This paper presents an exploratory study of the relationship between simulation game assurance of learning data, game performance outcomes, and business knowledge as measured by the Educational Testing Service (ETS) Major Field Test (MFT) in business. These measures are evaluated relative to their abilities to assess the achievement of learning goals in communication, technology, global perspectives, business knowledge, and ethics and social responsibility. The simulation purports to provide assurance of learning data in the following areas: Leadership Skills, Operations Management, Human Resources Management, Collaboration & Teamwork, Financial Management, Strategic Planning & Analysis, Analytical Skills, Marketing Management, and Corporate Social Responsibility. Further, the simulation claims to assess a student’s ability to interpret, analyze, evaluate, and identify data and strategic actions. The authors analyze a business school’s program learning goal assessment findings to determine whether the learning assurance data from the simulation game is a reliable indicator of the achievement of learning goal program outcomes relative to the MFT results.