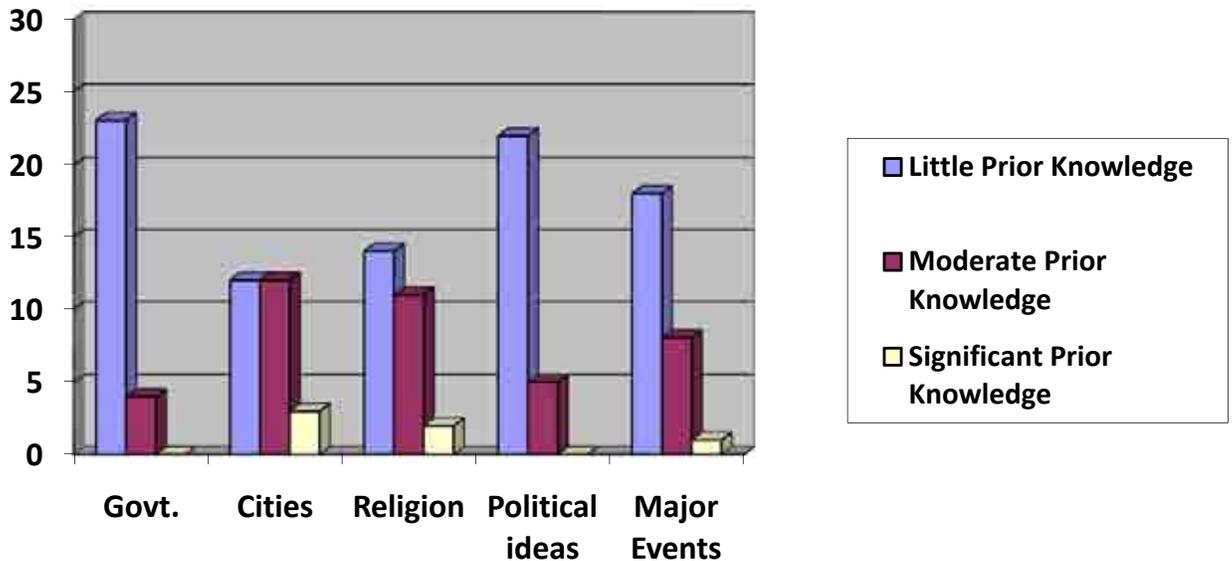


Analysis of Student Learning

Upon completion of this unit on Ancient Greece, most students were able to demonstrate a heightened understanding of Ancient Greek culture when compared to their pre-assessment results. The unit objectives appeared to be adequately covered, and the learning goals all seemed to be met. When assessing student results however, I could find that there were areas in which students demonstrated a far greater understanding of the material than in others. While reflecting on the unit and also examining the student work attached to this document, I can conclude that the areas in which students showed greater success were in some areas that I had previously decided (during pre-assessment) needed to be covered more intensely. In addition, however, some areas that pre-assessment revealed needed greater attention did not transfer into greater results. Here are the aforementioned pre-assessment results which drove instruction:

