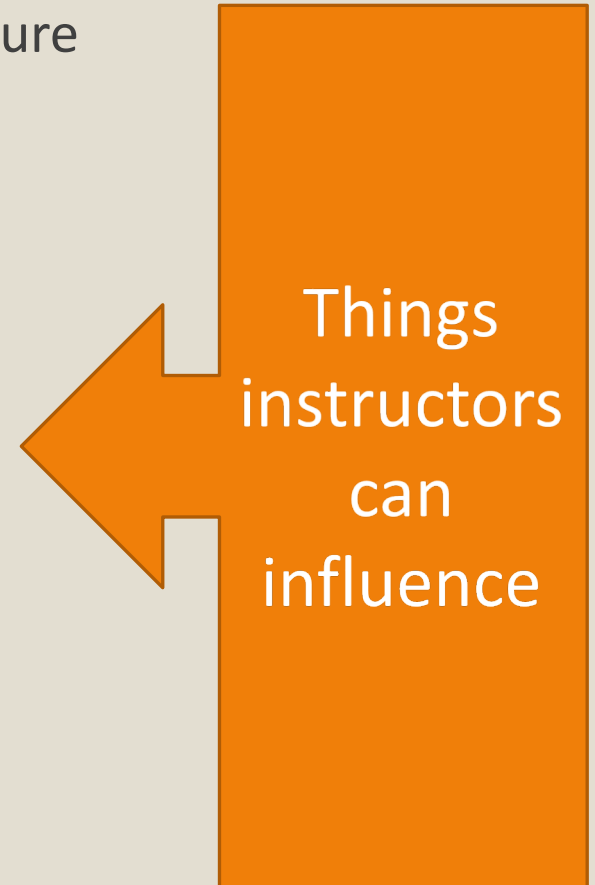
WHY ARE STUDENTS STOPPING?
HOW CAN WE HELP THEM?



The truth is....

Students cheat for all sorts of reasons...

- They are in a heightened state of arousal – under stress & pressure
- There are opportunities
- The class rewards performance, not mastery
- The student is oriented towards extrinsic, not intrinsic, goals
- The students have low self-efficacy
- They can justify their actions
- When it's less likely that they will be caught
- They can disassociate their identity from their actions
- They fail to recognize an action as unethical
- They perceive or observe their peers to be cheating



**And students
(aka humans)
have always
cheated...**



So, why does it feel so different now?



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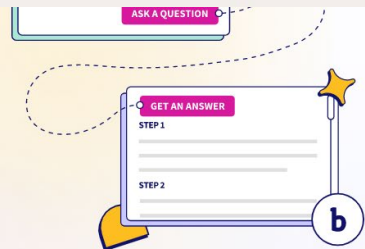
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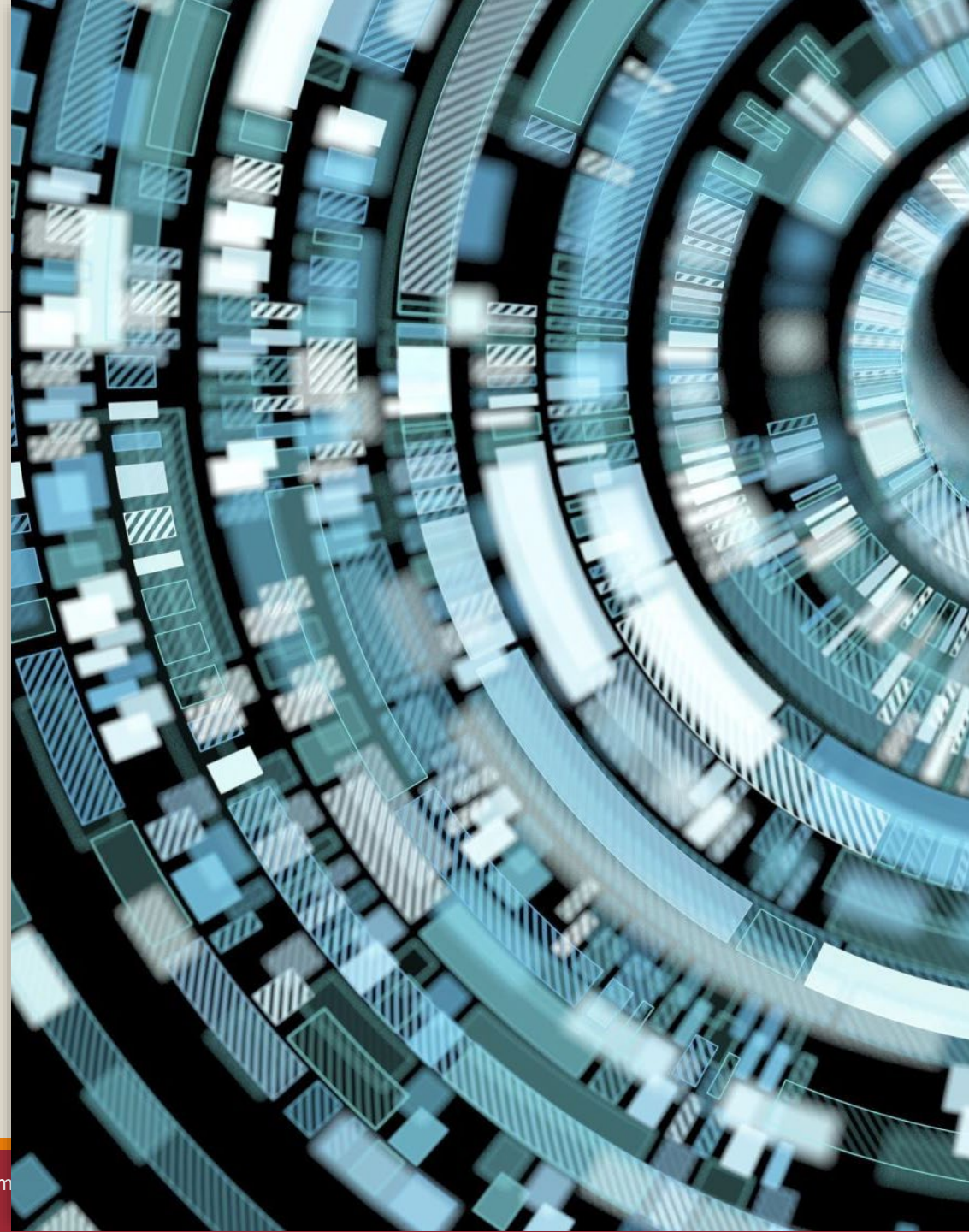


CONTRACT

CHEATING

Generative AI

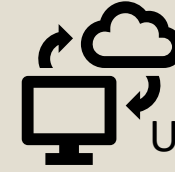
- Machines that have been trained on TONS of data
- The data, which was in words, is translated into numbers (0s and 1s)
- The computers are programmed to generate output based on input
- ChatGPT-3.5 (or 4) is most well known
 - Chat = “chatbot” = human interface
 - GPT = Generative Pre-Trained Transformer
 - Large Language Model (LLM)
- Other LLMs include: [Bing Chat](#), [Google Bard](#), and [Github’s Co-Pilot](#)
- Other GenAI tools include:
 - image generators like [Midjourney](#) and [Dall-E](#)
 - music generators like [Google's MusicLM](#)



**Students can (easily)
offload their work
to other humans
and machines**



Getting exam questions/answers from friends



Using spell & grammar checks

“Cognitive offloading”* isn't new

[*Dawson, P. \(2020\). Cognitive Offloading and Assessment](#)



