**Lesson 5: Usability Testing**

# 1) Key takeaways from the textbook

Usability testing focus. Evaluate a product by observing representative users completing predefined tasks under controlled conditions. Data typically includes observation notes/video/logs plus a brief post-test questionnaire.

Common performance measures. Success rate, time on task, error rate/type, help-seeking, and number of users experiencing a given problem.

Number of participants. For formative tests, 5–12 participants is a common range; very early checks can use 2–3 users.

Labs and equipment. Dedicated labs (or pop-up labs) enable controlled recording (audio/video/screen/keystrokes) and an observation room; remote and mobile setups are viable alternatives.

# 2) Chapter 8 highlights

Gather data that answers your design/evaluation questions. Methods include interviews, surveys, observation/contextual inquiry, diary studies, documentation/analytics. Triangulate methods; pilot instruments; plan sampling/recruitment; address ethics (consent, privacy).

# 3) Chapter 15.1–15.2 specifics (Usability testing in practice)

Plan → Run → Analyze → Report:

* Define goals & hypotheses; select representative tasks and success criteria.
* Recruit typical users; choose metrics & instruments (notes, audio, video, logs, eye-tracking as needed).
* Run pilot(s); standardize moderator script; manage consent and data security.
* Analyze performance & observations; rate severity; synthesize themes.
* Report clear findings with evidence and actionable recommendations.

Practical notes: use think‑aloud to reveal reasoning; include a brief post-test satisfaction measure; be careful generalizing from small samples and state context/limits.

# 4) Think‑Aloud protocols (Olmsted‑Hawala et al., 2010)

Compared four conditions on a federal data website: Traditional TA, Speech‑communication TA (minimal back‑channel prompts), Coaching TA (active guidance), and a silent control.

* Accuracy: Coaching > Traditional/Speech/Control.
* Satisfaction: Coaching > Traditional/Speech.
* Efficiency (time‑on‑task): No significant differences.

Implication: Coaching can inflate success/satisfaction; avoid if you want unaided behavior. Prefer Traditional or Speech‑communication TA for less moderator interference.

# 5) Instant Data Analysis (Kjeldskov et al., 2004) – “evaluation in a day”

Process: Run 4–6 think‑aloud sessions, then same‑day structured team debrief to produce a prioritized problem list with evidence.

* Captured a large share of critical/serious issues in a fraction of analysis time compared to full video transcription.
* Trade‑off: less traceability/detail; works best when observers and redesigners overlap.

# 6) From the slides (UXU 5 – Usability Testing)

* User‑centered approach: early focus on users/tasks; empirical measurement; iterative design.
* Think‑aloud: four modes (Traditional, Speech‑communication, Coaching, Silence).
* Recording options: notes/photos, audio, video.
* Class exercises practiced realistic task scenarios and moderation.

# 7) Quick checklist for your own usability test

* Goal & scope agreed (features, users, success criteria).
* 5–8 representative tasks; success/fail criteria; critical paths.
* Recruit 5–12 typical users; consent & privacy addressed.
* Script: intro, warm‑up, TA instructions (choose protocol), debrief.
* Instruments: recording setup, task sheets, metrics sheet, post‑test survey.
* Pilot once; adjust timings/prompts.
* Run consistently; minimize moderator bias.
* Debrief & analyze; rate severity; link evidence; recommend fixes.
* Report succinctly with screenshots and a prioritized backlog.

# 8) Study prompts

* When would you choose lab vs. field vs. remote testing?
* How would TA protocol choice affect what you can conclude?
* Where would IDA be appropriate—and when would you avoid it?
* Which metrics best capture success for your project?