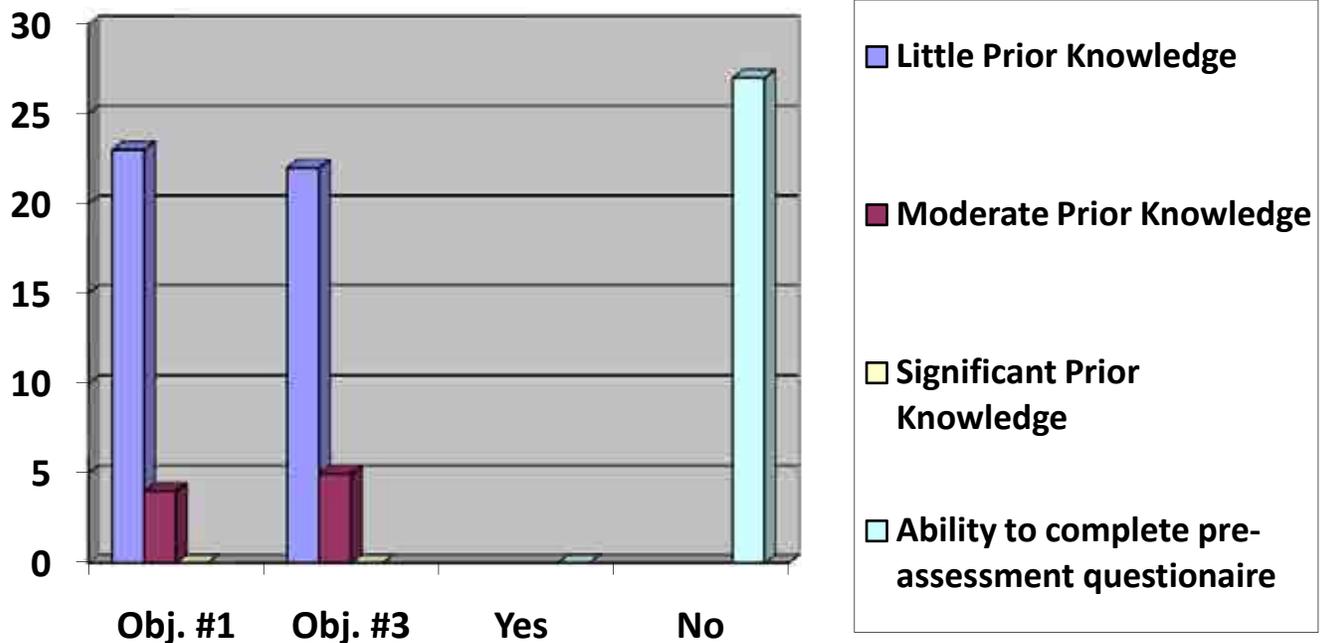


By observing these results, I concluded that while students showed little understanding of most major categories, the areas of government, political ideas, and major events needed to be focused on more heavily. As a result, student work revealed a greater understanding of some learning objectives, while struggling slightly more with others. For example, objective #1: ***Define the three types of government developed in the Greek city-states***, students demonstrated a greater deal of understanding for. Not only were students able to define the types of governments that developed (which were Monarchy, Aristocracy, and Oligarchy) but they also were able to use critical thinking to determine the strengths and weaknesses of each government. Furthermore, students were able to choose which government they felt would be the most efficient, and could defend their answer.

In other areas however, students did not reveal the same ability to understand and build upon their understanding of an objective. When dealing with objective #3: ***Explain Greek achievements and their lasting effects on the world (for example: in government, philosophical thought, scientific achievements, etc.)***, students appeared to have a slightly more difficult time grasping the content of this objective. While many proved by the end that they did in fact understand such a question, others appeared to struggle, and not nearly as many students could comfortably expand on their knowledge of objective #6 when comparing to objective #1. It is for this reason that I focused on these two objectives when analyzing student work. In this piece, I sought to understand the reason students understood one objective with great ability, but struggled to grasp another.