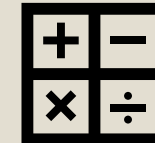
Getting other humans to do the work



Using google translate

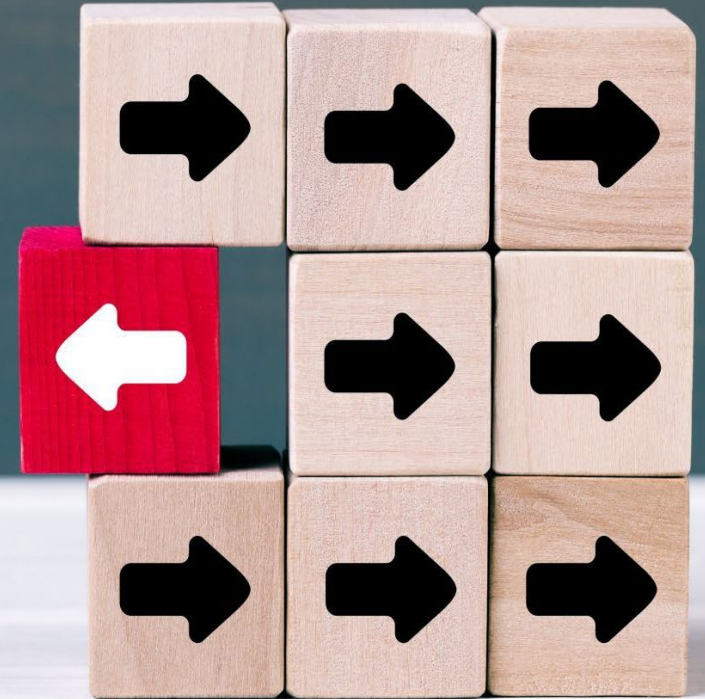


Using Cliff/Sparks Notes



Using a calculator

Cognitive
Offloading
doesn't have to
mean cheating



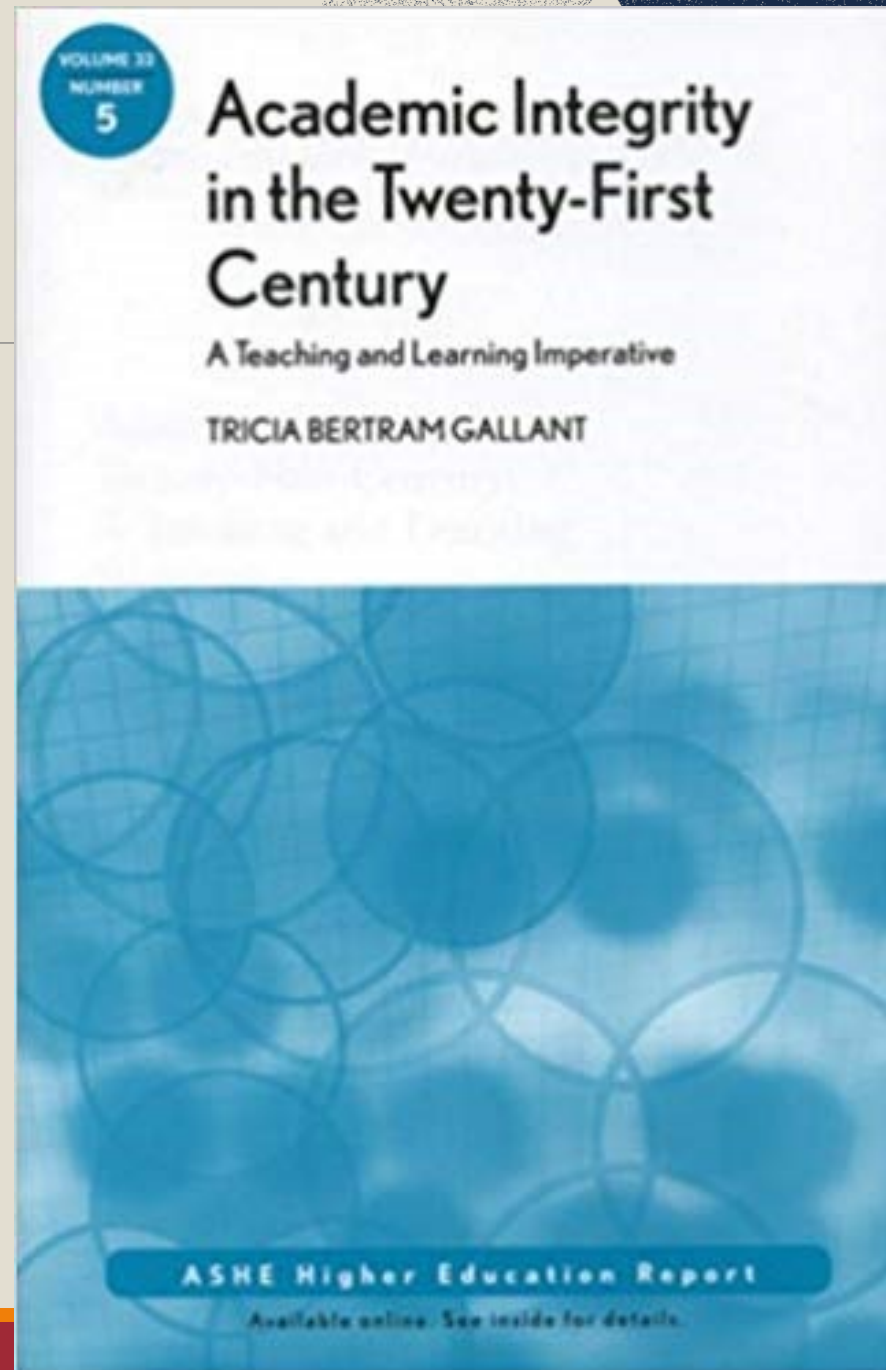
Cognitive Offloading Becomes Cheating when the action:

- undermines learning objectives
- gives a dishonest impression of knowledge & abilities
- violates the rules for that class/assignment



~~How do we stop students from cheating?~~

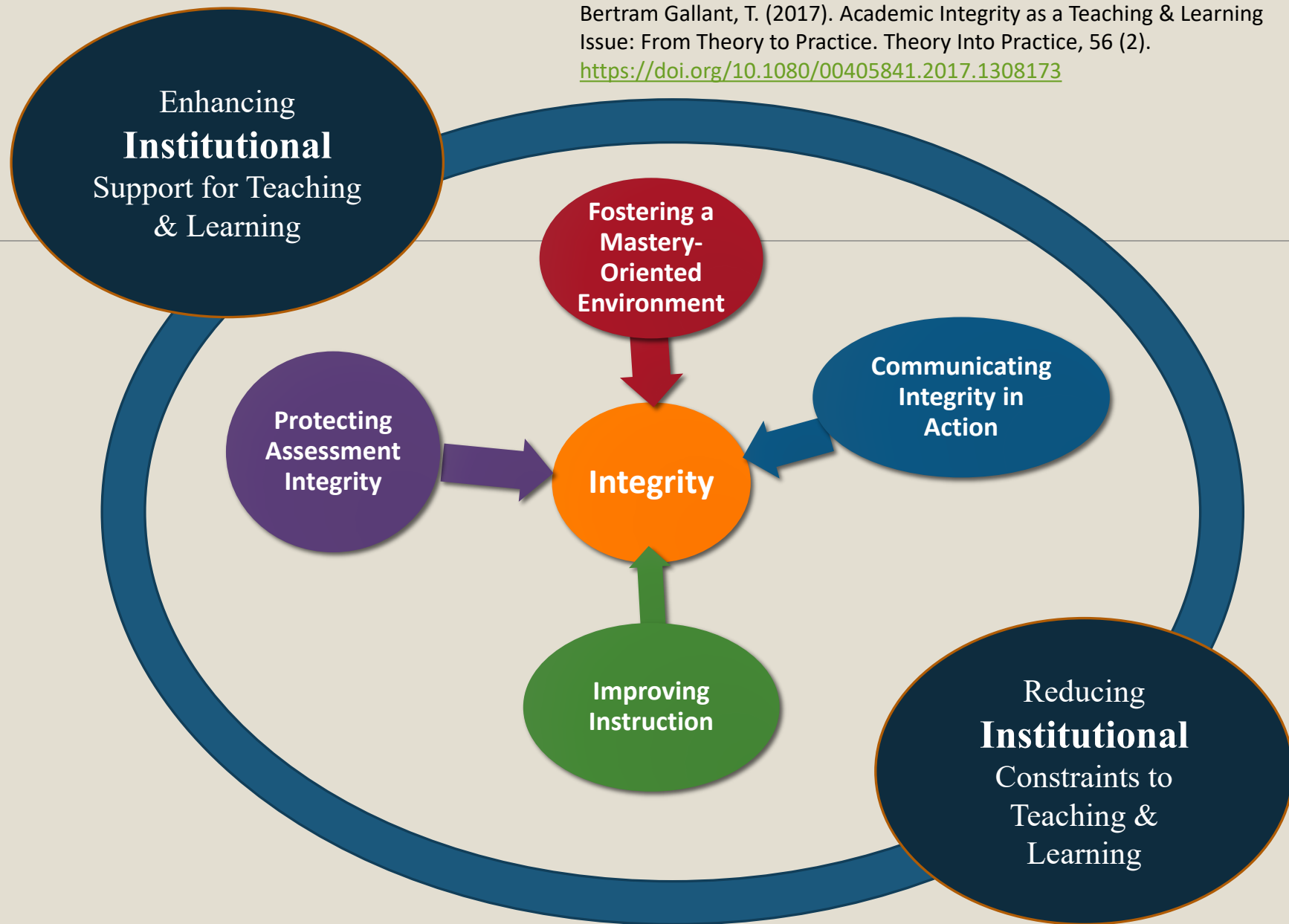
How do we ensure students are learning?



