Academic Dishonesty Risk Reduction Guide
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With recent technological innovations, we stand at the beginning of an exciting era, eager to harness the transformative power of technology to enhance teaching and learning.

By making intentional course design decisions, we will foster engaging, inclusive, and personalized learning experiences that prepare the students of today for the challenges of tomorrow.
Regardless of the learning environment, technology has admittedly made it easier for students to cheat and plagiarize.
To maintain academic integrity, strategies to reduce cheating and plagiarism must evolve to address new technologies powered by artificial intelligence (AI).

Evolving Strategies
Students are held accountable for their academic work when educators design, update, and deliver courses with intention.

Educating students to become professionals who value ethical behavior protects the integrity of the institution.

In addition to incorporating technology that guards against cheating, educators should use AI tools appropriately and with knowledge of their limitations.

Maintaining Course Quality

Promoting student accountability, preserving institutional integrity, and exercising responsible use of technology together uphold the highest standards of academic honesty and foster a robust, ethical learning environment.

While technology can be used to detect cheating and enhance learning, it is ultimately everyone’s responsibility to create a culture of academic honesty and uphold the academic standards of their institution.
Instructors are in a unique position, due to modern advancements of technologies that support course facilitation and design, to educate students on the importance of academic integrity and provide clear guidelines on what constitutes academic dishonesty.

To reinforce honesty, trust, and professionalism, instructors can design assessments and learning activities that are less prone to cheating while using online proctoring tools to monitor students during exams.
Purpose

Informed by current research and thought leaders, this guide is a tool intended to help instructors review and adjust the way they design different areas of their courses to deter academic misconduct in today's education environment.
This Academic Dishonesty Risk Reduction Guide presents six categories that will help you assess risks and make course revisions.

1. Course Materials
2. Course Tools
3. Course Activities & Collaboration
4. Assessment Design
5. Course Expectations & Instructions
6. Feedback & Student Support
Step-by-Step Process

For each of the six categories, this guide walks you through a **four step process** of determining and addressing cheating and plagiarizing risks.

**Assessment**
Questions to assess risks in the course.

**Recommendations**
General recommendations to address discovered risks.

**Decisions**
Course design decisions for addressing generative AI-related academic dishonesty.

**Methods**
Enhance learning and instruction through methods that harness the power of generative AI.
Important Consideration

Not all content in this guide will apply to every instructor or every course. Use this guide to select a combination of strategies to protect your course against plagiarism and cheating. This guide assumes a basic knowledge of teaching and assessment strategies.
Effective course materials provide relevant, useful information. When students receive appropriate and well-aligned learning materials for their coursework, they are less likely to seek and misuse external sources.
Course Materials

Assessment

Questions to Assess Risk

1. Do the provided learning materials adequately prepare students for the assignments, quizzes, and exams in the course?

2. Are there too many materials for students to reasonably use during the allotted time provided?

3. Are there extraneous or difficult-to-use materials which do not effectively teach?

4. Are all materials essential for instruction?

5. Do the materials meet student learning needs?
Course Materials

Recommendations

General Recommendations for Risk Reduction

**Organization & Accessibility**

- Introduce learning materials with clear instructions, highlighting their value and suggesting the best approach (skimming, in-depth reading, memorizing, etc.).
- Maintain consistent formatting and organization in learning materials for ease of understanding and navigation.
- Regularly update course materials, eliminating outdated, confusing, or extraneous content.
- Separate and label required materials from optional materials.
- Ensure all materials are accessible to students with disabilities, including video captions and readable PDFs.

**Interactive & Diverse**

- Incorporate interactive learning materials, such as interactive videos or simulations, to enhance engagement and understanding.
- Use a variety of learning materials such as text, videos, audio lectures, and images to meet students’ diverse learning needs.
- Incorporate real-life examples or case studies in your course material to make learning more practical and relatable, and thus more engaging and memorable.
- Choose materials reflecting various perspectives, cultures, and diverse voices.

**Alignment with Learning Outcomes & Objectives**

- Confirm that all essential materials align with learning outcomes and objectives.
- Align assessments with learning materials and highlight their direct connection to students.
- Design learning assessments that allow students to identify, use, demonstrate, evaluate, or create with concepts from learning materials.

