



Adaptive System for Assigning Reliable Students' Letter Grades—A Computer Code

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ABSTRACT

The availability of automated evaluation methodologies that may reliably be used for determining students' scholastic performance through assigning letter grades are of utmost practical importance to educators, students, and do invariably have pivotal values to all stakeholders of the academic process. In particular, educators use letter grades as quantification metrics to monitor students' intellectual progress within a framework of clearly specified learning objectives of a course. To students grades may be used as predictive measures and motivating drives for success in a study field. However due to numerous objective and subjective variables that may be accounted for in a methodological process of assigning students' grades, and since such a process is often tainted with personal philosophy and human psychology factors, it is essential that educators exercise extra care in maximizing positive account of all objective factors and minimizing negative ramifications of subjectively fuzzy factors. To this end, and in an attempt to make assigning students' grades more reliable for assessing true-level of mastering specified learning outcomes, this paper will: i) provide a literature review on previous works on the most common methods that have traditionally been in use for assigning students' grades, and a short account of the virtues and/or vices of such methods, and ii) present a user-friendly computer code that may be easily adapted for the purpose of assigning students' grades. This would relieve educators from the overwhelming concerns associated with mechanistic aspects of determining educational metrics, and it would allow them to have more time and focus to obtain reliable assessments of true-level of students' mastery of learning outcomes by accounting for all possible evaluation components.

KEYWORDS

Reliable Students' Grades; Computer Code; Assigning Reliable Letter Grades

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