How can we best facilitate & assess learning?

(in the new realities of the 21st century where companies and AI exist to do assessments for students)

Bertram Gallant, T. (2017). Academic Integrity as a Teaching & Learning Issue: From Theory to Practice. *Theory Into Practice*, 56 (2).
<https://doi.org/10.1080/00405841.2017.1308173>



Fostering Integrity: The Teaching & Learning Way

Bertram Gallant (2017). Academic Integrity as a Teaching & Learning Issue: From Theory to Practice. *Theory Into Practice*, 56 (2).

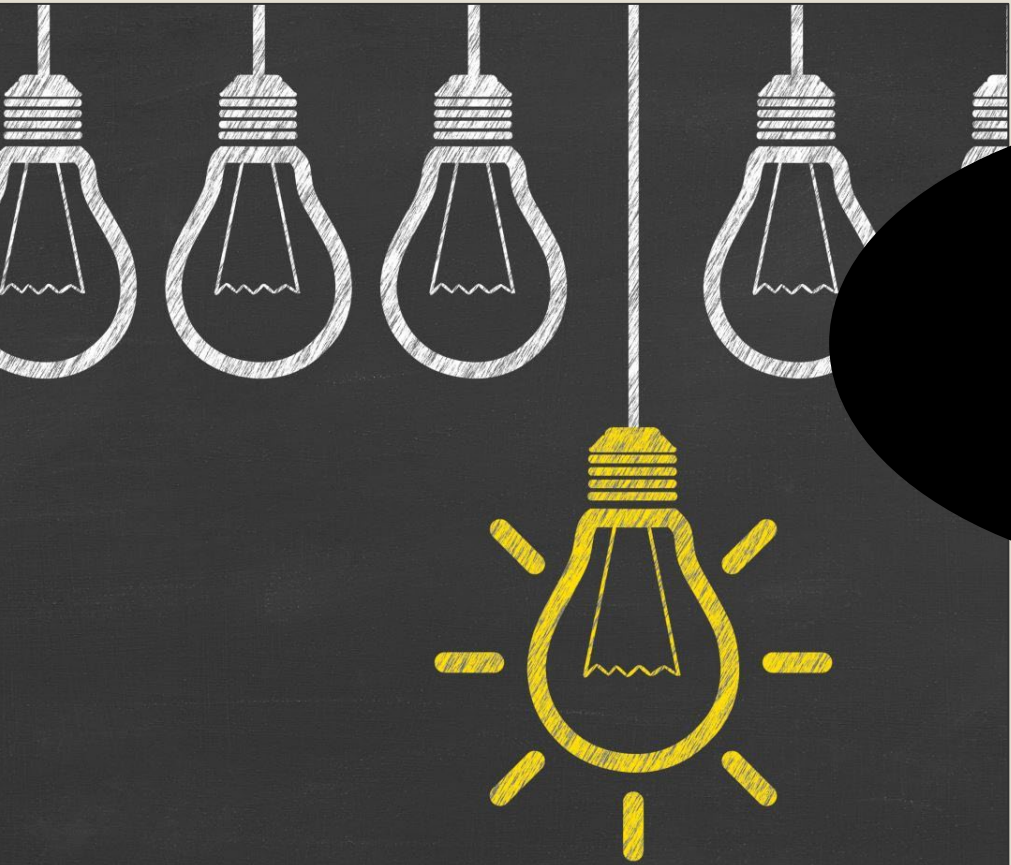
<https://doi.org/10.1080/00405841.2017.1308173>

Rettinger & Bertram Gallant (2022). *Cheating Academic Integrity: Lessons Learned from 30 Years of Research*. Jossey-Bass.

Bertram Gallant & Rettinger (2025). *Awesome Title Here*. University of Oklahoma Press



Use GenAI as an opening to Communicate Integrity



Students are worried about GenAI

27%
worried about the impact of AI on their education

31%
worried about AI impact on their career

40%
worried about AI defeating the purpose of education

48%
worried about the impact of AI on society

Yet many are already using it....

48%

it is possible to use AI in an ethical way to complete assessments



Of students who have used AI tools...

50% =
assistance

30% majority

17%
entirety

41%
using AI tools to complete assessments is morally wrong

51%

think the results can pass as "human."





And AI is and will increasingly be a big part of our lives.....

Already on or coming soon to a computer near you!

Microsoft 365's CoPilot
Google's Workspace



Listen to Your Students

1. How familiar are you with GenAI (like ChatGPT)?
2. How regularly do you use a GenAI tool?
3. What have you used GenAI tool to do?
4. How skilled do you feel in using GenAI to help you with academic work?
5. When do you think it's acceptable to use GenAI for academic work?
6. When do you think it should be considered cheating?
7. What else would you like to share with me about GenAI use?
8. What do you need from me to understand if, how and when you can use GenAI in this class?

Co-create a Statement of Values

CLASS STATEMENT OF VALUES

In order to best facilitate teaching, learning and the assessment of learning, this class operates according to the International Center for Academic Integrity's 6 Fundamental Values: Courage, Fairness, Honesty, Respect, Responsibility & Trustworthiness.

All members of this class – students, faculty and instructional assistants – are expected to uphold these values. Anyone who feels they cannot do so should reconsider being a member of this community.

VALUES	Upholding this value means that STUDENTS will...	Upholding this value means that the INSTRUCTIONAL TEAM will...
Courage		
Fairness		
Honesty		
Respect		
Responsibility		
Trustworthiness		



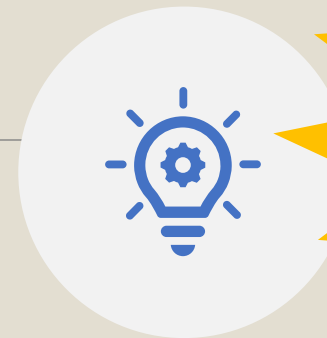
EXPLORE GENAI USE FOR EACH ASSESSMENT



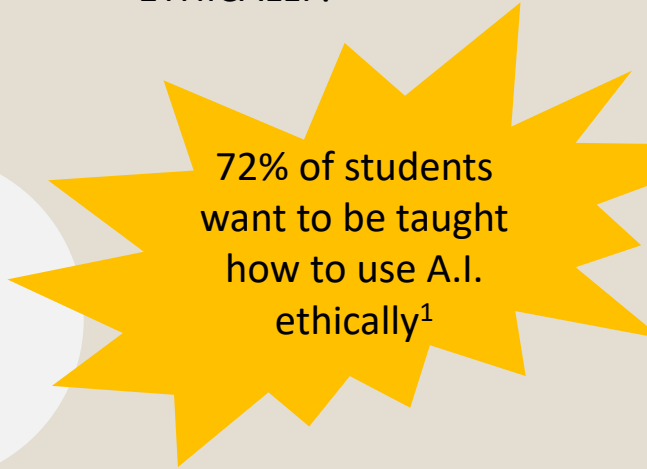
LOOK CLOSELY AT EACH
ASSESSMENT & THE LEARNING
OBJECTIVES



ARE THERE ANY WAYS THAT
GENAI COULD BE USED
ETHICALLY?



