PEAR Workshop

Leveraging Peer and Self-Assessment to Promote Active Learning and Student Engagement

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LAND ACKNOWLEDGEMENT

While we are coming together today in a virtual space, it is important to recognize the physical space that connects us and brings us together. The University of Guelph and its campuses are situated on the treaty lands of the Mississaugas of the Credit. We understand that these lands are connected by the Dish with One Spoon Wampum and continue to be home to diverse communities of First Nations, Inuit and Métis Peoples. By acknowledging the land, we reaffirm our commitment to decolonization and reconciliation with Indigenous peoples and our responsibility to the land on which we live, learn, and play.
AGENDA

- Peer Review and Group Assessment
- PEAR Basics
- PEAR Stages
- PEAR Grading Forms
- Administering PEAR Projects
- Participating in PEAR project
- PEAR Support & Resources
- Question & Answer Period
PEER REVIEW AND GROUP ASSESSMENT

Fostering Honest Feedback and Critical Thinking
**Peer Review: Benefits**

- **Improves student skills**
  - Writing
  - Research
  - Critical thinking
  - Reflection
- **Prepares students for academia**
  - Can simulate the peer review process of research journals, conference proposals, etc.
- **Can reduce workload for instructors/TAs**
  - Students perform initial reviews, provide feedback
  - Instructor evaluates reviews (optional)/assess final submission
**Pedagogy of Peer Review**

- **Evaluated by the submitter**
  - Reflection, critical thinking

- **Evaluated by the instructor**
  - Reinforcement/improvement of understanding

- Apply knowledge and feedback from reviews performed and received

- Builds research and writing skills
- Added motivation of knowing peers will see your work
- Reflect via self evaluation prior to submitting (if grading form is made available)

- Builds critical thinking skills
- Improves writing skills
- Knowledge transfer/exchange of ideas
- Motivation by comparison of the submission reviewed to your own

- Created Submission for Review
- Peer Reviews of Submissions
- Final Submission
- Evaluation of Reviews

- Reflect via self evaluation prior to submitting (if grading form is made available)
- Built research and writing skills
- Added motivation of knowing peers will see your work
- Reflect via self evaluation prior to submitting (if grading form is made available)
**Peer Review: SoTL Research**

Peer review isn’t new, so there is plenty of research and evidence of its benefits, here are a few selected readings:

- **From U of G (referencing PEAR):**

- **Other Scholarly Resources on Peer Review:**
GROUP WORK & ASSESSMENT

Value and Challenges
THE VALUE OF GROUP WORK

The value of having students work in groups:
- Developing important work-relevant skills such as planning & time management, collaboration, communication skills, etc.
- Tackling more complex problems that would be more challenging individually
- Stimulating creativity
- Gaining insight into their own strengths and weaknesses

The value of group work for instructors:
- Provide students with more complex & authentic problems to work on (two heads are better than one)
- Useful when the number of topics is limited
- May reduce instructional team grading time (grade 20 groups of 10 students vs. grade 200 individual students)
**GROUP WORK AND ASSESSMENT CHALLENGES**

Not all group members may put in the same effort

- Giving all students in a group an equal grade may not be appropriate in all cases
- It can be difficult, especially in large classes, for an instructor to be involved enough to understand group dynamics across many different groups
- Strategies such as using a group contract can help to encourage students to work in an equitable way
- A group contract on its own can be difficult to enforce
- Asking students to evaluate each other openly often results in unrealistic assessments (fear of reprisal for poor assessments, not wanting to hurt feelings, etc.)
PEAR BASICS

A general overview of the system and process
PEAR Basics

- What is PEAR?
  - **PEAR** = Peer Evaluation, Assessment, and Review
  - Facilitates both peer review and group assessment
  - Online application that integrates with CourseLink
  - Created in 2010 at U of G and developed over the years since to meet the needs of U of G faculty
PEAR BASICS

• Who is using PEAR?
  – Exclusive to U of Guelph & U of Waterloo (without LMS integration)
  – With over a decade of proven success, it has become U of G’s secret to efficient & effective peer review

• In the 2022-23 academic year, there were 380 PEAR projects across 158 courses and included ~15.8K distinct students

• If teaching a 3rd or 4th year course, there is a good chance your students will have already used PEAR
PEAR BASICS

PEAR Access

- Pear has two separate login pages:
  - PEAR Admin (instructors, TAs, and support staff)
    - https://peartool.opened.uoguelph.ca/admin/
  - PEAR User (students)
    - https://peartool.opened.uoguelph.ca/user/

Access Tips:

- PEAR uses central login for access, but it is not SSO
- You will need to link to PEAR from your CourseLink site, be sure you add the PEAR User (student) login page
- Add a bookmark for yourself to the PEAR Admin page
PEAR BASICS

Incorporating PEAR into your Course
PEAR’s core functions can be easily integrated into most courses

1. If students are submitting major assignments via Dropbox...
   - Consider adding a **Peer Review** for a draft earlier in the semester through PEAR to improve the final submission

2. If you have group work occurring in the class in any fashion...
   - Consider adding a **Group Assessment** through PEAR to increase accountability among group members

3. If you have a group project, presentation, or performance...
   - Consider using a **Distribution of Group Effort** through PEAR to help provide unique grades to group members
PEAR PROJECTS

