

Effects of Peer Grouping on Instructor Training in Martial Arts

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Running Head: INSTRUCTOR TRAINING STUDY

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Introduction

Continual training is essential to being a good instructor. In American Taekwondo Association (ATA) style martial arts there are two basic levels of instructor – *Certified* and *Trainee*. The certified instructors have completed a 2 to 3 year training regimen and have a fairly high status position in the martial arts community. This is fairly overt as the certified instructors even wear a special black stripe on the collar of the uniform and the trainee's wear variations of red stripes depending on their progress. Often, however, these experienced instructors are resistant to continuing their training in instruction because when they practice teaching among a group of instructors they state that they feel their status is lowered to the level of the trainee. A common statement after instructional practice is "I feel stupid being evaluated by the trainee's – I am certified!". The only real requirement they have to renew their certification is to send in a teaching video to the national headquarters and have it reviewed – once every three years. In my opinion, this is not adequate continuing education for the instructor. This study is an attempt to determine if grouping the certified instructors together during training will help them accept the instructor training and practice because they will be evaluated by peers (also certified) rather than a cross-section which may include inexperienced instructors. We will do this by doing a pre-survey to determine the best areas of instruction to cover, do actual practice teaching over a 3-4 week period, and do a post-survey to evaluate the instructor feeling at the end.

Research Design

Research Question

Does separating Instructors into experienced (certified instructors) and less experienced (non-certified instructors) for instructor training aid in how the experienced instructor feels about the training?

Additional Questions

- Does the information presented in instructor training get transferred better (is it applied when actually teaching) when there are two groups?
- What are the best ways to train instructors (is it different for more experienced instructors)?
- Does this result in more “buy in” from either group?
- How does the less experienced instructor feel?
- Would it be better to have different curriculum for the advanced group?

Initial Procedure

Design a survey form for the instructors to fill out prior to the study. This allows them to be part of the training and prioritizes what instructional areas will be covered. This is shown in Appendix I. The training areas are:

- Discipline
- Class Structure
- Parent Rapport Building
- Advanced Reinforcement
- Teaching Attributes
- Life Skills
- Child Rapport Building

Design a survey form for the instructors to fill out after each session. This will include an area for the instructor to write about how instructors performed.

Teach Instructors starting Thursday, Feb 21st and for the next 3 weeks. The topics covered will be based on the pre-study survey.

Analysis

Summarize information and make conclusions

Research

Pre-Survey

A Pre study survey was given (see Appendix I) to evaluate 1) the instructors opinion of the most important areas to cover, and 2) what method they would like to use to practice (lecture, etc).

The areas were ranked as follows:

Rank	Description
1	Discipline
2	Class Structure
3	Parent Rapport Building
4	Advanced Reinforcement
5	Teaching Attributes
6	Life Skills
7	Child Rapport Building

Since the study is only 3-4 weeks (sessions to collect data), we will cover the top 3 items.

Overwhelmingly the instructors wrote they would like to have both lecture and practice as the methods to train (all responses that could be interpreted).

Round One – Class Structure

Class structure was the first lesson. This was split into two parts: a discussion where we listed the top structure points we want in the classroom: how to stand, sit, raise hands, listening position, answering (“Yes Sir/Ma’am”), etc... Part 2 was the practice sessions – about 20 instructors were split into 5 groups - each person was the “instructor” for 5 minutes - teach anything they wanted, but they had to use as many class structure points as they could. At the end of each instructor’s 5 minute class the “students” would evaluate how many items they did off of our list.

The results were very positive – my observation was that all of the instructors were motivated and were not negative (since they were among peers). They all also used 7 (minimum) to 12 (maximum) structure items off of our list (which is really the measure of whether the training may work in actual practice).

Administratively it was difficult. I had a hard time doing observations AND keeping them organized, AND managing the “student” evaluations. For the next round of observations I will:

- Stagger the end times of groups sessions (i.e. we will end each group at different times so they can evaluate while the rest are still practicing)
- Have the “Students” use the pre-made evaluation form (Appendix I – “Student” Evaluation Form). This way I will not have to be involved as much and I can be free to observe.
- Use a tracking form myself and try and rotate observations. See “Observation Form” in Appendix I.