MAKE RECOMMENDATIONS OF
IF, WHEN & HOW GENAI
SHOULD BE USED



72% of students
want to be taught
how to use A.I.
ethically¹

1. <https://www.insidehighered.com/news/student-success/life-after-college/2024/01/10/survey-college-students-thoughts-ai-and-careers>

Part of communicating is having a clear academic integrity policy

AI Assessment Scale

Perkins, Furze, Roe & MacVaugh

<https://arxiv.org/abs/2312.07086>

1	NO AI	<p>The assessment is completed entirely without AI assistance. This level ensures that students rely solely on their knowledge, understanding, and skills.</p> <p>AI must not be used at any point during the assessment.</p>
2	AI-ASSISTED IDEA GENERATION AND STRUCTURING	<p>AI can be used in the assessment for brainstorming, creating structures, and generating ideas for improving work.</p> <p>No AI content is allowed in the final submission.</p>
3	AI-ASSISTED EDITING	<p>AI can be used to make improvements to the clarity or quality of student created work to improve the final output, but no new content can be created using AI.</p> <p>AI can be used, but your original work with no AI content must be provided in an appendix.</p>
4	AI TASK COMPLETION, HUMAN EVALUATION	<p>AI is used to complete certain elements of the task, with students providing discussion or commentary on the AI-generated content. This level requires critical engagement with AI generated content and evaluating its output.</p> <p>You will use AI to complete specified tasks in your assessment. Any AI created content must be cited.</p>
5	FULL AI	<p>AI should be used as a 'co-pilot' in order to meet the requirements of the assessment, allowing for a collaborative approach with AI and enhancing creativity.</p> <p>You may use AI throughout your assessment to support your own work and do not have to specify which content is AI generated.</p>

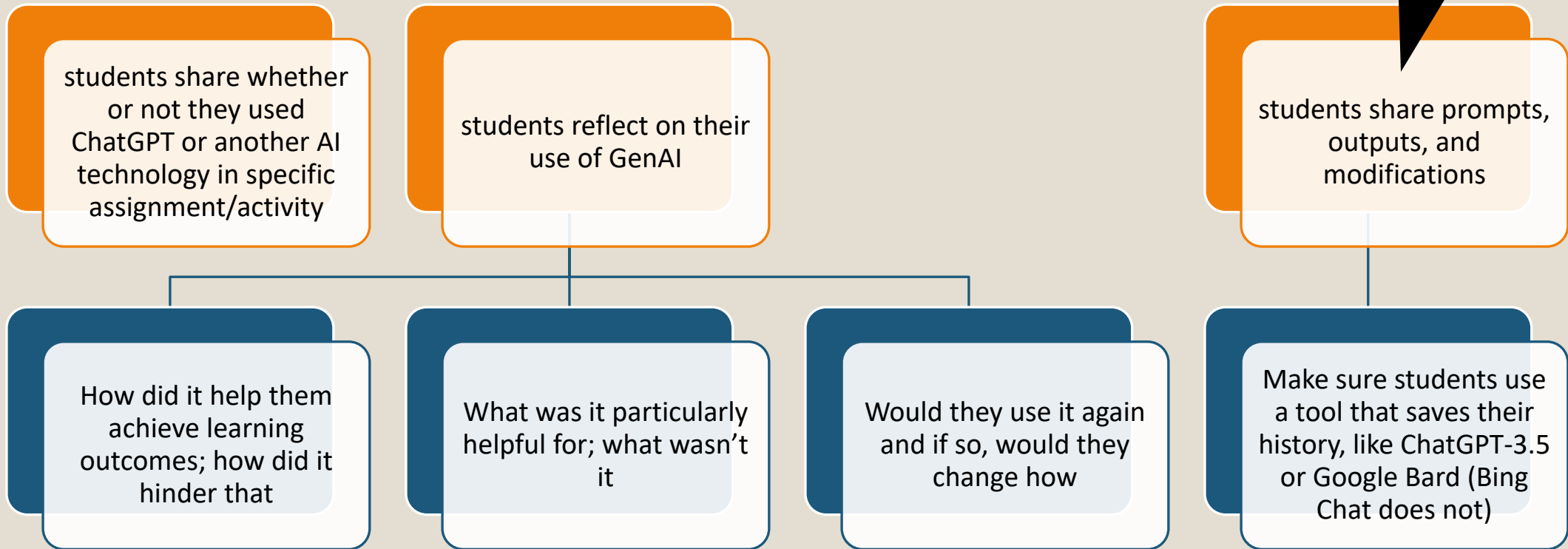
Secure the assessment

Remind students of the LOs and Facilitate Transparency & Critical Thinking

Table 1 The AI Assessment Scale

GenAI Use MUST be Transparent

Think about using Google docs with draftback , e.g.



Communicating helps because it...

- They are in a heightened state of arousal – under stress & pressure
- There are opportunities
- The class rewards performance, not mastery
- The class reinforces extrinsic, not intrinsic, goals
- The students have low self-efficacy

- They can justify their actions
- When it's less likely that they will be caught
- They can disassociate their identity from their actions
- They fail to recognize an action as unethical
- They perceive or observe their peers to be cheating

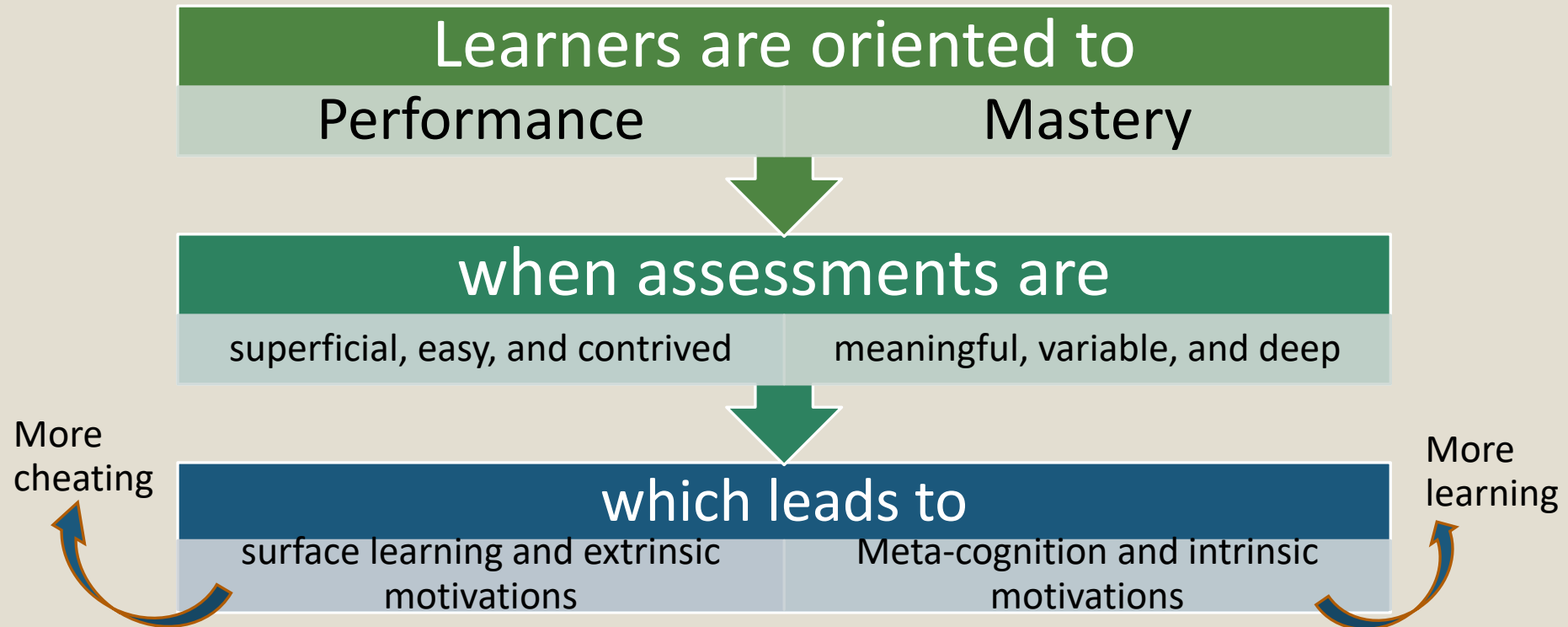
mitigates these temptations to “offload”

Foster a Mastery-Oriented Environment

*“Motivation theory and research helps us to identify the root causes of cheating and offer research-informed strategies that instructors can adopt to decrease the prevalence of cheating in college classrooms”
(Anderman et al, 2022, p. 92)*

