GRADING AND ASSESSING ONLINE STUDENT WORK
Core Concepts and Key Strategies You Can Use Today

By Jonathan E. Martin
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Assessing and grading online student work is an important component of an educator’s ability to instruct effectively.

This eBook will help you learn:

- The difference between grading and assessing
- The pros and cons of online learning
- Recommended methods and tools for online assessment and grading
- Ways to deter cheating online
- Emerging online teaching practices you need to know

And like every good lesson, we’ll leave you with some questions to ask yourself about your own practices.

Read on to start learning!
Introduction

For students, grades carry enormous weight. When assessments are done well, students thrive. They know what’s expected. They understand their targets. They want to achieve new heights. They’re encouraged, coached, and informed on what and how to learn. And they gain a sense of accomplishment, integrity, respect, and appreciation for their studies.

Many readers probably remember what it felt like to be poorly assessed in school. It was difficult not knowing what the teacher wanted, not receiving proper feedback, and not knowing why the grade was received in the first place. In my high school experience, my English papers only ever got one of two responses: “B+ Good” or “A- Good job.”

One study on this topic reveals a list of educators’ own memories about grading, including inscrutability, injustice, infallibility, mixed messages, administrative convenience, and cynicism.

Whether we like it or not, there is a sense in which assessment is the “de facto curriculum” for many students.1 “Research into student learning has consistently located assessment at the center of students’ thinking: how they spent their time, what they regard as important, and the kind of learning approaches they adopt.”2

Few elements of the schooling experience for students and parents are more prominent in their minds than how work is assessed and graded. Yet in many schools, far more time is allocated to other topics such as the schedule, curriculum requirements, advanced placement and honors classes, and technology.

Assessment not only puts stress on students and their families, but it also puts pressure on teachers. The grading workload can be demanding and the constant struggle to be fair and provide useful feedback weighs on teachers too.

That’s why grading and assessment deserve more of our attention. They even carry enough importance to be the subjects of a year-long, senior level course, bringing together students, teachers, and administrators to examine user experience, research best practices, and experiment with new models and methods.

Before proceeding, let’s establish our definitions.

In the dictionary, assessment means evaluating or estimating the nature, ability, or quality of something. So in education, we are evaluating or estimating the ability of our students and the quality of their schoolwork.

Etymologically, the word assessment derives from the Medieval Latin and means to “sit beside.” Therefore, when assessing, we should sit beside our students, metaphorically, as their aide.
But, the term has also been considerably broadened to contain the fuller processes of:

1. Determining what evidence of student learning will be collected (i.e., what tasks to provide students by which they can demonstrate their learning)

2. Studying student work to evaluate its quality—ideally with reference to a clear and communicated standard or rubric

3. Communicating the evaluation to students, their parents, and others with the intent and purpose to support formative growth and occasionally to record student achievement for official records and future decision-making

Grading is simpler. It means to mark on an assignment, usually a mark which will be counted in some formula as part of a permanent, transcript-recorded grade.

All grading is assessment, but not all assessing is grading—indeed, an important argument in the current conversation about grading is that we should be reducing the proportion of our graded assessments.

When teaching and learning online, grading and assessing issues are magnified. Practices that are only suggested for a traditional, bricks and mortar classroom often become required online. As we discuss further in the subsequent chapter and then in the heart of the eBook, the work of online grading and assessment presents challenges and opportunities to excel.
Ken O’Connor, a former long-time teacher and current consultant on assessment, has written an excellent, user-friendly teachers’ guide, *How to Grade for Learning*, in which he lays out the following eight guidelines for grading:

1. Relate grading procedures to learning goals.
2. Use criterion-referenced performance standards as reference points to determine grades.
3. Limit the valued attributes included in grades to individual achievements.
4. Sample student performance—do not include all scores in grades.
5. Grade in pencil—keep records so they can be updated easily.
6. Crunch numbers carefully—if at all.
7. Use quality assessments and properly recorded evidence of achievement.
8. Discuss and involve students in assessment and grading, through the teaching/learning process.
CHAPTER 1
THE LIMITS AND OPPORTUNITIES OF ONLINE LEARNING
The Limits and Opportunities of Online Learning

It’s important to appreciate the limitations and liabilities that come with the online learning environment. In the online classroom, teachers see students less frequently and are often less available. Teachers and students don’t bump into each other in the hallways, in the lunch line, by the bike racks. There’s a lack of immediate intimacy and the kind of informal communication and community that being together in the same physical space affords.

