Kristy A. Brandabur
Instructional Design Portfolio
Inquiry into Teaching & Learning: Winter 2012

❖ **Introduction & Background**

➢ Describe briefly one instructional concern or problem that you wish to resolve, improve or alleviate in your teaching context.

- Students in the Allied Health Program have a rigorous course content to achieve their associate's degree in Medical Billing and Coding.
- The Advanced Medical Insurance course curriculum is in need of complete revision. The course is a continuation of the Medical Insurance course.
- This course is designed to further develop the student's knowledge of managed care plans, HMO contracting, claims appeal processing, electronic claims filing, hospital billing procedures, and DRGs.
- Upon completion of the program, students should have a sound knowledge and skill base that will allow them to pass state board requirements.

➢ Outline briefly the background issues.

- I picked up this class as a favor to my department chairperson. We were both unaware of the need for complete revision. This course is taught both online and face-to-face which makes this project unique in that it will have several design plans that need to maintain the continuity between the formats.
- There was inconsistency between instructors that taught the prerequisite course. One instructor taught the entire text, whereas the other instructor skipped and jumped chapters.
- Previous instructors in the advanced course were teaching different material based on whether the course was being taught in an online or face to face format.
- Course material was being repeated, textbooks were incorrect or missing, curriculum was lacking any detail, and there was no form of formal evaluation.
- Students were meeting qualifications, but there was a dissonance in what was actually being learned that students would face on state boards.

➢ Explain the significance of your plan in relation to your role as an effective instructor.

- My plan will allow me to create a well designed course to increase proficiency in Medical Insurance based upon the requirements as set forth by the American Academy of Professional Coders (AAPC).
- In order to be an effective instructor, it is critical that I get baseline information from the students based on what courses they have had up to this point. Once this is determined, I

will be able to create a program that will be all inclusive of materials necessary to sit for the state boards.

- Smith and Ragan (2005) explain "the instructional design process consists of 1) where are we going, 2) how will we get there, 3) how will we know when we have arrived?" (pg.8).
- The above activities will be critical in designing, implementing and evaluating this type of program and educational curriculum.
- In order to meet the necessary schema of this course, it will need to be fashioned for delivery in a variety of formats.
- This course will be both knowledge and skill based.
- Students will learn through a variety of media in order to experience the various billing processes available to today's hospitals and medical offices.
- Because this course is offered both in a face to face and online setting, an instructor may not always be readily available therefore the instruction must be suitable for all levels of students.
- The course should be fully functional for use by the next semester, which will allow for continuity between courses and instructors, which will make all instructors involved more effective.

❖ Teaching Philosophy

➢ Describe your guiding philosophy, theory or underlying assumption that will influence the instructional design plan.

- I believe that several educational theories will be incorporated into this program in order to allow the students to be a part of their learning process. Students will have active involvement in completing forms, using online software, using CPT and ICD-9 codebooks.
- This project will be based on several areas within *constructivism*; individual constructivism and contextualism.
- *Individual constructivism* will allow for "knowledge to be constructed from experience; learning is an active process in which meaning is developed on the basis of experience (Smith & Ragan, 2005).
- *Contextualism* will allow "learning to occur in realistic settings; testing should be integrated into the task, not a separate activity (Smith & Ragan, 2005).
- Curriculum– calls for the elimination of a standardized curriculum. Instead, it promotes using curricula customized to the students' prior knowledge. Also, it emphasizes hands-on problem solving.
- Instruction- educators focus on making connections between facts and fostering new understanding in students. Instructors tailor their teaching strategies to student responses and encourage students to analyze, interpret, and predict information. Teachers also rely heavily on open-ended questions and promote extensive dialogue among students.

- Assessment– calls for the elimination of grades and standardized testing. Instead, assessment becomes part of the learning process so that students play a larger role in judging their own progress. (Grennon Brooks & Brooks, 1999)
- *Cognitive learning theory* will play a major role in this program. "The role of the learner as an active participant in the learning process takes on a great importance (Smith & Ragan, 2005).
- The program will be designed to be student lead. Instructors will initiate and lead the class, but students will self-direct their learning process.

➢ Describe how your instructional plan for resolving your concern/problem will relate to the real world goals of your learners.

