Quality control in the online classrooms - Is zero plagiarism possible with digital students?

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Abstract

Over the past few years, universities, colleges, and schools have made a substantial investment into the new learning online management systems aimed at improving the quality of courses with technology innovation tailored toward today's digital student. Integrated analytics are gaining more traction to differentiated online instruction and optimize the learning experience for students. There are trends evolving in online learning education with different models for institutions to meet the various student profiles (e.g. traditional versus non-traditional students). What makes each learning model approach unique? What innovative technology features standout? Which institutions are considered to be best-in-class for innovation, cost, access, and quality?

The purpose of this paper is to provide a framework for quality control in online courses for faculty to act as agents for quality assurance in the digital classroom environment; which includes: process steps for faculty to inspect written assignment for a zero plagiarism tolerance, student surveys, online course evaluations, faculty surveys, faculty peer reviews, and a faculty course clearance process. Examples of innovative institutions with best-in-class performance in online learning is used as supportive evidence throughout the paper.

The value of this paper lies in its practical, yet comprehensive treatment of the subject-matter. There is a responsibility gap between faculty, administrators, and the various institutions in the implementation process of quality control in online courses, university policies, and the actual process for those responsible for executing the oversight in the digital classroom. Academic leaders and faculty should consider the best-in-class performance of institutions that are implementing action-oriented quality control measures and assessments by faculty or online quality control managers. In lieu the societal influence of technology that has provided readily accessible information from the internet, educators must rethink ways to measure student's performance in the digital classroom to assure academic integrity, and ultimately assessing future calls for education reform with digital students.

1. Introduction

The future of education is centered on the technological changes that have influenced the world with the use of the Internet. As in many organizations, adopting new technologies requires training and mastery of the new tool(s) used in the workplace. Academia has been either slow to adapt to new media or has imposed the same closed system to its digital delivery via course management systems [1]. Studies have demonstrated that having access to the Internet does not mean that it is being effectively integrated into the curriculum [2], [3], [4], [5]. Over the past few years, universities, colleges, and schools have made a substantial investment into the new learning online management systems aimed at improving the quality of courses with technology innovation tailored toward today's digital student. Integrated analytics are gaining more traction to differentiated online instruction and optimize the learning experience for students. An example of technology innovation is the use of Cloud technology to facilitate greater student engagement, and collaboration when effective teaching styles are integrated by the instructor. Teachers must constantly and consistently search for technology that will assist them in teaching the knowledge or skill represented by the learning outcomes [6]. There is a qualitative shift in learning approaches that is occurring with digital students that expect a rich, interactive, and even "playful" learning environments [7]. Gaytan [8] found that business education teachers, having received technology training, were able to understand that there is a difference between merely using and effectively integrating technology into teaching practices. Hence, there was a gap with effectively integrating the technology and instructional practices with the use of the technology.

2. A Brief Literature Review

There is a dearth of education research and instructor experience that integrates various social media tools in the classroom with pedagogy of plagiarism in the assessment process. Teaching effectively with the Internet has proven to be a challenging task which requires content knowledge, pedagogical content knowledge, and technical knowledge [9], [10], [11]. The internet has a wealth of free plagiarism detection tools and many commercially available tools that are integrated into learning management systems (LMS), but tools are just tools unless used in a systematic way with an assessment process. Any tool used to enhance learning outcomes and processes must be assessed for authenticity and relevance to particular context, and applied in ways that are authentic to that context [1]. Wallace [12] cited, "being a competent technology user is different from knowing how to effectively teach with technology". Earlier work from Gioia and Brass [13] on the T.V. generation found the technical and social changes in the wider environment can have major implications for teaching and learning pedagogies. Equally, today's mobile multi-media generation have access to information and experts in the field that poses a threat to the traditional teacher-centered pedagogy as the source for information in the learning process.

As the social-cultural aspect of digital students change the future of education, there are trends evolving with online learning education institutions that are using different models to meet the various needs of their student profiles, such as; traditional versus non-traditional students. In lieu of the societal influence in using technology that provides readily accessible information from the internet, educators must rethink ways to measure student's performance in the digital classroom. Equally, educators will need to assure academic integrity, and ultimately transform an antiquated education model with digital students.

This paper proposes a framework for quality control measures in online courses related to the pedagogy of plagiarism. The author articulates a process map to be considered as a comprehensive continuous process improvement method that balances assignments with the levels of inspection to lead toward a zero tolerance of plagiarism.

