

MICHAEL RADIN'S TEACHING METAPHORS:

1. Commander of an Infantry:

Taking responsibilities of soldiers' lives and their efficiency, accuracy and precision.

In particular, teaching the students how to approach and set up each problem that they see very carefully. In addition, discovering all the options on how to solve each problem and making the decision(s) to solve each problem the fastest and clearest way. Furthermore, teaching students to check for their mistakes while in the process of solving a problem.

Enforcing discipline in the class; making sure that each student is coming to class on time, making sure that each student informs me if he or she is going to miss class and/or can not hand in the assignment on time, making sure that each student is paying attention and asking questions, and not allowing any student to disrupt the class.

Assigning homework assignments is essential; forcing the students to practice doing problems and understanding the material with high accuracy and precision on showing all the work in setting up each problem, explaining all the details and reinforcing the knowledge of the prerequisite material. Therefore, students become better and more efficient at doing the problems and understanding the material and will be prepared for the tests.

Giving assistance to students who are struggling is just as crucial; providing help to students by answering their questions in class and outside the class, letting them know the tutoring hours and sending them e-mails and to their advisors to let them know if they doing poorly in class.

As a comparison, it is the Commander's responsibility to teach his/her soldiers how to shoot from a rifle with very high accuracy and precision and making sure that they never miss the target. In addition, teaching them when to shoot. Furthermore, enforcing defense techniques of how, where and when to spot the enemy. In the meanwhile, it is very crucial to enforce discipline in the infantry; in particular, making certain that each soldier is coming to the drills and practices, each soldier obeys the rules of the infantry and obeys orders as well.

Practice and training is the key for success of every soldier in the infantry preparing each one for battle and real life situations. Practicing accuracy and precision in firing, knowing how and when to spot the enemy, and reporting to the commander about any problems that arise.

It is also very crucial for the Commander to provide assistance to any soldier who is having problems understanding the tactics and especially important to give each wounded soldier assistance too.

2. Sea Navigation Captain (Captain James Cook):

Inviting students to a journey of discovering new majestic and beautiful places; in the meanwhile, indicating to students that it may be a pretty treacherous journey to reach and discover each beautiful destination.

Leading students on a journey to discover the beauty and power of mathematics just as sailing the oceans and seas to discover new places with majestic beauty such as New Zealand, Cook Island, and many other islands in the Pacific Ocean.

However, discovering these beautiful new places many require sailing treacherous waters during rough weather conditions. Nevertheless, we are still destined to reach them as we are destined to understand the new mathematical ideas to solve many more complicated problems that deal with the laws of Physics and the Universe as well.

It is the professor's responsibility to make certain that every student understands all the prerequisite material that the new material will be built upon and remind the students what they have learned previously; this will be the key to master the new material and overcome the obstacles that may arise. Overall, making sure that the material is understood crystal clear at the end.

Similarly, it is the Captain's responsibility to educate the crew on the basics of sailing; what the direction the wind is coming from, angle of the ship with respect to the waves, handling the windy conditions, determining the depth of the water, spotting icebergs, and others. In the meanwhile, taking responsibilities of each sailor during treacherous waters. Overall, making sure that the final destination will be reached.