
AC 2012-3969: DEVELOPMENT AND IMPLEMENTATION OF A WEB-BASED PEER EVALUATION TOOL FOR TEAM PROJECTS

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Development and Implementation of a Web-Based Peer Evaluation Tool for Team Projects

Abstract

Student group work is a proven instructional model, but the time-consuming evaluation component can reduce its effectiveness¹. The University of Delaware has developed a web-based software program to improve the evaluation of student groups. Three objectives of the project were:

- create a more meaningful evaluation process for students,
- reduce the administrative time for faculty, and
- build an evaluation mechanism that promotes broader faculty consideration of student group activities as a pedagogical tool.

University of Delaware developers in Academic Technology Services (ATS) worked closely with interested faculty from a variety of disciplines to create an online peer evaluation system. The system accommodates numerical grading schemes in which student team members can use instructor-defined rubrics or other criteria to evaluate or rate contributions to the team effort of themselves and fellow team members.

To provide beneficial feedback to the students, the system encourages essay response commentary that students can write about themselves and other team members. The comments can be compiled by the system and forwarded to the instructor. To insure anonymity and that comments released to students are constructive, the system gives the instructor the ability to examine all comments and provide appropriate editing before the comments are anonymously forwarded to the individuals for whom they were written.

The system was piloted during the fall semester of 2011 in a variety of courses ranging from philosophy to math and science to engineering and engineering technology. Two surveys were developed, one for students and the other for faculty, to examine the effectiveness of the system in meeting the goals of the project. The student response rate was about 15% (56 out of 368) while faculty response rate was 70% (7 out of 10).

Overall, a majority of the students and faculty found the system to be beneficial. For the majority of faculty, the system saved time over previous methods of peer evaluation they had used. This paper examines the features of the system in detail, discusses the student and faculty survey results, looks at problems encountered in use of the system, and provides recommendations for possible changes to be implemented in subsequent versions.

Introduction and Background

It is well recognized, especially in science, technology, engineering, and math (STEM) subjects, that teamwork and group learning activities can enhance the learning experience². Team activities can, however, present challenges to both students and instructors. In particular, students may perceive grading schemes that assign a single grade to the entire group as unfair because the grade does not account for the variable levels of effort and different contributions of individual team members^{1,3}.

For instructors, a key problem is that groups usually meet and perform the bulk of their work outside of class when behavior is unobservable. Faculty who wish to assign grades that reflect the different contributions of the various team members may struggle with identifying an

efficient and reliable means of doing so. For many faculty who assign group activities, peer evaluation is an important component of the group experience and grading scheme.

Peer evaluation has long been used in STEM education to inform evaluation of individual contributions to team assignments (e.g., Byrd & Hudgins⁴). Eschenbach & Mesmer⁵ discuss the long history of using peer evaluation to assess team work. They note that peer evaluation has become widely used in business and industry citing the example of Hewlett Packard in Puerto Rico including peer evaluations in promotion procedures.

Studies have found that peer evaluation reliably measures team effectiveness, but ratings of individual peers by students become more reliable with increasing maturity and competence of the student raters⁶. Students who are incompetent tend to rate peers more highly and equally than do more competent students; they also tend to rate themselves more highly than their abilities would justify⁷. To a large degree, design of the rating instrument plays a big role in the reliability of the peer evaluations^{1,8} as does training of students to provide useful evaluations of their peers⁵.

Kilpatrick et al.³ specifically examined the characteristics of peer evaluation schemes that encouraged business students to perceive the peer evaluation process as being fair. Among other results, Kilpatrick et al.³ found that students:

- “prefer evaluations that provide for both student and instructor input over those that provide for instructor input alone.”,
- “prefer evaluation procedures that include self-evaluations over those that do not.”,
- “expect evaluations to be fairer when evaluation procedures use more highly structured peer evaluation forms (i.e. those that specify the criteria to be used in evaluating an individual) versus those that are less structured.”,
- “expect evaluations to be fairer when evaluation procedures use forms that allow for open-ended comments versus forms that do not.”, and
- “think a policy of confidentiality is more important [to achieve fairness] than a policy of open access to evaluations.”