Round Two – Discipline

As stated in the previous round of data collection, this round we used the forms in Appendix I for the peers to rate their performance, and for me to use as well. We did stagger the end times of the groups sessions so I could handle helping the peers collect data.

This was performed on 3/7/02. This had to be moved from 2/28 because 95% of instructors were out of town for a national event.

As in the Class Structure lesson this was split into the discussion/practical format. The instructors came up with a lot of overt discipline items – both what discipline is (what the students do or don't do when they are disciplined) and how the instructors foster discipline in the class. This is a sample of their list:

Student Behaviors (to teach, reinforce or correct)

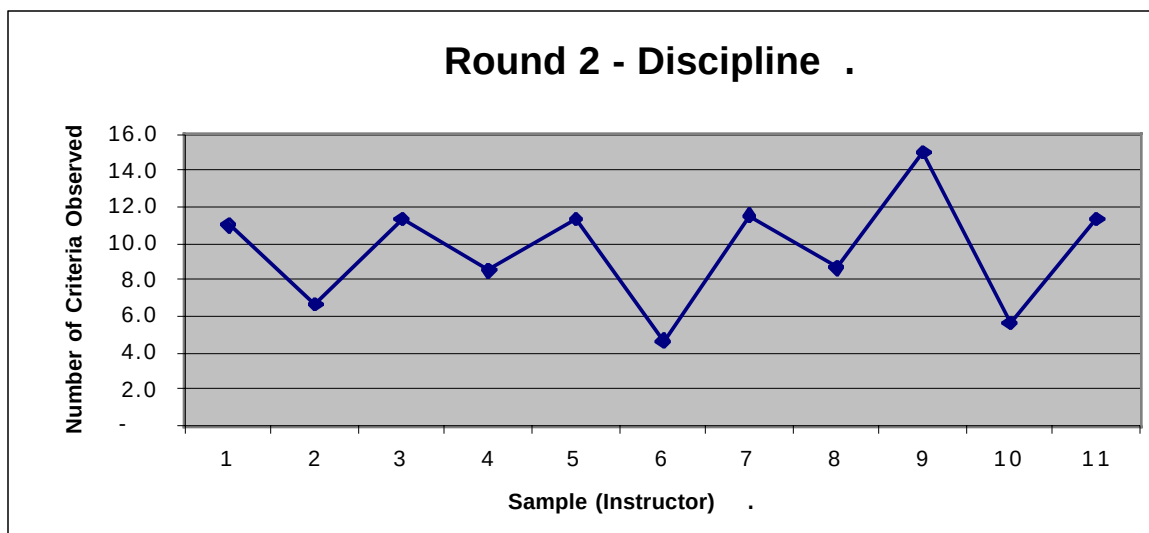
- Raising hand before talking
- Keeping their hands and feet to themselves
- No goofing around
- Handing their attendance cards in properly
- Asking permission to enter class if late
- Sitting properly
- Standing properly
- Following directions the first time
- Staying still when they're supposed to

Instructor Behaviors

- Having parents act as an example
- Instructors being a consistent example
- Correcting poor behavior
- Reinforcing good behavior

After this list was determined, the instructors broke into groups and taught a 3 to 5 minute class to 3 to 4 of their peers. At the end of each instructor's 5 minute class the "students" would evaluate how many items they did off of our list using the evaluation form. During this time I evaluated this based on their criteria as well.

As in round one, the results were good – my observation was again that all of the instructors were motivated and were not negative. As you can see in the following graph – they all also used many of the discipline criteria from the discussion (from a minimum of 5 to a maximum of 15). One of the additions we made in this round was they had to teach one aspect of self defense. This prevented the instructors from just reinforcing discipline criteria and not teaching anything.



My observation was that every instructor was positive about the experience. There were no changes planned for structuring the data collection in the instruction practice part of round three. Summary statistics and data processed is in Appendix II.

Round Three – Teaching Attributes

The data collection format for the third lesson was the same as in Round Two. This was performed on 3/13/02.

Also as in the previous rounds, the Attributes lesson this was split into the discussion/practical format. In martial arts, “attributes” refers to the qualities that are part of a martial arts technique. Therefore, in this lesson, different from rounds one and two, the instructors didn’t come up with the criteria themselves, but instead used a predefined list. This was accompanied by a handout that described each attribute in detail (see Appendix III). These attributes were:

Martial Arts / Taekwondo Attributes	
Power	Eye Contact
Timing	Focus
Proper Technique	Rhythm and Movement
Speed	Memorization
Balance	Attitude

After a discussion about the attributes, the instructors broke into groups and taught a 3 to 5 minute class to 3 to 4 of their peers. The same procedures as in Round two were employed, however in this case the instructors were asked to pick out only 2 attributes to focus on.