3. The framework for quality control

The framework for online quality control (see figure 1.0) proposes that faculty act as agents for quality assurance in the digital classroom environment; which includes: process steps for faculty to inspect written assignment for a zero plagiarism tolerance, student surveys, online course evaluations, faculty surveys, faculty peer reviews, and a faculty course clearance process. There is a responsibility gap between faculty, administrators, and the various institutions in the implementation process of quality control measures in online courses, university policies, and the actual process for those responsible for executing the oversight in the digital classroom. Proserpio and Gioia [7] conceptual framework proposed the alignment between learning and teaching styles with the integration of new technologies into the classroom. The proposed framework presented in this paper extends the learning and teaching style domain with a comprehensive strategy to include quality control measures in the digital classroom. The box labeled 'assignments' in figure 1.0 describes the attributes for a robust integration of assessment activities that utilized various modality of compliances within a learning management systems (LMS), such as; Moodle™, Edmodo™, Blackboard™, Instructure Canvas™, ConnectEDU™, Desire2Learn™, etc. The activities must be meaningful exercises that allow students to engage in critical and higher-order thinking so the students are using, not just finding, information [6]. Aspects included in the evaluation include: design, aesthetics, accessibility, navigation, appropriateness, purpose, scope, depth, sequence, accuracy, and meaningfulness of resources [6]. For example, a student could produce a video to describe the key concepts for the week and apply some of the concepts with examples. The instructor would assess the quality of the video to determine the level of achievements (see table 1.0). As a byproduct of a video discussion by the student would be the level of authenticity and knowledge of subject area with a low probability of plagiarism. The effort required to implement effective high-tech learning experiences is not trivial, but it is also not beyond the learnable skill set of most instructors [8].

