

## Group work and problem based learning in experienced rider training

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In this paper, a group work method for accident and risk study is described. This type of group work is used in voluntary experienced rider training organized by a motorcycle club MP69. Number of participants varies from 200 – 300 yearly. The accident data is based on fatal motorcycle accidents analyzed in Finland. The main ideas for group work are to give participants a realistic picture of risks in motorcycling and also give ways to reduce the risks rider takes. The group work is the “theoretical” part of a 1 or 2 days riding course, including also field training, basic maneuvers for dangerous situations.

In the first part of the group work, the participants are analyzing fatal motorcycle accidents, trying to find accidents they could self be involved. Also riders own “near by accidents” and other experiences are used as material, same as the own riding in general as a reference. At later stages, survival means are developed and discussed. The whole groups ideas and experience is used to develop the means. During the group work, the participants usually are analyzing, dealing and developing their perceptions strategies, “see the dangerous”, they are motivated for field training and, hopefully, getting an attitude for more conscious risk taking.

The method developed is using peer group. The instructor usually has only a practical role, he or she is taking care of the material and schedule. Thus this group work can be used after a light training, and the results are quite much independent on the instructor.

The method used was developed because during many years of organizing advanced riders courses, we as instructors felt that the common propaganda for safer traffic behavior was not very popular. Both the participants and the instructors felt it to be somewhat downright given, something obvious and also something that did actually not have much to do with their own behavior and problems in the traffic.

We felt that it was something everyone knew, everyone did their best, but also: everyone every now and then was not able to fill the standard. Like traffic rules, or good manners: we knew them, but somehow, we were not able to behave all the time. But, when is it dangerous and when only making frustrations or bad feelings to us or to others in traffic?

In the same time, we found that we have good records of the accidents – see Kaivola’s paper in this conference. There was a lot of information from various viewpoints available how and why motorcyclists died.

### **Peer group work**

Combining these two aspects could be done by utilizing a group work. From our teaching work in the Tampere University of Technology, we adopted a method named

“Tuplatiimi”. We have found it to give good results when producing ideas for product development, so why not test it with the motorcyclist. Original Tuplatiimi (Double Team) starts with an individual search for ideas and then developing, combining and assessing them, first in pair, then with a subgroup of two pairs etc.

In principal, Tuplatiimi has three steps: individual, pair and group phase. Individually, the problem and a relevant set of ideas are developed. The ideas are then introduced to pair, in turn, and then developed and combined. Each pair then presents their ideas to all, and after presentation, all the ideas are assessed by giving votes to the best ones. In the last phase, the most popular ideas are then developed together, perhaps combined with features or ideas from prior stages. It is a simple and straightforward method to get ideas, and develop and combine them in a positive atmosphere.

We just took the skeleton, reduced a bit the evaluation or assessing part, and gave the accidents stories for the basement, for the individual working. We also mixed or added the individual, own risk analysis to the idea production: ideas are dependent or related to own driving and also to real risks.

The accident stories we use are rather short, they use only some sentences and a one picture to give an overview of one single, real fatal accident. The participants are asked to find accidents they may involve, and at the same time, to find preventive means, ideas for surviving.

In the pairs, the ideas are written to a paper sheet, as a slogan or a picture, slogans are placed on bulletin board, and they are also presented to all. After the presentation of ideas, a common combining and evaluating is done – again using only positive developing attitude. After introducing every idea, usually the ideas are first grouped (for instance, animal accidents, collisions in crossings, swerving off road etc), then discussed, and then listed by importance.

Then two or three four people subgroups are build. They have the task, to once again check that nothing important is missing, and then gather the ideas to a “top slogan” which – for the participants – contains all information found.

### **Problem based learning**

The participants are facing an unsolved problem, their own riding and risks they take. They do not have any given ways, answers how to handle the actual problem. Only the framework and of course, goal are given.

The purpose of the work is give to the participant tools for surviving. According to our experience as instructors, everyone is of course able to evaluate their own ways of acting in the traffic without any special tool like group work. We also have noticed during the courses, that participants had the feeling that they are lacking of those survive tools, so new elements are needed.

Those new elements are relevant and simplified accident cases. The cases are introduced so, that only the situation and riders actions are presented. All the details, like riders precise age, are reduced if they have no relevancy from a riders experience viewpoint. The cases are not containing any moral or other statements, just facts, what have happened. If the rider was drunken or speeding, those facts are mentioned, but if those facts do not have direct impact to accident, it is also mentioned. For instance: the rider did not wear a helmet, but other than head injuries were enough to kill.

We wanted to have a starting point, where all participants could really analyze those accidents. Analyze without rejection or repression, in a manner, that helped them to pick up factors, or risks they themselves understood they were taken. We can thus say that those problems are connected to the participants own experiences: the problems he or she meets when riding.

The other view to problems is the records, cases that show us what really is, or has been, dangerous. In our courses, we often met riders that have experience of one type of accident, and they could, for instance really be aware of trucks, but did not realize that busses are the same. Recognizing the problems, real risks, analyzing with own riding as context is the starting point, or problem statement of the work.

### **Cooperative learning**

The framework is rather simple: after the individual phase, about 20 minutes, participants get a pair. Every idea for surviving is introduced to the pair, and a mutual discussion clarifies the ideas on both students. And in the group phase the survival means are discussed and refined. Cooperative learning means profound learning.

This cooperation means that the experience and cases are not taken as absolute. Their relevancy is first evaluated against participants own riding: say, one is riding only when drunken, so he/she can concentrate to those drunken-driven accidents, or vice versa.

The pair and bigger group give participants references, so one single risk factor or accident is not understood as the only or main risk. The picture is getting nuances and reflections from all the participants, and we hope that this way of working gives more detailed understanding of the risks.

We used to say in the beginning of the work, that we are not interested of bad manners, or to evaluate anything bad or good. We just want to survive. Using this perspective gives the participants freedom to find or choose their own risk level when riding.

### **Conclusion**

During almost ten year of use, with many instructors and app. 2000 participants, we have every time got the very same result: perceptions and defensive driving. Of course, the words used are different. But the result is actually not so important: the process itself gives participants tools to understand their own risks and tools to avoid fruitless risks.