Eric Hudson, the global online academy director of teaching and learning, says,

"Online assessment forces teachers to rethink what engagement means when you can’t rely on your personal charisma and warmth that carried you through. In online learning, it’s less about you, and more about the material, which is something of a reversal of the norm in many schools.”
The research agrees. One study published in the *Information Technology, Learning, and Performance Journal* found that “Online assessment requires educators to modify their methods of instruction to make them more innovative than traditional instruction” because it changes human interaction, communication, learning, and assessment methods. As a result, several researchers have found significant challenges when assessing student learning in online courses.

Another study, published in the *Electronic Journal of e-Learning*, reported that

“The lack of visual cues, use of asynchronous conversations, and technical issues suggest assessment in online learning is not to be conducted as it has been in a traditional face-to-face classroom.”

It’s not just the teacher-student relationship that is different. Classroom community is very different as well. In most cases, students come to the online course without any previous relationship, and then as the course proceeds, continue without opportunities beyond the online classroom to develop relationships.

Lacking the immediacy and intimacy of their teachers and peers, students online are left to their own devices. The online class places more demand on independence and the ability to navigate a course. This can manifest in multiple ways—for some students, it may be that they don’t know what they’re supposed to do. And for others, with less opportunity to see other students’ work, it may be that they struggle to know how well they’re doing comparatively.

Researchers of online learning at the college level see the metacognitive demands as a substantial hurdle. “Online learning requires higher degrees of self-discipline and self-monitoring of progress. Student responsibility and initiative were viewed as significant factors to consider when designing effective online environments conducive for relevant teaching and learning because, as one professor explained, ‘Everything is pushed back on the student. [In a face-to-face class] you can go in and sit down and let the lecturer tell me everything. Go and sit. Listen to the lecture. Whereas in an Internet class, it’s on your own. I think the Internet class has put a lot more back on the student as far as their learning.’”

Organizing the work online is not just a problem for kids. Time management challenges teachers too. “This aspect of online teaching and learning had a direct impact on the instructors’ time management process, as the medium of the online class heightened student expectations of much more frequent and immediate communication with the course instructor. Participants reported that students expected immediate response and feedback to their questions or to their test results. [One teacher] indicated that, ‘I have got to be there emailing them and be available more. It is probably more one-on-one instructor participation than in a face-to-face class.’"
But these significant deficits of the online learning environment are offset by the advantages afforded to assessing and grading excellence. This relatively new platform presents a lot of opportunity for teaching and learning, and if used properly, educators can supercharge the quality and effectiveness of their assessments. And there may be no better way to improve your teaching than by improving your grading and assessment.

First, much of what students do online is saved, archived, stored, and searchable. This presents huge opportunities for teachers and students to track progress, see patterns, manage multiple drafts, and generate several sources of evidence of learning. What a teacher communicates online to a student doesn’t disappear—it is part of a permanent accessible source of encouragement and guidance.

Second, some of the tiring and time-consuming work of communicating messages, reminders, and providing instant feedback can be automated.

Third, the flexible nature of online learning can be leveraged to support diverse learning styles. Students have the opportunity to do their work when it suits them and provides those who find it difficult to vocalize their ideas aloud the convenience of a chat box. Connie White, director of learning design and innovation at Woodward Academy, says that in her experience as a teacher and a parent, “Online learning is so much better for ADD/ADHD and distracted students—they can’t function in class, or on demand, but they can be so much more successful on their own schedule, and better online when they can focus on a screen and zero in. In my daughter’s case, she can learn when she’s ready to learn, and take more control of her learning.”

Fourth, the online platform allows for multiple communication channels and methods to provide feedback. Teachers can write feedback inside the learning management system or record audio and video messages through other platforms. While these approaches are available in the traditional classroom environment, the online platform makes them much more natural and convenient.