Whole Class

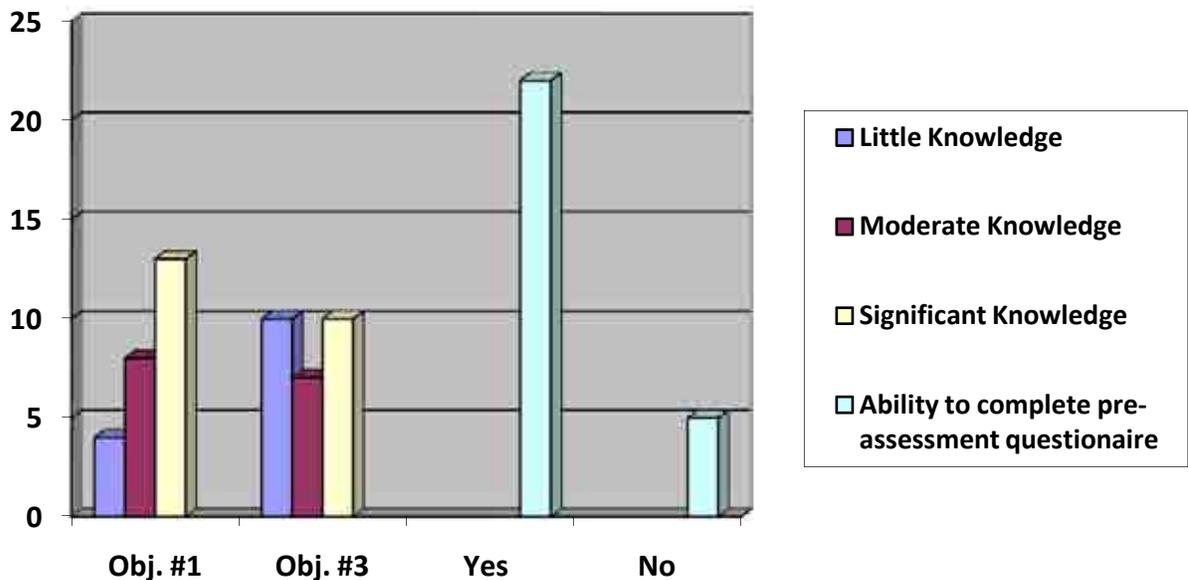
Pre-assessment Data



The above graph on the whole class pre-assessment reveals several pieces of information. As with the original pre-assessment results, this graph depicts student work by their portrayal of little prior knowledge, moderate prior knowledge, or significant prior knowledge with regards to each unit objective being covered. Since my pre-assessment results did not include standard grading, I decided to judge student work based on how much knowledge they already had on the subject by distributing a questionnaire on ancient Greece. As is visible by the results however, not one student out of twenty seven demonstrated significant prior knowledge for either objective. Furthermore, only four and five students were able to demonstrate even moderate prior knowledge for objectives # 1 and 3, respectively.

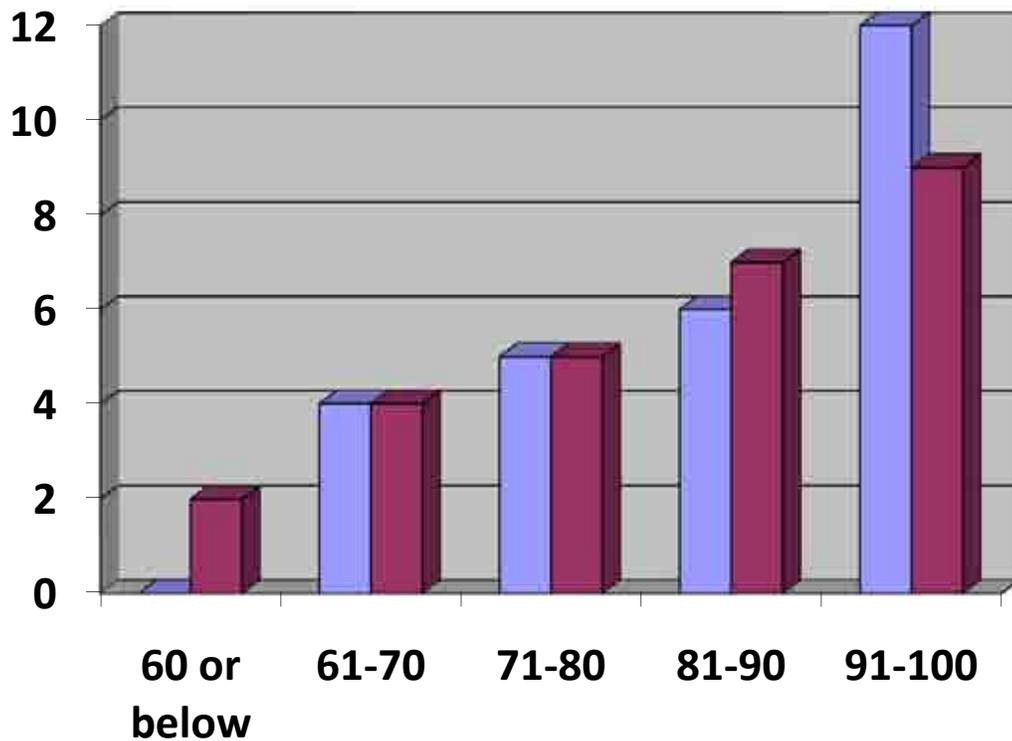
The rankings of each student were based on my discretion when reading the questionnaires. Basically, if a student could identify three or more examples of prior knowledge in either objective, I considered this significant. If they could identify two examples, I considered this moderate, while one example or zero was considered limited. Student knowledge proved limited overall, but perhaps even more significantly on these two objectives, judging by the data. Furthermore, this graph depicts the amount of students who were able to complete the questionnaire on ancient Greece. In assessing this, I looked for students who could provide one legitimate example for each category on the questionnaire in order to consider it complete. Not one student was able to do this, displaying a great lack of prior knowledge regarding the topic of Ancient Greece.