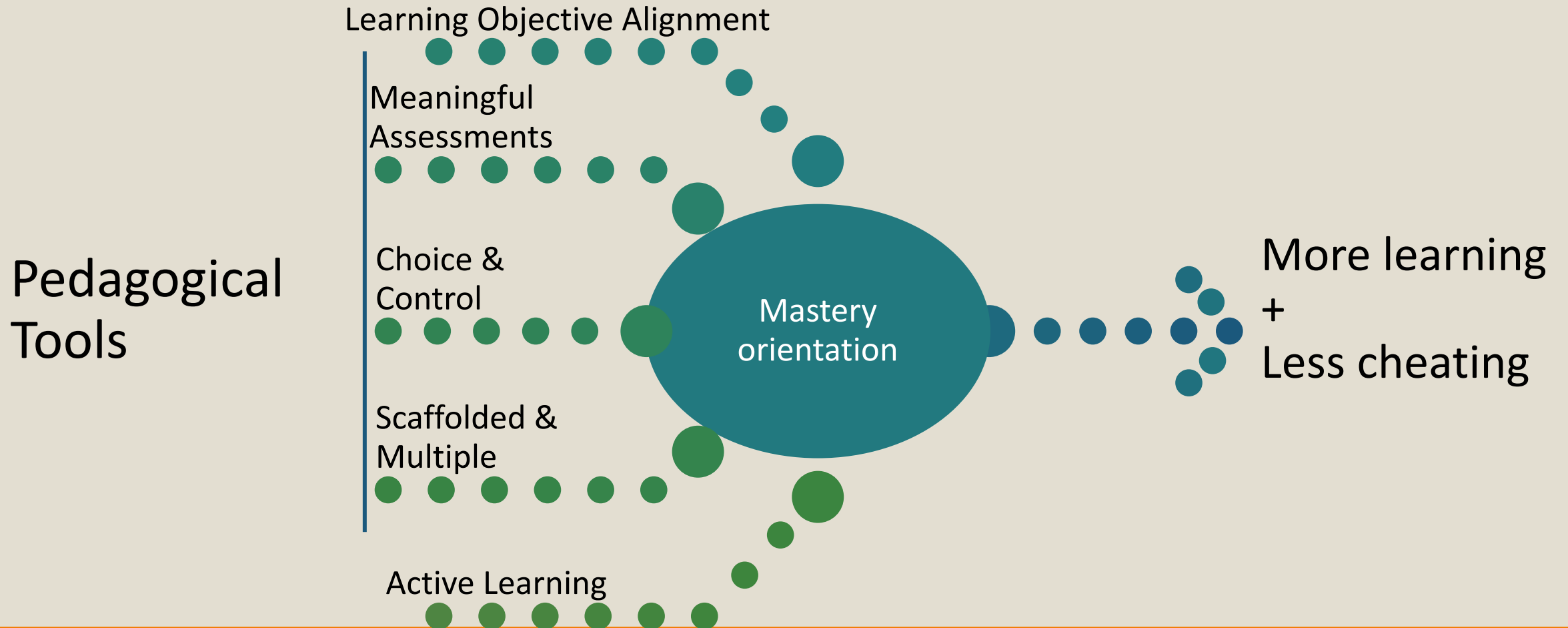
Anderman et al (2022). Academic motivation and cheating: A psychological perspective. In Rettinger & Bertram Gallant (Eds) Cheating Academic Integrity: Lessons Learned From 30 Years of Research. Jossey-Bass, pp. 65-98.

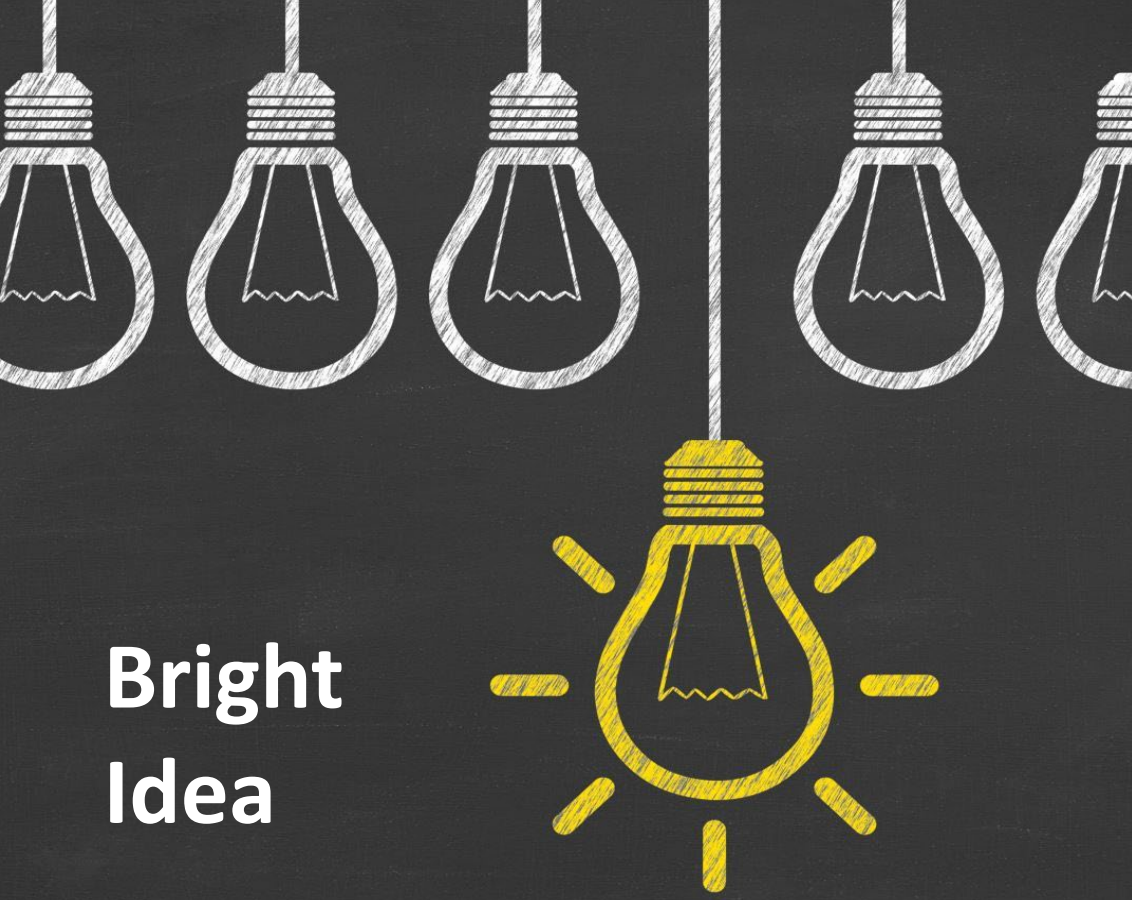
Performance vs. Mastery



See, for example, Anderman, E. M., Griesinger, T., & Westerfield, G. (1998). Motivation and cheating during early adolescence, *Journal of Educational Psychology*, 90. <https://doi.org/10.1037/0022-0663.90.1.84>; Van Yperen, Hamstra & van der Klauw (2011). To win, or not to lose at any cost: The impact of achievement goals on cheating. *British Journal of Management*, 22 (s1). <https://doi.org/10.1111/j.1467-8551.2010.00702.x>

