

Lesson 1.08 — Finding & Fixing Errors

Overview

Objectives — *Students will be able to...*

- **Find and fix** errors and style in their returned homework assignments.
- **Correct** their code

Assessments — *Students will...*

- **Re-submit** all homework assignments with corrected answers.

Homework — *Students will...*

- **Study** for the test by:
 - **Reviewing** all the blue pages at the end of Chapter 1
 - **Re-reading** sections as needed
- **Submit** 5 questions for review in class tomorrow using electronic survey

Materials & Prep

- **Any student homework assignments** that you have not yet returned
- **Student self-help system** (such as C2B4 or student pairing)
- **Electronic survey** for student review requests

When you grade homework assignments, it will be most useful to these lessons if you only mark an answer incorrect or correct. ELL classrooms are the exception to this rule—students will be having a hard enough time just reading the material; you can speed along their processing by correcting one example, then having them look for similar errors with that example.

The homework tonight asks students to submit 5 questions for review. Create an **electronic survey** for students to complete with 6 text fields, one for name, and 5 for questions they have about Ch. 1 content. Set a time-deadline (*e.g.* 10pm) by which time students must have submitted 5 questions from Ch.1 that they would like to see reviewed in tomorrow's class. If students do not have questions, stipulate that they still have to submit something to receive credit, even if it is only questions they think other students may have.

Pacing Guide

Section	Total Time
Bell-work and attendance	5min
Introduction and homework distribution	5min
Lecture on style	10min
Student work	25min
Students trade work, check, and submit	10min

Procedure

Today we continue reinforcing concepts and applying the tools, procedures, and code that were introduced last week. Students will have the opportunity to correct any incorrect homework assignments. If students did not have time to finish the programming projects from yesterday, you may allow them time to work on those projects today.

This is a good day to loosen up the vibe in the classroom a bit. Try playing music softly in the background to encourage students to relax and focus on spotting errors. Try to avoid loud, rhythmic music. Reward your class for good grades/behavior by allowing them to select music from a pre-selected group of Pandora stations (or the like).

Bell-work and Attendance [5 minutes]

Introduction and Homework Distribution [5 minutes]

1. Return student homework packets, or have students place their returned homeworks in a pile on their desk.
2. Explain to students that they have the opportunity to get full credit on their homework grades by correcting them now, in class. Ask students for suggestions/ideas on how to make sure they don't miss any errors. (By now students should be used to relying on their error checklist/algorithm.)

Lecture on style [10 minutes]

Add the caveat that they must correct their style to receive that credit. Explain that style is necessary to improve readability and that you lose points for having poor style. - Although it was already touched on previously, tell them that identifiers must be properly capitalized. - Commenting must be properly used throughout. - Lines must be no longer than 100 preferably 80 lines. - There should be no redundant code. - There are links to the full style guide we recommend on the slides.

Student Work [25 minutes]

Have students work individually to correct their homework grades. - Offer time checks for students so they stay on task. - If students have not finished their programming project from yesterday's class, allow them to do so today.

Students trade work, check, and turn in [10 minutes]

At the end of class, have students trade their homework assignments to evaluate each other's corrections before submission.

Accommodation and Differentiation

If you have students who are speeding through this lesson, you should encourage them to tackle programming project 5 & 7 in the text book.

If you were unable to finish grading student notebooks yesterday, finish them today while students are working. Return notebooks by the end of class so students may use them to study for the exam.

Forum discussion

Lesson 1.08 Finding and Fixing Errors (TEALS Discourse account required)