TAKE A BITE OUT OF PEER REVIEW WITH PEAR

Exploring Peer Review with U of G’s Peer Evaluation, Assessment, and Review tool - PEAR

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AGENDA

- Benefits of Peer Review
- PEAR
  - The Basics
  - Projects
  - Stages
  - Grading Forms
- Where to get PEAR support?
- Demo: Setting up a basic PEAR project
- Brief Q&A (time permitting, not recorded)
Peer Evaluation

Pedagogy, benefits, research
**Pedagogy of Peer Review**

- When evaluated by the submitter:
  - Reflection, critical thinking
  - When evaluated by the instructor:
  - Reinforcement/improvement of understanding

- Build research and writing skills
- Added motivation of knowing your peers will see your work
- Reflect via self evaluation prior to submitting (if rubric 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

- Apply knowledge and feedback from reviews, evaluations received and performed

- Build research and writing skills
- Added motivation of knowing your peers will see your work
- Reflect via self evaluation prior to submitting (if rubric is made available)
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
Peer Review: 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:
THE BASICS OF PEAR

U of G’s secret to efficient & effective peer review
PEAR: THE BASICS

• What is PEAR?
  – PEAR = Pear Evaluation, Assessment, and Review
  – Online application that integrates with CourseLink
  – Created in 2010 and developed over the years since to meet the needs of U of G faculty
  – Exclusive to U of G (& UWaterloo without LMS integration)
  – In 2020, PEAR produced 668 projects across 410 courses, with over 70,000 participants
PEAR: THE BASICS

What can PEAR do?

- PEAR has 5 basic functions (or stage types)
  - Submissions (of files by individuals or groups)
  - Reviews (of submissions by peers/instructor)
  - Evaluations (of reviews by instructor/submitter)
  - Group Assessments
  - Group Distribution of Effort

- Only one of each stage type can be added to a single project, however multiple projects can be created for a single course if required

- Reviews, Evaluations, and Group Assessments typically rely on PEAR Grading Forms for feedback/scoring
THE PEER REVIEW PROCESS IN PEAR

- Students/groups create a draft based on the assignment provided and submit
- Students use the feedback received and insights gained from reviewing others to improve their assignment
- Students review their peers' drafts (anonymous option)
- Students receive reviews of their own submission (anonymous option)
- Students receive an evaluation of the reviews they performed
- Evaluation can be by the instructor/TA or the submitter
PEAR PROJECTS
PEAR PROJECTS

What is a PEAR project?
• A PEAR Project is a container for the stages (submission, review, evaluation, etc.)
• A project is connected to your CourseLink course site
• You can import users and groups from CourseLink
• You can export grades from stages (with scored grading forms) to CourseLink
• Your initial project set up determines:
  – The linked CourseLink course site
  – The name of the PEAR project (Peer Review Assignment 1)
  – What stage types will be used
  – The end date for the project (when students lose access)
• Projects can also be copied as a starting point for other assignments or use in future courses
PEAR PROJECTS

PEAR PROJECT
CODE*1000 (01) F21
Peer Review Assignment 1

Available to:
You (creator)
Additional Instructors
Teaching Assistants
Students
Groups

Stages Used
Submission
Peer Review
Instructor Evaluation

Project End Date: December 20, 2021
PEAR PROJECTS

Peer Review Assignment 1
Stages
• Submission
• Peer Review
• Evaluation of Review

Peer Review Assignment 2
Stages
• Submission
• Peer Review
• Evaluation of Review

Group Assessment
Stages
• Group Assessment

PEAR ➔ CourseLink
Classlist (users)
Groups (optional)

PEAR ← CourseLink
Grades
PEAR'S STAGE TYPES

Submission, Review, and Evaluation
**PEAR: Stages**

**Submission Stage**
- Required for projects with review stages
- At least 1 file submission is required
  - Reviewing presentations or performances will require a file be submitted (slide deck, outline, summary, etc.)
- Only accessible by project participants with the student role
- Submissions are always made by groups
  - *Groups of 1 are used for individual submissions*
- Up to 2 unique submission stages in a single project
  - *Submission* (Initial/Draft)
    - Can be reviewed by students/instructor
  - *Final Submission*
    - Can **ONLY** be reviewed by the instructor
    - Often done via Dropbox in CourseLink instead of PEAR
PEAR: THE STAGES

• Submission Stage
  – Like setting up a Dropbox folder on CourseLink
    • Add **Instructions** (optional)
    • Set a **Start Accepting** date
    • Set a **Submission Due** date
    • Set an **Accept Until** date
    • Set the **Allow Re-submissions** (until due date) option
    • Set the **Confirm with Email** option
    • Set the number of **Required Files** (up to 4), file types you are requiring for those files (pdf, docx, pptx, etc.), and which of those files should be available to reviewers
PEAR – BUILDING A PROJECT > SUBMISSIONS

- Initial Submission by Students (Required)
- Instructor Reviews of Submission (Optional)
- Instructor Evaluation of Reviews (Optional)
- Final Submission by Students (Optional)
- Peer Reviews of Submission (Required*)
- Student Evaluation of Reviews Received (Optional)

