

**NORTHCENTRAL UNIVERSITY
ASSIGNMENT COVER SHEET**

Learner: **Steven Diaz**

THIS FORM MUST BE COMPLETELY FILLED IN

Please Follow These Procedures: If requested by your mentor, use an assignment cover sheet as the first page of the **word processor** file. Use "headers" to indicate your course code, assignment number, and your name on each page of the assignment/homework including this assignment cover sheet. .

Keep a Photocopy or Electronic Copy Of Your Assignments: You may need to re-submit assignments if your mentor has indicated that you may or must do so.

Academic Integrity: All work submitted in each course must be the Learner's own. This includes all assignments, exams, term papers, and other projects required by the faculty mentor. The knowing submission of another persons work represented as that of the Learner's without properly citing the source of the work will be considered plagiarism and will result in an unsatisfactory grade for the work submitted or for the entire course, and may result in academic dismissal.

LTM5007

Dr. Susanne Flannelly

Multimedia Production Management

**Assignment 8: Podcasting and
Vodcasting**

Dr. Flannelly,

Thank you for granting the incomplete grade. Unfortunately, I allowed once again my busy teaching schedule to interfere with my responsibility to complete the last 3 assignments of this course during the extended time. However, I am determined to complete the last two assignments during the last few days I have left from the 45-days extension granted by the incomplete grade policy. According to my calculations, I have until April 10th to submit my pending assignments. I will submit assignment #9 on Tuesday, April 7th and assignment #10 on Thursday, April 9th. Once again, thank you for your support.

Faculty Use Only

<Faculty comments here>

<Faculty Name>

<Grade Earned>

<Writing Score>

<Date Graded>

Podcasting and Vodcasting

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In a mathematics classroom where instruction is self-directed and the emphasis is on learning mathematics by doing, not by listening lectures, podcasting and/or vodcasting have an essential role in the learning environment. Based on the Emporium model suggested by the National Center for Academic Transformation (NCAT), the instructional model of my basic skills math courses consists in converting the classroom into a learning center, where students have access to online resources and on-demand assistance. Students depend on a web-based instructional software (i.e. ALEKS) to learn the course topics and to assess frequently their mastery levels of the course content. In the absence of class lectures, instructional time is spent on students actively engaged learning and doing mathematics, in which they choose those resources that will fit their learning style and help them master the course content. In other words, the responsibility to direct learning is on the learners' hands, not on the instructor, whose role is to facilitate the necessary conditions for learning to occur. The focus of the emporium model is to meet students' individual learning styles and needs instead of the *one-size fits all* focus of the traditional class lectures. Podcasting and vodcasting are key add-ons to the already available learning resources since it gives students more choices to select those resources that meet their needs and learning styles.

My views for teaching mathematics using traditional approaches changed once I started facilitating online mathematics courses. I realized the need to change my classroom practices from teacher-centered instructional strategies to student-centered strategies, as it is done in the online learning environment, to give students more control of how, when and what they learn. Giving students more control of the learning process implies changing my paradigm of how students learn mathematics, which I believed was only possible with the direct guidance of the instructor within the physical walls of the classroom. If students were not physically in the

classroom observing the math instructor modeling mathematical thinking then I did not conceive how they could become proficient doing mathematics. However, facilitating online mathematics courses has increased my awareness of available technological tools that can create an online mathematics classroom as effective as in the physical classroom. For such reason, I have been redesigning my on-site basic skills math courses to integrate many of the tools and teaching practices that I am using in the online learning environment.

Before facilitating online courses, I struggled seeing the usefulness of podcasts and/or vodcasts in my classroom. I always thought learning mathematics was different from learning history or literature in which inciting students' imagination is necessary, so they can relive and appreciate historical events or the drama of inspiring stories or poetry. Using audio tools for those courses, students experience a new dimension in the classroom environment where their learning experiences are broader and deeper (Smaldino, Lowther & Russell, 2008). On the other hand, mathematics is characterized by abstract ideas, strict rules, and structured thinking that could suppress ones' imagination and creativity. Therefore, I did not conceive how using audio only could effectively convey mathematical ideas that are better learned through visuals and demonstrations.

However, I appreciated the pedagogical value of podcasting and vodcasting after I started experiencing one of the limitations of online learning: communication still predominately text-based. Using only text to explain mathematical concepts and skills is extremely time-consuming, ineffective to emphasize implied details of mathematical steps, and lacks interactivity to communicate effectively mathematical ideas. For example, introducing the concept of intercepts of a line would typically take me approximately 3 to 5 minutes in the on-site classroom, but in the online classroom, it would take me twice such amount of time since drafting several

paragraphs will be necessary to include every detail that I effortlessly communicate orally in the onsite classroom. Hartsell and Yuen (2006) stated students can process information more rapidly by using visual and audio communication, which enhance their ability to grasp the course content. Lamb and Johnson (2007) recognized podcasting as an alternative to convey ideas and emotions that are difficult to articulate in text format and to access high-quality information for those students who have reading difficulties in content areas.