Post Assessment



This graph shows how the post assessment revealed significant improvement by the entire class when considering the two objectives. Upon receiving the same questionnaire that was used as a form of pre-assessment, students were able to demonstrate a far greater understanding of the several categories than from the beginning of the unit. While using the same criteria as pre-assessment for judging student knowledge, this graph reveals that only four students demonstrated little knowledge regarding objective #1 as opposed to twenty three in pre-assessment. What this reveals is that after completing the unit, nearly the entire class was able to obtain a moderate or better understanding of Ancient Greek governments. Conversely, however, the results for objective #3, while improved, were less impressive. Ten out of twenty seven students continued to show little knowledge on the lasting effects of Greek achievements. This statistic came as a surprise to me at first, but I have surmised that my instruction was clearly not oriented enough towards objective #3. While some assignments portrayed in design for instruction are geared toward understanding Greek achievements (such as their impact in the United States government), it was clearly not enough. The unit would have to be adjusted to focus more closely on Greek achievements to insure student understanding.

The final graph below depicts how students faired on two post-assessment assignments by displaying a range of grades. One assignment was the questionnaire mentioned earlier (represented by the purple bar), while the other was the final test given to conclude the unit (represented by the red bar.) This graph shows that the results for students to conclude the unit covered a wide range, but display significant progress from my pre-assessment conclusions:



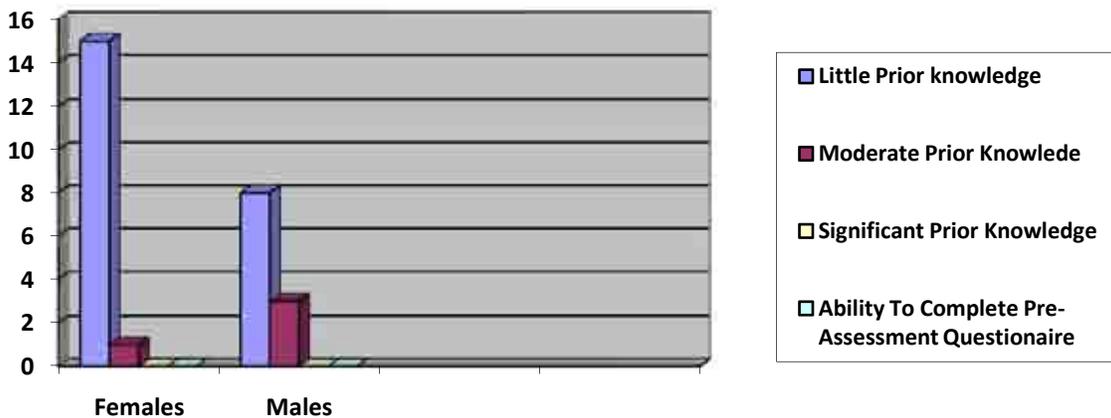
Many students were able to score in the highest possible range, and while some students performed poorly, the results clearly show an upward trend when plotting student grades.

While these numbers are not specific to the two unit objectives that have been discussed so far, they remain important as they reveal the success of the unit as a whole. By reading this data, I can conclude that the majority of my students benefited greatly from this unit, and that my design for instruction was successful in improving what began as an extremely low level of knowledge on Ancient Greece.

