A core principle of learning is that shorter, more-frequent episodes of practice lead to better mastery than longer, less-frequent episodes. Acquiring skills through more-frequent practice is considered distributed learning, whereas acquiring skills through less-frequent practice is considered massed learning. Distributed learning almost always trumps massed learning.

Psychological science, as well as personal observation, identifies differences among us in our optimal time of the day. Our cognitive processes peak at our optimal times and flounder at our non-optimal times.

Empirical research documents that every cognitive process – memory, attention, language, even intelligence testing, and attitude change – operates at a peak during our optimal time of the day. By puberty, students’ optimal time of the day has already shifted beyond the traditional school day to evening. Even if students try to get a good night of sleep, their biology dictates against morning hours bringing their optimal performance.

Distributed learning’s advantage over massed learning has been demonstrated for students of all ages, acquiring mastery in a wide range of courses. “Harness the pedagogical power of distributed learning” has been one of the most common battle cries for improving higher education.

Psychological science documents the value of deeper levels of processing. Information that is processed to a deeper level is remembered better; more deeply processed information is also more tightly connected to previously learned and subsequently learned concepts.

Internet-based learning can deepen levels of processing for one simple reason: To allay concerns about cheating, assignments and exams must assess deeper levels of processing. Indeed, if the answer to a question, or the solution to a problem, is just a click away – be the assignment Internet-based or in-person – we should probably not be assessing such superficial knowledge in our higher education courses.

A few years ago, a group of psychology students refused to spend $168 to purchase the course textbook. Instead, they gathered all the information for their course using only the Internet. How did these students fare? Top of the class. Surprised?

The accuracy of information on the Internet, although commonly underestimated, is one factor that led to the students’ success.

The other factor was that the process of gathering information from the Internet evokes more critical thinking than simply reading a textbook. Active learning – winnowing and sifting intellectual wheat from chaff – facilitates learning.

Across one term of my courses, each student writes approximately 75 posts, with each post comprising two to three paragraphs. In essence, each student writes the equivalent of a five-page double-spaced paper each of 15 weeks. Who reads the equivalent of 50 students’ five-page papers each week? I read a sample of them, but the primary readers are the other students in the class.