**Student Engagement & Feedback**

- Keep students engaged with content within the course by embedding videos directly, rather than hyperlinking video titles.
- Include opportunities for students to give feedback on the learning materials and course structure, so you can identify and rectify any issues.
- Offer review sessions or materials summarizing course content to help students focus their studies.
Course Design Decisions for Reducing Artificial Intelligence-Based Academic Dishonesty

1. **Ensuring Alignment**
   Students are more motivated to learn when course materials help students meet learning outcomes and prepare them for course assessments. Students who feel learning materials help them meet course learning objectives are less likely to seek AI-based tools as a shortcut to complete assignments rather than engaging in the learning materials and working toward student learning outcomes.

2. **Providing Appropriate Number of Resources**
   Well-structured and organized course materials reduce the likelihood students may be overwhelmed by the volume of information presented to them. Students are less likely to turn to AI-based tools to help them sort through the information and complete assignments or exams when presented with a reasonable number of learning materials.

3. **Quality of Materials**
   When course materials are comprehensive enough, students do not need to use AI-based tools to fill in the gaps in their knowledge. Students are less likely to seek AI-based support when they become frustrated or disengaged.
NLP technology can be used to analyze and improve the quality of online learning materials. NLP algorithms can analyze the content of online learning materials and identify areas where the content is confusing or difficult to understand. This information can then be used to improve the quality of the content and make it more accessible to students.

AI-powered AR/VR applications can provide interesting and meaningful opportunities for students to experience the content they are learning.
Online courses can utilize various technologies to deter cheating and promote academic integrity. These include proctoring tools, plagiarism detection software, and annotation tools that showcase student work. Additionally, careful selection and use of Canvas quiz settings can further reduce opportunities for dishonest practices.
Course Tools

Assessment

Questions to Assess Risk

1. Are students required to submit writing through plagiarism detection software? Are all student papers scanned and compared to a database of previously published work to identify instances of plagiarism?

2. Are proctoring tools required for exams and quizzes? Do they monitor the audio, video, and web traffic of students as they are tested?

3. Are appropriate settings used for all quizzes and exams to randomize questions, restrict availability to solutions, or set time limits?

4. Are annotation tools being used in the course on appropriate assignments to show student work?
Course Tools

General Recommendations for Risk Reduction

Exam Design & Structure
- Use course tools to administer asynchronous or synchronous oral exams.
- Randomize test questions from large question pools.
- Show one exam question at a time.
- Prohibit backtracking in exams.
- Randomize the answers for multiple choice exam questions.

Exam Timing & Availability
- Set availability dates for exams and for feedback.
- Set time limits on exams.
- Track the time and duration of exam access.

Proctoring
- Administer remotely proctored exams.
- Use a lock-down web browser for exams.
- Administer “record and review” exams.
- Password protect exams.
- Use course tools to administer asynchronous or synchronous oral exams.

Review Technology
- Use plagiarism detection software for writing assignments.
- Selectively use tools that will show student work as they are completing it.

Collaborative Work
- Incorporate discussions as part of the course learning sequence.
- Use group projects or group presentations.

Acknowledgement
- Ask students to acknowledge their awareness and adherence to the University Student Academic Integrity Policy in a syllabus quiz.
- Prior to taking an exam or quiz include a question in which the student agrees to a statement related to academic integrity.
Course Design Decisions for Reducing Artificial Intelligence-Based Academic Dishonesty

1. Browser Lockdown
   Proctoring tools can lock down the student's web browser, preventing them from accessing external resources, including AI-based tools. This can make it more difficult for students to search for answers and cheat using AI-based tools.

2. Video Recording
   Proctoring tools often use video recording to monitor students during exams. Recording can detect suspicious behavior and flag potential instances of cheating. This can deter students from using AI-based tools to cheat, as they know they are being watched and recorded.

3. Writing Style Analysis
   Plagiarism detection software can analyze a student's writing style to ensure that it is consistent throughout the document. This can identify cases where a student has used an AI-based tool to produce some or all of the content of an assignment.
Course Design Decisions for Reducing Artificial Intelligence-Based Academic Dishonesty

1. **Plagiarism Detection Software**
   - By comparing a student's work to other sources, including online sources and other student submissions, plagiarism may be detected. In some cases, this may identify where a student has used an AI-based tool to generate their work.