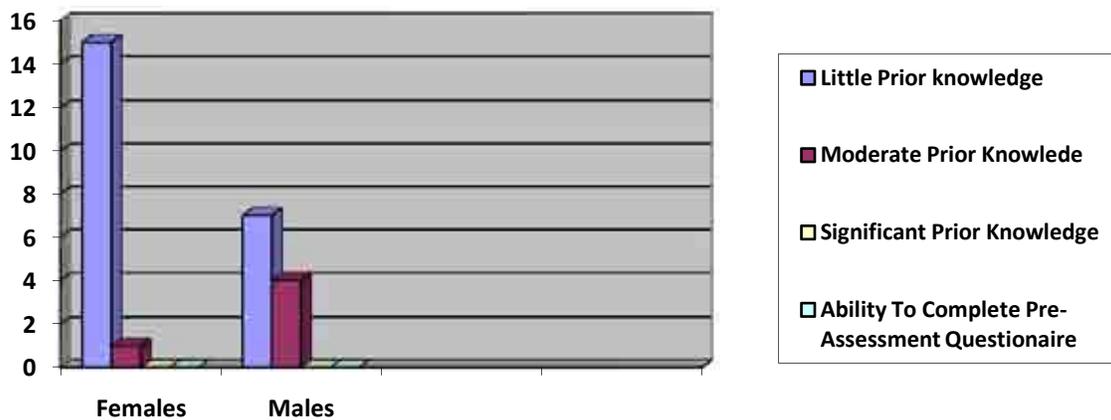
Subgroups- Males and Females

The subgroups that I chose to compare for this analysis were the males and females in the class. There were several reasons why I made this choice. One reason was that the class was almost evenly divided between the two groups, containing twelve males and fifteen females. This made for a very useful arrangement when analyzing student data. Another reason I chose to divide the class into these subgroups was based off of classroom behavior. For reasons I did not ask about, the class tended to divide itself into groups of solely males and solely females when we broke down to complete several activities. Upon noticing this, I thought it would be interesting to examine the effects this might have on the success students have with the assessments for the unit. I would expect the results to be nearly even, but being that I was unsure, I proceeded with these subgroups.