What are they? How do they integrate with CourseLink?
**WHAT IS A PEAR PROJECT?**

- A PEAR Project is essentially a container (like a folder)
- Each project is limited to a **single** set of PEAR stages (Submission, Review, Group Assessment, etc.)
- Multiple projects can be associated with a single course (e.g., Week 1 Assignment, Week 2 Assignment)
- Projects are organized by participants and timeline
- Projects connected to CourseLink course sites, allow:
  - Import of users & groups from CourseLink to PEAR
  - Export of PEAR scores to grade items in CourseLink
- Projects can also be copied as a starting point for other assignments in the course or for use in future
DEMO – PEAR PROJECT

- Create a project linked to a CourseLink course site
- Import a class list
- Import groups
PEAR Stages
PEAR STAGES

- Stages divide PEAR projects into individual actions required by the participants
- Identifies who will participate
- Sets timelines for the required actions
- 5 stage types that can be enabled/disabled in a project
  - Submission
  - Review of Submission
  - Evaluation of Review
  - Group Assessment
  - Distribution of Group Effort
PEAR STAGES - SUBMISSION

- Submissions are completed by “groups” of students
  - Individual submissions are groups of 1 student each
- Allows for up to 2 rounds of submissions (first & final)
- Requires students to submit 1 or more files
  - File type requirements are set by instructors
  - Files can be shared or hidden from reviewers
  - File are uniquely renamed on upload
PEAR STAGES – REVIEW OF SUBMISSION

• Can be completed by *self*, peers or instructors
• Anonymity can be set for both the reviewer and / or submitter
• Reviews can be distributed to any number or set of participants and distributed by topics / categories
• To complete a review requires participants to
  – fill out a grading form
  – submitting 1 or more files
• An average of all reviews can be provided as a grade
PEAR STAGES — EVALUATION OF REVIEWS

• Allows for feedback on review by either the original submitter(s) or an instructor
• If the review was of a group submission, an evaluation can only be completed by one of the group members
• Anonymity cares forward from the review
• To complete an evaluation participants must fill out a grading form
  – File submission is not an option
• An average of all evaluations can be provided as a grade
PEAR STAGES - GROUP ASSESSMENT

- Allows participants to assess their group members and optionality themselves
- Stand alone stage, does require a submission
- To complete participants must fill out a grading form
  - File submission is not an option
- The grading form is completed for each group member until each group member has been assessed
PEAR STAGES - DISTRIBUTION OF GROUP EFFORT

- Allows each team member to distribute a pool of points among group members, indicating each member's effort or contribution during an activity
- The pool of points is dependent on the number of active team members
- All points must be spent and cannot be exceeded
- An average of the distribution is calculated and can be used as a factor to be applied to the group
DEMO – PEAR STAGES

• Review a PEAR project and its stages
• View the details of key stages
PEAR GRADING FORMS

What is a PEAR Grading Form?

• Simplified rubrics, but not presented in a table/grid rubric format
• Created independent of a project allowing them to be used/re-used in any project you create
• Can be copied and edited to provide a starting point or to build upon for future assessments
• Can be used for qualitative feedback or quantitative scores, or a combination of both
  - Only quantitative grading forms can be exported back to CourseLink
PEAR GRADING FORMS

Grading forms provide the following criteria type options:

• **Group Header**
  – Organize/divide your criteria (Grammar, Content, etc.)

• **Comment**
  – Create a question or statement that requires a text answer
  – Not scored, but can be paired with a numeric criterion

• **Numeric**
  – A question or statement that requires a numeric answer
  – Answer is selected from a list of options (not entered manually)
  – You provide the score option range (e.g., 0-10) and set the increment (by 0.5 points, 1 point, 2 points, etc.)
  – Produces a score that is added to the total for the grading form

• **Select One From List**
  – Requires an answer selected from a provided list
  – You create the list options (like multiple choice or Likert scale)
  – Not scored, even if the list items include numbers
DEMO – CREATE A PEAR GRADING FORM

• Creating a new grading form
• Add each of the different criteria options
• Copying an existing grading form
PARTICIPATING IN PEAR PROJECTS

Getting the student’s perspective
PARTICIPATING IN PEAR PROJECTS

- Student have their own separate login
- Projects from all Courses are aggregated
- Only active projects are available
- Any required or completed actions can be accessed
DEMO – PARTICIPATE AS A STUDENT

- Login as a student
- View a project, and complete activities
- View and complete a review
PEAR SUPPORT CONTACTS

Getting started with your first project or looking to overhaul an existing assignment to include online peer review?

• Contact the ITS team for support:
  – Email: instttech@uoguelph.ca

Have a how-to question about a project you’re working on? Need timely assistance? Do your students need support?

• Contact CourseLink Support
  – Email: courseslink@uoguelph.ca
  – Phone: ex. 56939 or 1-866-275-1478
PEAR SUPPORT RESOURCES

PEAR Project Checklist to help verify that you have everything set up:
https://courselink.uoguelph.ca/shared/Support/PEAR/PEAR Checklist.docx

Recording of this and previous workshops available on the OpenEd Instructor Training page
https://opened.uoguelph.ca/instructor-resources/instructor-training