Using Rubrics to Improve Online Class Communications

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Abstract: Effective instructor-learner communications, especially communications on assessment, help to improve online learning. This article analyzes the challenges faculty encountered in online course assessment at Purdue University. It introduces how instructional designers helped to improve online instructor-learner communications by enhancing assignment instructions and creating/adopting assignment rubrics.

Keywords: online courses, communication, assessment, rubrics

Background

Communication has a foundational influence on teaching and learning (Smith & Ragan, 2005). Educators claimed that effective instructor-learner and learner-learner communication help to improve learning (Simonson, Smaldino, Albright, & Zvacek, 2012). Several learning activities and teaching strategies have been used to enhance communication and interaction in online classes, such as using discussion boards, assigning online group assignments, and hosting online synchronous class meetings. Researchers pointed out that using rubrics can be another way to help with creating better communications in online courses. (Haught, Ahern, & Ruberg, 2017). Steven, Levi, and Walvoord (2012) claimed effective rubrics can provide timely feedback, encourage critical thinking, facilitate communications on the goals and expectations, and help instructors to refine their teaching skills.

Meanwhile, literature shows that the quality of rubrics impacts learning performance (Chan & Ho, 2019). Researchers discussed ways to improve rubric design, such as inviting students to participate in the design process (Bauer, 2002; Steven, et. al, 2012), and using online rubric bank (Simonson, et. al, 2012). Jonassen, Howland, Marra, and Crismond (2008) identified five main characteristics of well-designed rubrics, which are:

- Includes all the items that are important enough to assess
- Create clear criteria categories instead of combining multiple criteria into one category
- Rating scales should cover the range of expectations
- Communicate clearly with both instructor and learner
- Provide rich information about the multiple aspects of the performance (pp.229)

From an instructional designer’s perspective, this article analyzes the challenges faculty at Purdue University met in online assessment. It also introduces the strategies instructional designers investigated to assist faculty in designing and developing rubrics, and how rubrics improved communications and interactions in online courses.
Problems and Challenges

Assignment rubric is also called scoring schemes or rating scales. The benefits of using rubrics have been discussed by many educators. Jonassen et al. (2008) claimed applying rubrics can promote intentional learning by identifying important aspects of the assessment and learning goals. Simonson et al. (2012) pointed out that assignment rubrics should be provided in online classes to assist students with assessment because using rubrics helps to improve consistency and fairness of scoring.

However, rubrics have not been popularly used in online courses. In the online courses that do not have assignment rubrics, instructors experienced similar challenges. For example, students kept asking about the requirements of the assignments even though the instructions were provided on the course site, the time teaching assistants spent on grading assignments was longer than expected, or instructors spent extra time explaining the grades to students after grades were posted. When instructional designers reviewed the assignments instructions of these courses, we discovered some typical issues:

- The assignments do not clearly state the intended learning objectives they are to assess
- The expectations of the assignment are not clearly stated
- The assignment instructions are too brief, and the requirements are not clear
- The assignment instructions are too long and not easy to understand
- The assignment instructions are not clear on grading criteria

On the other hand, in the courses that adopted assignment rubrics, some faculty were struggling with using them. Instructional designers also noticed some common problems:

- The rubrics were designed for other courses or other assignments. They do not match the learning objectives or fit the assignment requirements of the current course
- The rubrics are downloaded from the online rubric template and were not adapted to the current course assignment
- The rubric criteria statements are somewhat ambiguous. The expectations of each point scale are not clearly explained
- The rubric criteria statements and point scale descriptions have confidences
- The rubric criteria statements and point scale descriptions include words with weak or several meanings, single terms instead of full sentences, or Grammatical errors.

Furthermore, faculty have different opinions on using rubrics. Some faculty embraced the idea of using rubrics in online courses and believe it is one of the best ways to improve the effectiveness and efficiency of online assessments. In some online courses, instructors created rubrics for each assignment, including online discussion assignments. However, many faculty do not have enough time to create rubrics. Some claimed that rubrics are not helpful in grading assignments. Other faculty complained students never read the instructions and rubrics. These pushbacks from faculty are one of the biggest challenges for instructional designers in online course design.

Investigating Solutions

As mentioned before, poorly designed assignment instructions and rubrics can cause issues in online course communications between instructors, learners, and teaching assistants. In addition
to this situation, faculty are not willing to apply rubrics in their courses because designing and developing assignment rubrics is a time-consuming task. It requires instructors to spend time reviewing the learning activities and aligning the assessment with the learning objectives before writing the criteria and point scales. Furthermore, there are also some new faculty do not have experience in designing rubrics and need assistance. To solve these problems and improve instructor-learner communication, the instructional designers created the following strategies:

First, instructional designers hosted workshops to introduce the benefits of using rubrics in online assessments and provided hands-on activities to walk faculty through the process of creating rubrics. In the workshop, participants were asked to list some specific requirements of their dream house in an imaginary house hunting scenario. The requirements can be size, location, and price of the house. Then the workshop facilitator helped to group these requirements to different categories and created criteria of a house hunting rubric. The participants tried to group different criteria to categories. The facilitator discussed the point scale with the participants and completed the rubrics. Participants provided positive feedback on this workshop. They claimed it helped them understand the basics of rubrics and how to use them in their courses. They also expect to attend in depth workshops on creating and using rubrics in different contexts. The following figure shows one of the PPT slides we used in the workshop.