Fifth, when learning online, students are plugging into the web, forming powerful connections with other learners. They have the research capacity of the Internet at their fingertips. Asking them to draw upon multiple sources, search archives, interview experts, and demonstrate their knowledge and skills via accessing, interpreting, and applying information online is not an extension of what they do inside a school building—it is the very nature of their schooling.
CHAPTER 2

FOURTEEN METHODS FOR EFFECTIVE ONLINE ASSESSMENT AND GRADING
1  **Design Deliberately**

Online teaching requires more advanced planning. It almost requires starting over, readjusting your expectations, and approaching the course with a mindset completely different from what you’ve done previously.

Set aside your preconceptions and begin anew. What is your course intended to teach and develop? What are the ways students will demonstrate that they have learned those things? And what are the ways in which they will receive feedback so that they do learn?

Connie White, director of technology and learning at Lakeview Academy in Georgia, says, “You have to be very much more clear, and tie grading and assessment explicitly to learning goals. Clarify exactly what you’re looking for from the beginning and repeat throughout.”

This design requires a more user-centered approach, putting the emphasis on the learning not the teaching. It allows you to build a course map of formative and summative assessment that will provide transparency, accountability, and equity in grading.

Eric Hudson, director of teaching and learning at Global Online Academy, says, “It is highly recommended to approach assessments through the lens of design, not instruction. Through the lens of design, two things come to the fore—goals and audience. Imagine yourself as a designer, and whether by design-thinking strategies or *Understanding by Design* practices, design student experiences that are meaningful and valuable to students and that will ensure they can achieve your goals.”

Consider your course plan. It should be more than a simple syllabus. It should be a fully designed game plan and roadmap to your destination. And once designed, review it again and again with feedback from colleagues and students and parents.

2  **Model Method**

The reality is that you teach what you know. To teach effectively online you need to know how to learn online firsthand.

Before you post an online course syllabus, manage and assess a threaded conversation, assign a group project, or administer an online test, you should view and experience these things from the student perspective. Take an online course or interview those who have. This will help you understand your students and inform your instruction.

Another helpful tip is to become a connected learner. Plug into social media, join a list server, read and comment on a blog, start your own blog, or participate in a chat group. Being connected has all kinds of
advantages, including giving you a greater appreciation of the power of networked learning.

Global Online Academy’s Director of Professional Learning Amy Hollinger recommends this tip too. She says, “The biggest advice I have is to form your own PLN—professional learning network—to support you, and be an online learner yourself, and you can really benefit from connecting and sharing with others doing this practice, AND you can model for students being an online learner and be more empathetic with them too.”

3 Communicate Clearly

Online School for Girls Executive Director Brad Rathgeber says, “If a student in a traditional class says I didn’t understand what was required, maybe that’s on them…but online, it’s on us.”

Rathgeber’s statement may be an obvious message, but that doesn’t mean it doesn’t need repeating. Again and again, educators emphasize the urgency of enhanced communication. No matter how good you’ve been in the past—and no matter how good you think you are now—it’s worthwhile to conduct an audit on your communication methods to identify opportunities for improvement. You might even consider taking an online survey designed specifically for this purpose, such as this one: http://www.mindtools.com/pages/article/newCS_99.htm

Oregon Episcopal School’s History Department Chair Mike Gwaltney, with many years of experience in traditional and online classrooms, agrees with Rathgeber, saying, “Because they can’t see me in person, they don’t get all that meta-communication from me about my standards and expectations, and so there is additional work to make these clear.”

Even within the most savvy and experienced online school programs, communication continues to be a challenge. Global Online Academy’s Eric Hudson says, “Clear communication is a must. You have to be very clear with students. This is what the project is and the deliverables are. These are the research skills you need to develop and demonstrate. These are the collaboration best practices you must manifest.”

Another tip is to make a flow chart, or a mind map. See if you can visualize for yourself and your students how communication works in your online environment. Use multiple methods to check for understanding of curriculum content, course expectations, and assignments. Survey students regularly and use input to evaluate your communication. Remember that clear communication is a never-ending process.