Pre-assessment: Objective #1

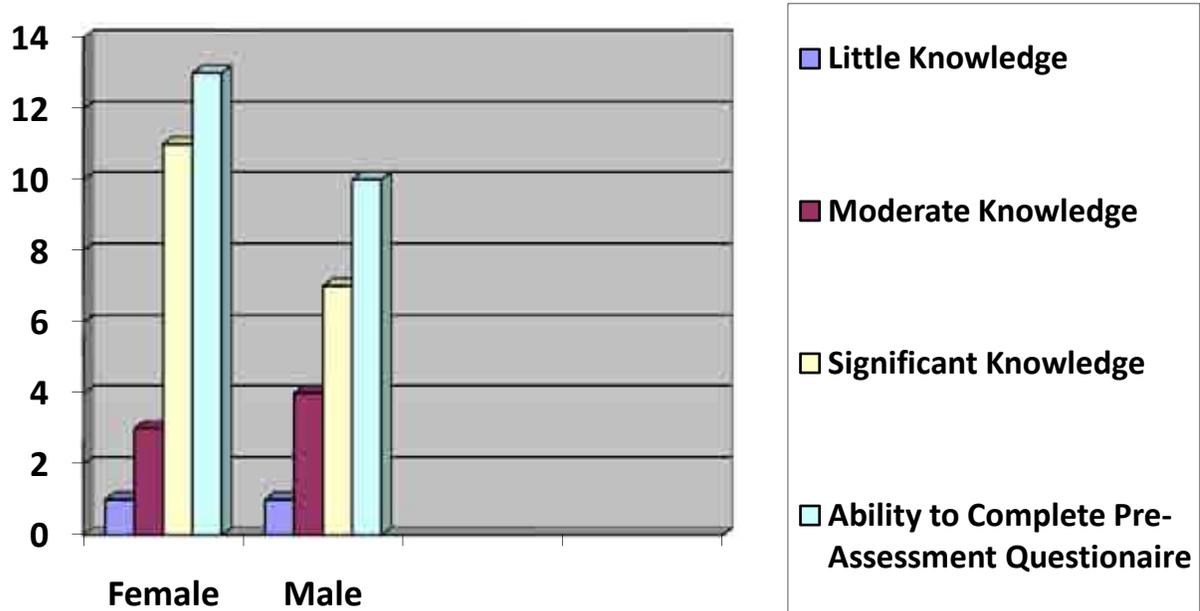


Pre-assessment: Objective #3

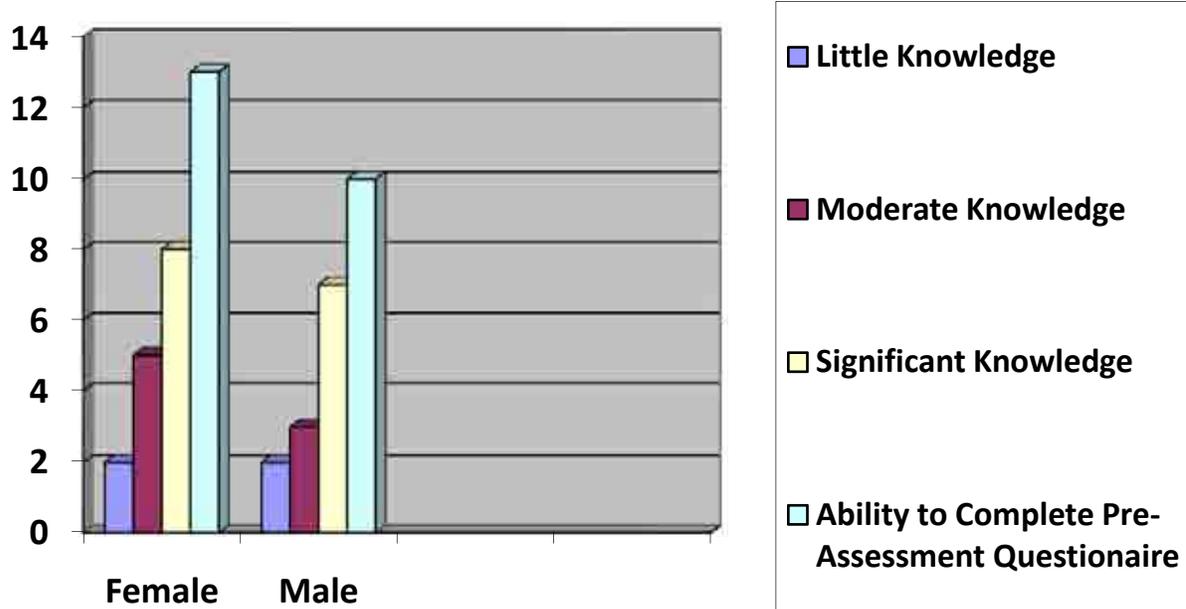


According to these graphs, the female sub-group seemed to have more students who fell into the “little prior knowledge” category than the male subgroup. While part of this reason is that there are three more females in the class than there are males, the data still seems to indicate that the male subgroup contained more students who portrayed at least moderate prior knowledge of the content covered by the objectives. What both groups had in common however, was their inability to complete the questionnaire during pre-assessment. As indicated earlier, not one student in class could complete the questionnaire, and none showed significant prior knowledge on Ancient Greece. What the purpose of these subgroups then becomes is how does each group fair when looking at post-assessment. Will both groups show improvement, or will the groups differ in their progress when assessed at the end of the unit?

Post Assessment: Objective #1



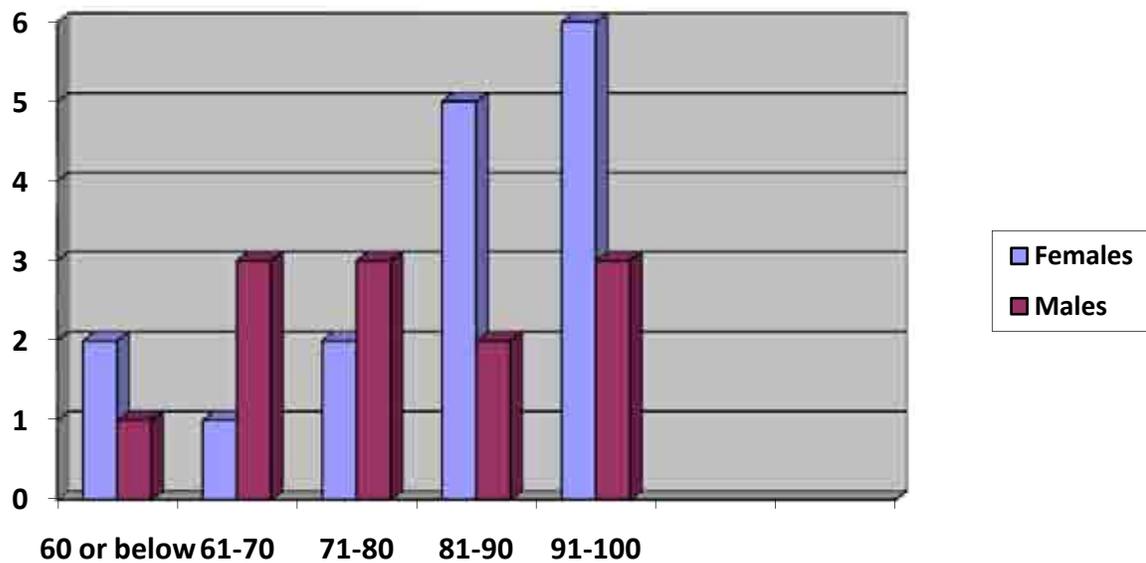
Post Assessment: Objective #3



These two post-assessment graphs indicate several things. With regards to objective #1, most of the students in the class maintained their success in furthering their knowledge of

Greek government. However it also portrays a pattern that does not hold true to the pre-assessment data. While looking at the graph, one can deduce that more of the students in the female group were able to progress to the point on gaining significant knowledge than those in the male group. While the students in the male subgroup did in fact progress, the ratio of males with significant knowledge come post-assessment proved much lower than that of the females group. We can also tell that while looking at objective #1 that only one student from each group failed to increase their knowledge to at least moderate. This provides more proof that students in general were able to increase their knowledge on this objective significantly, as opposed to objective #3.

While looking at the graph depicting objective #3, earlier patterns remain true in that the female subgroup was able to advance their knowledge slightly more than the male group. It also shows that both groups proved to have difficulty grasping this objective as opposed to objective #1. 5 female students and 3 male students were unable to display at least moderate knowledge with regard to lasting achievements of Ancient Greece. Both graphs are also set up to display student ability to complete the post-assessment questionnaire, which again shows more of an increase when looking at the female subgroup. This is also evident when viewing the data regarding the final test, as can be viewed in the following graph:



As this graph shows, the female subgroup in the class was able to score significantly higher on the final test upon completion of the unit. While the male sub-group nearly leveled out when examining their scores across the board, the female sub-group continued to show significant improvement. Coupled with the other data presented here based on pre and post assessment, it would appear that the females in the classroom were able to show a much greater progression than the males. Considering that the pre-assessment data suggested that the male sub-group held greater prior knowledge of the content, their post-assessment data does not show as much of an improvement as expected. Conversely, the same data shows how the female subgroup greatly expanded their knowledge throughout the unit. As an instructor, the reasoning behind this is somewhat puzzling. It could be coincidental, in that the students in the classroom who were able to better grasp the material were female. Perhaps the male subgroup had difficulty with some methods of instruction, which would prompt me as an instructor to adapt. One idea would be to control the student's partners whenever they break

down for group work. As mentioned before, these sub-groups seemed to form themselves, so perhaps by breaking them apart, I can insure a wider range of classroom success.