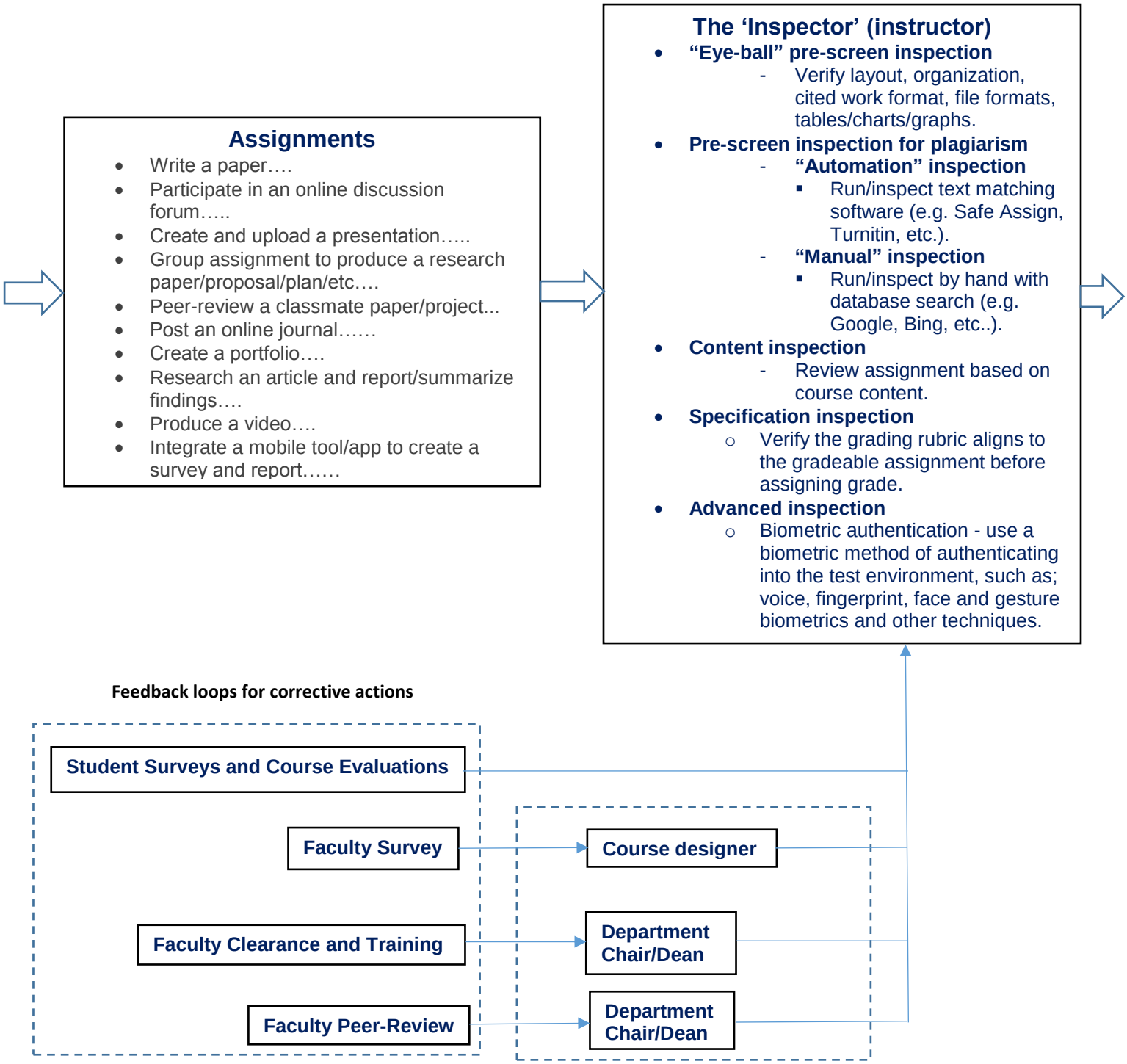

Figure 1.0 Framework for quality control in online courses

The box labeled 'inspector' in figure 1.0 describes the attributes for the instructor to act as the sole catalyst for implementation of a quality control and assurance practice that leads toward zero plagiarism in online classes. These inspection steps required by the instructor are labor intensive with the use of manual and automation procedures with the LMS. Teachers must constantly and consistently search for technology that will assist them in teaching the knowledge or skill represented by the learning outcomes [6]. Gaytan [8] found that business education teachers, having received technology training, were able to understand that there is a difference between merely using and effectively integrating technology into teaching practices. Hence, there was a gap with effectively integrating the technology and instructional practices with the use of the technology.

Criteria for assessment	Description
Quality (Assessing the creation of video quality)	Presenter had excellent eye contact to the viewer. Excellent pace of video; able to keep viewers attention and interest; introduced self and topic of material. Provided an excellent summary analysis as well as the ability to relate ideas to course material.
Critical Thinking (Assessing the demonstration of knowledge and comprehension of assigned reading(s) or other required sources related to the discussion)	Presenter created a video that clearly indicates that course material were understood and concepts incorporated with proper use of sources.
Communications (Assessing Use of terminology and Style of Communication)	Presenter used definitions/terminology to communicate the ideas/concepts to the viewer. Able to use the appropriate style, such as; persuasion, voice inflections, etc.

Table 1.0 Level of achievement with a video assignment

4. Conclusion

Academic institutions face the dilemma of ensuring the integrity of the learning processes along with faculty who are well-supported by their institution and who are ready to be agents of quality control. There is no substitute for positive, authentic, front-line experience with quality online education [14]. Educational institutions therefore need to recognize that addressing plagiarism requires a holistic and multi-stakeholder approach which aims to foster a scholarly community based on shared understandings and practices of academic integrity [15]. Teachers are called upon to relinquish singular claims to authority or power in the classroom. As a result, the role of the teacher becomes recast as one of —coach or —facilitator. Teachers must consider a wide variety of aspects when integrating the Internet into the learning environment of their classrooms [6]. Proserpio and Gioia [7] suggested an approach to teaching the virtual generation replies on the instructor creativity, but they fail to expand upon the "Google" anything or anyone anytime aspect of information obtained by students. As Wankel [1] found, students are less inclined to value an instructor's unique expertise if the internet can readily deliver the same content information. Research from [16] showed a common practice among students looking for information on the Internet, which they then copy and paste in its original form. This paper provided a framework for quality control in online courses for faculty to act as agents or digital inspectors that utilize self-motivation to assure originality of work by students. In addition, the framework in figure 1.0 identified a more advanced inspection step to utilize biometric authentication technologies tools that support the best practices of quality control in online classroom. In order to narrow the academic integrity gap between university policies and the quality control measures, instructors must lead and act as the agents of quality control for real change to occur in online education for zero plagiarism in this digital world.

5. Future Research

While much scientific research has been conducted about the integration of technology into the curriculum, very little exists related to understanding teaching subject matter in the classroom with the

Internet. The future of education will continue to integrate technology into the curriculum, but more research is needed to develop best practices on teaching the subject matter with the Internet (multi-media/social network platforms) as the instructors act as agents of quality control.

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