4 Initiate Interaction and Create Community

You know that successful communication is a two-way street. But knowing isn’t doing. Experienced online educators insist that effectively initiating interaction and creating community takes substantial proactive effort.
It's important to initiate interaction from the start, and begin by creating community among your online students. Remember that in most cases, your students will not know each other already.

Hudson says, “Relationships are at the core of independent school excellence, and online you have to leverage relationships, getting kids to connect with you and with each other.”

Just as schools create orientation and onboarding experiences for new students, you must provide icebreakers and trust-building exercises from the start. Put in the time and effort; it will be returned in great proportion when students are more involved and willing to engage and collaborate with each other.

Communities are safe spaces, and as we are often reminded, tone, nuance, and warmth can be severely diminished in online communications. Be wary of sarcasm, and remember that criticism intended to be constructive can be purely detrimental when separated from the body language of the physical learning environment. Online, criticism must be more strategic—which is where rubrics can help.

5 Formative Feedback Frequency

Research from John Hattie’s comprehensive meta-synthesis draws a compelling conclusion: No matter how frequent your feedback, it probably isn’t frequent enough. Doubling the rate at which you give specific, supportive, actionable feedback may very well be the single fastest and most significant way to improve your teaching, your students’ performance, and their attainment of the intended learning objectives. Does it take more time? Yes. But the best work often does, and your students deserve no less.

According to Eric Hudson, “Feedback is the most important thing—it is essential to generating and sustaining student engagement. And planning for ongoing feedback from teacher and peers needs to be a fundamental—a huge—part of the design process for the course.”

The good news is that online learning environments can bolster a strong feedback technique. Rathgeber says, “Technology can hypercharge what formative assessment looks like.” Teachers can easily create, swiftly deploy, and automatically grade for understanding. They can create reminders and send encouraging notes by auto-scheduling emails or other messages. Students can give each other feedback easily, and those communications can be logged, recorded, and revisited. Teachers can make quick videos or screencasts of
themselves providing feedback to one student, and then post it for others to see as needed.

6 Exploit the Online Environment

The environment of online learning is a huge asset when properly exploited. Every written communication can be saved, stored, and searched. Every rubric can be immediately accessed and studied. Teacher comments can be returned to and treasured by a student.

Global Online Academy’s Hollinger is a believer. “It’s a huge advantage—everything you do, all the feedback you provide, is there and stays there in the online environment. I love seeing students take advantage of that. They are taking the stored saved feedback provided at the beginning of the semester and applying it at the end, because they went back to it.”

And the automation of technology is just the half of it. Online environments connect students from more diverse backgrounds than a typical classroom experience would. Class discussion can use this to generate richer debate and discussion. Mark Lauria, executive director of the New York State Association of Independent Schools, explains, “If I’m teaching a class where we’re looking at a novel like Fahrenheit 451, and discussing issues of freedom, censorship, and democracy with students from China, Australia, UK, and South Africa, the conversations will be so robust, the analysis so global—it’s incredible.”

Consider how the tasks you assign students can challenge them to draw upon the diversity of location, background, and perspective of their classmates. Furthermore, by being immersed in the online environment, the wider world is much closer to your students’ fingertips. As Gwaltney explains, “Online, there’s an open-minded thing. The kids are already online, and so there’s just a very natural, very easy, and automatic congruence for online research work, communication with others, and creation.”

7 Mentor Meta-Cogs

It’s neither cognitive talent nor technological skill that makes the difference between success and failure for online learning. The success of each student beyond baseline academic ability depends nearly exclusively on the student’s non-cognitive strengths.
In an article published in the *Electronic Journal of e-Learning*, Beebe writes that student self-discipline, responsibility, and initiative are the most significant factors for determining success. This is an environment entirely different from the conventional classroom, in which far more structure, personal attention, and social norms guide students forward.

Accordingly, teachers should strategize with intention. As a teacher, ask yourself: How will students be assisted in recognizing what non-cognitive and meta-cognitive strengths are important for success and how those skills and practices are developed and exercised?

Time should be set aside near the beginning of the course for students to evaluate themselves and identify their growth mindset, initiative, independence, and time management proficiencies. One quick self-assessment tool that addresses some of these qualities is the Mindset Meter from Stanford’s PERTS program. Students who recognize their own limitations can then be better supported, and teachers can provide lessons, such as online time management interventions, to assist students in the areas they need it most.