Foster a Mastery-Oriented Environment

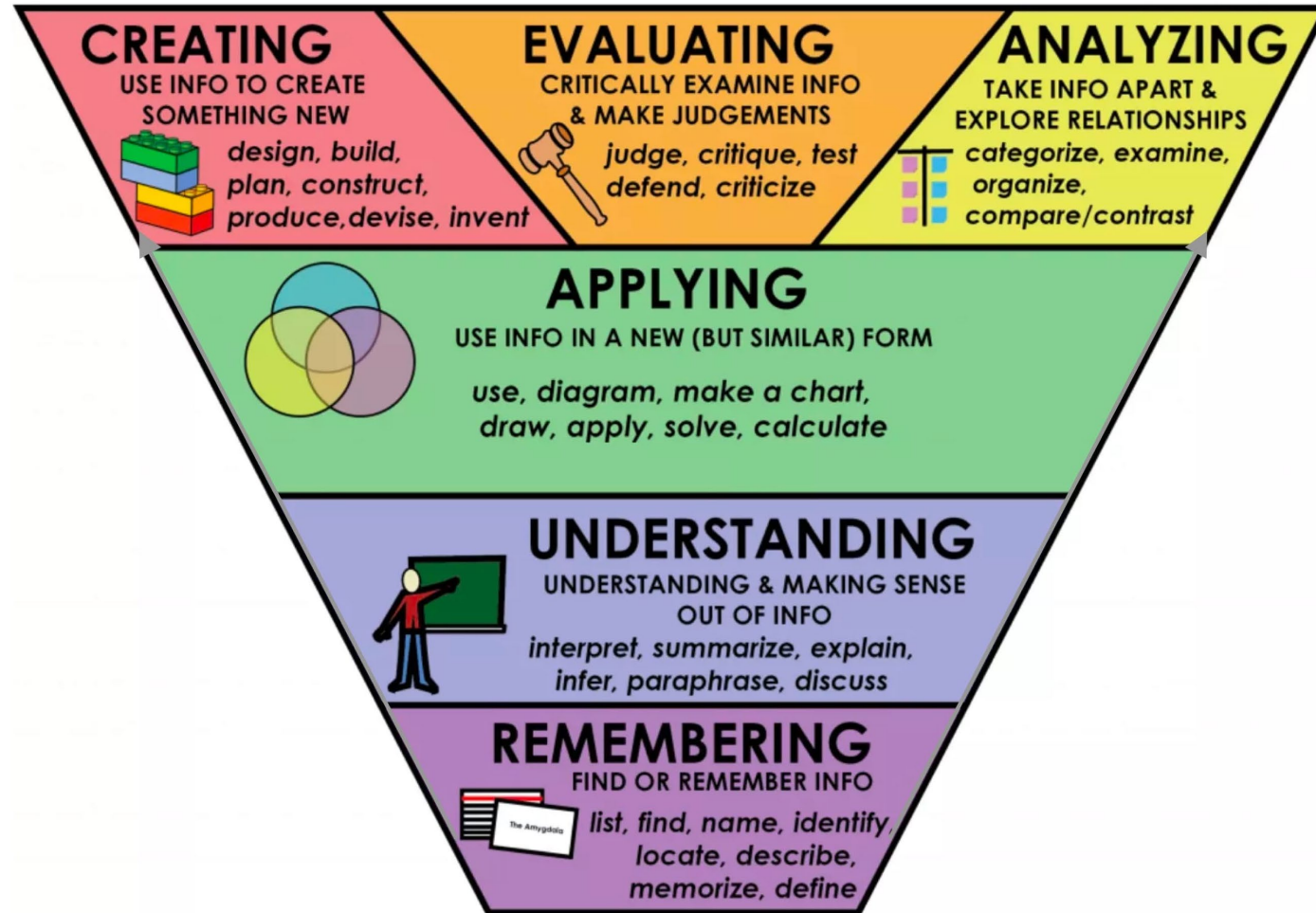




Bright
Idea

Move assessment up a
taxonomy of learning

Illustration: Rawia Inaim
<https://addyosmani.com/blog/blooms-taxonomy/>



Original Question (Knowledge/Remembering)

What is the primary function of the nephron in the human kidney?

Revised Questions for Each Level of Bloom's Taxonomy

1. Comprehension/Understanding

Explain how the nephron in the human kidney processes blood and forms urine.

2. Application/Applying

Given a case where a patient has a significantly reduced number of functioning nephrons, discuss how this condition might affect the kidney's ability to filter blood and maintain homeostasis.

3. Analysis/Analyzing

Compare and contrast the functions of the different segments of the nephron (such as the proximal convoluted tubule, loop of Henle, distal convoluted tubule, and collecting duct) in terms of their role in urine formation and electrolyte balance.

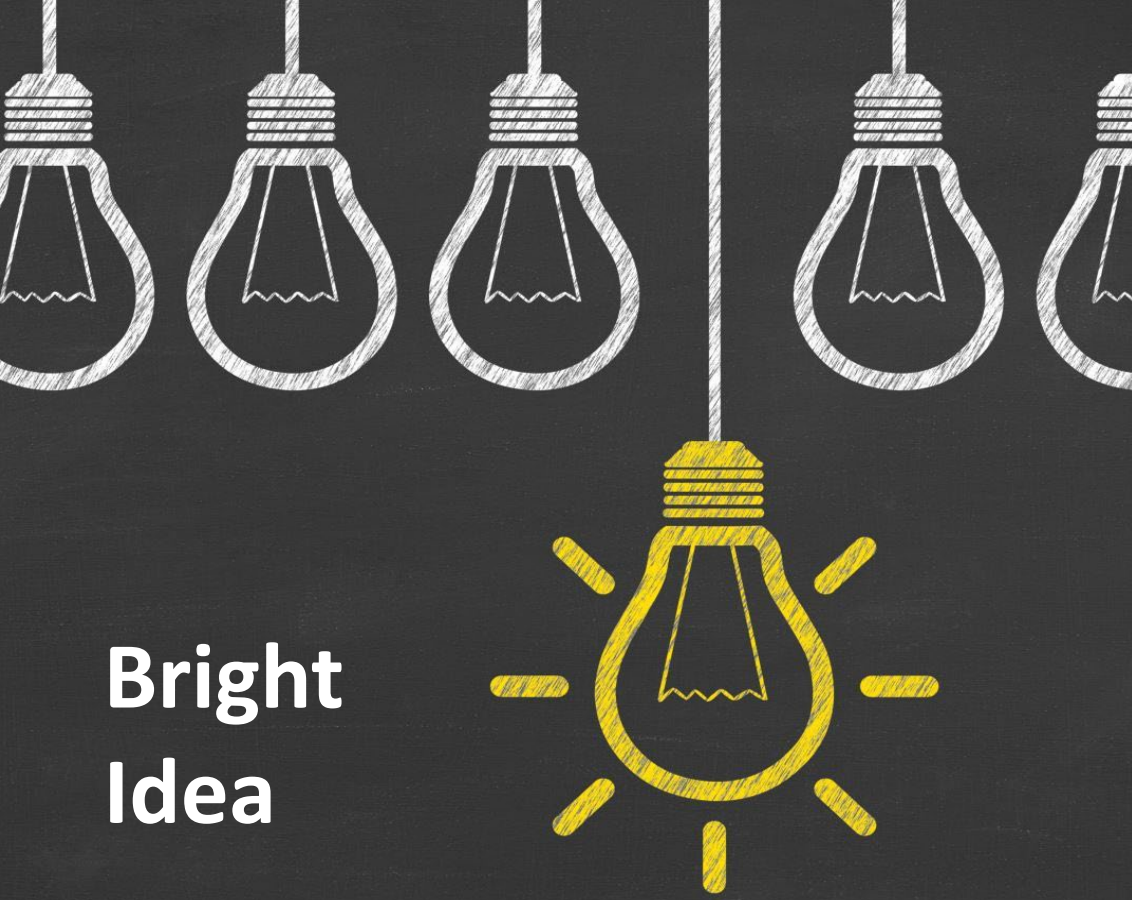
4. Synthesis/Evaluating

A patient presents with symptoms of dehydration and hypernatremia. Evaluate how these conditions can affect nephron function and suggest potential treatment strategies.

5. Evaluation/Creating

Design a clinical study to investigate the impact of a new drug on nephron function. Outline the methodology you would use to assess its effects on glomerular filtration rate, tubular reabsorption, and secretion.

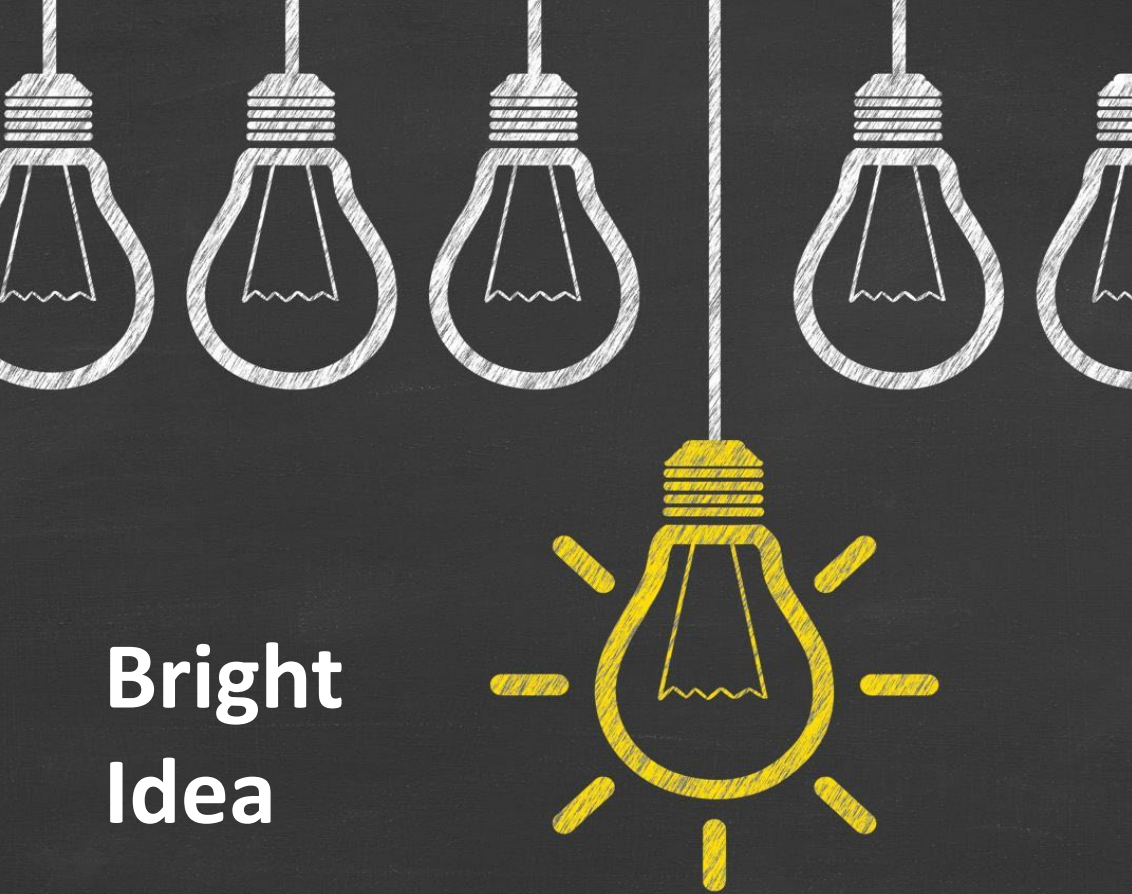
<https://chat.openai.com/share/03624e16-42bf-4c99-88b5-18ec81e2b0ec>