Ohland et al.⁸ examined three peer evaluation instruments that ranged from Forms A and C, each a one-item nine-level Likert-scale rating to Form B, a 10-item, five-level Likert scale rating. Forms A and C used these descriptive words to define the nine Likert-scale levels:

1. <i>Excellent</i>	6. <i>Deficient</i>
2. <i>Very Good</i>	7. <i>Unsatisfactory</i>
3. <i>Satisfactory</i>	8. <i>Superficial</i>
4. <i>Ordinary</i>	9. <i>No Show</i>
5. <i>Marginal</i>	

Form B used these descriptors for its five levels:

1. <i>Excellent</i>	4. <i>Marginal</i>
2. <i>Satisfactory</i>	5. <i>Unsatisfactory</i>
3. <i>Ordinary</i>	

Form A asked students only to choose a word from the nine Likert levels that best described their assessment of a particular team member’s performance. Form B was most detailed with ten items and asked students to rate their peers’ performance for each of the 10 items:

1. <i>Attends meetings regularly</i>	6. <i>Takes responsibilities seriously</i>
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2. <i>Contributes to discussions</i>	7. <i>Accepts criticism gracefully</i>
3. <i>Has good communication skills</i>	8. <i>Performs significant tasks</i>
4. <i>Committed to group goals</i>	9. <i>Tasks have technical content</i>
5. <i>Listens effectively</i>	10. <i>Completes tasks on time</i>

Form C asked for only a single overall rating of each peer, but provided “behavioral anchors”⁸ to attach additional meaning to the nine Likert-scale levels. In contrast, form A that used the same nine Likert-scale descriptors provided no additional description of the associated behavior. The single question on form C asked students to rate the performance of their peers in fulfilling their team responsibilities – responsibilities that include⁸:

1. <i>Attending scheduled meetings,</i>	4. <i>Listening effectively,</i>
2. <i>Contributing to discussions,</i>	5. <i>Accepting criticism gracefully, and</i>
3. <i>Attempting to communicate clearly and with civility,</i>	6. <i>Completing tasks fully and on time.</i>

The nine Likert-scale levels were described as follows⁸:

- *Excellent – Consistently went above and beyond; tutored teammates, carried more than his or her fair share of the load.*
- *Very Good – Consistently did what he or she was supposed to do, very well prepared and cooperative.*
- *Satisfactory – Usually did what he or she was supposed to do, acceptably well prepared and cooperative.*
- *Ordinary – Often did what he or she was supposed to do, minimally well prepared and cooperative.*
- *Marginal – Sometimes failed to show up or complete tasks, rarely prepared.*
- *Deficient – Often failed to show up or complete tasks, rarely prepared.*
- *Unsatisfactory – Consistently failed to show up or complete tasks, unprepared.*
- *Superficial – Practically no participation.*
- *No Show – No participation at all.*

In their results, Ohland et al.⁸ found that form C was the most reliable of the three forms considered while having the advantage of being the most “parsimonious”. Form C, while including the most detailed instructions, asked students to give each peer only a single overall rating. Such a system is less burdensome to the student raters than one with multiple items and may therefore elicit more thoughtful responses⁸. Also, as Ohland et al.⁸ speculate, perhaps the “additional instructions encouraged students to think about various ways in which team members contributed to the team effort before they made their ratings of each team member.”

Objectives

The objectives of this project were to employ a web-based peer evaluation tool to:

- create a more meaningful evaluation process for students,
- reduce the administrative time for faculty, and
- build an evaluation mechanism that promotes broader faculty consideration of student group activities as a pedagogical tool.

The goal of this paper is to examine how well these objectives were achieved during the pilot run of the system in the fall semester of 2011.

Features of the University of Delaware System

Online web based peer evaluation systems are not new (eg. Eschenbach & Mesmer⁵, Cheville & Duvall⁹, Freeman & McKenzie¹). Online peer evaluation systems have been found to be preferred by students and faculty over paper-based methods for their ease of use and time-saving benefits⁵.

The peer evaluation system we developed was designed to be flexible and easy to use. The system allows peers to be rated using a default rating system or one custom-designed by the faculty member. All evaluations include two fields: total score and comments. In addition, the default evaluation includes four sub-scores and instructions. Both instructions and all sub-scores are customizable on a per-project basis. A basic text editor is built into the Project Creation form. This can be used to add simple text-formatting (bold and italic) and links to other files, such as more extensive instructions.