8 Alternatively Assess

If you’re reinventing your instructional practice to align with the demands and opportunities online environments provide, why wouldn’t you also reinvent your assessments?

Students can collaborate effectively online. They can research, connect with others globally, and be creative in widely different ways. They can even use the power of connectivity to gain new audiences and create new kinds of impact. But that doesn’t mean you should toss out everything you’ve done before. Tests still have their place, and a traditional writing exercise is great preparation for college and beyond.

Consider having students maintain a digital portfolio of reflections. Initially, this can be used for formative feedback, and then later revised to provide a new product for summative assessment. Challenge students to make movies, animations, screencasts, or website contributions to keep in their portfolios.

Ask them to explore the implications and ramifications of what they’re learning. How are the content, skills, understandings, and analyses used in the world to shape and influence action? Then ask them to learn from that example and make their own kind of impact. How can they demonstrate their learning by doing work that matters?

At the Online School for Girls, for instance, teachers are required by the school pillars to use a wide variety of summative assessments. Rathgeber says they still have regular tests and exams, but they are weighed less heavily, and they are supplemented with research papers, major projects, and collaborative projects.
Authenticate Appropriately

How do you know who actually did the submitted work? This is a growing challenge in teaching of all kinds. Surveys report that students are cheating on an extraordinarily high level. It is easier than ever to find work and copy and paste. Savvy cheaters are even becoming better at stumping the tools that are intended to catch plagiarism.

Classroom teachers, perhaps, have a better ability to pay closer attention to the source of student work.

Online teachers are at a disadvantage and need to have a plan that ensures the work being submitted is the work of that student.

Here are some suggested strategies:

**Do interim check-ins.**

Elizabeth Helfant, coordinator of pedagogical innovation at Mary Institute and St. Louis Country Day School says, “You can’t just take the final work in the same way, because you haven’t seen them prepare it all along the way. You need more interim check-ins, and you need to pay closer attention throughout.”

**Create Google®-proof assignments.**

Eric Hudson suggests ensuring authenticity, “Through design of the assessment, personalizing assessment, designing assessments you can’t Google.” Test your assignments before distributing; see what happens when you search the questions or challenges online, and then consider how you might revise them. Make assignments more challenging, more applicable to real-world challenges, demand more creativity or originality.

**Think publish, not submit.**

In Hudson’s words, “We also think about the difference between publishing and submitting; when students put their work out to their classmates, to audiences beyond the teacher, and there are that many more eyes on it, the odds of plagiarism decline.” When it is meaningful work, the inclination to steal the work of others drops. Putting work out to the world elevates its value while also making it more easily recognized when plagiarized.

**Require academic honesty pledges.**

Speaks for itself; research suggests they help.
As Hudson notes, “In effective online classes, teachers will actually get to know students’ written voice so much better, because you see it so much more than in a traditional classroom.”

Personalize tasks.

Woodward’s Connie White suggests giving assessments that are “meaningful, personal, individual, and progressive, and plagiarism will become less attractive and less possible.”

An article in the *Online Journal of Distance Learning Administration* entitled “Cheating in Online Student Assessment: Beyond Plagiarism” offers two additional suggestions:

**Make the assessment a learning experience.**

Tests that are too difficult or overly easy tend to encourage cheating because the student doesn’t see the point. It’s best to avoid giving these types of assignments or tests.

**Use varied test formats.**

Drawing questions randomly for each student from a pool can be effective. Re-ordering multiple-choice answers at random is also another useful technique to deter cheating.

10 **Automate Accordingly**

Don’t let the progressive educational ideologues mislead you—there IS a place for the quick quiz. You can use multiple choice or other simplified assessments as means to end. Deeper learning requires many skill sets, and it’s your job to ensure learning, because without the foundation, the superstructure will fail.

Use Quizlet®, Google® Forms, Socratic, or Poll Everywhere to ensure students are getting it, that they’ve used the learning experiences you’ve facilitated to master what they must know and be able to do.