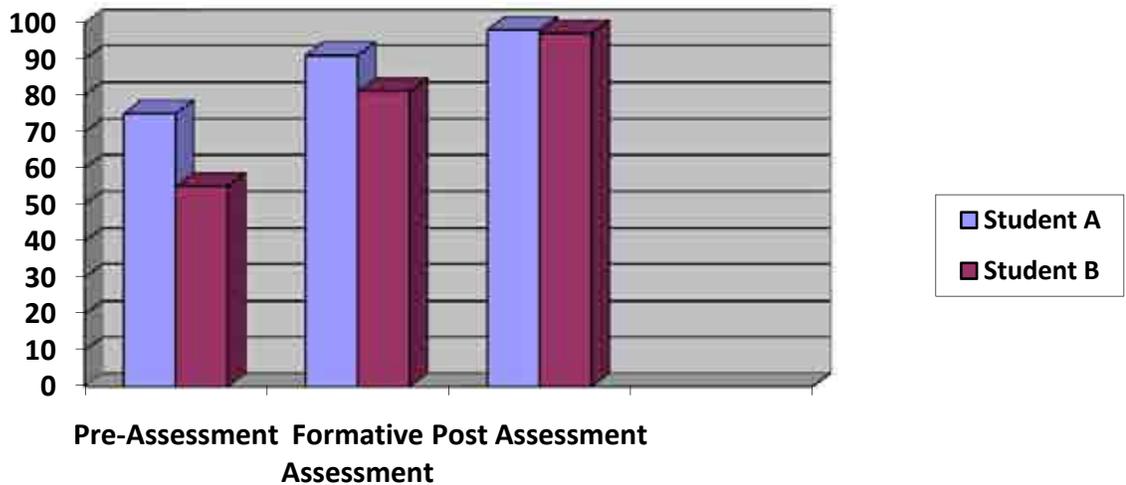
Individual students

For this portion of the analysis, I selected two students from my classroom who exhibited different levels of progress throughout this unit. Student A performed very well throughout the unit, showing moderate prior knowledge on the pre-assessment activities and continuing to show constant improvement throughout. Student B began the unit at a different level, showing little prior knowledge on the pre-assessment activities and continuing to display limited knowledge for the beginning portion of the unit. However, where these two students ended up was remarkably similar. While student A was able to maintain an impressive showing of knowledge on the subject throughout the unit, Student B was able to ascend from having little to no knowledge of the objectives to displaying significant knowledge by the units end.

There are several reason why these two students performed the way they did. To start, the unit was designed to start students off under the assumption they had almost no prior knowledge of Ancient Greece, which was demonstrated in pre-assessment. This being the case, many steps were taken throughout the unit to insure that student understanding was at its highest. Such steps include offering guided notes, using several diagrams or compare and contrast models, as well as a large incorporation of group work. By diving instruction in such a way, the unit was able to meet the strengths and weaknesses of all students. This could explain

why Student A and B were able to fair well. Student A was able to maintain their understanding while going through the unit, and Student B's knowledge was able to show significant growth.

The following chart shows the progression both students took throughout he unit, based off of examples of student work. It is based off of student's average grade point average at each point. (Note: Pre-assessment measures were not graded, so for data purposes the graph represents them with a hypothetical grade the student would have received.)



As is shown by this graph, both students were able to improve throughout the unit. From an average grade standpoint, Student A was able to maintain relative success throughout the unit, while Student B showed a much lower level of prior knowledge, but a much higher rate of success.

The unit objective that students seemed to have the greatest success with was objective #1; **define the three types of government developed in the Greek city-state**. There are several reasons as to why this objective could have yielded such great progress. First off the objective was clear and direct, and called only for student's ability to define the governments. However, as stated before students displayed a greater knowledge of this objective than simply definition, and were able to critically think on the subject of Greek government to the point of deciding which type they would choose to live under. They understood how it worked, why it developed as well as why it might not have lasted, and also which they thought was most efficient. I believe this continued success was due to the heavy emphasis the unit placed on comparing Greek government with the United States government. By designing the objective to relate to something students were familiar with, I believe it allowed them to gain a greater understanding of how Greek societies function. So while objective #1 was extensively covered, it was also taught in such a way that allowed for greater student success. The same could be said for the methods used, such as several diagrams as well as group work to enhance student knowledge.

Students were unable however to show such heavy growth for objective #3, **explain Greek achievements and their lasting effects on the world (for example: in government, philosophical thought, scientific achievements, etc.)** This objective is slightly more difficult than some of the others, however it is not one that should be difficult for students to understand should the unit have covered it properly. One aspect that students were able to grasp was how Ancient Greek government influenced our own. However, when considering such achievements such as those in the fields of mathematics, science, philosophical, etc...,

students were unable to consistently demonstrate significant knowledge. Part of this reason could be because the unit plan did not spend enough time emphasizing the topic. The activities planned out in this lesson were significantly geared towards understanding Greek government, and while other Greek achievements were incorporated, the methods used to cover these topics were probably not strong enough. One idea that could have been used was a jigsaw activity in which each group researches a different achievement. This would bring in a wide variety of topics to discuss, and allow students to continue to learn from each other as in other parts of the lesson.

Upon analyzing my two unit objectives, I feel that while this unit proved productive, there is definite room for improvement. Some of the objectives, like objective #1, were adequately covered, while others, like objective #3, were not. Looking back, I feel that while designing the instruction for this lesson, I would have benefited from basing my activities directly off of my objectives more than I did. While lessons were created with the specific objectives in mind, perhaps I prioritized some objectives more than others too much. By doing so, my post assessment data proved that students were able to understand those objectives more than others. In order to fix this problem, I would have to make sure my unit plan gave equal attention to each objective, and also make sure my instruction was flexible enough to adapt to student needs. For example, once I realized students were not grasping a certain objective, I could design a lesson within my unit to aid them in their understanding. This would have improved my overall experience, as it would have allowed me a way in which to monitor student progress more closely, and adapt accordingly. That is a skill I will be using throughout my career.