**EdTPA Level 1 Final Assessment:**

**Reflection on Level 1 Field Experience**

Task 1: Planning for Instruction and Assessment

**Context for Learning Information**

1. **About the School**
2. Mankato East School is one building that houses both junior and senior high school students. Between both junior and senior high, the suburban school houses roughly 1300 students, 543 of those students being are found in the junior high area where I observe a seventh grade class of twenty students. Even though the two age groups are taught in the same building, the faculty and layout of the school keeps the students relatively separate from one another. Mankato East is known as a diverse school with 27.3 percent of the junior high students being non-white. In the school there are populations of African American, Hispanic, Asian, and Native American students. This diverse setting also results in seven percent of the students learning English as their second language. This diverse classroom setting means that some classes must incorporate co-teaching practices with an English-Language (EL) instructor for the students learning English. It is also important for an educators to focus on culturally relevant pedagogy for all groups of students. The educators must understand the different customs of their students, whether it is the clothing they wear or their willingness to speak in class, and not make a student feel excluded when in their class.
3. With seven percent of the student population being English language learners, the school does employ EL educators to assist those students in class. Another less common characteristic found at Mankato East is their AVID program. This college prep program is meant to guide students in their professional development and aid them in areas that they may be struggling in. In my content area and the classroom I am observing, there is a student that works with special education faculty, but he does not receive aid during pre-algebra class unless taking a test. The student-teacher relationship with this particular student requires more communication and flexibility.
4. As I mentioned before, Mankato East is a combined school of junior and senior high. Even though, the age groups are generally separated, resources must be shared and organized between the two groups, such as laptops and gym space. Another expectation in place for math classes is that the instructor prepare the students for material that will be on standardized tests and help the students be prepared for those tests. In relevance to planning and instruction, this places a definitive deadline for when students must know the material. This means the teacher must move at a consistent pace that will prepare the students. A program that has been recently implemented by Mankato East is a one-to-one iPad program for their junior high students. These iPads enable faculty to deliver their instruction through videos, presentations, and online assignments. The school’s goal when implementing this program is to bring the students to the same level of resources available to them despite their diverse backgrounds. In the classroom I am observing, my mentor teacher uses the iPads for short lesson quizzes to check understanding, deliver instructional videos, and assigns projects that utilizes google docs and google spreadsheets on the devices.
5. **About the Class**
6. In Mr. Dierks’s first period, he is allotted 50 minutes for his seventh grade pre-algebra class. Every morning he reads announcements and on Mondays the class recites the Pledge of Allegiance. Mr. Deirks usually starts his class with some kind of review that the students are able to start once they enter the classroom. Some mornings there is an online lesson review that the students complete using their assigned iPads that contains three to four questions or they complete a problem that is written on the whiteboard at the front of the classroom. By giving the students this immediate task, he gets their attention and focus early before starting the new material. This warm-up strategy maximizes the limited time he has with the students each day. Another time consideration that must be made in this class is preparing students for the Minnesota Comprehension Assessments, or MCAs. By the end of April, the class must have covered the topics that will be found on the assessment. This means that Mr. Dierks must use his daily class time to stay on track to properly prepare his students. If the class struggles with a concept he must adapt his original plans to help them be successful, whether it is spending an extra day on the concept or providing more opportunities to practice using the new skill, concept, or formula. Despite the time he must spend on a specific lesson, he must complete all topics that will be on the MCAs.
7. In math, it is very common to have ability grouping and Mankato East is not different in this aspect. The two class periods that I observe are both standard sections of the class, later in the day my mentor teaches an enriched class, but I have not observed this group. The different sections, standard and enriched, are determined by the students’ test scores from the previous year and a consultation between the superintendent and instructor. As the students move forward in their schooling, it is possible for them to move from a standard class to enriched if their test scores and grades reflect that they are capable of being successful in the enriched class. They can also be assigned to a standard section of the class if it would fit their abilities better.
8. In this class, there is a textbook used entitled *Mathematics: Course* 3 published by Holt McDougal in 2011 and the students have access to the text in print and on their iPads. Mr. Dierks primarily uses the online version of this text but there are print copies of the book located at the back of the classroom in case students do not bring their iPads to school and/or cannot access the online version. This textbook is used as a reference for the students during their lessons along with instructional videos. From this textbook, they are also assigned practice problems regularly.
9. Other resources used in this classroom include a smartboard, laptops, and Moodle, an instructional platform. The smartboard is occasionally used when Mr. Deirks starts a new section with a presentation. In these presentations there are multiple slides and example problems that he completes directly on the slides. Even though every student has access to an iPad, laptops are also used when some students may prefer to create graphs for different projects online. These functions are difficult to use on the iPads so chrome books are provided. Moodle is a platform that has is regularly used in this classroom. Moodle allows this instructor to create and post instructional videos, conduct quizzes where results can be seen in real time, and keep in contact with the students. These technological advantages allow the instructor prepare more materials that can be immediately accessed and give immediate and relative feedback about progress in the class.
10. **About the Students**