- In terms of meeting the real world goals of my learners, it is imperative that I assess based on a *criterion referenced model*. This will allow me to be certain that students are competent in the skills necessary to pass state boards.

➢ Indicate how your instructional plan will contribute to positive experiences for all participants.

- Students will be able to see the connections between the Medical Insurance and Advanced Medical Insurance courses.
- Students should gain a positive experience from this curriculum program because it will allow them to play an active role in their learning process.
- Students will be bringing their previous experience into the program, which will allow them to build on their own prior knowledge from the prerequisite courses.
- Students will have the opportunity to test and assess their own knowledge by working on computer software that will allow them to become proficient in their skills by trial and error.
- Students will also engage in peer directed assessment. Students will work cohesively to help other students obtain necessary skills.
- Students will be able to self-evaluate what they have learned, and identify areas that they need improvement.
- Students will be allowed to work collaboratively on various activities and complete a portfolio for graded review.
- The utilization of a collaborative environment will allow students to learn through trial and error without fear of failure.
- Students will learn through peer experience and gain exposure to office/hospital computer software.
- This method will be feasible for both online and face to face classroom experiences.

❖ **Instructional Analysis & Learner Assessment**

➢ Outline briefly how you will determine/confirm the instructional goals or needs of your particular situation.

- A formal needs assessment will need to be performed based on the *Discrepancy Model.*
- The discrepancy model will allow me to review the goals mandated for the class, assess how well those goals are being met, identify and gaps in instruction and/or curriculum, and determine the appropriate method for securing the absence in instruction and curriculum.

➢ Describe what you will need to know generally and specifically about your learners to guide you in designing instruction.

- I will utilize the *Four Categories of Learner Characteristics* (Smith & Mayo, 2005) to determine the curriculum for the *target population*.
- This assessment will allow me to discover the similarities and differences between learners in both stable and changing conditions.
- It is essential to look at who the curriculum is being designed for.
- The learners in this setting vary in age, gender, and socioeconomic status. This will directly impact the way the program is designed.
- Students are in their second year of instruction. The course is typically offered in the winter, with the prerequisite in the fall term.
- Some learners will be self-motivated; others will need to be directed as to how to progress through the course.
- It is essential that the program be interesting and effective for learners of all abilities.

➢ Indicate the types and conditions of learning that will be the focus of your instructional plan.

- Smith and Mayo (2005) discuss approaches to teaching *cognitive strategies*; the initial work was constructed by Pressley, Snyder, and Cargilia-Bull (1987).The approaches that I will be utilizing in my program will be guided discovery, guided participation, direct explanation, didactic instruction, and self-instructional training.
- I intend on using various forms to make sure I address each individual learning style and this will also allow students to work at their own pace with little pressure to "keep up". This will hopefully permit the student to "monitor, evaluate, and revise their strategy use (Smith & Mayo, 2005) (ie) *metacognition*.
- *Guided discovery*- To initiate the use of the ICD-9 and CPT code books, I will ask students about various medical procedures. This will allow the students to utilize their previous medical knowledge by identifying signs, symptoms, and diagnostic procedures usually performed. I will then allow students the opportunity to research items in the index of the books.
- *Guided participation*- Now that the students have begun to familiarize themselves with the indexes in the book, I will ask them to go to a certain part of the book where we will identify and code the characteristics of a particular disease or procedure. This allows me the opportunity to have them use their guided discovery without too much assistance.
- *Direct explanation*- Once students have identified what "they" believe the codes to be, we will look at the options together, allowing me to see how the strategy should be applied in order to come up with the correct coding. This is concrete practice.

- *Dyadic instruction-* For students who "get it" they can proceed with "self-instruction". For those who did not come up with the correct codes, this will allow me to work one-on-one with these students to provide instructional advice.
- *Self-instructional training-* Once students have formed a strategy as to how they will approach the books, they can guide themselves through more case studies.
- *Psychomotor skill learning-* will develop using closed and open skills, and will be practiced using space practice, where the learner has short practice sessions over time (Smith & Ragan, 2005)
- *Divergent thinking* allows for problem-solving, which is the main strategy behind this course. You are given concrete information, now you must work the "puzzle" to come up with the proper codes etc… "… domain-specific problem solving involves application of rules from within a subject area to problems within that domain" (Smith, Mayo 2005).

❖ **Designing & Developing Instructional Strategies**

➢ Instructional goals and learning objectives.

- The learning objectives will be piggy-backed upon those of the Medical Insurance class.
- The objectives are based on *declarative knowledge, concepts, principles, procedures, problem solving, and cognitive strategies* (Smith & Ragan, 2005).
- Examples of learning objectives would be similar, but not limited to:
  - Define common insurance terms.
  - Demonstrate how to track submitted insurance claims.
  - List the functions of an aging accounts receivable report in a computerized practice management system or "tickler" file in a paper environment.
  - Explain how current billing and coding information can be kept up to date.
  - Name several systems used when organizing health records in the documentation process.
  - State the contents of a medical report.
  - Define common medical, diagnostic and legal terms.
  - Describe the importance of matching the correct diagnostic code to the appropriate procedural code.
  - Demonstrate the ability to complete the CMS1500 claim form for accurately for federal, state, and private payer insurance contracts using current basic guidelines.
  - Demonstrate the ability to utilize Electronic Data Interchange systems for online accuracy of claim forms.

➢ Instructional strategies, events and learning tasks.

- The course will be similarly structured weekly in order to maintain continuity and flow of learning objectives.
- The typical class, whether online or face to face would include these activities/strategies. This program will be based on an 80 minute class.

- *Introduction(5-10 minutes)*
  - Identify the purpose of the day's activities. What information will we be covering and how does it apply to the CBS (certified billing specialist).
  - Stimulate their interest by presenting a falsified case or a mock role-play scenario.
  - Write/discuss the outline of the learning activity, goals for the day.
- *Body (30-40 minutes of independent work on computers or claim forms)*
  - Ask questions as they pertain to the previous course (used to get a baseline of information and/or knowledge retention).
  - Present information and guide the students into independent work.
  - Allow students to work individually on computers or claim forms.
  - Provide feedback one on one to students as they progress through the day's activities.
- *Conclusion (10 minutes)*
  - Discussion and personal experiences. Problems, solutions, "ah ha" moments.
  - Identify any problems and look for solutions as a group.
- *Assessment (5 minutes)*
  - Use this time for provide necessary feedback and describe the next weeks learning activities.

➢ Instructional resources and support materials.

- Computer and Medisoft software will be necessary for Electronic Data Interchange.
- Case studies will be given out in order for students to prepare necessary claim forms whether online or on CMS1500 claim form.
- Paper CMS1500 claim forms will be given to students for completion.
- Textbook will provide as an additional resource if necessary to look up information.
- ICD-9 and CPT code books will be necessary to look up any diagnostic and procedural codes.

❖ **Instructional Delivery & Management Options**

➢ Outline your criteria for selecting particular media for instructional delivery.

- According to Smith and Ragan (2005) in Web Chapter 1, "delivery strategy decisions involve determining an appropriate medium (or media) of instruction and determining grouping strategies. These selections may be the same through all the events, or they may vary from event to event (pg.1-2)
- *Introduction* to the course. I will use 'elluminate live' to introduce the course and course work. What I have found in teaching this course "blind", the students were not equally prepared depending upon the instructor they had for the pre-req. By using elluminate live, I can demonstrate via the internet and Blackboard the processes involved in medical coding, giving the students a brief tutorial before they jump in on their own. http://www.elluminate.com/Services/Training/Elluminate_Live!/?id=418

- During the *body* of the course, I will be using a computer-based software program called Medisoft. This software is already in place at the University for the pre-req, but for some reason is not included in the advanced course. I will add this component in, since most offices and hospitals are all using Electronic Data Interchange. This will emphasize the importance of the e-data and keep students current in the field. http://medisoft.com/
- In the *conclusion* of the course, I will utilize student electronic portfolios to examine the work they have completed over the course of the class. This will allow me to give immediate feedback and correct issues that I find, and help the student to become proficient in coding. http://eduscapes.com/tap/topic82.html

➢ Justify your selection of grouping or individualized strategies for instructional delivery.

- I will utilize Blackboard because it is the collaborate program that the University uses for student/instructor online and face to face instruction.
- Smith and Ragan's information of the attributes of the medium to comply with the tasks that is required for this course. "So when we come to the point in design where we must select a medium, we consider a number of factors:(1) The learning task along with the instructional conditions that facilitate the learning of that task(2) The characteristics of the learners(3) The learning context and other practical matters that influence the appropriateness of the medium(4) The attributes of the potential media (what each potential medium can and cannot do with regard to the prior three factors) (pg.4-5).

➢ Describe your management strategies for ensuring learner access to instructional resources.

- I will monitor the face to face courses to ensure students are using the software programs as directed.
- As for online learners, I will utilize the Discussion Board feature on Blackboard to monitor student progress.
- Students will also be maintaining an online portfolio of assignments to which I can check at anytime to monitor student progress. This online portfolio will be for both methods of classroom instruction delivery.

❖ **Assessment of Learning Outcomes**

➢ Describe how you will assess the achievement of learner objectives.

- Several assessment methods will be used to evaluate the learner's abilities.
- *Simulations* will allow me to give the student the necessary forms either paper based or computers based and have them complete them for accuracy. The importance of simulations is that it "creates a real-world-like environment in critical aspects (Smith & Ragan, 2005).

- *Portfolios* will allow me to track the progress of the students' effort. A web-based portfolio will include their initial pre-test and subsequent work, which will monitor their advancement.
- *Paper and pencil assessment* forms will also be completed using multiple choice and true and false type questions. This will allow me to assess declarative knowledge, intellectual skills and cognitive strategies (Smith & Ragan, 2005).

➢ Give two sample assessment items of the terminal behaviors of your learners.

- "Terminal behavior includes a description of the actions that the learner can show that will demonstrate that he has learned" (Smith & Ragan, 2005).
- The purpose of the terminal behaviors is to create and action statement for which the learner can demonstrate their cognitive objectives. *See Appendix A*
  - Example 1: Given the CMS1500 form, locate and correct incorrect CPT codes.
  - Example 2: List the steps necessary to complete and correct a rejected claims form.

➢ Indentify the constraints or challenge problems that may arise in assessing learning outcomes.

- Not all students may be technologically experienced with online software necessary to create simulations, or design portfolios.
- Computer programs/software is not always reliable.
- *Validity, reliability and practicality* are all issues that may arise when assessing learning outcomes. It will be critical to plan the evaluation methods carefully in order to meet these criteria.
- Keeping online students motivated and self-directed always poses an issue.
- Keeping more advanced students from becoming bored and ahead of others, while maintaining motivation in the slower learners.

❖ **Instructional Plan Evaluation & Revision**

➢ Describe how you will evaluate the overall effectiveness of your instructional plan.

- I will use a pre/post student evaluation to determine the levels of competency prior to and post course work.
- The post course evaluation will be in the form of a Likert scale used to measure the beliefs of the students perceptions of the content of the course.

➢ What aspects of your plan will you continue to work on for future implementation?

- The actual program curriculum still needs to be formally constructed.
- *Curriculum mapping* will be a part of the development process.

- The work that I have done on this project will assist in the future planning of the course prior to the next school-year.

➢ What type of formative strategies will you include to give and receive feedback?

- "*Formative evaluation* is especially important to include in the instructional design process when (1) the designer is a novice, (2) the content area is new to the designer, (3) the technology is new to the designer or design team, (4) the audience is new to the designer, (5) the designer is using a unfamiliar instructional strategy, (6) task performance is critical, (7)the design agencies accountability is high, (8) the client is expecting that a formative evaluation will be conducted, (9) the instruction will disseminated widely and in large quantities, and (10) opportunities for later revision are slim." (Smith & Ragan, 2005)
- I created a pre- assessment to determine the baseline knowledge of the incoming students. This allowed me to identify any differences in education that may have occurred because of different instructors in the prerequisite course. The assessment tool was a survey completed using online technology, Surveymonkey.com.

❖ **Reflective Practice: Personal Success**

➢ What did you learn personally from this project about planning for instructional effectiveness?

- I have developed numerous curriculums before, but this whole process gave it new meaning. Typically I use curriculum mapping to organize the course content. This method will allow me to build on the mapping by making sure the program is sufficiently constructed and evaluated.

➢ How was your plan impacted by the feedback from your peers?

- I appreciate what peer feedback I got. I understand my project was not as exciting and important as some of the other programs, but I still would have liked more feedback. Other programs received a good deal of feedback. This would have been helpful. Please take note of my "group discussion board."

➢ What recommendations will you offer to improve the instructional planning process in your organization?

- The main suggestion that I would have would be to look over all current programs over the next months to year to evaluate that they are delivering the information in a clear, concise and consistent manner.
- Focus on the continuity between online and face to face instruction.
- Require faculty to follow a curriculum map to ensure the courses are being taught the same, from instructor to instructor.

❖ **<u>References</u>**

▪ Grennon Brooks, Jacqueline, Brooks, Martin G. *The Case for Constructivist Classrooms. (*1999) Association for Supervision and Curriculum Development. pg. 15-16.

▪ Smith, P.L. & Ragan, T.J. *Instructional Design*. 3rd Edition (2005). ISBN: ISBN: 0-471-39353-3. John Wiley & Sons, Inc.

❖ **<u>Appendix A</u>**
These are sample assessment forms and handouts used in Advanced Medical Insurance.

Acct No. __9-3__

STATEMENT
Financial Account
COLLEGE CLINIC
4567 Broad Avenue
Woodland Hills, XY 12345-0001
Tel. 555-486-9002
Fax No. 555-488-7815

Mr. Jabe Bortolussi
989 Moorpark Road
Woodland Hills, XY 12345

Phone No. (H)__(555) 230-8870__   (W)__(555) 349-6689__   Birthdate _____04-07-71_____

Primary Insurance Co. __ABC Insurance Company__   Policy/Group No. __4206/010__

DATE	REFERENCE	DESCRIPTION	CHARGES		CREDITS PYMNTS.		ADJ.		BALANCE	
			BALANCE FORWARD ➡							
6-3-xx	99204	E/M NP Level 4	250	00					250	00
6-3-xx	94375	Respiratory flow vol loop	40	00					290	00
6-3-xx	94060	Spirometry	75	00					365	00
6-3-xx	94664	Aerosol inhalation	50	00					415	00
6-3-xx	94760	Pulse oximetry	50	00					465	00
7-6-xx	6-3-xx	**ROA ABC Ins #1234567890**			258	44			206	56
7-6-xx	6-3-xx	**ABC PPO Discount**					141	95	64	61
Alternate posting method										
7-6-xx	6-3-xx	**ROA ABC Ins.#1234567890**			258	44	141	95	64	61

PLEASE PAY LAST AMOUNT IN BALANCE COLUMN ⇧

THIS IS A COPY OF YOUR FINANCIAL ACCOUNT AS IT APPEARS ON OUR RECORDS

❖

College Clinic
4567 Board Avenue
Woodland Hills, XY 12345-0001
Telephone No. (555) 486-9002
Fax No. (555) 487-8976

INSURANCE CLAIM TRACER

INSURANCE COMPANY NAME: __Blue Shield__ DATE: __06-03-20xx__

ADDRESS: __146 Main Street, Woodland Hills, XY 12345__

Patient name: __Harry N. Forehand__

Date of birth: __01-06-1946__

Employer: __Acme Electrical Company__

Insured: __Harry N. Forehand__

Policy/certificate No.: __111704521__

Group name/No.: __A482__

Date of initial claim submission: __03-03-20XX__

Date(s) of service: __03-03-20XX__

Total charges submitted: __$71.00__

An inordinate amount of time has passed since submission of our original claim. We have not received a request for additional information and still await payment of this assigned claim. Please review the attached duplicate and process for payment within 7 days.

DETAILS OF INQUIRY

Please check the claim status and return this letter to our office. Thank you.

   No record of claim.

   Claim received and payment is in process.

   Claim is in suspense (comment please).

   Claim is in review (comment please).

   Additional information needed (comment please).

   Applied to deductible. Amount: $ _____

   Patient not eligible for benefits.

   Determination issued to beneficiary.

   Claim paid. Date: _____ Amount: $ _____ To whom: _____

   Claim denied (comment please).

Comments: _____

Thank you for your assistance in this important matter. Please contact the insurance specialist named below if you have any questions regarding this claim.

Insurance Specialist: __Student's name__   (555) 486-9002 Ext.: _____ .

Treating Physician: __Concha Antrum, MD__   State license number: _____ .

Provider Number: __1245897700__   Provider's IRS number: _____ .

❖

1500
HEALTH INSURANCE CLAIM FORM
APPROVED BY NATIONAL UNIFORM CLAIM COMMITTEE 08/05