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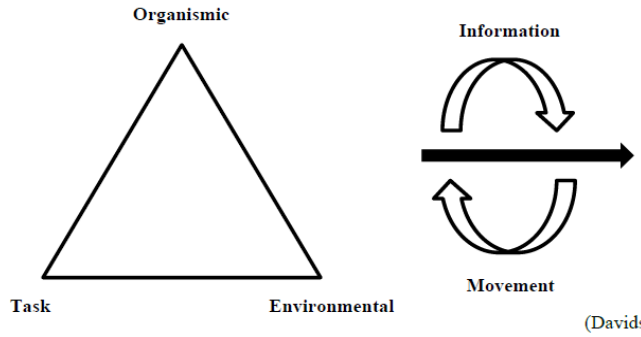
FNASI educational and training system background

The Finnish National Association of Snowsports Instructors (FNASI) educational system has been renewed and adapted to recent scientific concepts and theories.

Modern theories and concepts of motor learning reject the traditional view of ”perfect performance technique” or “optimal template” of movement pattern for all learners. The fundamental attribute in the learning and perfomance of motor skills is the idea of three interacting key constraints; *Organismic* constraints refer to person’s individual characteristics such as height, weight, genes, connectivity of synapses in brain, motivations or emotions. *Task* constraints include specific rules associated with activity, task goals, surfaces or boundary areas such as posts or gates. *Environmental* constraints refer to physical variables in nature like altitude, ambient light, temperature or gravity. Constraints can be seen as boundaries that shape a learner’s movement solutions, cognitions and decision-making processes.



(Davids, et al 2008)

It's essential, that the instructor must offer “motor problems”, which allow individuals time and space to explore and discover coordination patterns and make decisions that are most appropriate for their unique constraints. It's also crucial from a learning point of view to regard the treatment of failures as an important and unavoidable part of the learning process. Regarding this, teaching cannot only be the elimination of “mistakes”. Each learner perceives environment-based information individually and adapts movement behaviors according to that information, meaning that different surfaces and textures (e.g. snowy slopes and terrains) in the environment can afford different actions from different people in relation to individual constraints. Therefore, e.g. for a novice, the effort to mimic the expert-level demonstration of the instructor might be fruitless from the perspective of effective learning.

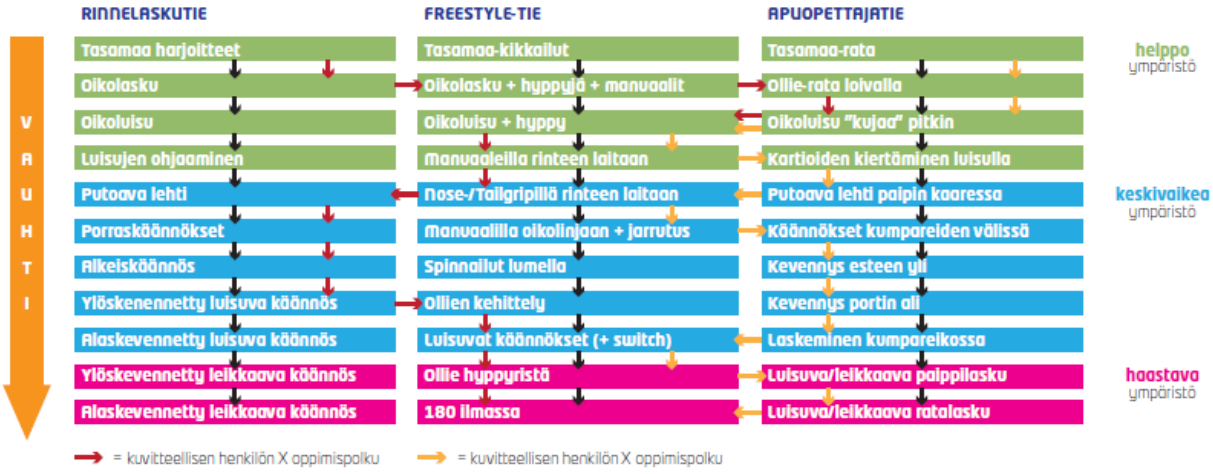
The instructor can put these essential principles into practice by altering and manipulating key constraints. For example, instructor can organize lessons to support the intrinsic motivation (*organismic*), alter objectives (*tasks*) and adapt the learning environment (*environment*).