To establish student groups, an instructor must submit student identifiers from his roster into a group creation field. The system then looks up each group member's name and email address, and displays them within a group-specific section of the web page. After two or more groups have been created in this way, it is possible to drag individual group members from one group to another before submitting the project to the database.

Instructors can release, retract, remove or copy submitted projects at any time. Only released projects are available to students, who are then able to evaluate only members of their own groups. Completed evaluations can be viewed individually by the instructor, and are compiled into a summary evaluation for each group member. The instructor is able to edit the compiled summary before submitting it for student review. Submitted instructor evaluations are also compiled into a project summary spreadsheet, which may be viewed as a table online, or downloaded as a comma-separated values (.csv) file.

Methods

Seven faculty members in disciplines ranging from philosophy to math and science to engineering and engineering technology were recruited to participate in this project for a pilot run in the fall semester of 2011. A total of 368 students were enrolled in the associated classes. The pilot run was intended to test whether we could accomplish the objectives of the project.

Two Qualtrics¹⁰ survey instruments were developed, one for students and the second for participating faculty members. The main questions we wished to answer with the surveys were about the system's ease of use and whether it enhanced the group learning experience. The student survey and results are shown in Appendix I, while the faculty survey and results appear in Appendix II. Branching in the student survey is noted in red typeface.

Discussion & Results

Out of 358 students enrolled in the classes employing the peer evaluation tool, we had 56 students who completed the voluntary survey – a reasonably good response rate of approximately 15% given the timing of the survey at the end of the semester during finals week. All seven faculty who used the system responded to the survey – three faculty members had originally expressed interest in using the system at the beginning of the semester but had subsequently decided it did not meet their needs, did not use the system, and did not respond to the survey. Inspection of the survey data in Appendices I and II indicates that the peer evaluation system we developed was successful in meeting our objectives for this project.

With respect to creating a meaningful evaluation process for the students, Question 4 asked students directly about the value of the feedback they received. Thirty-four of the 55 respondents (62%) perceived some value in the feedback. Ten (18%) of the respondents who thought the feedback was valuable said it was very valuable. Responses to questions 6 and 7 indicate that 51 out of the 56 students who completed the survey would or actually did alter their behavior in positive ways due to the knowledge that they would be evaluated by their peers. Question 9 asked students whether the peer evaluation process helped them learn more about teamwork. Responses were split with 29% agreeing or strongly agreeing that peer evaluation was helpful in learning about teamwork, 51% neutral, and 20% disagreeing or strongly disagreeing.

A large majority of students (76%) thought online peer evaluations were superior to paper-based methods, while 20% were neutral or thought paper-based methods were better (4%). Question 2 on the student survey asked about ease of use. Ninety-seven percent of students rated the system either easy (34%) or very easy (63%) to use. Seventy percent of students spent under five minutes on each evaluation with 95% needing less than 10 minutes.

An interesting result is the response to question 11 in the student survey which asked students to self-rate their performance within the teams. Twenty percent thought they were the top performers in their groups, 48% thought they were above average, and 32% thought they were about average. No students rated themselves below average or the worst performer on their team. At first glance, one might think that for some of the responders this is an instance of “Lake Wobegon Effect”^{11,12}, a manifestation of the illusory superiority with which incompetent or below average performers often regard themselves as discussed by Kruger and Dunning⁷. Such an observation might be true if we had sampled the whole population, but we had only 56 responses out of the total population of 368 students enrolled in the classes that used this peer evaluation tool. To some degree, the responders to this survey were a self-selected group. They made an effort to respond to the survey request during what was a busy demanding time - finals week. The responders might be expected to be more conscientious and somewhat higher performers than were the students who did not take the time to complete the survey.

Results for faculty shown in Appendix II were similarly supportive. Question 1 on the faculty survey asked how easy the system was to use. The seven responses to the five choices were: very easy (1), easy (2), neutral (3), difficult (1), and very difficult (0). In answer to question 2 about the time it took to set up each project, three people took under 10 minutes, two people took between 10 and 20 minutes, one person between 20 and 30 minutes, and one person more than 30 minutes. Time for set-up will undoubtedly drop as user experience with the system increases and interface improvements are introduced.

In question 3, all seven faculty indicated that peer evaluation is important in their course goals with three indicating it was somewhat valuable and four very valuable. In response to question 7 that asked how the peer evaluation data were used, six of the seven respondents indicated the data were used in some manner to inform grading decisions for individual students.

Four of the five faculty respondents to question 8 who had used peer evaluation previously felt the system saved time in comparison to previous methods they had employed. Four of the six faculty who answered question 9 indicated they would use the peer evaluation system again with one saying it would be dependent on features that were added. Only one faculty member indicated that he or she would not use the web-based peer evaluation system in the future.

Future Work

There are a number of new features planned for spring semester 2012. Some of these were the result of direct requests from faculty, while others are motivated by technical considerations. Others are simply features that had always been planned, but could not be completed in time for the initial release. Among requested feature upgrades, the two most significant are the ability to disable self-evaluation on a project-by-project basis and the ability to randomly generate groups from a course roster. In addition to a handful of bug fixes, a mobile version of the student view will enable students to evaluate their peers more easily using a smart phone.

From a technical perspective, the most important upgrade is more rigorous form validation and the addition of a maximum total score field to the database. Initially, all evaluation forms enforced a total score limit of 100 points. Very early in our beta testing, it became clear that faculty wanted more flexibility, and the 100-point ceiling was removed.

In addition, customizable sub-scores were added at the last minute. Because these additions were made in haste, and after the beta program was already in use, the resulting forms lacked proper validation routines. Students were able to submit scores that did not fall within the constraints of the written instructions provided. The spring 2012 form forces evaluation designers to designate maxima for all numeric fields, and these are enforced by the form validation protocol. The addition of a maximum total score field to the database will allow meaningful score comparisons across projects, while still allowing project scoring rubrics to be customizable.

Lessons Learned: In developing the Peer Evaluation System, we sought to adhere to guidelines we have learned over many semesters of developing web applications for faculty:

- Seek faculty input early and often.
- Keep the user interface as simple and self-explanatory as possible.
- Differentiate between essential and non-essential features. Develop non-essential features sparingly, as these will complicate the user interface, and thus discourage use.
- Develop core features in such a way that high-demand secondary features can be added without re-designing the core.

While we still believe in those guidelines, we made a few mistakes early on in distinguishing between core and non-core features. In addition to the flexibility of the evaluation that was described earlier, we committed a wishful-thinking error in believing that faculty should be prevented from editing an evaluation after it had been released. Rather, we provided a means for faculty to copy an existing evaluation, and then delete the original. This turned out to be unsatisfactory. Despite the obvious logical issues that arise, faculty occasionally need to be able to juggle group membership and reword evaluation instructions mid-project! The spring 2012 version will allow them to do that, at the expense of clicking through a rather vague warning message.

Another lesson, which is not unique to this particular effort, but which cannot be emphasized enough, is that real users do not read instructions. Anything that can be done to remove instructions from an interface, and replace them with constraints that force the desired behavior is probably an upgrade. Such interfaces are time-consuming to build, and can be annoying to power-users, but on balance, they save time and aggravation all around.

To that end, we have substituted a Project Creation Wizard for the single page form used in the beta release. We have high hopes that this will streamline the process of project creation as well

as improve our ability to rigorously validate the resulting evaluation forms. Finally, we plan to add an additional guideline to our list:

- Develop for mobile from the outset.

While our failure to do so in this project was not a significant impediment, we believe that designing for mobile first is a guideline that will stand us in good stead.

Summary and Conclusions

A web-based peer-evaluation tool was developed to facilitate use of team projects in courses at the University of Delaware by simplifying what many instructors consider to be an important component of team activities: peer evaluation. The system was piloted during the fall semester of 2011 in a variety of courses ranging from philosophy to math and science to engineering and engineering technology. Surveys of student and faculty users were conducted at the end of the semester to determine whether the system met the objectives of the project. Overall, the project appears to have been a success.

Students found the system was easy to use, and four of five instructors who had used peer evaluation previously felt it saved time. Many students were neutral (51%) about whether peer evaluation is a valuable part of the teamwork learning experience. More, however, were positive (29%) than negative (21%) about the importance of peer evaluation. In contrast, all faculty thought that peer evaluation was either very valuable (4 of 7) or valuable (3 of 7) in their course goals. A majority of faculty (6 of 7) used the peer evaluation data to help them decide on assignment of individual grades. All but one of the seven faculty planned to or would consider using the system again.

Acknowledgement

The authors wish to express their appreciation to Mr. Paul Hyde, Manager, University of Delaware Academic Technology Services, for his contributions to project development, authoring Qualtrics surveys of participating faculty and students, and editorial assistance with this paper.

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Appendix I. Student Survey about Peer Evaluation Tool

Last Modified: 12/13/2011

1. As of today, are you age 18 years or older?

#	Answer	Response	%
1	Yes	56	100%
2	No*	0	0%
	Total	56	100%

* If “No” survey ends.

Statistic	Value
Min Value	1
Max Value	1
Mean	1.00
Variance	0.00
Standard Deviation	0.00
Total Responses	56

2. How easy was the UD Peer Evaluation System to use?

#	Answer		Response	%
1	Very easy		35	63%
2	Easy		19	34%
3	Neutral		1	2%
4	Difficult		0	0%
5	Very difficult		1	2%
	Total		56	100%

Statistic	Value
Min Value	1
Max Value	5
Mean	1.45
Variance	0.51
Standard Deviation	0.71
Total Responses	56

3. Approximately how long did you spend on each evaluation form that you completed?

#	Answer		Response	%
1	Under 5 minutes		39	70%
2	5-10 minutes		14	25%
3	10-15 minutes		1	2%
4	15-20 minutes		0	0%
5	More than 20 minutes		2	4%
	Total		56	100%

Statistic	Value
Min Value	1
Max Value	5
Mean	1.43
Variance	0.72
Standard Deviation	0.85
Total Responses	56

4. How valuable was the feedback you received from peer evaluation?

#	Answer	Response	%
1	Very valuable. I will be a much better contributor on my next project because of it.	10	18%
2	Moderately valuable. I may be a slightly better contributor on my next project because of it.	24	44%
3	The feedback I received was not valuable.	21	38%
	Total	55	100%

Statistic	Value
Min Value	1
Max Value	3
Mean	2.20
Variance	0.53
Standard Deviation	0.73
Total Responses	55





5. Did you know at the outset of your project that your group would be asked to complete peer evaluations?

#	Answer		Response	%
1	Yes		51	91%
2	No*		5	9%
	Total		56	100%

* If "No" go to question 7.

Statistic	Value
Min Value	1
Max Value	2
Mean	1.09
Variance	0.08
Standard Deviation	0.29
Total Responses	56





6. Did knowing that you would be evaluated by your peers motivate you to perform better in any of these areas? Check all that apply.

#	Answer		Response	%
1	Attend meetings or contribute to group-maintained web content.		41	85%
2	Submit high-quality work.		42	88%
3	Contribute work in a timely manner.		42	88%
4	Be helpful, cooperative, encouraging. Try to make the project a positive experience for others in my group.		47	98%

* Go to question 8





Statistic	Value
Min Value	1
Max Value	4
Total Responses	48

7. Had you known there would be a peer evaluation, would you have done any of the following differently? Check all that apply.

#	Answer		Response	%
1	Attend more meetings or contribute more to group-maintained web content.		3	100%
2	Contribute more work or work of better quality.		2	67%
3	Complete my portion of the work on time, or in advance of due dates.		2	67%
4	Behave in a more helpful, cooperative, encouraging manner.		2	67%

Statistic	Value
Min Value	1
Max Value	4
Total Responses	3

8. Which statement below best describes your goal in completing peer evaluations?

#	Answer		Response	%
1	I wanted to give all my group members the highest possible score.		12	21%
2	I wanted my evaluation to reflect the relative contributions of all members.		38	68%
3	I wanted to provide feedback that would help my peers become better team members.		3	5%
4	I wanted to punish and/or reward a small number of specific individuals within my group.		3	5%
5	I just wanted to be done as fast as possible.		0	0%
	Total		56	100%

Statistic	Value
Min Value	1
Max Value	4
Mean	1.95
Variance	0.49
Standard Deviation	0.70
Total Responses	56

9. Rate your level of agreement with this statement: The peer evaluation process help you learn more about teamwork.

#	Answer	Response	%
1	Strongly agree	3	5%
2	Agree	13	24%
3	Neutral	28	51%
4	Disagree	7	13%
5	Strongly disagree	4	7%
	Total	55	100%

Statistic	Value
Min Value	1
Max Value	5
Mean	2.93
Variance	0.88
Standard Deviation	0.94
Total Responses	55

10. Rate your level of agreement with this statement: Online peer evaluation is an improvement over paper-based peer evaluation methods.

