

**QUESCREN OL Design Guidelines: Findings from meta-analyses and other professional literature:  
*OL can be effective across a wide range of content and learners. But that means ...***

- **Instructional clarity and intentionality:** It is essential for educators to design lessons and use online resources with *defined learner outcomes*.
- **Collaboration\***: OL is more effective when students are required to *actively engage*, as opposed to working independently or passively viewing material. Collaboration and active engagement distinguish well-designed OL from classic distance education, where students typically worked in isolation.
- **Meaningful activities\***: Collaboration requires the inclusion of meaningful activities. Video capture of lectures can range from brilliant to boring. Get students active for some components of a course, using synchronous (e.g., breakout rooms in Zoom in a live session) or asynchronous methods (e.g., group assignments over the following week, ideally reported back to the live session for whole group discussion)
  - \*These two goals becoming increasingly challenging as class size increases. This is where “emergency remote teaching” can break down – to be discussed in Q&A.
- **Online quizzes** are more effective than other OL experiences, such as assigning homework, so use both.
- **More media?** More media doesn’t necessarily help – should only be used for specific instructional purposes. For example, YouTube vignettes of content/applications can serve as core or supplementary material.
- **Instructional tasks** that stimulate *active learning and deep student thinking* should be used whenever possible. As noted in meaningful activities, scenarios requiring problem solving, decision making, and critical thinking work best. Our meta-analyses show that “cognitive tools” (e.g., simulations) maximize technology’s impact. Presentation software (e.g., PowerPoint) shows no meaningful positive impact.
- **Feedback, Feedback, Feedback.** OL should allow teachers and peers to provide student feedback, correcting misunderstandings, clarifying expectations, and directing additional learner strategies. Instructor monitoring is critical, but as noted earlier, student/student feedback yields significant dividends (contrary to many popular beliefs).
- **Social presence.** It is important for instructors to maintain social presence in the learning process, providing feedback, communicating regularly, modelling participation, and creating an inviting tone.
- **Self-regulation and Metacognition.** OL seems to be optimized when self-regulation (planning, monitoring, evaluating) is central to the learning experience. Meta-cognition is thinking about one’s thinking, a key component to effective learning.
- **Accommodate.** Accommodating individual student situations does NOT mean compromising on standards. Where possible, as we routinely do with students with special needs - give them more time, and perhaps more support.
- **Bottom line:** Emergency remote OL teaching can result in a high level of student success, which is our primary objective. But the simple truth is: it is more work, especially initially, for instructors.

Primary reference: Connecticut Center for School Change (2020). *Evidence-based practices in online and distance learning: A research review for educators during the COVID-19 pandemic*. Hartford, CT.