Eric Hudson states, “There is a role for automated feedback. You can be really boring in ongoing formative assessment if it frees up the opportunity for students to take on far more interesting, challenging tasks in their
summative assessment. Kids need to know the stuff—let them demonstrate they know the content and core skills in quick five-question quizzes, and then let them move on to create stuff.”

11 Use Effective Tools

Everyone has a favorite technology. It is important to seek out and choose your preference and not get stuck on any one type. You must be nimble, responsive, and forward thinking. Elizabeth Helfant suggests giving kids a say in what tools you use.

Some of the most useful tools are the ones that are most familiar. Google® Docs was frequently mentioned for its ease of use, flexibility, and its ability to serve as a real-time collaboration platform.

PowerPoint® was only mentioned because of its audio recording abilities. Helfant says, “It’s important to have kids do more than just submit PowerPoint slides. Have them use recorded PowerPoint presentations and Zaption®, and then double-flip your classroom—where kids are the teachers doing the flipping.”

Here are the 10 tools that were enthusiastically recommended in our interviews.

1. Edulastic
   Enter in your skill and content standards for your unit, and you can easily create quizzes with questions tied to those standards. It also has 16 different types of questions in its arsenal.

2. Camtasia™
   Among the most popular screen-casting tools, Camtasia is appreciated for its ease of use and additional features. But there are certainly other popular tools such as Screencast-O-Matic and Explain Everything®.

3. Respondus®
   Designed for post-secondary school purposes, Respondus can still be used in K–12 and has many attractive features for designing and managing online testing and provides lock-down browser technology.

4. Zaption®
   Fast-growing in popularity, this engaging and creative tool allows teachers and students to add images, text, and questions to any online video. Teachers can use it to embed quick checks for understanding into video lessons and require questions be answered correctly before proceeding. And students can use it to analyze videos or create new versions of historical videos or scientific experiments.
5. **Actively Learn**
   This fascinating tool has many applications and is a portal to thousands of inexpensive or free online texts and textbooks. It's also a place for teachers and students to annotate, communicate, critique, and collaborate around texts.

6. **Ponder®**
   Want students to engage more meaningfully with what they’re studying? Ponder provides a platform for tagging texts and videos and allows students to demonstrate their critical reading skills. Any online text can be “pondered” and students can access communities of “ponderers” working on the same text and share their perspectives.

7. **Curriculet®**
   This tool allows you to embed a layer of questions, quizzes, and rich media annotations into any reading assignment and track mastery of literacy skills and Common Core standards in real time.

8. **Edpuzzle**
   Somewhat like Zaption, this video-editing tool allows you to add commentary, captions, and quiz questions into videos. You can see who watches the videos and how often, as well as their quiz answers.

9. **Flipgrid®**
   Want to use videos to strengthen your online classroom community, promote more interactive sharing and reflection, or engage students more effectively? Flipgrid helps you create questions or discussion topics, launched by text or video, which your students can respond to with a short video of their own.

10. **Voicethread®**
    An older tool, Voicethread was still suggested by several as being the best way to generate audio-recorded discussion and analysis of text or video.
12 Support Self-Assessment and Require Reflection

“Learning to learn” is more than just a saying; it’s an essential skill our students need to thrive in an information economy. Because there can be less direct physical interaction in online courses and because online learning can be isolating for some, it’s critical that you empower students with the mindset and tools to set goals, monitor their own progress, and regroup as needed.

Rathgeber urges the importance of this by saying, “What is so different in online learning is that students don’t get the in-class feedback and must be more supported in self-assessment. You have to set clear expectations and assist in self-assessment in an online environment.”

As discussed earlier, rubrics are one way you can help students evaluate their success and identify their gaps. Journals, learning logs, and blogs are other tools that can stimulate this necessary reflection. Mike Gwaltney notes, “I need much more reflection from students about their process because I can’t observe it firsthand.”

13 Promote Powerful Peer Assessment

Another key tool for strengthening feedback and helping students gauge their progress is peer feedback. But it’s important to keep in mind that all peer assessment is not helpful and that bad peer assessment is worse than no peer assessment at all.