In many instances, I have experienced students' frustration for not comprehending the course textbook and my detailed written explanations, which lead them to vent about the ineffectiveness of taking mathematics courses in the online environment. What they most yearn is the opportunity to have an instructor with them, so they could listen and observe how the math problems are done and clarify the math jargon used in the course textbook or in the communication of mathematical ideas. Even when my online students have access to excellent online resources to help them grasp the course content, they prefer having an instructor personalizing the course content with his or her teaching style. For such reasons, I realized the value of podcasting and vodcasting tools, such as the Pulse Smartpen, Jing, Camtasia, and Audacity, to provide my students with what Campbell (2005) recognized as one of the potential benefits of podcasting in education, "*the explaining voice*, the voice that performs understanding" (p. 42). Facilitating online courses has increased my awareness of the power of my voice on how it can impact my students' success; therefore, realizing the pedagogical value of podcasting and vodcasting in my teaching practice.

Vodcasting is a recent activity that I have integrated into my teaching practice. My first vodcasts attempts consisted on using a Pulse Smartpen to explain how to do math problems that students typically struggle. This pen records everything I write on a notebook, and it also records

everything I say while I am writing. This type of vodcasting is called pencasting since the recording tool is a pen. I also have started creating vodcasts of my Power Points presentations that I used during my on-site class lectures. The vodcasts of my presentations have been done using Jing, a free capturing tool that limits recording to at most 5 minutes. Due to the limited recording time that Jing allows, I am forced to be clear and concise when introducing math topics, and to just provide snapshots of what students will be learning. Vodcasting my presentations in this manner is a form of microlecture, which according to David Penrose, who developed microlectures for San Juan College in New Mexico, it promotes active learning since students are forced to learn by completing the assignments following the microlectures (as cited in Shieh, 2009). However, I am in the process of learning how to use Camtasia, so I can record better quality vodcasts.

Podcasting is an activity that I have yet adopted in my teaching practice, but with plans to start using in the near future (e.g. summer terms) to enhance the text-based communication with my students, as an assessment tool, and to promote math awareness. Paivio, Mayer, and Moreno indicated that information is better processed and stored when received via two sensory channels than from one (as cited in French, 2006). This is the reason I am considering creating *answer-casts* and *wrap-ups*, suggested by The Educational Technology Center of Northeastern University (2008), which are podcasts used to enhance the text-based communication with my students in a rapid fashion and without drafting elaborated text responses during e-mails or asynchronous discussion boards. *Answer-casts* are quick answers to students' questions and *wrap-ups* are additional insights, summaries, and/or examples during asynchronous discussion threads. Another use of podcasting in my mathematics classroom is to create textbook-casts,

which consists on clarifying chapters and sections of the course textbook since many students often have difficulties reading a math textbook.

In a recent conference about students' success and academic skills, I learned the importance of public speaking as an instructional strategy to help struggling students gain confidence and motivation to succeed in college. Promoting communication of mathematical ideas using mathematical language among my students has always been a challenging task in my classroom since most of my students are freshmen college students, which Roberts, Kelley and Sanders (2007) stated "Beginning students lack mathematical precision and vocabulary as well as confidence in using mathematical language, especially when speaking" (p. 179). Asking students to create podcasts about homework problems or specific math topics for their classmates seems to be a possible strategy to enhance my students' skills on public speaking and communicating mathematical ideas; therefore, increasing their chances to succeed in college. According to Chasteen (2008), podcasting is a good communication exercise that allows students to take the role of the teacher, which consist of organizing the information and presenting it in a relevant manner. Using podcasting in this manner is also a way to validate students' grades, as suggested by Criswell (2008). In other words, podcasts can be a valuable method or tool for authentic assessments.

One of my goals as a mathematics developmental instructor is to promote math awareness. Students in my math courses typically ask for the reasons to learn mathematics since they cannot see its usefulness and connections with their lives. This type of attitude towards mathematics hinders students' chances to appreciate and excel in mathematics. Chasteen (2008) recognized podcasting as a valuable strategy to enhance the mathematics curriculum through a technology that students are very familiar using. She suggested creating or finding podcasts that discuss

and/or expose the impact of mathematics in today's society, how historical math events shaped human history, and/or uses of mathematics in many careers and everyday life activities. Dr. McCubbrey from University of Denver stated that his students view podcasting as a tremendous class adjunct to gain different perspectives on class topics (as cited in Lum, 2006). He also stated that podcasting is legitimate substitute for guest speakers when it is not possible due to time, distance, or financial constraints. Podcasting is one more tool that I can use to accomplish my goal of promoting math awareness with my students.

My experience facilitating online courses has increased my awareness of the pedagogical value of podcasting and vodcasting in my mathematics classroom. The use of these technological resources is suitable with the instructional model that I am currently using in my on-site mathematics classroom (i.e. Emporium model). It provides more choices for my students to select those resources that fit their learning style and needs and it promotes active learning. In addition, podcasting and vodcasting facilitate even more my new role as an instructor in my classroom, which Mikat, Martinez, and Jorstad (2007) described precisely, "When supplementary instruction occurs outside of the classroom, teachers become free to engage in more advanced activities in class-thus enhancing the educational experience" (para. 13). My goal is that my students learn mathematics by doing and being actively engaged and this will only occur when I change my role from lecturer to facilitator. Podcasting and vodcasting gets me closer to fulfill such change.

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