![Group Discussion](image)

*Figure 1: Workshop Activity*

Second, instructional designers created a resources page to help faculty develop rubrics. The resource page includes the following items:

- Template and examples of holistic rubrics and analytics rubrics
- Good examples of rubrics designed by Purdue faculty,
- Links of online rubric creator, such as Rubistar and iRubric, and an OER resource, VALIE Rubrics
- Job aids and tutorials videos about how to use the rubric creation tool on LMS
Third, instructional designers developed rubric templates for three types of commonly used online assignments, which include online discussions, online presentations, and online group projects. These templates and best practice examples of each type of rubric are shared with faculty in the regular course design meetings. Before designing or revising a rubrics, designers encourage faculty to review learning objectives and the existing assignment instructions. Faculty are asked to align learning objectives with rubric criteria. Instructional designers created the following checklists to help faculty review their rubrics:

![Creating a Well-designed Rubric Checklist](image)

Fourth, except for helping faculty create rubrics, instructional designers helped to review and redesign the assignment instructions because rubrics are considered as one part of the instructions. The redesigned instructions improved the clarity of the assignment requirement, learning goals, the expectation of the assignments, points possible, and due dates. The instructional designers also suggested faculty include a communication plan if students have questions about the instructions. The most used method is asking students to post questions in an online Q&A forum or ask questions in course synchronous sessions.
Fifth, As mentioned before, instructor found that many students would not read the rubrics before working on the assignment. Given this complaint, the designers adopted the following strategies to gain students' attention:

- Create rubrics using the rubrics tools in the Learning Management System and attach them to the assignments. Remind students that they can download the PDF version of the document or print it out.
- Added the quick links to the rubrics in the assignment instructions.
- Encourage faculty to explain the assignment requirements and the rubrics in their pre-recorded instructional videos or virtual synchronous sessions.
- Remind faculty to send out an announcement about the assignment requirement and the rubrics

The following figure shows a course site screenshot of a re-designed assignment instructions with a quick link of the rubrics.

Figure 4: Assignment Instructions with Quick Link of the Rubrics

Case Review

Rubrics are used in different ways at Purdue University, such as helping students with self-assessment, peer evaluation, and non-graded assignments. In online courses, they are most often used to evaluate paper assignments, projects, online presentations, and online discussions. This session reviews two cases and discusses how rubrics help to improve online teaching and communications. This session reviews two cases and discusses how rubrics help to improve online teaching and communications.

Case 1: A fully online course
This course was taught in a traditional classroom in the previous semesters. Learning activities include project progress reports, final presentations, and related coding assignments. The instructor created detailed instructions for these activities and assignments. In the 2021 fall semester, the course was re-designed for online sessions. The online session keeps most of the activities from the face-to-face class.
The instructor re-designed the bi-weekly project progress presentations and the final presentations to fit online settings. He spent four weeks creating rubrics for each presentation and assignment. In a pre-recorded introduction video, he shared his computer screen and showed students the locations of assignment requirements and rubrics in the course site.

After the course launched in the 2022 spring semester, the instructor reported the online presentations went very well. He received fewer questions about homework and presentations compared to the previous semester. In addition, his teaching assistants claimed that they spent less time grading assignments using the rubrics that the instructor created.

**Case 2: A hybrid course:**
In a graduate-level management course, students meet in the classroom every other week and are required to complete activities and assignments online in the week they don’t meet. There were no rubrics designed for the course in the previous semesters. The assessments includes weekly paper and final paper.

In the 2021 fall semester, the learning activities and assignments were redesigned to improve class engagement. Re-designed activities include online discussions, case studies, and reflection papers. The instructional designer and the instructor worked together to design rubrics and instructions for each assignment. The instructor reviewed the rubrics using the checklist created by the instructional designer before publishing them to the course site.

After the course launched in the 2022 summer semester, the instructor explained each assignment requirement and reviewed the rubrics with her student in face-to-face sessions. She reported that using rubrics greatly improved efficiency when grading assignments, especially in evaluating online discussions. She mentioned the online discussion rubrics helped students focus on the topic when creating their discussion posts. In addition, students provided positive feedback on the assignment rubrics. They claimed the rubrics helped them complete the paper assignment.

**Conclusion**

Designing rubrics could be time-consuming, however, well-designed rubrics can help with grading and save time in the long run. They also work as valuable pedagogical tools to help instructors be aware of their course outcomes, intentions, and expectations, which can help to improve communications between instructors, learners, and teaching assistants. The instructional designers noticed that one of the reasons faculty don’t use rubrics is because they are not aware of them or have misunderstandings about them. The strategies we investigated helped to increase awareness of rubrics as a tool for the online class. We also noticed that faculty need help with course design basics, such as setting clear expectations and aligning learning objectives with assessments. We are planning to address these needs in our faculty development sessions. For future studies, we would like to see evidence-based studies on the effectiveness of using rubrics in online courses.
Reference: