

## Synthesis Statement

### Introduction:

Participating in the Instructional Design & Technology program has opened my eyes to the world of Instructional Design, its values to the society and its complexity. Having spent all my educational years in just one style of learning (behaviorist), made me appreciate even more various ways of learning, and I specially became found of Constructivist model. It was a pleasure to see almost all courses in this Master's program were designed with the Constructivist model in mind. This program also covered in detail various phases of implementing a design process from initial need evaluation for final results evaluation. Many of these skills I have already put to use in my current position as an application developer and a group leader, which I am very grateful for it.

This document is my synthesis statement indicating what I have learned by taking part in the Instructional Design and Technology graduate program at George Mason University. The categories and their descriptions are based on the International Board of Standards for Training, Performance, and Instruction competencies (IBSTPI).

### Professional Foundations:

Competency in professional foundation refers to communicating effectively; applying research and theory; updating & improving knowledge, skills, and attitudes to the process; applying data collection and analysis skills to projects; identifying & responding to ethical, legal, and political implications of design in the workplace.

Many of my courses had some kind of group project. This was specially the case in EDIT 732 and EDIT 752. Effective communication becomes very important when you have to work with 5 other people for a common goal. Each of us had different background, skills, knowledge, and way of doing things. It was only through effective communication that we were all able to harmonize our efforts and complete our projects with success. Worked with at least 15 people on various projects. It was not always smooth or easy to communicate and get on the same page. At times it was frustrating, but looking back I can see how my communication skills improved and we were able to get the job done.

Applying research was the focus of at least two of my courses. In EDIT 590, I learned about various research methods, and in EDIT 752 I put this knowledge into practice. My team had to come up with the best and most practical way of testing a mobile app. We created the prototype for a mobile app to help Enrollment Central (EC) office at George Mason University. We created the prototype in EDIT 732, but had to find out if it was meeting our objectives. This was when we applied various research methods to evaluate this app and get enough feedback data from end users. We then applied the data we collected for further analysis and design modification to make the app more user friendly.

When thinking about the ethical and legal implications of design in the workplace, the course that stands out is EDIT 526. This course was about web accessibility and universal design. In this course I learned about how people with various forms of disabilities are affected if a designer does not take them into consideration. I also learned about laws like Section 508 of the Rehabilitation Act of 1973 and the Web Content Accessibility Guidelines (WCAG 2.0), which was developed by the World Wide Web Consortium (W3C).

### **Planning and Analysis:**

Competency in planning and analysis refers to conducting need assessments; identifying / describing target population and environmental characteristics; selecting / using analysis techniques to determine instructional content; analyzing the characteristics of existing & emerging technologies and their potential use.

Many courses in this field required various skills like planning, analysis, need assessments, identifying a target population, using analysis techniques, and evaluating existing / emerging technologies for their potential use. Of all my course EDIT 732, EDIT 752 combination stands out for including almost all of the above subjects. My team and I set out to help the Enrollment Central office, which is one of the main help desks at the university for new students. This office helps students in many ways including at least 50 enrollment related processes. After many meetings with EC staff and analyzing their jobs and processes, we did a thorough need assessment, identified target population (students and parents), evaluated environmental characteristics (on and off-campus usage), and evaluated various technologies to design the best possible solution for EC office. We came up with the conclusion that a secured mobile app, which stored student's profile and history, was the best solution in this case. In EDIT 732 we spent many weeks on our design rationale to ensure we provided the best user experience possible. We then built a fully functional prototype, which could be tested on any mobile device. In EDIT 752 we created several evaluation plans and executed them with success using both manual and an automated tool (User Zoom).

### **Design and Development:**

Competency in design and development refers to the appropriate use of instructional design for a given project; organizing instructions / products to be designed; designing instructional interventions; planning non-instructional interventions; modifying existing materials; developing instructional materials; and designing learning assessment.

At the heart of most of my IDT courses there was some kind of design, development, and evaluation of instructional material. From the very first course I took, EDIT 704, I had to organize the project, design, and develop an instructional course with the addition of a course aid. I later had to modify the existing material and add proper learning assessment sections to this project. This process was repeated in EDIT 705 when I was part of a team and worked on a similar project, but with much more detail and professional documentations. Both of these were

based on ADDIE model, but in EDIT 730 I went through the same process for two constructivist learning environment projects. One was to design and development of an airplane flying course for new pilots, and the other was to design and develop an online course to be used by high school students to learn about causes of climate change and global warming. This process was then repeated for EDIT 732 / EDIT 752 course combination, which was explained in the previous section.

### **Evaluation and Implementation:**

Competency in evaluation and implementation refers to evaluating instructional and non-instructional interventions; revising solutions based on data; and implementing / disseminating / and diffuse instructional interventions.

Many courses had evaluation element in them, but the course which stands out here is EDIT 752. In this course my team and I had to design various evaluation methods to get the widest and most accurate feedback. We also had to implement these evaluations multiple times and sift through the feedbacks before adjusting our prototype for the next round. This turned out to be a very valuable experience. We were getting opposing feedbacks on our mobile app. Some students really liked the look and feel of the app, but others didn't care much for it, and had their own recommendations for us. It was then up to the team members to go through all of them and make judgment calls on which feedback we should act on and which ones we should ignore. This was not an easy task since some of the team members had their own ideas (likes / dislikes) about the mobile app, which complicated this task even more. After about three rounds of evaluation, all team members were happy with changes we had made.

### **Management:**

Competency in management refers to applying business skills to managing the instructional design function; managing partnership and collaborative relationship; and plan / manage instructional design projects.

Management skills were important on all the projects I worked on during this program. I had to manage both individual and some of the group projects. Effective planning, partnership, and collaborative relationship lies at the heart of any of our group projects, including the ones I have already mentioned in previous sections.

One of the courses, which was very helpful, as far as task management was EDIT 706. For this course I had to write a business proposal to improve some kind of a process. I chose to come up with a business proposal to improve the efficiency and functionality of the development team, which I am part of. This proposal had multiple dimensions to it. I first had to evaluate the current mode of operation, then compare it with the department's vision and goals. I then had to do a gap analysis and find a couple of alternatives to current ways of doing business. Because this document was to be presented to the upper management, I had to look at this process from

management's point of view, which meant cost analysis, return on investment analysis, and future forecast for the current way of doing business and two other alternative. This became a very valuable experience for me.

## **Conclusion**

I must confess that when I first started the IDT program, I had no clue about what this program was about. Knew nothing about different theories and various ways people learn. This program captivated me from the very first course I took and did not let go until the end. Being out of school for over 30 years meant I had to work harder on projects and spent more time reading the large amount of required reading for each class, but the magnetism of this interesting subject carried me through the end.

Little did I know that the knowledge and skills taught in this program will be used in my position as a software developer? The business proposal I created for EDIT 706 was implemented with my manager's approval. The agile project management methodology came in very handy because soon after I took EDIT 573, I was asked to produce a document explaining agile methodology and an agile template for developing IT projects. My new knowledge and skills in user experience design (EDIT 732) and evaluation process (EDIT 752) are now being used for software design, development, evaluation, and testing by my group. These are just some of the examples, which stand out in my mind. Completing this program was not easy for me and took a lot of hard work, but it has been a rewarding journey. Finally a big "Thank You" to George Mason for offering this program and to every one of the instructors who provide excellent service term after term.