#	Answer		Response	%
1	Strongly agree		20	36%
2	Agree		23	41%
3	Neutral		11	20%
4	Disagree		1	2%
5	Strongly disagree		1	2%
	Total		56	100%

Statistic	Value
Min Value	1
Max Value	5
Mean	1.93
Variance	0.79
Standard Deviation	0.89
Total Responses	56

11. Among members of your group, how do you rate your own performance across all categories?

#	Answer		Response	%
1	I was the top performer on my team.		11	20%
2	I was above average.		27	48%
3	I was about average.		18	32%
4	I was below average.		0	0%
5	I was the worst performer on my team.		0	0%
	Total		56	100%

Statistic	Value
Min Value	1
Max Value	3
Mean	2.13
Variance	0.51
Standard Deviation	0.72
Total Responses	56

12. If you encountered any technical difficulties or have any suggestions for improving the system, please describe them below.

Text Response

When I first logged in, the page showed the "instructor view" which didn't allow me to complete evaluations. I had to find a button to switch to student view. There were other members of my class who experienced this bug and weren't able to figure out how to fix it on their own.

Peer evaluations (in my experience at the University) hasn't made me or any other members work more or less than normal. Without peer evaluations, if a member isn't performing his duties, that will be brought up by the professor without necessary busy work like peer evaluations are. As far as on the online peer evaluation went, I visited my professor a few times to correct the issue that I was having to no avail (I received an email to perform the peer evaluation online but I had no link on the left side that indicated that I was in any group in the class whatsoever, so I couldn't complete the evaluation).

no

We did not receive feedback from the peer evaluation system.

If you had to return to a student, the values you gave at first were gone; you had to re-enter them.

The first few days I tried to complete evaluations online, the link took us to the wrong page however I believe that was a faculty error.

One of my group members was not in the group.

I never received feedback after peer evaluations were due. Some groups were missing the tab for our class, and others were missing specific team members in their group.

i wish that i could be able to access the comments that my peers had for me as well as viewing the grade that we received i also had technical difficulties because there were two categories to be filled out of peer reviews on my pull down bars, next time i wish that it would be simpler to fill out i was not able to view the results through this system, i was informed of my peer grade via my sakai page for the class

When I tried to do the peer evaluation on my computer, the names appeared along the top of my screen, not the side. So, I was not able to click on the names. I was able to do it on my phone and other computers, so it was my computer and not my log in.

One of our members was not listed. We didn't see how we were rated by others.

Statistic	Value
Total Responses	11

Appendix II. Faculty Survey about Peer Evaluation Tool

Last Modified: 12/16/2011

1. How easy was the UD Peer Evaluation System to use?

#	Answer		Response	%
1	Very easy		1	14%
2	Easy		2	29%
3	Neutral		3	43%
4	Difficult		1	14%
5	Very difficult		0	0%
	Total		7	100%

Statistic	Value
Min Value	1
Max Value	4
Mean	2.57
Variance	0.95
Standard Deviation	0.98
Total Responses	7

2. About how long did it take you to create each evaluation project?

#	Answer		Response	%
1	Under 10 minutes		3	43%
2	10-20 minutes		2	29%
3	20-30 minutes		1	14%
4	More than 30 minutes		1	14%
	Total		7	100%

Statistic	Value
Min Value	1
Max Value	4
Mean	2.00
Variance	1.33
Standard Deviation	1.15
Total Responses	7

3. How valuable is peer evaluation to your course goals?

#	Answer		Response	%
1	Very valuable		4	57%
2	Somewhat valuable		3	43%
3	Not valuable		0	0%
	Total		7	100%

Statistic	Value
Min Value	1
Max Value	2
Mean	1.43
Variance	0.29
Standard Deviation	0.53
Total Responses	7

4. Did you write custom instructions or scoring logic for any of your evaluations?(Check all that apply.)

#	Answer	Response	%
1	Yes, I edited the instructions and category scores.	3	43%
2	Yes, I changed the scoring logic.	2	29%
3	No, I used the default evaluation.	3	43%

Statistic	Value
Min Value	1
Max Value	3
Total Responses	7

5. What scoring logic do you prefer for peer evaluation? Was the customization capability of the existing system sufficiently flexible to allow the logic you prefer?