Hudson says, “You need to work to establish the culture of the classroom, and it might be hard to get students speaking to each other.” Some teachers take extra steps to model the qualities of effective feedback, and some take precious time to establish protocols and norms for what to say and how to say it. Don’t be afraid to hold students’ hands and script their first few rounds of peer feedback. Consider adding time to debrief and strategy sessions to enhance the process for subsequent sessions.

14 Coordinate Collaboration

Collaboration is one of the paramount skills of the 21st century, and it’s hard to imagine a future career for our students that doesn’t demand this proficiency.

To help students develop these abilities, you can assign tasks that require students work together to address and solve complex issues. But similar to peer feedback, you can’t leave collaboration to chance alone.

Hudson notes, “Online student collaboration can be a pain. You have to be highly intentional in how to scaffold the experience of collaboration—start with very low stakes activities, getting them to connect and
communicate, then move on to simple one-off prompts, and then slowly, slowly build to more complex extended tasks. Only then can you start to take them to collaborative research and more complexity.\textsuperscript{44}

The stakes rise when it comes to grading, because grading collaborative work is a minefield. Mike Gwaltney notes, “I do want to assess collaboration, despite its many challenges. I ask students to become more skillfully conversant and to dig deep. And to assist them with this, I give examples of what good discussion looks like. I learned by trial and error that I need students to provide screenshots and timestamps for their participation in Google\textsuperscript{®} hangouts for my record-keeping.”\textsuperscript{45}
CHAPTER 3

THE FUTURE OF GRADING AND ASSESSMENT: FIVE EMERGING PRACTICES
The Future of Grading and Assessment: Five Emerging Practices

This eBook is about the present—the things educators can do now to improve grading and assessment in their online classrooms.

But today’s learning environment is far from static. Things are changing fast, and five to ten years from now you may see a true transformation of grading and assessment, online and face-to-face.

Here are five practices that I see coming in the future to an online learning classroom near you.

1. Standards-Based Grading and Adaptive Online Grade Books

Grading is due for a revolution (see Guskey’s On Your Mark for a complete overview). Experts have completed extensive research and analysis about how to grade for learning, and now it’s only a question of how to use those findings in general widespread practice.

You should grade students by evaluating the proficiency they’ve demonstrated in the learning goals of the course—not by averaging their scores over the course of a semester on multiple assignments. Many learning management systems and online course grade books aren’t ready for this approach. However, many are starting to implement the adaptations necessary to support this far more effective grading system. It’s partly...
just a matter of adding columns to rows, where rows show the grade students receive on each assessment and the columns represent each learning target.

But averaging is so 20th century, so it’s not just a matter of averaging the rows and columns. Why would you average grades over the course of a semester if the students are constantly learning and developing over that semester?

What’s important is that you report on whether they’ve learned what was expected, regardless of the time it took. New grading software will use formulas such as predicted next number or the forecast formula in Excel®.

2 Adaptive Learning Platforms

Adaptive learning technology is being increasingly implemented in a variety of environments, including Arizona State University and Khan Academy. Some standardized testing, such as the Northwest Educational Association Measures of Academic Progress (NWEA MAP), uses a version of this approach known as computer adaptive testing (CAT). In CAT, students take tests which configure to the individual learner. The technology quickly learns each test-taker’s level of knowledge and then adapts to that level, zooming in on each student’s individual and specific proficiency level far more effectively than any static flat-form test.

In online environments, teachers can collect student work in the same system and then generate tasks and assignments suited to that student’s zone of proximal development.

Think of a textbook which constantly adapts itself to each individual student, providing him or her with personalized levels of reading difficulty, problem sets, and applied learning extensions. Rubrics can be adapted and customized for each student, and grading can be informed by instant access to algorithms which help the teacher understand how much the student has developed. This will be a dramatic revolution for personalized instruction, and online learning classes will likely have a great head start.

3 Gamification

Kids love gaming because it provides constant challenge, immediate feedback, and a powerful sense of increasing mastery. Plus, it’s colorful, fun, stimulating, and usually social. University of California Berkeley cognitive science Professor Jane McGonigal, author of Reality is Broken, points out the two implications that come from this idea: gaming should become more a part of life and life should become more like a game.47

Games are entering the learning realm. They have been for decades, but only now do they seem poised for their quantum leap.