As in round one and two, the results were good – my observation was again that all of the instructors were motivated and were not negative (since they were among peers). All instructors were rated as emphasizing at least 2 attributes during their lesson – in fact the emphasis on teaching attributes was so strong they all averaged over 4 different ones. This may be too many for a “real” 3-5 minute time frame, though it did appear that the goal of some practice and repetition on teaching attributes was achieved. Summary statistics and data processed is in Appendix II.

Post-Study Survey

The Post-Study Survey (located in Appendix I) was given following the lesson for round three. In this survey we wanted to rate 5 areas of instruction opinion:

- Were the rankings of teaching skills in the pre-survey still correct in your opinion?
If not, how?
- Was the Lecture / Discussion – Practice – Discussion format good – Was it effective?
- Did the exercise help you in class this week?
- How did you feel about the training?
- Did you feel your status was affected?

To summarize our findings, we will take each question separately and review the answers. Summary statistics and data processed is in Appendix II.

Rankings of Teaching Skills

100% of the instructors agreed on the rankings of teaching skills that the group rated. Four did comment directly that the Class Structure and Discipline lessons are by far the most important and one suggested they be combined because they are similar. This clearly demonstrates either that they agree on the importance of the teaching areas or that I have influenced them to rate them the highest. Either way accomplishes the goal of training the instructors to pay attention to the important areas!

I feel that to improve the survey, I should have structured the question in a more abstract way – perhaps listing the 7 areas and having them re-rank them, then compare them myself directly. I couldn't have done it this time because I did the pre-survey anonymously (which was unnecessary).

Lesson Format

Here too all of the instructors liked the format. Comments revolved around wanting more post practical discussion time (“...more discussion time”, “it would have been helpful to see feedback forms”, “more time evaluating instructors”).

Did it Work?

The third question really addresses whether some of the lessons were applied. Of course this wouldn’t apply to our round three subject because the survey was done the day of that lesson.

The response by every instructor was that it did heighten awareness of the teaching subjects in classes over the previous 3 weeks. The only comment theme was that the beginner instructors would have liked to see a demonstration from one of the experienced instructors.

How Did It Feel?

The fourth question was structured to find out some of the instructors emotional response during the practice. They were mostly positive. One instructor remarked that it was stressful to get all of the attributes in 2 or 3 minutes...” though it was followed up by “but on a positive note – if you can do them all in 2-3 minutes, it should be no problem in 30-45 minutes”. There was a similar comment to question 5 (status) that “it isn’t realistic to do all of them in 2-3 minutes”. Clearly because the instructors in the attribute lesson tried (and succeeded) to touch on so many attributes, we should have done a better job explaining that *we had asked for a focus on only 2 of the attributes*. The only neutral to negative response was that it was tough teaching people who were higher rank or more experience (by a 3rd degree black belt certified instructor that had to teach a 6th degree black belt). Overall it appears the instructors enjoyed the process.

Status?

The fifth question really was the most important question regarding this project. Was your status effected negatively by the lessons. I hoped that if the groups were separated by certified (experienced) and non-certified (less experienced) that the lessons would be more palatable by the experienced instructors. This was supported by the instructor's response. None of the instructors felt their status was reduced by the efforts and 31% reported a positive change in their status.

Study Design Comments

Many of the study improvements that could be made have already been discussed. In summary:

- Pre-Study Survey:
 - Names on the survey.
 - Areas to write more categories.
- Lessons/Practice:
 - Have an assistant to hand out and gather the evaluation forms - I had trouble doing a lot of observation because I did the administration as well.
 - Make it clearer how many criteria instructors should cover – otherwise it they try to cover everything and it becomes less realistic.
- Post-Study Survey:
 - Include more rating scale type responses for the questions. This will help get more detailed emotional responses and also clarify the question to the respondent (sometimes the response wasn't directed at the intended question).

