**Problem:**

**1.** How to measure the increase is physical and mental ability/endurance of bench pressing one’s body weight.

**Refining the Problem:**

2.The target population that will be targeted in this rating scale is the average male college student. These males are within the age group of 18 – 22 years old. The involved males will have more than 6 months of weight room experience. College athletes will be excluded and only those the exercise recreationally will be included.

3. This problem could be monitored with the rating scale using many elements of measurement. The initial measurement would be a pretest to monitor their initial ability to bench press their body weight. After ensuring they student is well rested and prepared to give their greatest effort, including being warmed upped and ready to go, we will ask the individual to bench press their own body weight until failure. Throughout the time frame of the assessment we will work on motivating the students to continue making their healthy gains while following our exercise regimen. They will be receiving immediate feedback as they see the results everyday of how they are improving. Our motivation will include rewards for reaching certain milestones of increased in durance. This improvement will be recognized and monitored through to the final examination, where we duplicate the same conditions as the first pretest.

4. There are several components of the exercise that will be monitored and emphasized. These include the use of strict proper form, which is being broken into flat back and touching the chest with the bar. It also included stability of bar during exercise, meaning whether or not the students arms are shaking vigorously or if they are firm. Another emphasized trait is general energy level of the student before and after the lift, as in whether they feel like they are able to continue a workout or if they are completely burnt out. We will also be focusing on the degree to which the individual student is able to handle the weight alone. This means if they need a spotter to lift it off the bar for them or not as well as a spotter to help get last three repetitions. Repetitions with spotter assistance will not be counted. We will also monitor how loyal the student is to the assigned exercise program. If one is not complaint with the program, it will be noted. The last emphasizing point will be excitement level. We will observe the student to see how happy and satisfied they are with their improvement.

**Instrument and Methodology:**

5. Our scaling for our six points of emphasize will be broken into two categories. There will be a 1-5 scale for each section, with one being the least fulfilling and 5 being the highest level of pass. We will have a page for the student to fill out as well as a section for the observer to fill out. The importance of having both fill out the form is to show how different perspectives affect how one grades themselves. It will also be more accurate in the emotional points because they do not have convey their feelings aloud. A one on the scale is indicating you did not achieve the attempted task or you feel as though you failed yourself. A three is in the middle ground where you know you gave your best effort and satisfied requirement. A five exceeds all expectations from the student and observer, showing great excitement and accomplishment. Each point of emphasize will have its own brief description to allow more precision in choice.

6. It is important for the test administer to have several characteristics in order to administer this test effectively. They must have an in depth understanding of the bench press exercise, knowing proper form and being able to identify incorrect form. They must be able to know if a student is putting themselves in an unsafe situation and be able to intervene to ensure safety. It is important to be physically fit enough to act as a spotter for the student while still monitoring his performance. Have good people skills is also vital to being an effective test administrator. There will be a vast range of different types of students in this test and it is important to help them feel comfortable and encouraged. The administrator must also feel comfortable judging the students’ performance honestly and unbiasedly.

**Analysis of Results:**

7. The rating scale would be used to monitor the overall improvement of the individual, not just to measure one aspect, although all can still be looked at for improvement. The six aspects will be added together to give the final score out of thirty. There will then be a scale on the bottom that will indicate how much the test impacted the student. A score of 25-30 is a significant positive impact that made a real difference in the health and moral of the student. 20-25 shows serious progress in most aspects of emphasis. The test definitely had a positive impact on these student. Those with scores from 15-20 did not benefit greatly from the program, but still did not become discouraged or deterred. The 10-15 range is those who simply did not benefit at all from the program, they just did not perform well to it. Those who score below 10 did not benefit from the program at all and it may have not been a good fit for them to try. The scores will be marked and it will be helpful in planning the next stage of activity for the student. Those who scored well may be well suited for similar programs for other exercises. Others who did poorly may be directed to different methods of training. These will be a summative evaluation because a lot of aspects of exercise can vary day to day. It is important to look at the entire program as a whole instead of one really good or bad day.

Source for proper bench form:

[Huang, Yen-Po YP](http://rl5qf8nx6k.search.serialssolutions.com/?ctx_ver=Z39.88-2004&ctx_enc=info%3Aofi%2Fenc%3AUTF-8&rfr_id=info%3Asid%2Fsummon.serialssolutions.com&rft_val_fmt=info%3Aofi%2Ffmt%3Akev%3Amtx%3Ajournal&rft.genre=article&rft.atitle=Elbow+Joint+Fatigue+and+Bench-Press+Training&rft.jtitle=Journal+of+Athletic+Training&rft.au=Huang%2C+Yen-Po&rft.au=Chou%2C+You-Li&rft.au=Chen%2C+Feng-Chun&rft.au=Wang%2C+Rong-Tyai&rft.date=2014&rft.pub=National+Athletic+Trainers+Association&rft.issn=1062-6050&rft.eissn=1938-162X&rft.volume=49&rft.issue=3&rft.spage=317&rft.epage=321&rft_id=info:doi/10.4085%2F1062-6050-49.1.05&rft_id=info%3Apmid%2F24533529&rft.externalDBID=5PM&paramdict=en-US), “Elbow Joint Fatigue and Bench-Press Training”. Journal of athletic training