2. **Randomizing Question Order**
   - By randomizing the order of quiz questions, instructors can make it more difficult for students to use AI-based tools to find and answer questions quickly.

3. **Limiting Quiz Attempts**
   - By limiting the number of quiz attempts, instructors can discourage students from relying on AI-based tools to complete the quiz. When students know that they only have a limited number of attempts, they are more likely to engage with the material and complete the quiz honestly.

4. **Setting a Time Limit**
   - By setting a time limit for the quiz, instructors can reduce the effectiveness of AI-based tools for cheating. When students have a limited amount of time to complete the quiz, they are less likely to rely on AI-based tools to find answers.
By enabling question shuffling, instructors can ensure that each student receives a unique set of questions. This can reduce the effectiveness of AI-based tools for cheating, as students will not be able to share the exact questions with other students.

Use annotation tools to ensure student work is transparent. When students use annotations to ask questions, share comments, and collaborate with other students they are less likely to plagiarize.
AI-based plagiarism detection tools can help faculty to evaluate student work and discourage plagiarism to ensure that assignments meet academic standards.

AI can be trained to grade formative assessments, using machine learning algorithms to analyze responses and assign scores, providing immediate feedback to students and personalized insights to instructors. This AI-assisted grading offers data-driven insights that can enhance teaching strategies, ultimately improving student learning outcomes.

AI can be used to create adaptive testing systems, which can adjust the difficulty level of questions based on a student’s previous responses. Adaptive testing helps students to improve their understanding of course concepts by providing a more personalized learning experience and allowing students to progress at their own pace.
Promoting higher levels of student collaboration on assignments can enhance student accountability, make learning more apparent, and reduce instances of cheating. Such collaborative assignments may include group work, peer reviews, or online discussions. Furthermore, establishing a learning community in which each member feels a sense of belonging and accountability can effectively discourage cheating in online courses.
Questions to Assess Risk

1. Are discussions used to share different perspectives and analyze source materials? Or do discussion questions only seek correct answers or encourage students to repeat information?

2. Do collaborative assessments encourage students to come up with creative solutions to problems?

3. Do students have an opportunity to provide each other feedback and hold each other accountable for the quality and authenticity of their own work?

4. Do assignments encourage students to work toward a common goal and build trust with members of their group?

5. Are low-stakes discussions included to help students build confidence in discussing key concepts?
General Recommendations for Risk Reduction

Promote Collaborative Learning
- Use collaborative projects, presentations, or writing assessments to encourage group work.
- Incorporate discussions as part of the course learning sequence.
- Create assignments that require presentations or demonstrations.

Develop Research & Writing Skills
- Provide students with research and study skills resources.
- Require full citations with writing assignments and discussion posts.
- Provide students with information on how to provide various forms of attribution for authors and their ideas.

Encourage Awareness and Understanding of Academic Integrity
- Present the main reasons students cheat and discuss them.
- Ask students how they can create a community of honesty and integrity.
- Ask students to develop and commit to a class honor code.
- Ask students to discuss their thoughts on the Student Academic Integrity Policy.
- Ask students to restate or cite the Academic Integrity Policy in a writing sample.
Course Activities and Collaboration

Peer Review

Peer review encourages students to work together and hold each other accountable. When students review each other's work, they can provide feedback and help identify any issues with the work, which can reduce the need for AI-created work.

Group Projects

When students work together and collaborate to complete the project they are able to rely on each other for support and input. They can share ideas and help each other correct knowledge deficits. Students feel less pressure to plagiarize or pass off AI-completed work as their own.

Course Design Decisions for Reducing Artificial Intelligence-Based Academic Dishonesty
AI algorithms can analyze student contributions to collaborative activities and provide feedback to individual students and the group as a whole. This can help to ensure that all students are contributing equally and can provide opportunities for students to reflect on their learning and identify areas for improvement. Faculty can use data related to student contributions when they grade group assignments.