Conclusion

Since there was not very much time to do a lot of data collection, we didn't get as deep into the subject as we could. However, it appears the instructors are more open to instruction training based on the strongly positive response in post study survey questions 4 and 5 about how they felt and how their status was affected. It also appears that the instruction format positively affected their instructional skills as well, based on the observations by peers, and the survey responses. At the least it should heighten their awareness of quality instruction. We also suggested a few ways to improve in the process, such as more post practice discussion and more direct feedback to the instructors (they should see their evaluation forms). I am confident that this was a good start toward being able to continuously develop an instructional staff and improve their skills in a positive environment.

Appendix I

Staff Instructional Survey

Our main job is to provide great martial arts instruction to our students so we are going to do some staff training on Thursday's after our level 1 reporting. This is designed to help you have tools to "spread the word" to your staff at the schools. Please fill out this survey to help in organizing this.

Rate which areas you feel are most important (highest rate 1 to lowest rate 7):

- Discipline
- Class Structure
- Parent Rapport Building
- Advanced Reinforcement
- Teaching Attributes
- Life Skills
- Child Rapport Building

How would you like to see the material presented (lecture, activity, both, be detailed and include any ideas you have):

Other Comments:

“Student” Evaluation Form

Date: ____/____/02 **Instructor:**_____ **Reviewer:**_____

Criteria	Frequency	Remarks
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		

Date: ___/___/02 Subject: _____ Reviewer: _____

[illegible]

Instructional Training Evaluation Survey

Name: _____

Date: ____/____/02

Now that you have had a chance to practice a few areas of instruction in regular staff training, please help us do a better job by answering the following questions (none of this information will be revealed to any staff or students of the Black Belt Academy – please be complete):

- 1) Would you re-order the rankings of the instructional areas? (i.e. Class Structure, Discipline) from what you had listed before? Explain:

- 2) Did the Lecture/Discussion – Practice – Discussion format work? Did you feel it was effective in learning / refreshing on the material?

- 3) Did this help you in class this week?

- 4) What emotions did you have while doing the teaching practice?

- 5) How did you feel your status was affected by being evaluated by your peers?

Appendix II

Processed Data

Pre-Survey Data

Instructor Subject	Rankings																Average
Discipline	2	1	2	2	1	2	1	2	1	2	2	2	1	5	1		1.8
Class Structure	1	6	1	1	2	1	2	1	2	5	6	1	2	3	6		2.7
Teaching Attributes	3	5	3	5	4	5	3	3	6	4	1	4	3	1	7		3.8
Child Rapport Building	4	2	4	4	3	4	7	4	4	7	4	7	6	4	4		4.5
Parent Rapport Building	7	7	5	3	5	3	4	6	3	3	5	3	7	6	3		4.7
Advanced Reinforcement	5	4	7	6	7	6	5	5	5	6	7	5	4	2	2		5.1
Life Skills	6	3	6	7	6	7	6	7	7	1	3	6	5	7	5		5.5

Round Two Data

Instructor	Criteria Samples					
	1	2	3	Average		
1	9	12	12	11.0	+	15%
2	6	7	7	6.7	-	-31%
3	9	11	14	11.3	+	18%
4	8	9		8.5	-	-12%
5	10	14	10	11.3	+	18%
6	6	4	4	4.7	-	-51%
7	11	12		11.5	+	20%
8	9	7	10	8.7	-	-10%
9	15	15		15.0	+	56%
10	5	7	5	5.7	-	-41%
11	9	13	12	11.3	+	18%

Average 9.6

Round Three Data

Instructor	Criteria Samples					
	1	2	3	Average		
1	7	6	3	5.3	-	-8%
2	9	9		9.0	+	55%
4	5	2	6	4.3	-	-25%
5	6	8	6	6.7	+	15%
6	5	5		5.0	-	-14%
7	7	7		7.0	+	21%
8	3	7		5.0	-	-14%
9	5	3	6	4.7	-	-20%
10	6	7		6.5	+	12%
12	4	6		5.0	-	-14%
13	7	4	6	5.7	-	-2%
14	8	5	7	6.7	+	15%
15	5	7		6.0	+	3%
16	4	6	3	4.3	-	-25%