Grade Level: 7th grade

Students in Class: 20

Males: 9

Females: 11

**Students with Specific Needs**

|  |  |  |
| --- | --- | --- |
| **Classification** | **Number of Students** | **Supports Offered** |
| Emotional Disturbance | 2 | Modified grading, consulting with para, testing done outside of the classroom |

|  |  |  |
| --- | --- | --- |
| **Other Learning Needs** | **Number of Students** | **Supports/Accommodations** |
| None recognized by instructor | 0 | NA |

**Planning for Commentary:**

**2a) Prior academic learning and prerequisite skills related to the central focus—What do students know, what can they do and what are they learning to do?**

After observing this class, I notice they need to be engaged and active in their education through answering questions and moving around the room to stay involved. This was brought into a graphing lesson by assigning a project where the students were required to work in pairs and create the graphs they had learned about in the section. This required them to work in a different area, walk around the room to gather the information for their graph, and talk with their classmates within an educational structure. In previous years, the students had learned to read and interpret pictures, diagrams, as well as other visual representations, but had very little experience with creating their own bar graph, line plot, or histogram. The students currently know how to read the graphs, but are learning to present their own information to another individual, identify the appropriate graph needed, communicate effectively with their partner, and create the various graphs.

This activity addresses social development as well as the targeted content of graph making and graph interpretation. This method and structure most closely follows Vygotsky’s theory of social constructivism through the group work, data collection from peers, and observing examples given by other students in order to complete the project and gain understanding. The students were given peer examples to refer to and communicate with their partner in order to work through difficulties with little intervention from the teacher.

Another aspect of the students’ educations that was incorporated into this project was expanding their understandings of other cultures in their own community outside of their egocentric views. This project encouraged them to use their interests to guide some research questions to investigate, such as sports scores/statistics, but they were also required to ask a question of their classmates for a specific number of graphs. As the project progressed there were questions posed that were similar to “How much money do you spend on clothes?” and “How many people live with you?”. The students would then discuss the differences in responses they would receive if all of their peers were asked the same question. This project encouraged them to consider others’ lifestyles in comparison to their own and brought a better understanding between peers.

While doing this activity, the students learned to cooperate with one another as pairs and as a class to complete a task which in turn expanded their social and communicative skills. They used peer resources to be successful which enforces Vygotsky’s cognitive development theory and expanded their questioning outside of their egotistical sphere. They started the project with being able to read graphs and completed the project with an understanding of how to collect information then present it in a graph of their own.

**2b) Personal/cultural/community assets related to the central focus—What do you know about your students’ everyday experiences, cultural backgrounds and practices, and interests?**

The class that I observe is a standard section of seventh grade pre-algebra. At Mankato East Junior High, “standard” refers to students with average or lower test scores in comparison to their classmates that are placed in “enriched” sections of the same class. Out of my mentor teacher’s three sections of standard pre-algebra, this section averages the highest grade percentage at 81 percent in comparison to the 68 percent and 59 percent averages in the other sections this past quarter. A difference that I noticed in this class of twenty students is a lack of ethnic diversity. Mankato East boasts of their diverse classroom settings with a 27 percent enrollment of African American, Asian, Native American, and Hispanic students. In this specific class, there are only two such individuals: one African American male, one Latina female. In the other section I observe and the third that enters when I leave, there seems to be an increasing number of minority students in other classes. This observation may simply be a coincidence of how classes were planned since I have not observed an enriched section of this class, but these classes are divided based on test scores. With this being said, I am unable to attest to minority representation in enriched classes, but I do find the apparent trend between minority representation and grade averages notably negative in this situation.

Another notable difference that I found between the first section of pre-algebra and the second section is the difference between socioeconomic standing. Most students in the first section appear to be wearing new and in-style clothing. In following classes, there are similarly dressed students, but progressively more students seem to dress in sturdy clothing as the day goes on, such as jeans and tennis shoes, rather than the newest dress and sandals from Vanity. Even though there is a wide variety of socioeconomic standings at Mankato East, the school ensures that each student has equal access to required materials whether it is through their iPad program or availability of chrome books or calculators. In an interview, the junior high principal, Steven Rustad, expresses the school’s goal of “closing the gap between students” in the aspect of their access to technology despite their different ethnic or socioeconomic background.