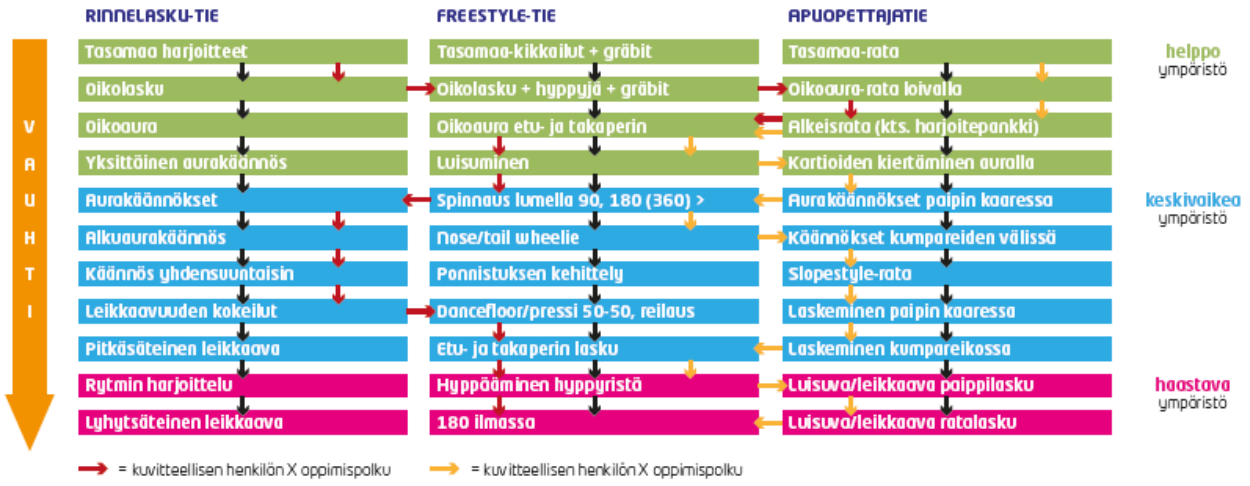
Traditionally in the teaching of snowsports, the instructor's own technical ability and corrective performance feedback has been excessively emphasised. In addition to these, the modern understanding and knowledge of the learning process highlights the instructor's pedagogic knowledge, interactive skills and especially the ability to motivate students in finding independent solutions to motor problems. A significant part of the instructor's professional skills is the ability to adjust and select a learning environment that make it possible for individualised challenges and for a sufficient amount of practice to support the student's learning process.

Although the learning of motor skills is a complicated phenomenon, it can be adjusted in a relatively simple manner. Learning paths are one tool for this. A fundamental priciple in the FNASI training system is that the learning paths are only starting points for the teaching and without any change, they are not necessarily the optimum for all students.

From the perspective of effective learning, the essential elements for teaching are:

1. Creation of the student's intrinsic motivation
2. Maximising the amount of activity
3. Creation of an effective learning environment.
4. Logical progression of teaching
5. Practice of overall performance




RINNELASKU-TIE
FREESTYLE-TIE
APUOPETTAJATIE
VAUHTI
Tasamaa harjoitteet
Oikolasku
Oikoaura
Yksittäinen aurakäännös
Aurakäännökset
Alkuaurakäännös
Käännös yhdensuuntaisin
Leikkaavuuden kokeilut
Pitkäsäteinen leikkaava
Rytmin harjoittelu
Lyhytsäteinen leikkaava
Tasamaa-kikkailut + gräbit
Oikolasku + hyppyjä + gräbit
Oikoaura etu- ja takaperin
Luisuminen
Spinnaus lumella 90, 180 (360) >
Nose/tail wheelie
Ponnistuksen kehittely
Dancefloor/pressi 50-50, reilaus
Etu- ja takaperin lasku
Hyppääminen hyppyristä
180 ilmassa
Tasamaa-rata
Oikoaura-rata loivalla
Alkeisrata (kts. harjoitepankki)
Kartioiden kiertäminen auralla
Aurakäännökset paipin kaaressa
Käännökset kumpareiden välissä
Slopestyle-rata
Laskeminen paipin kaaressa
Laskeminen kumpareikossa
Luisuva/leikkaava paippilasku
Luisuva/leikkaava ratalasku
helppo ympäristö
keskivaikea ympäristö
haastava ympäristö
= kuvitteellisen henkilön X oppimispolku
= kuvitteellisen henkilön X oppimispolku