AI algorithms can help to form groups of students with complementary skills, interests, and learning goals. This can improve the effectiveness of collaborative activities by ensuring that students are working with peers who can provide diverse perspectives and expertise.
Well-designed assessments can build student confidence in their ability to complete coursework and make it more difficult for students to cheat. Assessments that are iterative, scaffolded with other assignments, require logic and justification, include factual data, are specific to the individual, include a peer review, include group work, are randomized or varied, or include discussions or presentations, can significantly decrease the likelihood of cheating.
Assessment Design

Questions to Assess Risk

1. Are a variety of methods of assessment used (presentation, conducting an experiment, portfolio, etc.)
2. Do students have an opportunity to apply feedback, refine, and re-submit their work?
3. Does the course include formative assessments which allow students to refine drafts and incorporate feedback in order to produce high-quality work?
4. Are project-based assessments used to encourage students to apply their knowledge to real-world contexts or scenarios?
5. Does the course include assessments which make work visible (case studies, group work, discussions, drafts, etc.)?
Assessment Design

Recommendations

General Recommendations for Risk Reduction

Use Diverse Assessment Methods
- Include a mix of high- and low-stakes assessments.
- Consider assessment approaches other than objective testing (e.g., papers, discussions, portfolios, projects, journals, peer review, group work, debate, role play).
- Give open-book or proctored exams.
- Use oral exams or presentations.

Personalize Assessments
- Create assignments that require students to incorporate their personal interests and experiences.
- Ask students to expand on their work in follow-up questions.
- Ask students to submit reflective pieces alongside their work, explaining their thought process and the steps they took to complete the assignment.

Ensure Iterative and Sequenced Assessments
- Design assignments to progress in a sequential manner, building upon previous work.
- Divide large cumulative assessments into smaller summative assessments.
- Design assessments that mirror the kind of tasks students will face in the real world, making it difficult for students to cheat and enhancing their learning experience.
Assessment Design

Course Design Decisions for Reducing Artificial Intelligence-Based Academic Dishonesty

1. Authentic
   
   When students are asked to apply their knowledge and skills to real-world situations it is more difficult for them to cheat using AI-created work. Authentic assessments may require students to complete a project or write a report based on real-world data or scenarios. Students are less likely to cheat on authentic assessments because they see the value in the assignment and how it applies to real life and could be valuable for their future career.

2. Appropriately Timed
   
   Selectively introduce appropriate time limits to quizzes without lengthy writing prompts. As appropriate, limiting the amount of time for students to complete an assessment makes it more difficult for them to use AI-generated work to retrieve specific information taught in the course. Timed assessments may help reduce the opportunity for students to seek outside help because they need to rely on their own knowledge and skills. On the other hand, introducing time limits that are too short for lengthy writing assignments may have the opposite effect as students may seek AI to generate text faster than they can type.
Assessment Design

Course Design Decisions for Reducing Artificial Intelligence-Based Academic Dishonesty

3. Personalized

Students are more committed to sharing what they know when they are asked to write a paper or a reflection on how course concepts apply to their experiences and community. Personalized assessments are more interesting to students and reduce the likelihood that AI technology can be effectively used.

4. Open-Ended

Ask students to write an essay or produce a creative work that reflects their own ideas and perspective. Designing assessments that require students to demonstrate their understanding and reasoning rather than just regurgitate information ensures they are engaged in the learning process. Open-ended assessments require students to think critically and creatively, which can make it more difficult for them to cheat using AI-completed work.
Assessment Design

Course Design Decisions for Reducing Artificial Intelligence-Based Academic Dishonesty

Providing clear, specific criteria and expectations for the assessment is increasingly proven effective. This approach is challenging and takes time and iteration, but it makes it easy for instructors to differentiate between writing that addresses the prompt, and content-relevant text generated by AI. Instructors can reduce the risk of academic dishonesty because students are more likely to draw on what was taught in the course and rely on their own knowledge and skills to complete the assessment. Rubrics can help detect AI-generated work that may not meet the learning outcomes and expectations of the assessment.