Average 5.8

* Instructors numbered the same as last round. 2 were absent

Instructor	Question 1 Response 5 NO	Quotes	Question 2 Response YES	Quotes	Question 3 Response y	Quotes	Question 4 Response S	Quotes	Question 5 Response N	Quotes
10	NO	CS & D ARE IMPERATIVE TO EACH OTHER CS & D SHOULD BE TOGETHER	YES		-		P		NJ	
16	NO		NC	MAYBE MORE DISCUSSION	NA	Like to see cert instructor demonstrate	NC		NC	
15	NO		YES						N	
9	NO	DO MORE	YES		Y		P	slightly pos - stressful to get in a short segment	P	
14	DU		YES	LIKED SEEING DIFFERENT STYLES OF TEACHING	Y		P		P	
13	NO	CS&D MOST IMPORTANT	YES		y		P		P	
1	NO		YES		Y		P		N	
11	NO		YES		Y		P		N	
6	NO		YES		Y		P	Felt funny teaching experts	N	
4	NC		YES		y		p		n	
12	NO		YES	MORE TIME EVALUATING INSTRUCTORS	Y		P		P	EVERYBODY HAD FUN
7	NO		YES		Y		P		N	Feedback is important
8	NO		YES	WOULD HAVE BEEN MORE EFFECTIVE IF WE HAD SEEN FEEDBACK FORMS	Y		-		N	
2	NO	I HAD IT DIFFERENT BUT NOW I AGREE WITH THE GROUP	YES, BUT	I HEARD SOME PEOPLE ARE NOT GOING TO CHANGE HOW THEY TEACH ANYWAY	Y		P		N	NEEDS FEEBACK TO INSTRUCTOR
									N=NO EFFECT ON STATUS P=POSITIVE EFFECT	
		DU -instructor didn't understand								
		NC- No Comment						Neutral or no status change	9	69
		S-Suggestion						Positive	4	31
		P-positive							13	
		- Neutral							15	
								total		

Appendix III

Attribute Handouts

Power

All of our blocks, strikes, kicks and stances must demonstrate power. This is what we really need to defend ourselves, and what looks really cool when we do our form, break boards, or just kick and everybody says "Wow!". There are many aspects to teaching power. Like all attributes, they overlap with teaching the other attributes. Some components of power are listed below:



Proper Technique

Obviously we must do the technique properly to expect it to create power. A poor example of this would be doing a knifehand strike, but having your fingers spread, risking injury.

Complete Chamber and Re-Chamber

The more motion we create, the more time we have to accelerate through The target.

Mental Preparation

Visualization of our technique blasting through a target helps our self-confidence and also helps our body prepare for the technique.

Targeting

You have to look at it to hit it.

Ki-Hap

Ki-haps increase our self-confidence, help control our breathing (so we are exhaling when we connect with the target) and in a real fight would scare the bad guy!

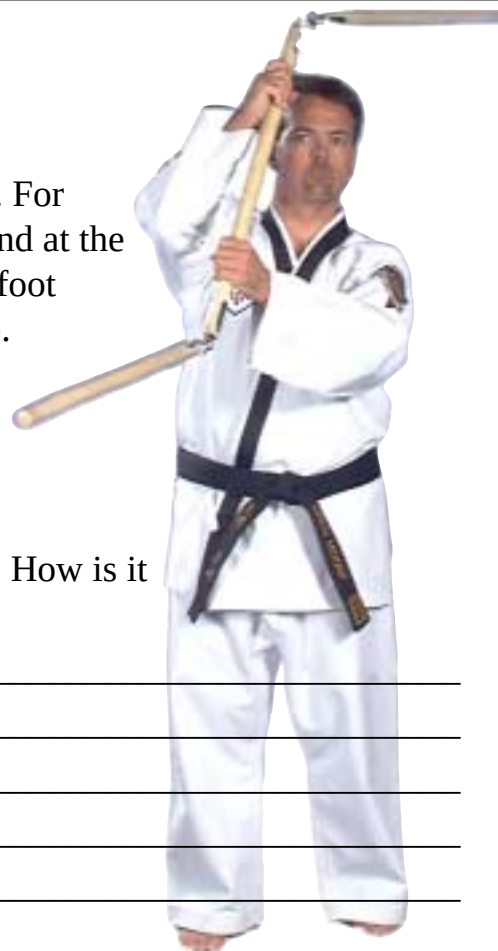
Teaching It

Think of two ways to integrate teaching power into class. Write them down:

Timing

Timing refers to how our body coordinates actions. For example, during a hand technique, our feet must land at the same time as our hand for maximum power (hand-foot timing - if the foot is moving during the technique).

