

Employment of Cloud Teaching to Help Students Develop Technical Report Writing Competency

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BACKGROUND

The importance of international English has only grown with the rise of global supply chains requiring engineers, technicians, designers, and even marketing and finance specialist to cooperate closely across national boundaries. Students, simultaneously, have grown accustomed to their mobile technology tools, and fast access to cloud solutions. These two trends are in conflict for the engineering educator who is working out of a traditional classroom setting. Not only are teachers increasingly overburdened, leaving little time for the intensive work needed to increase student English report writing skill, but students themselves have little patience for assignments that include using large (out of date) devices and approaches for creating, printing, and turning in assignments.

The needs and benefits are quite clear for improved English technical report writing. Even with tools like Google translate, a simple test quickly shows the ability to translate even the most basic ideas from Chinese to English is weak, not to mention technical topics. In the engineering sector, one of the major communication forms is the technical report writing in English, and this is unlikely to change to be automated in the coming decades. A workforce with good technical report writing skill is crucial for a company to employ effective global logistics and expand overseas. Therefore, cultivating students' technical report writing competency is important.

TARGET AUDIENCE

Instructors/Teachers who feel their students' international English writing skill needs improvement, but are too overwhelmed to even think about how to address the issue. If you are looking for a way to DO MORE FASTER, in the domain of technical writing, this session is for you. Today's students live in a mobile technology environment, and they have little patience for teaching/learning systems that do not fit into that ecosphere.

METHOD

This workshop will focus on two major methods. The first method is a practical hand on testing of cloud-based solution from both the teacher and the student perspective. Mobile devices, iPads, smartphones, and notebooks/PCs/Macs can be used for a hand on experience. The second method is a simultaneously delivery of a narrative, showing attendees the very real benefits experienced in the field by the authors. The topics to be covered include how such systems affect the many aspects a teacher must pay attention to in today's academic setting, including: efficiency and effectiveness of the system in student learning and teacher effort, impact on student reviews of teacher, school administrative reactions, research/promotion opportunities, etc.

The specific cloud software covered automatically saves and submits student work to an instructor, avoiding uploads, emails, or printouts. Frequently used teacher feedback, comments, and notes can be stored in a cloud database for each teacher to easily insert into student work. This approach reduces grading time and effort as well as allowing students a more modern approach to learning, including smartphones and tablets. Instructor feedback is fully customizable.

INTENDED LEARNING OUTCOMES

This workshop will show the power of instruction through the cloud by allowing participants to take the roles of both instructor and student. Automated error correction will be introduced as well as practical methods for combining effective pedagogy with cloud-based assignments.

Through cloud teaching, both synchronous and nonsynchronous instructions can be used to increase learners' English technical report writing skills. Cloud teaching can ensure the students to be equipped with the skills needed by the workplace and enable them to be more employable, resulting in quality improvement of engineering education

KEYWORDS

Cloud Teaching, Collaborative Learning, Peer Review, Process Writing, Technical Report

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