**Bright
Idea**

Evaluate Process Where You Can

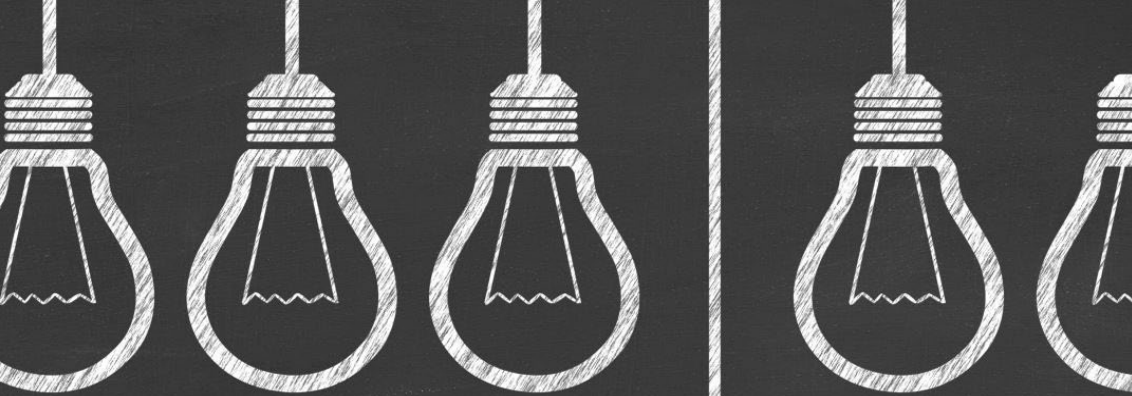
- Scaffold summative assessments
 - Formative assessments (assessments for learning) provide steps towards completion
 - Feedback and improvement is the goal (not grades)
- Have students write in format where process is observable
 - Google docs with Draftback extension
 - other programs that provide some insight into process (e.g., Lex)
- Observe the student doing the skill
- Talk to the students about their process
 - Change "office hours" to conference hours



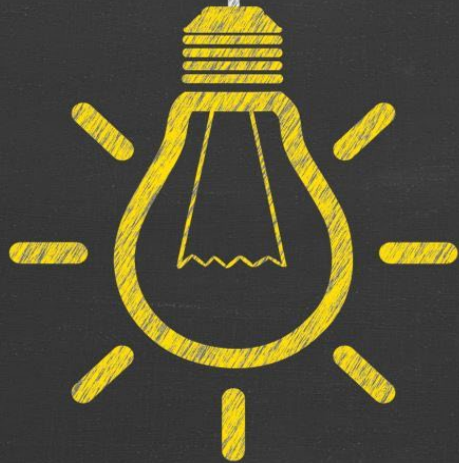
**Bright
Idea**

Reconsider Grading Structures

- Don't grade everything – some assessments can simply be for providing feedback
- Develop & Share [Assessment Rubrics](#)
- Reconsider what "mastery" means given what machines can do
- Consider alternative forms of grading (e.g., ungrading, specs grading, contract grading)
- Be explicit about your grading structures with students

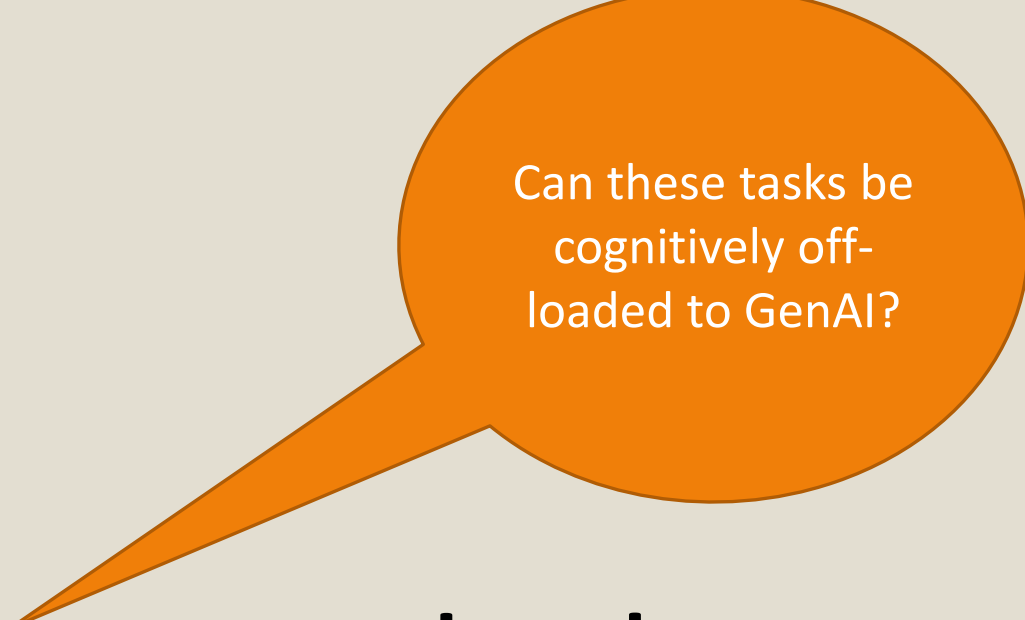


**Bright
Idea**



Change the Artifact of Learning

- If writing isn't a learning outcome, don't require writing!
- Give students some choice & control
 - e.g., Research paper OR research presentation OR research poster
- Add public accountability
 - e.g., oral assessments, peer review, class presentation



Can these tasks be
cognitively off-
loaded to GenAI?

Ask yourself:
what do students have to do that
is **NOT** being assessed?

(I.E., TASKS THAT ARE NOT LEADING TO MASTERY OF THE LEARNING
OBJECTIVES)

Fostering a mastery-oriented environment....

- They are in a heightened state of arousal – under stress & pressure
- There are opportunities
- The class rewards performance, not mastery
- The class reinforces extrinsic, not intrinsic, goals
- The students have low self-efficacy
- They can justify their actions
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mitigates these temptations to “offload”