What are other examples where timing is important?



Timing Examples

List the ways timing is important in Taekwondo. How is it important in other parts of life (sports, etc.)

Teaching It

Think of ways to integrate teaching timing into class. Write them down:

Proper Technique

There are many elements to proper technique. This can be simplified and broken down into:

Starting Position

This includes chamber, eye contact, hand position and stance.

Execution

How does the move progress from start to finish. Including hand rotation, foot position, stance and specifically on blocks, does it do what it's supposed to?

Ending Position

Where do we finish the technique? Does the technique accomplish what it was supposed to do? Does it hit the target? Did we move too far so we are open to attack now?

Examples

Proper technique depends on the type of move you are executing (a Punch has a different ending position than a low block). List some examples:

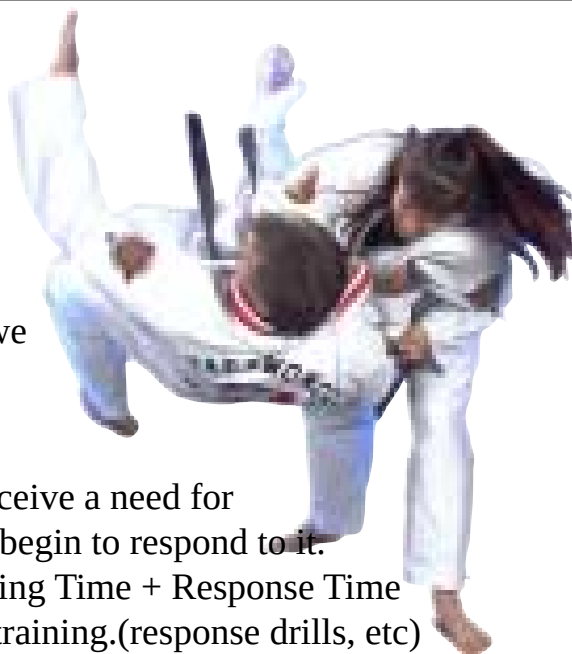
Technique	Start Position	Execution	Ending Position
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Teaching It

Think of ways to integrate teaching proper technique into class. Write them down:

Speed

Speed is the element that is the foundation of power when combined with proper technique. Speed doesn't always mean fast - sometimes a move is supposed to be performed slowly. If we want to increase speed, we need to consider:



Reaction Time

Reaction time is the time it takes us to perceive a need for a move, decide what move to do and then begin to respond to it.

Reaction Time = Perception Time + Planning Time + Response Time
Decreasing reaction time requires mental training.(response drills, etc)

Execution Time

This is how fast the move can be executed. Changing this requires physical training (such as bag work, plyometrics, speed drills, etc.)

Recovery Time

Recovery time is the time from execution of the move to returning to a proper defensive position or to begin execution of the next move.

Total Time (Speed)

Total Time= *Reaction Time* (Perception Time +Planning Time + Response Time)
+ *Execution Time* + *Recovery Time*

All 5 components can be improved to increase total speed. During this we also must be aware of proper technique. Speed without proper technique is useless.

Teaching It

Think of ways to integrate teaching speed (especially increasing speed) into class.
Write them down:

Balance

Balance is really just keeping the proper weight distribution during a move. It's one of the more difficult attributes to perfect. There are many components of balance, but they may be categorized into Focus, Body Position and Proper Weight Shift.

Focus

Being aware of your target is crucial to achieving balance. The components of Focus are:

Eye Contact

Your eye position tells your brain where you want to go. Your brain regulates all body functions so it will help your balance in many ways that are not conscious.

Mental Focus

Mental focus is when your thoughts are on the execution of the move and not other unnecessary things (like worry about your balance, or thinking of work problems). Mental focus should be on where the weight should be.

