



AASI-I SNOWBOARD EDUCATION AND **LEVEL 3** CERTIFICATION

This Level 3 Research Project is valid for the 2016 – 2017 Season ONLY

Instructions:

1. Completed projects must be **typed** and either emailed to admin@psia-i.org, or received by the PSIA/AASI office no later than **21 days prior to your 2nd mandatory Clinic**.

2. All submitted research projects must be emailed, faxed or mailed to the PSIA/AASI office and must include the following information:

Full Name: _____

Home Resort: _____

Current AASI Certification Level: _____

Research Project Submission Date: _____

Name of Trainer(s), AASI staff member(s), etc. with whom you reviewed your project answers with:

3. Ultimately, a passing grade research project must be turned into the PSIA office **at least 14 days** before your on-hill exam, to be eligible to take the on-hill exam.

Important Information (It is in your best interest to read this section):

- The questions and your answers contained in this written assessment may be used during portions of the on-hill exam. **Make sure each answer is your own.**
- **Three of the ten questions will be selected at random for grading**, one from each of the two sections and a third from either section below. Make sure you give the appropriate amount of attention to each of your answers to the questions.
- The on-line research project can be taken as many times as needed to obtain a passing grade and research project fees will apply for each attempt. Questions on subsequent research projects and those that are graded may or may not change. **Research projects may take up to 10 days to grade**, so plan accordingly.
- Make sure you allow enough time for subsequent research project attempts if you think you may need it.
- The candidate should prove that they **know the definitions of, application of, and the underlying theories** related to each question.

Suggestions:

- Spend at least a couple of days thinking about and researching the appropriate answers to each of the questions. Give each answer the appropriate amount of **research, thought and consideration** before giving concise answers.
- Be sure to provide enough detail to make sure each question is answered completely.
- Use AASI & PSIA materials, AASI staff, the internet, training directors, peers, and experienced instructors as resources for answering these questions.

Section #1

1. a. How do you introduce a student into learning “freestyle tricks” and at what point in their learning should this happen?

b. Once you determine it is the appropriate time to teach “freestyle tricks”, use the phases of the ATML model to give a "how-to" of a trick that you're comfortable teaching. Be specific and incorporate safety, discussion of stance and the concept of ranges of motion into your explanations.

2. a. Describe the major lower body movements a 25-year old person would need to make to perform one single basic heel-side turn on groomed green terrain (assuming the rider will start the turn from their toe edge, standing still and perpendicular to the fall line). Where is the rider’s center of mass located throughout this turn in relation to both the board and the hill?

b. Describe in detail the forces and two other physics concepts that affect the turn described in part a.

3. Movement Analysis and Subsequent lesson plan

Background – A parent shows up at your school and requests a 3 hr private lesson for their 6 year old boy. The parent tells you “My son has been riding about 15 times and is getting better, but his riding development seems to have “plateaued”. He can ride much of the mountain on his heel edge (his preferred method) and is getting better at linking turns on green and some blue runs. Please take him out and help him become a better rider.”

Review the video at:

http://www.youtube.com/watch?v=4wr2h8budEk&list=HL1354462770&feature=mh_lolz

(YouTube User = AASIIMtn, Video Name = AASIIMtn Rider for Research Project, Disregard the reference to the 2010-2011 project shown in the video)

- a. Provide a complete and detailed movement analysis on the rider using AASI terminology and the 4 board performance concepts in your answer, with a strong emphasis on cause and effect relationships.
- b. Design and describe a lesson plan for the rider, i.e. how you will spend the next 3 hrs with this student.
- c. Discuss the human elements that should be considered in the movement analysis process. Describe and give two examples of how you address the following points in your teaching process.
 - i. Giving feedback
 - ii. Teaching methods
 - iii. Cognitive aspects
 - iv. Affective aspects
 - v. Physical aspects

4. a. Explain within the form below how and why the adjustment of binding stance (Width, Angles, Longitudinal Placement, Forward-lean) affects each of the 4 board performance concepts (Twist, Tilt, Pivot, Pressure). Include in your answer the effects on body movements (ankles, knees, hips, upper body).

Answer Form	Tilt:	Twist:	Pivot:	Pressure:
Width:	I.e. changes in width (too narrow / too wide) affect the ability to tilt “how” because body movements are... “why”			
Angles:				
Longitudinal Placement:				
Forward Lean:				

5. Personal riding feedback question:

Question Staging:

- I. Find a slope or run which you would consider challenging for you to ride and one in which you can link together at least 8 turns.

- II. Get a staff trainer, AASI Level 3, DECL, etc. to perform a detailed movement analysis on you riding that slope, preferably multiple times from multiple angles. If possible, have somebody take video of you on the slope and analyze that as well.

Questions

1. Describe in detail the slope that you chose, i.e. the pitch, terrain, snow conditions, etc., and the name(s) of who provided feedback for you.
2. Using AASI terminology, the 4 board performance concepts, and body movement patterns, describe in detail how you rode down the slope. Describe the feedback that you received.
3. Using AASI terminology, the 4 board performance concepts, and body movement patterns, describe in detail how an AASI Level 3 rider should look and efficiently ride the slope that you chose.
4. Based on your responses to questions 1 – 3, build and describe an action plan to close the gap between your riding and the desired outcome described in question #3. (Hint: If no gap occurs, choose a more difficult riding situation.)

Section #2

6. Describe in detail the 3 steps of the movement analysis process and how you personally incorporate these aspects into your teaching. Include in your answer a discussion of the human

elements, tasks, tools, reference alignments, turn phases and any other aspects you feel are important in the movement analysis process.

1. Observation
2. Evaluation
3. Prescription

7. Discuss the different ways in which you, as an instructor, can and do influence return business to your resort. Expand on and discuss at least three personalized specifics within each of the following topics:

- a. Reasons why people do and do not come back to resorts
- b. Things you can do to influence return business
- c. The learning partnership
- d. Handling of groups within the mountain environment – pacing, preparedness, terrain selection and other risks facing students

8. a. For arguments sake, assume you have two students, identical in every way, except each is riding a different type of board. One is on a traditional cambered board and one is on some type of a hybrid. Describe the hybrid board. Discuss the riding characteristics of the rider on each board and give examples of how you would or would not alter lesson tactics in certain situations.

b. Provide two examples of body movement adjustments you would need to make, to have your two students achieve a desired effect when riding one board compared to the other.

9. Discuss and provide at least three examples for each and how your use and knowledge of Student Makeup and Instructor Behavior can affect the:

- e. Reasons why people do and do not come back to resorts
- f. Things you can do to influence return business
- g. Handling of groups with the mountain environment – pacing, preparedness, terrain selection and other risks facing students

10. How do speed and turn size affect the forces on a rider during a slow, large radius toe-side turn compared to a quick, short radius toe-side turn? Describe the movements that need to be made by the rider to counteract those forces.