Describing the purpose and value of the assignment for students at the beginning of the assessment instructions is important. Students using generative AI need to understand how each learning activity helps them develop specific skills. While AI can be helpful in summarizing text and extracting main ideas, there are essential skills in reading and writing that can only be acquired through experience. When assigning students to read on a specific topic, it's not just about learning the topic, but also about helping them learn how to read various types of writing and develop their own writing skills. By conveying this point explicitly, students can make informed decisions on how much they should rely on and leverage AI assistance. They are better prepared to critically evaluate AI outputs and to be more intentional about their own learning.
Methods for Harnessing the Power of Artificial Intelligence to Enhance Online Learning

Adaptive Learning

Al-powered adaptive learning platforms can be used to personalize learning experiences for students. These platforms use machine learning algorithms to identify each student’s unique strengths and weaknesses and provide them with customized learning content and feedback.
Clear assignment instructions and explicit standards for attribution and original work help to clarify what is expected of students. When students understand what they need to do, they are less likely to resort to cheating to complete the assignment.
Course Expectations and Instructions

Assessment

Questions to Assess Risk

1. Does the information in the course or course syllabus define plagiarism and explain how students will be held accountable for academic misconduct or dishonesty?
2. Do the assignment instructions align with the rubric for assessing student performance?
3. Do assignments include a reasoning section in which students analyze and justify the decisions they made in the work they are submitting?
4. Does each assignment include clear instructions outlining clear steps for completing the assignment and stating explicit standards for attribution and original work?
5. Does the course contain at least one discussion in which students proactively determine or discuss the rules in their course learning community?
6. Are module overview pages provided which clarify the connection between learning objectives and work for the module?
Recommendations

General Recommendations for Risk Reduction

**Reinforce Ethical Use of Technology & Academic Integrity**
- Define cheating and proactively discuss cheating scenarios with students.
- Discuss new technologies powered by artificial intelligence and how they might be used in the class.
- Define situations where using AI is appropriate.
- Emphasize academic integrity throughout the run of the course, not just at the start.
- Inform students in advance about any planned use of technology solutions for promoting academic integrity.
- Define situations where collaboration is and is not appropriate.
- Foster a sense of respect and community within courses in order to build rapport and establish a foundation for integrity.

**Enhance Assignment Clarity & Relevance**
- Clarify the connection between learning objectives and assignment tasks.
- Provide custom rubrics and detailed grading criteria.
- State expectations for the time needed to complete assignments.
- Regularly change test questions, discussion prompts, and assignment topics.

**Promote Effective Research, Writing, & Testing Practices**
- Require abstracts with writing assignments.
- Require annotated bibliographies with writing assignments.
- Ask students to discuss the assignment research methods they used and provide summary statements.
Course Design Decisions for Reducing Artificial Intelligence-Based Academic Dishonesty

1. **Assignment Instructions**
   - When assignment instructions are clear and concise, students are more likely to understand the purpose of the assignment and what is expected of them. This can help reduce the need for them to rely on AI-tools to complete work.

2. **Examples and Models**
   - Showing students how the concepts they are learning are applied to an assignment helps students understand what is expected of them and provides additional guidance on how to approach the assignment. Examples and models can also promote creativity by providing students with different perspectives and approaches to the same task. This can help reduce the likelihood of AI-based cheating, as students are encouraged to think creatively and develop their own methods of meeting assignment expectations.

3. **Emphasize Originality and Critical Thinking**
   - When instructors emphasize the importance of original thinking and critical analysis, students are more likely to engage with the material and produce work that is uniquely their own. This can help reduce the temptation to plagiarize or rely on artificial intelligence to complete the assignment for them.
When instructors clearly articulate the learning outcomes and how they apply to work in the course, students are empowered to become partners in the learning process. They are more likely to self-evaluate how well they are learning course concepts and make adjustments. When students are committed to developing their own understanding of concepts they are less likely to use AI tools to plagiarize or cheat.