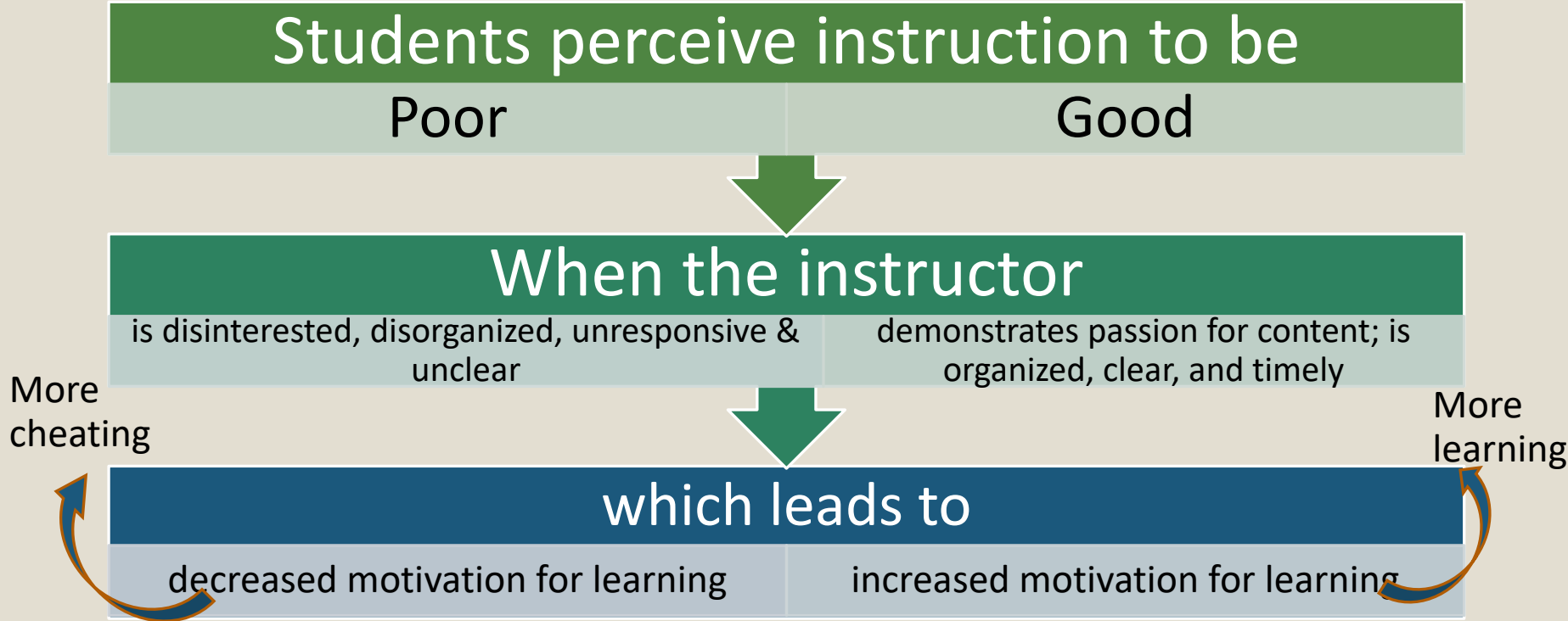
Give (Perceived) Good Instruction

“when a student with poor time management skills encounters a highly disorganized course and unresponsive instructor...this student can become easily frustrated and desperate, introducing the risk that an unauthorized shortcut becomes the ‘least bad’ way [to proceed]”

(Goldman et al, 2022, p. 157)

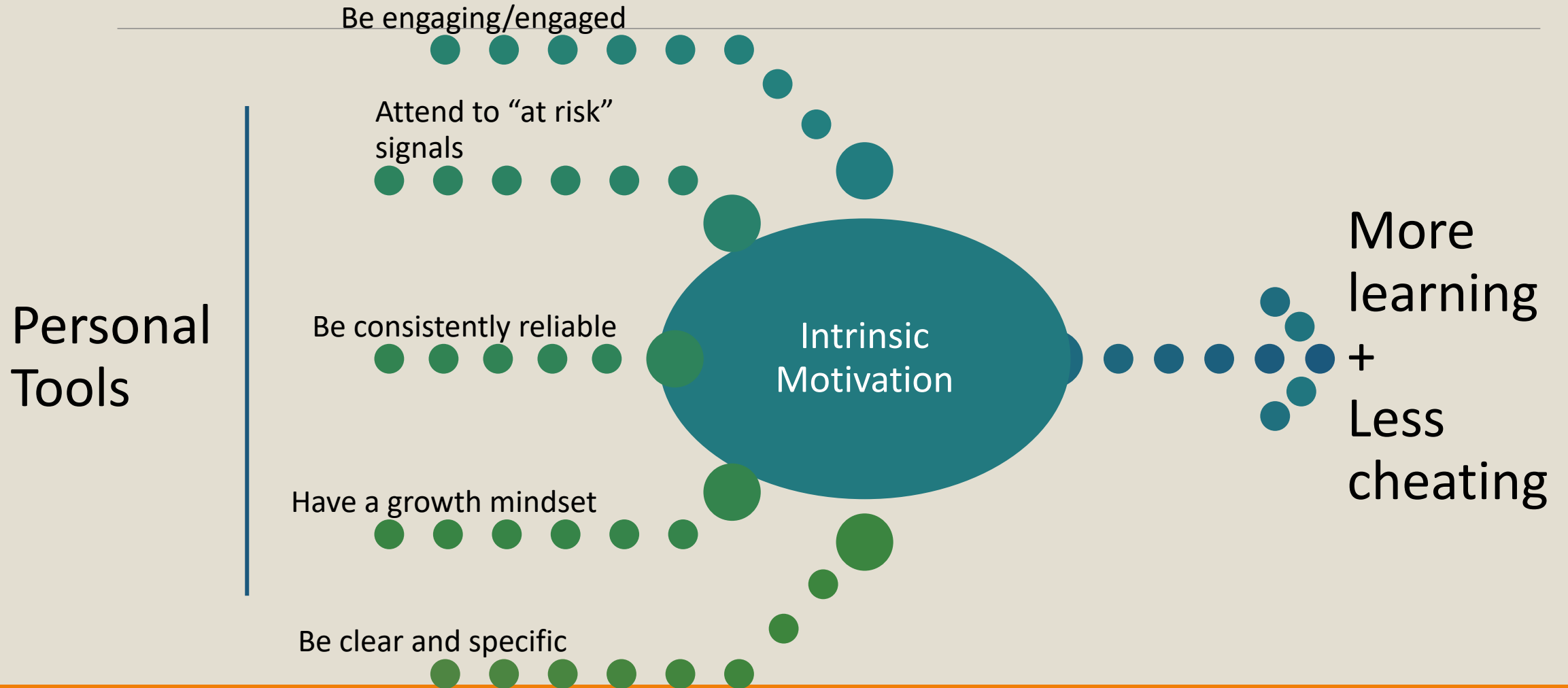
Goldman, Carson & Simonds (2022). It's in the pedagogy: Evidence-based practices to promote academic integrity. In Rettinger & Bertram Gallant (Eds) Cheating Academic Integrity: Lessons Learned From 30 Years of Research. Jossey-Bass, pp. 131-168

Give(Perceived) Good Instruction



See, for example, Ambrose, S., Bridges, M. W., Lovett, M. C., DiPietro, M., & Norman, M. K. (2010). How learning works: 7 research-based principles for smart teaching. San Francisco, CA: Jossey-Bass.

Give(Perceived) Good Instruction



think about reducing
"logistical rigor"
to focus on
"intellectual rigor"



Giving good instruction....

- They are in a heightened state of arousal – under stress & pressure
- There are opportunities
- The class rewards performance, not mastery
- The class reinforces extrinsic, not intrinsic, goals
- The students have low self-efficacy
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mitigates these temptations to “offload”

Secure Assessments

Secure Some Assessments

measures taken to clamp down on cheating opportunities

“assessment security starts where academic integrity finishes” (Dawson)

Is "surveillance" (aka "close observation")

We are responsible for assuring that the person we're certifying has the knowledge & skills represented by that certification

PHILLIP DAWSON

DEFENDING
ASSESSMENT
SECURITY IN A
DIGITAL WORLD



Preventing E-Cheating and
Supporting Academic Integrity
in Higher Education

ROUTLEDGE

Assessments that should be Secured are those that:

- evaluate, rather than facilitate or improve learning
- determine if a student is ready to progress into the next course in the sequence
- predict a student's ability to succeed in a particular genre/discipline (e.g., math placement tests)
- require a restriction of cognitive offloading (because lower level knowledge is being assessed)
- have to be reused term after term with few changes
- result in degrees being granted (e.g., theses, culminating exams, capstone projects, dissertations)

The Future of Assessments

Non-Secure Mastery-Based Assessments

Individualized

Multiple attempts

GenAI allowed

Scaffolded to summative assessments

Secure Mastery & Summative Assessments:

Program

Course

Focus on process, not artefact

Oral Assessments

Demonstrations

Presentations with Q&A

If must be an artefact

Individualized (using GenAI)

must be invigilated

Best in a Computer-Based Testing Center (CBT)

Securing Your Assessments...

- They are in a heightened state of arousal – under stress & pressure
- There are opportunities
- The class rewards performance, not mastery
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mitigates these temptations to “offload”

4 Lessons

1. Communicate integrity clearly and often
2. Focus on mastery (not performance)
3. Give good instruction
4. Secure (some) assessments

The 5th Element

Respond to cheating when it occurs

(no matter what else you do, if you ignore cheating, it will keep happening in your classes)

Degree Integrity
is the
ultimate goal





Crafting Your GenAI & AI Policy: A Guide for Instructors

Prepared by Tricia Bertram Gallant, Ph.D.
Director, Academic Integrity & Triton Testing
UC San Diego

Fall 2023
(last updated September 29, 2023)

Thank you to our colleagues in the Teaching & Learning Commons for content and course
Thank you to the faculty who reviewed a draft of this and provided feedback.