Aside from the visual evidence of lower SES, I have heard different students talking about experiences at home, excuses about homework, or reasons for coming in late to school that suggest different socioeconomic standings. Recently there was a student who came in a morning after she had missed a day of school because she had burned herself making food at 3 o’clock in the morning. She went on to explain that she was up early that morning making the food because she does not usually have supper at night. She did not share if this was by her choice or necessity, but 40 percent of the students at Mankato East qualify for free or reduced lunch at school. This can allude to a possible lack of food at home available to students. The issue of hunger can affect a students’ focus throughout the day or their interest in what they are learning.

A student’s attention can be greatly dependent on a teacher’s pedagogy. In the first period of the day, I have noticed that many of the male students talk about sports before, during, and after class. My mentor teacher uses this interest by suggesting they use their interest in sports as a basis for some of the projects they are assigned. For example, during their graphing unit the students were required to complete five different graphs. Mr. Dierks suggested that the students may choose to use sport statistics or ask what their classmates’ favorite sport or sports team is and use this data to complete their assignment by creating a graph. By incorporating the students’ interests, this graph activity in particular encouraged students to become more involved across the class.

During my time at Mankato East, I have found that the classes I observe are divided by their test scores, but there is also a correlation between one’s socioeconomic standing, home life, and interaction with their peers. These are not intentionally made by administration when forming the different sections, but there does seem to be a correlation between a student’s personal life and the section they are put in. Across the class periods, there are many different students, interests, and stories to be told about where each one comes from. It is interesting to see my mentor teacher relate their interests to different assignments to keep them involved in class.

**4. Supporting Student Learning Through Language**

**A. Language Function:**

The ability to interpret information in mathematics, especially in pre-algebra, is critical. The concepts of algebra and their applications are endless in real-world situations and that is very important for students to understand. A use of interpretation in this class is reading graphs and diagrams to understand the meaning of a set of information.

**B.** **Key Learning Task:**

In a recent unit, students in Mr. Dierks’s class were expected to conduct research, then use their research to create their own graphs. In order to prepare the students, Mr. Dierks had previously conducted lessons on what each type of graph looked like, how to read them, and the data sets best suited for each type of graph. After completing the introductory lesson, the students were paired with a partner to conduct their research of the class and create six graphs that demonstrated their understanding of a histogram, line plot, circle graph, bar graph, stem-and-leaf plot, and how to find mean-median-mode from a data set.

Once the students completed their graphs, they were expected to present each one to Mr. Dierks. In these one-on-one presentations, Mr. Dierks would ask them what their research question was for the graph, what their graph showed, what they learned from the collected data and how they answered their research question. The students were expected to interpret the data they collected from their peers, determine the best type of graph for that data, then present their findings and be able to answer questions about it. The most challenging part for the students was determining which graph to use and which question to ask. There were examples hung up around the room that they could reference for help. As a class, they had also classified which graph would be best for number answers versus category or word answers to their research questions. This helped them interpret their own data and results.

**C. Additional Language Demands**

**1. Discourse:**

In this situation, the language used was very expository. The students used numbers and diagrams to describe characteristics and tendencies of their classmates, such as how many pets they own, hours of sleep they get, and number of family members they live with. They were required to share their findings verbally and created visual representations for those findings. When presenting their data to Mr. Dierks, they used statements similar to “In our class, there are five students that own \_\_ pets.” or “\_\_\_ students have been to \_\_ states.” The students reported facts from the data they collected.

**2. Syntax:**

There were two forms of syntax being used in this pre-algebra lesson. The first was used when the students formed research questions to gain the appropriate knowledge they meant to collect, and the second being the student’s ability to take the data from their graph and describe the results. In any algebra class, it is important for students to be able to interpret information and express through equations and variables. In this graph assignment, the students had to take information and apply their graphing making kills with real-world information.

**3. Vocabulary:**

In pre-algebra, there are specific vocabulary words that describe parts of graphs, such as axes, mean, and mode. These brick vocabulary words are supported by other mortar words such as key, labels, and average. In algebra, the students must differentiate between terms in other content areas. For example, an average in other content areas may refer to the mathematical mean. These two meanings and interpretations must be made by the student to fully understand what a question is asking or what a set of data is describing.