Understanding Critical Information, before and during a “platform jump”:

Relationship between diagnosis competence and prescription during teaching processes

**Author:** César Peixoto  
Prof. Dr. Sport coaching
**Institution:** Human Kinetics Faculty  
Technical University of Lisbon

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**Introduction:** The motor Tasks are a whole combination of different events for several specific situations. They are dependent of three different parts. One consider the teaching through several adaptations, that we can understand like sub-routines, they allow to perfome better and easier the learning process, with the induction of behavior in different skills and contexts. The second, is the own adaptation to the real model, that it is possible to adjust some kind of conditions with the propose to find the aim of the skill. The last, consider the involve sub-skills, for correcting the mistakes inside the skills.

**Aim of study:** It is important that teachers can have a competent diagnosis and prescription, during the learning process. The diagnosis competence, is very important, they need to know all about the skill, and everything about the learning process. The Prescription competence, for pedagogical process is the other important part, because if the teachers can’t modify the problems in skills, the learners cannot understand and perform the skill better.

**Sample:** The study covered 100 of boys and girls from secondary school, who wants to access the Physical Education course at university. Students age, from 16 to 18, X= 16,43 » SD 0,8.

**Hypothesis:** We want to know if teachers understand the influences during a gymnastic vault (between: speed; lengths from trampoline and platform; lengths from initial point and trampoline contact; lengths from last floor contact before trampoline contact.,. We observe the relationship between distances of running to jump.

**Results:** The diagnosis competence, have to be related with the speed and the lengths, and we find: For Initial started to Trampoline (Min-120 cm»Max-200 cm; X-167cm»SD-27,16); For Trampoline to “Platform” (Min-30cm»Max-100cm; X-68cm»SD-19,43); For last contact floor to Trampoline (Min-55cm»Max-112cm; X-82cm»SD-17,24); These results confirm that less speed the students place the trampoline close to “platform” and the angle Mass center decrease. Speed didn’t increase if the start position is longer. Last contact didn’t increase with acquire speed.

**Conclusions:** The Prescription competence, should find pedagogical situations, applied in a context of process-product, modifications whose relationship must have a reciprocal influence between the components and the environment/contexts which contribute to the success of the task. So it appears that analysis observation feedbacks for correct the components for execution, don’t influence the founded/observed errors. Or diagnosis competence of teachers as problems to know and explain the technique or the prescription didn’t correct the important points to apply in the technique.

**References:**
»Brüggemann, Peter (1978) - "Biomechanical Analysis of Selected Vaults on the Long Horse", (9-24)

César Peixoto   » cpeixoto@fmh.utl.pt