Body Position

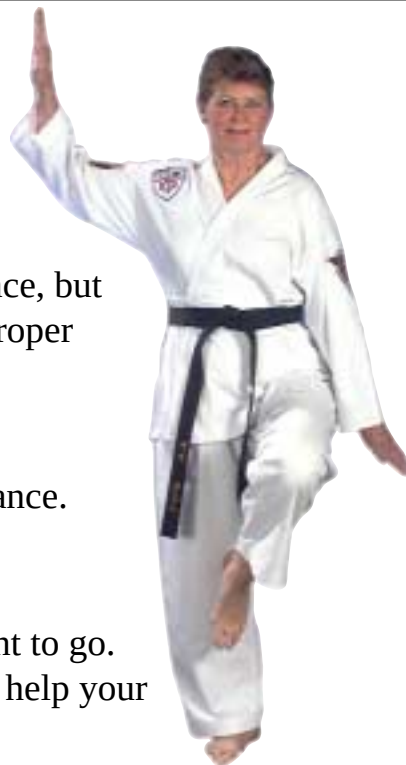
Hand Position, Body Position, Keeping a Bent Knee, and Proper Pivot are the components of body position.

Weight Shift

Body position and Focus result in good balance because they result in proper weight shift. You must also consider weight shift as a dynamic moving thing (ex: a reverse kick requires shifting weight to the front leg even though you spin backwards).

Teaching It

Think of ways to integrate teaching Balance in class. Write them down:



Eye Contact

Eye Contact is obviously crucial to hitting your target! It is the foundation of Focus relative to execution of your technique. To improve Eye Contact you need to have:

Mental Focus

Mental focus is when your thoughts are on the execution of the move and not other unnecessary things (like worry about your balance, or thinking of work problems). Mental focus should be on where the weight should be.

Head Position

Your head and neck need to be aligned with your body.

Eye Position

Your eye position should be on the target, but also monitoring potential attacks. Therefore you would not look directly at the point you punch the opponent, but out at the entire person, using peripheral vision to see attacks. If you focus to directly on one spot, you may miss their attacks.



Teaching It

Think of ways to integrate teaching Eye Contact in class. Write them down:

Focus

Focus is the skill of keeping our mind centered on the task at hand or the future goal without getting distracted by other things. This starts in our head - our ability to keep the most important tasks at the forefront of our consciousness.

Teaching It

Think of 5 ways to integrate teaching Focus in class. Write them down:

- 1) _____

- 2) _____

- 3) _____

- 4) _____

- 5) _____



Rhythm and Movement

Rhythm and movement is the attribute that makes your moves flow and seem graceful, and still powerful.

Body - Eye Coordination and Timing

Examples are: the head turning prior to the body, focusing eyes on target area (not always the exact target point, the proper area).

Foot Timing

Examples are: shuffling, single step, double step, and other combination steps.

Hand Timing

Examples are: hand rotation, proper reaction force (opposite and equal) timing,



Teaching It

Think of 5 ways to integrate teaching Rhythm in class. Write them down:

- 1) _____

- 2) _____

- 3) _____

- 4) _____

- 5) _____

Memorization

Memorization the method we put information into long term memory for later retrieval. Successful memorization is measured by how well we are able to retrieve it later.

Senses and Interpretation

Information gets into your brain by the senses and your cognitive (mental processed) interpretation. (SEE, SAY, DO)

Short Term Memory

On the average, people can remember 7 ± 2 items in short term memory. These items may be small (like individual numbers) or large (like an interconnected phrase). When a group of small items is combined into one cluster this is called *chunking*. Chunking allows us to retain more information by combining small pieces into a larger *chunk*.

Repetition, Context, Emotion,

Are methods of transferring information into Long Term Memory so we can retrieve it indefinitely. (see SEE, SAY DO)

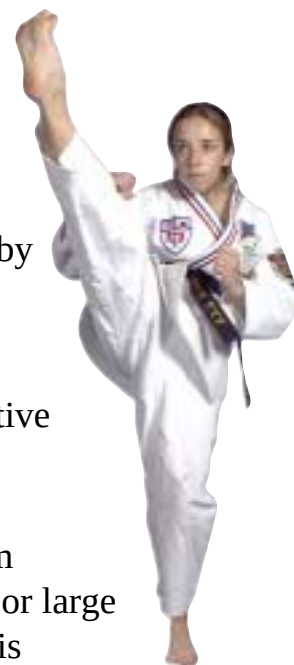
Long Term Memory

This is where information is stored indefinitely. There is no know limit to the amount of information that can be stored and there is no know time limit to retrieval on information. However, the more often information is retrieved, the easier it is to retrieve the next time. In addition, The *context* of the information (what the information is associated with) seems to be connected with retrieval.

Teaching It

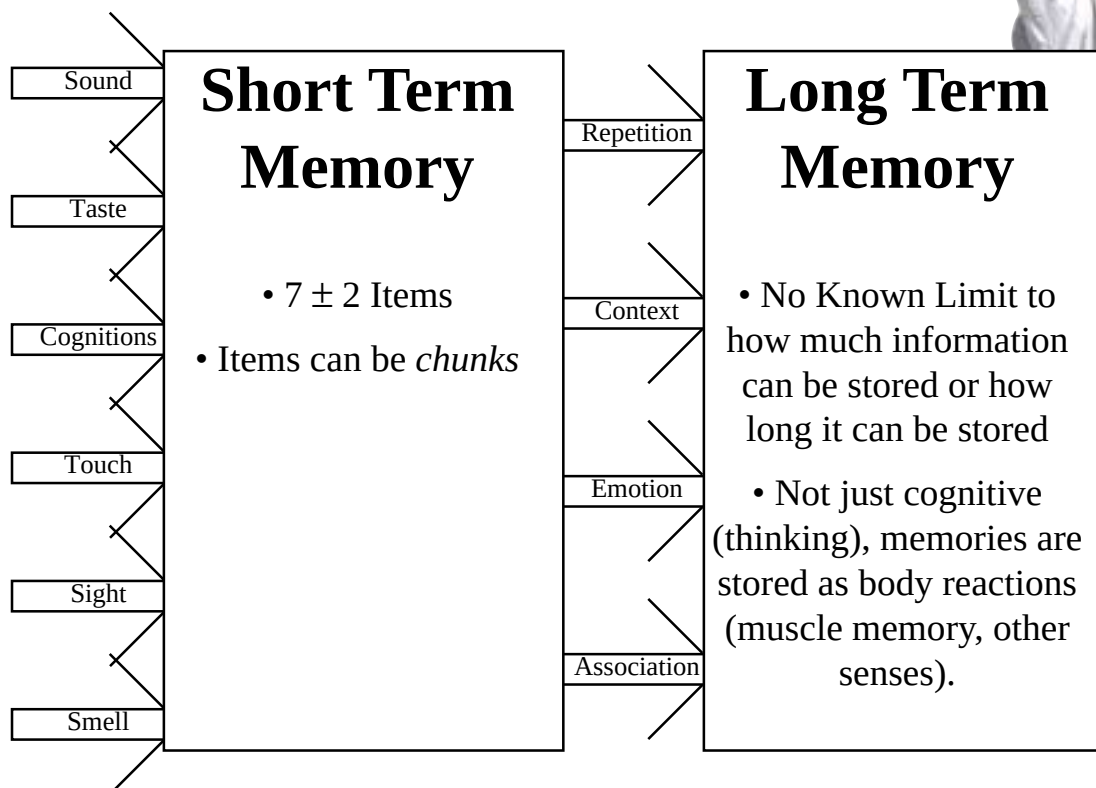
Think of 5 ways to help students memorize. Write them down:

- 1) _____
- 2) _____
- 3) _____
- 4) _____
- 5) _____



Memorization (Continued)

Simple Graphic Model for Memory:

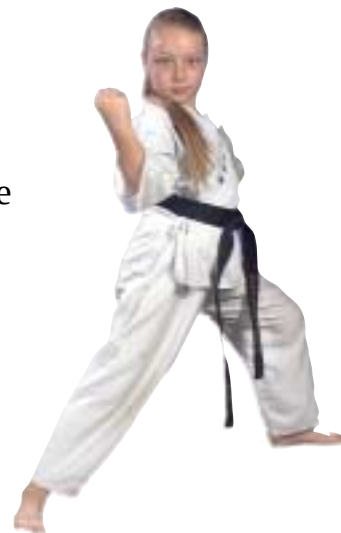


Remember:

- **SEE:** Sight
- **SAY:** Sound and Touch
- **DO:** Touch (Sight, Sound)

Attitude

Our Attitude is not just applicable to class. We need to educate the students about having a black belt sttitude outside of our school. Do the exercise below:



Teaching It

Think of 5 ways to integrate teaching Attitude in class. Write them down:

- 1) _____

- 2) _____

- 3) _____

- 4) _____

- 5) _____

*"Your Attitude
Determines youe
Altitude."*