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**PEAR: THE STAGES**

**Review of Submission Stage (Peer Review)**
- Requires a submission stage
- The initial (draft) submission stage is typically associated with a peer review stage
- An optional instructor review can be performed on the same submission
- Submissions being reviewed can be set to anonymous
- Reviews being performed can be set to anonymous
- Reviews are typically performed via a selected PEAR grading form, which (if scored) can be exported to a grade item in your CourseLink site
  - Reviews can also be submitted as files, however no score can be associated and exported without a scored PEAR grading form
PEAR: THE STAGES

Review of Submission Stage (Peer Review)

• You choose how many reviews are required by each reviewer
  – Example: If reviewers are assigned 2 reviews each and there are 3 reviewers and 3 submissions, then each reviewer will be assigned 2 different submissions to review
    • Owen reviews Carolyn and Claire
    • Carolyn reviews Owen and Claire
    • Claire reviews Carolyn and Owen

• PEAR distributes review assignments for submissions as evenly as possible

• No student/group is assigned their own submission to review

• Some submissions may receive more reviews than others, but all students will perform the number of reviews you set for the stage
PEAR: THE STAGES

PEAR Review Assignments

PEAR’s review assignments are manually triggered. The instructor initiates the review assignments once the submission stage is closed & before the review stage opens.

Tip: Add a reminder in your Outlook calendar!
*Required for peer review. You could use only the instructor review, though that would typically be better suited for a CourseLink Dropbox folder.
PEAR: The Stages

Evaluation of Review Stage

• Requires a review stage
• Unlike reviews, there is no need to assign evaluations
• There are two types of evaluation stages:
  – Reviews evaluated by Instructor
    • Student reviews of their peers’ submissions are evaluated by the instructor(s)/TA(s)
    • Any instructor or TA in the project can evaluate any completed review
  – Reviews evaluated by Submitter
    • Allows a student to evaluate the peer reviews they received for their submission
PEAR: THE STAGES

• Evaluation of Review Stage
  – Evaluations of reviews are typically made using a PEAR grading form, which (if scored) can be exported to a grade item in your CourseLink site
  – For evaluations performed by the instructor, 1 evaluation is required for each review performed by students
    • This can result in a lot of work in larger courses (300 students doing 3 reviews each = 900 evaluations)
    • This work can be shared with TAs or additional instructors, though coordination outside of PEAR is required
    • Keeping the evaluation feedback simple can speed up the process, while still providing guidance and accountability
PEAR – BUILDING A PROJECT > EVALUATIONS

1. Initial Submission by Students (Required)
2. Instructor Reviews of Submission (Optional)
3. Instructor Evaluation of Reviews (Optional)
4. Peer Reviews of Submission (Required*)
5. Student Evaluation of Reviews Received (Optional)
6. Final Submission by Students (Optional)

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PEAR GRADING FORMS

Used for reviews and evaluations
PEAR: Grading Forms

- PEAR Grading Forms
  - Grading forms are like simplified rubrics, but not presented in a table rubric format
  - Grading forms are created outside of a project
    - Can be reused in any project you create
      - This could be another project for the same course, a different course, a future course, etc.
  - Grading forms can be copied and altered to provide a starting point or to build upon for later assignments
  - Grading forms can be used for purely qualitative feedback or purely quantitative scores, or a combination of both
PEAR: GRADING FORMS

Grading forms provide the following criteria type options:

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

- **Comment**
  - Prompt a question that requires a text answer
  - Purely qualitative (not scored)

- **Numeric**
  - Requires a numeric answer
  - You provide the score option range (i.e. 0-10) and set the increment (by 1 point, 2 points, etc.)
  - Purely quantitative (produces a score)

- **Select One From List**
  - Requires an answer selected from a provided list
  - You create the list options (similar to multiple choice)
  - Qualitative (not scored)
PEAR: GETTING SUPPORT

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

- Contact the ITS team for support:
  - Email: insttech@uoguelph.ca
  - Register for a Drop-in session:
    - Today 2-4pm and July 20th 2-4pm

Have a question about a project that’s running, need timely assistance, or do your students need technical support?

- Contact CourseLink Support
  - Email: courselink@uoguelph.ca
  - Phone: ex. 56939 or 1-866-275-1478
Let’s set up a basic PEAR project
PEAR – OUR DEMO PROJECT

- Individual submissions from students
- Each student performs 3 reviews (scores to CourseLink)
- Instructor evaluates each review (scores to CourseLink)
ACCESSING PEAR AND ADDING A LINK TO YOUR COURSELINK NAVIGATION BAR

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/

- PEAR uses central login for access, but it is not SSO (you will need to sign in, even if you are logged into CourseLink)

- When adding a custom link for PEAR to your CourseLink site, be sure you add the student link and create a separate bookmark for yourself to the admin link
**DEMO TIME**

Let’s get our simple project set up (it really doesn’t take very long)