

A Test of the Intensive Course Format vs. the Semester-Length Format

Higher education analysts and instructors have discussed the efficacy of the intensive course format (similar to a “compressed calendar” format). A recent study may shed some light on the topic. Its two salient findings are as follows:

1. “...intensive courses seem to be better instructional formats than semester-length courses of equal instruction time, regardless of student characteristics...This superiority persisted when the examination was shifted exclusively to higher order learning items, which are indicative of deep processing and procedural learning as opposed to cursory declarative knowledge...” [pp.864-865]
2. “This study’s lack of support for the hypothesis that intensive courses would remain superior to semester-length courses in long-term comparisons [3 years] suggests that no matter how good the initial instruction, knowledge and skill that are not used will be lost. This finding runs counter to the hypothesis that intensive courses, because of their superiority in cultivating higher-order learning, would produce deeper, longer-lasting memory and recall of information than semester-length courses. The long-term retention in both formats fell to about the same level...[p.865]

To help evaluate these findings, the study gives the following details about its data and methods:

3. “One matched pair of intensive and semester-length, graduate-level educational psychology courses was compared at a mid-Atlantic state university. The summer 1999 and fall 1999 sections of a course titled ‘Psychological Foundations of Learning’ were used...The summer 1999 section was an intensive-format course meeting 3 hours a day, 5 days a week for a total of 45 hours of instruction. The fall 1999 version was a semester-length course meeting 3 hours a day, 1 day a week for 15 weeks, for a total of 45 hours of instruction. The same instructor taught both sections of the class using the same pedagogical approaches, grading systems, and IGOs...The students in both sections were given identical pretests and posttests of content to measure differences in instructional effectiveness. The tests were composed of 25 multiple-choice questions designed in conference with the instructor to tap the specific learning outcomes of the class...A survey was also administered on the first day of the class (concurrent with the pretest). The survey included demographic questions and the *Need for Cognition* scale, which is a published instrument with high reliability and proven value for measuring affinity for learning...Using ANCOVA [analysis of covariance] to control for the variance of unequal prior knowledge measured by the pretest provided a better measure of differences in instructional effectiveness reflected in the posttest...[pp. 860-1]

The study did not use grades in its comparison, assuming that the use of grades “allows the grading philosophy of the instructor to affect the outcome of the comparison in a way that cannot be measured or predicted. The literature shows that past studies have recognized the need to eliminate the variance introduced by using instructor-influenced course grades to make a comparison...” [p.860]

The study’s author is Marc Seamon, a PhD fellow and instructor in College of Communication at Penn State University. He published his study as an article (“Short- and Long-Term Differences in Instructional Effectiveness Between Intensive and Semester-Length Courses”) in *Teachers College Record*, Volume 106, Number 4, April 2004, pp. 852-874. The article includes 30 references and a brief literature review.

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[Abstract by Willard Hom, Director Research & Planning, System Office, California Community Colleges, 7/26/04]