

TEACHER LESSON PLAN

Topic 1.1: Collaboration

LO: CRD-1.A, CRD-1.B, CRD-1.C | Skill: 1.C, 6.A | Scenario: 1A: The TideTrack App Team

Teacher Lesson Plan — Topic 1.1 (2 days)

Suggested pacing for two 45-minute periods. A block-schedule variant and differentiation notes follow the daily flow.

Day 1 — Why teams build better software (45 min)

Time	Activity	Materials
0-5	Bell Ringer — warm-up: recall a group project that went well and one that went badly; what made the difference?	Bell Ringer handout
5-20	Slides 1-5 — what a computing innovation is; how diverse perspectives strengthen a product and reduce bias; why teams talk to real users. Students complete Guided Notes Sections 1-2.	Slides; Guided Notes
20-35	Worksheet Part 1+2 — vocab match + a short bias-in-design analysis.	Worksheet
35-44	Whole-class debrief — share where a missing perspective could have hurt a product; tie back to avoiding bias.	Worksheet
44-45	Close — assign Worksheet completion + Guided Notes review as homework.	-

Day 2 — How teams actually work together (45 min)

Time	Activity	Materials
0-5	Recap — quick whip-around: name one online collaboration tool + one interpersonal skill.	-
5-13	Slides 6-10 — online collaboration tools; pair programming (driver and navigator); the four interpersonal skills. Students complete Guided Notes Section 3.	Slides; Guided Notes
13-23	Scenario — TideTrack — read in pairs; respond to 4 application questions.	Scenario
23-43	Collaboration Activity (hero) — structured pair programming: students run the driver/navigator protocol, swap roles, and use a consensus + conflict-resolution checklist.	Collab Activity
43-44	Exit Ticket — quick individual check.	Exit Ticket
44-45	Close — assign MCQ Practice + Mini-FRQ as homework (or use them as a Day 3 review).	MCQs, Mini-FRQ

Block-schedule variant (one 90-minute period)

Run Day 1 Slides 1-5 and the Worksheet in the first 40 minutes, take a 5-minute break, then run the Scenario and the full Collaboration Activity in the back half. Push the MCQ set and Mini-FRQ to homework. The pair-programming protocol benefits from the longer uninterrupted block — students can complete two full role swaps instead of one.

Differentiation

- **Extend:** have advanced pairs add a third "tester" rotation to the protocol and reflect on how a three-role rotation changes communication.
- **Support:** pre-highlight Guided Notes blanks with starter letters; give scaffolded sentence stems for the consensus and conflict-resolution steps.
- **Async/virtual:** the Worksheet, Exit Ticket, and MCQs work cleanly as async work. Pair programming can run remotely with a shared screen — assign one student to share and the other to navigate by voice, then swap.
- **Mixed readiness:** when pairing, put a stronger navigator with a less confident driver for round one, then flip the roles so the less confident student must drive.

Formative checkpoints

- **Day 1 Worksheet Part 2** — if students cannot name a missing perspective in the bias example, reteach the diverse-perspectives slide before Day 2.
- **Day 2 Collaboration Activity** — circulate and watch for one student dominating both roles; the reflection prompt surfaces this for grading.
- **Mini-FRQ + MCQ Set** — practice-tagged for targeted feedback. Use the answer keys to scope any reteach.