Think of how stores used to have to close to do inventory. Now, they handle inventory automatically, with every purchase generating the data necessary to manage supply. Sometimes, it also seems like teachers have to
shut down learning to assess student work. As students tackle complex tasks demanding subject knowledge and high level skills, they are being constantly “inventoried” without even being aware that every click, every pause, every message, everything they do inside the game environment is being counted, aggregated, and evaluated for knowledge, proficiency, and growth.

Often called stealth assessment, this approach will transform the way you work with students to set goals and challenge them to perform quality tasks, as well as how you provide instant feedback on their progress, offer appropriate awards, and generate grades.⁴⁸

But don’t just plan to incorporate learning and assessment into games. Instead, look to put gaming strategies into learning and assessment. How can the way you assign, respond, reward, advance, and evaluate students be better informed by gaming? How can you improve conventional assessment by borrowing from the many ways games challenge, engage, and motivate?

### 4 Badges

One of the greatest misconceptions of our contemporary grading system is the aggregation error: the idea that student learning of an entire course can and should be aggregated into a single letter or numeric grade. This is where digital badges can help.

According to the MacArthur Foundation, which has done a great deal of research in this field,

“The digital badges are an assessment and credentialing mechanism that is housed and managed online. Badges are designed to make visible and validate learning in both formal and informal settings.”

The rise of digital badges has many foundations, but one of them is the appreciation that learning is a matter of mastering multiple, discrete things—specific concepts and understandings, skills and habits—and assessment is far more effective when it is broken down and aligned with these discrete things.

It is conducive for students of all ages to have a clear understanding of their target and what is required of them to demonstrate mastery. You don’t want students to get letter grades from which they derive only the vaguest sense of what they have and haven’t learned. You want them to know exactly what they have and haven’t mastered and by what standards proficiency has been established.
Within five or ten years, many online learning platforms and individual classes will be engineered such that teachers can (or must) establish digital badges at the beginning of the course and as part of the syllabus. Students’ personal pages or profiles will showcase these badges throughout their coursework. In addition, teachers in subsequent courses can refer to awarded badges to design the course and differentiate the learning.

5 Learning Analytics

Imagine you could accurately predict your students’ end of term grades within the first two weeks of class. Consider the advantage of discovering what kind of feedback is most effective for improved student performance.

Big data learning analytics draws upon the archived evidence of thousands—or millions—of students and determines patterns that will influence teaching and assessing. Student privacy will have to be considered of course, but usually such aggregation effectively masks or eliminates user identification. In the end, you’ll have meaningful new insight that you can put into practice. You’ll know when and how to intervene and what assignments motivate, challenge, and engage students. You can expect analytics to completely change the work of grading and assessment soon.
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CHAPTER 4

CONCLUSION: FIVE QUESTIONS TO ASK YOURSELF ABOUT GRADING AND ASSESSMENT IN ONLINE LEARNING
Conclusion: Five Questions to Ask Yourself about Grading and Assessment in Online Learning

Assessing and grading student work are among the most important components of effective instruction, and they should come at the forefront of your work. We hope this guide will help you in your role as an educator. Feel free to share it with colleagues or contact the author for more information.

To help move things along, here are five questions to ask yourself about your own assessment and grading practices.

1. How well do your students know what they’re expected to learn, master, and demonstrate in your class?

2. How comfortable and confident are your students in their ability to communicate and collaborate with you and their fellow students?

3. How frequently and effectively are you providing formative feedback to your students about the most important things for them to learn and demonstrate?

4. How effectively are you exploiting the advantages of the online learning platform to increase the quantity and quality of your feedback and to deepen the challenges and extend the real-world applications of your assigned tasks?

5. How effectively do your grading practices, grade book, and platform capture and convey what your students have and haven’t learned?
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In the past five years he has presented at more than 80 independent schools and educational conferences, including the past five annual conferences of the National Association of Independent Schools.

A graduate of Sidwell Friends School and a 2008 Klingenstein Visiting Fellow, he holds degrees from Harvard and University of San Francisco. He has been a member of nine accreditation visiting committees, chairing two of them, and served on the board of the Independent School Association of the Southwest. Read more at his blog, www.21k12blog.net.

About Blackbaud

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