Text Response

I have students rate their team mates by assigning each person in the group an estimated percentage of the total effort they contributed. I'd like to see the capability for using a radio-button Likert scale response scheme included. Also, I don't think the system verifies the scores add up to 100 in the current scheme, so that limitation could be removed.

system truncated my first attempts at custom instructions. Did not allow system where students have fixed number of points to allocate among all evaluatees - which, in retrospect, i think might have worked better.

I am happy with the default choices - except I would prefer that students not grade themselves.

I don't know

I'm actually looking for more qualitative evaluation than scoring, so I played with this tool a lot but didn't use it in the end. I may in the future, but for the assignment already in place I couldn't utilize it.

I have my students award 100 points total to the team. I provide categories for each team member so stimulate reflection on how different members contribute to the project. However, when I tally student scores, I just sum over the categories. The main point is that students have the freedom to give more points to one person than another, but the total should sum to 100.

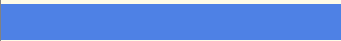

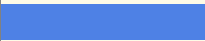

Statistic	Value
Total Responses	6

6. Did you notify your students in advance that they would be asked to complete peer evaluations?

#	Answer	Response	%
1	Yes	6	100%
2	No	0	0%
	Total	6	100%

Statistic	Value
Min Value	1
Max Value	1
Mean	1.00
Variance	0.00
Standard Deviation	0.00
Total Responses	6

7. Which statement below best describes the way you used peer evaluation and the data gathered?(Check all that apply.)

#	Answer		Response	%
1	Peer evaluation scores are rolled into the grade each student receives for the project, in a formulaic way.		5	71%
2	Peer evaluation scores are rolled into the course grade, but in an informal way. For example, they may guide the choice between an A and an A- for a student who is on the bubble.		1	14%
3	Provide feedback for individual students to help them become more productive when working in groups.		3	43%
4	Provide a sense of fairness in assigning		3	43%

	grades that uses student input to help differentiate between levels of effort.			
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Statistic	Value
Min Value	1
Max Value	4
Total Responses	7

8. Do you feel that the Peer Evaluation System saved you time and effort compared to other methods you have used in the past?

#	Answer		Response	%
1	Yes, it saved a huge amount of time.		1	14%
2	Yes, it saved a moderate amount of time.		3	43%
3	No, it was about the same amount of work.		0	0%
4	No, it was more work than my previous methods.		1	14%
5	I have never used peer evaluation before.		1	14%
6	I have never used peer evaluation before, and only tried it this semester because an online system was available.		1	14%
	Total		7	100%

Statistic	Value
Min Value	1
Max Value	6
Mean	3.14
Variance	3.48
Standard Deviation	1.86
Total Responses	7

9. Do you plan to use the peer evaluation system again?

#	Answer	Response	%
1	Yes	4	67%
2	Maybe, it depends on the features that are added to the next version.	1	17%
3	No	1	17%
	Total	6	100%

Statistic	Value
Min Value	1
Max Value	3
Mean	1.50
Variance	0.70
Standard Deviation	0.84
Total Responses	6

10. If you encountered any technical difficulties or have any suggestions for improving the system, please describe them below.

Text Response

Group numbers were arbitrarily changed between projects, making it a little difficult to transfer ratings into my spreadsheet.

Very nice system! The estimate of 30+ minutes to set up project was due to the time necessary to set up the names and student IDs for 39 different groups of students. I've already relayed suggestion below to Becky: Remove self-grading (or provide a simple project-wide toggle to disallow self-grading, if some instructors want it). Force total score to be equal to the sum of the subscores. Limit subscores to a fixed ceiling (25 if using the default logic). Without such constraints, one spends too much time fixing problems. (Some students don't follow instructions, can't add, etc.) Less important, and only do it if it's not a lot of work: In "Export results", give student name in the same format as UDSIS rosters: "Last,First [Middle]" rather than "First [Middle] Last [title]". Reasons: It is easier to reliably and automatically extract last and first names from a UDSIS-formatted name than from the current "Export results"-formatted name. And it will be consistent with UDSIS.

I had issues with my id number and saving/accessing projects. they were resolved!

Statistic	Value
Total Responses	3