Explicitly indicating that original student work is valued in the learning community encourages academic integrity by creating a culture of honesty and transparency. This can be achieved by clearly communicating course expectations and consequences for academic dishonesty, and by providing resources and support to students to help them succeed honestly. When students understand the importance of academic integrity and feel supported in their efforts to succeed honestly, they are less likely to turn to AI-based cheating.
Methods for Harnessing the Power of Artificial Intelligence to Enhance Online Learning

Computational Logistics Tools

AI can analyze the language and structure of assignment instructions to ensure that they are clear, concise, and easy to understand for students. This can help to reduce confusion and improve student comprehension and performance.
Providing students with an appropriate level of feedback and support reduces their need to take shortcuts to learning which may result in cheating. Support resources can range from timely feedback on assignments to access to tutors and instructors during pre-determined times (office hours). Resources should include technical, academic, time management, accessibility, and mental health support.
Feedback & Student Support

Questions to Assess Risk

1. Are the support resources easily accessible for students? Are there any gaps in the types and availability of support resources?
2. Are all available student support resources communicated in the syllabus and on key assignments?
3. Does the course indicate how peer support can be obtained in the course? Is there a community forum? Are there standards for discussions listed?
4. Does the syllabus include the required accessibility statement and contact information for support?
5. Is information about how to use library and tutoring resources provided for writing-intensive courses?
6. Are there areas within the course shell which allow students to seek clarification on assignments and ask questions?
Feedback & Student Support

Recommendations

General Recommendations for Risk Reduction

Ensure High-Quality Feedback

- Offer regular, specific, and constructive feedback on assignments to guide students' learning and development.
- Use digital tools for real-time feedback during online classes or discussions.
- Make use of peer-review activities, allowing students to learn from each other and understand different perspectives.
- Provide students with clear grading rubrics or criteria to set expectations and standards.
- Utilize online platforms that allow for tracking revisions and seeing feedback history, which can help students see their progress over time.
- Require students to apply feedback to future assignments.

Share Timely & Relevant Resources

- Promote the use of university academic support services, such as tutoring, writing centers, and libraries.
- Encourage students to attend office hours for one-on-one guidance and clarification on course materials and assignments.
- Share resources related to academic integrity and plagiarism prevention, such as online workshops or webinars.
- Encourage students to utilize student counseling services for stress management and mental health support, which can indirectly reduce the likelihood of cheating.
- Include course videos which educate students on time management and study skills, helping students to prepare effectively for assessments.
Providing timely and relevant feedback throughout the assignment or assessment process helps students to identify areas for improvement and develop their own skills and knowledge. Providing iterative feedback on assignments and assessments ensures students can improve their work and decreases the likelihood that students will rely on AI-generated papers, reports, and projects.

Tailoring feedback to individual students helps them to develop their own understanding of the concepts and to engage more deeply with the course material. Indicating when students have correctly applied a concept to a scenario or assignment reduces the need for them to rely on AI-generated work.
Sharing support resources such as office hours, tutoring, and study guides can help students to develop their own skills and knowledge, which can reduce the need for them to rely on Artificial Intelligence to fill in knowledge gaps or complete work for them. By offering support resources, instructors can help students to develop the confidence and competence they need to succeed in the course.
Intelligent Tutoring

AI can be used to develop intelligent tutoring systems that provide students with real-time feedback and personalized learning experiences. These systems can analyze student data, identify knowledge gaps, and provide targeted guidance and instruction to help students master difficult concepts.

Methods

Methods for Harnessing the Power of Artificial Intelligence to Enhance Online Learning

Feedback & Student Support
Next Steps

Are you ready to begin?

Here are some guiding questions to help you move forward:

What risks have you identified in your courses?

What combination of strategies will you use to reduce these risks?

Which strategies will you prioritize? Which strategies may require lower effort and can be implemented quickly?

Who can assist with design improvements within your institutional resources like instructional designers, librarians, or your support team?

What outcomes will you be looking for with your improvements?

How will you measure the impact of your improvements on your students?
References


https://docs.google.com/document/d/1go2AT-X0DSS6JLhGQF7ptpdhAA7p40RKbPHH4-_wQ94/edit?usp=sharing

OpenAI (n.d.) GPT 3 vs GPT 4 Limitations.
https://openai.com/product/gpt-4

https://platform.openai.com/docs/chatgpt-education

OpenAI. (2023, February 15). *Usage policies*.
https://platform.openai.com/docs/usage-policies/disallowed-usage

This guide was informed by ASU Online’s “Cheaters Never Prosper” and follows the proactive approach suggested by the EdPlus Action Lab’s Response to ChatGPT.