Description of interactive session.

This session focuses on the notion of creativity. What it is, why it is important in research, how can creative tendencies be recognised and fostered and what are the advantages and disadvantages of recruiting creative thinkers as PhD students. We focus on PhD research in the sciences but the lessons learnt from this interactive session can be applied in other disciplines. Following a short introduction participants will have the opportunity to brainstorm the characteristics of creativity. The ideas will be summarised and compared with definitions and characteristics that are current in the research literature on this topic. The main research source used in this workshop will be Kantorovich’s theory of blind creativity (Kantorovich, 2001, ‘Blind creativity’, Galileo, 43, 46-55).

Recruiting the best candidates for research study is crucial for the success of a research group. It can also contribute to the intellectual and academic satisfaction of both supervisors and recruited students. Currently senior researchers face a real problem in evaluating a candidate’s creativity, one of the more important qualities for research. In this interactive workshop we suggest a pedagogical tool for helping to determine in advance the potential creativity of candidates for research study. The tool includes a workshop on creativity to help research leaders in the recruitment process. It is this activity that forms the basis of our interactive workshop.

The tool also includes the development of a course for prospective PhD students. We will touch upon this during the workshop but time does not allow for extensive treatment of it. In brief the course would be offered to prospective PhD candidates at the master's level. A key part of the courses would involve each researcher presenting a research-task from his or her field to the whole class. Both the working style and solutions to the task are evaluated. The quality of the answers are judged according to traditional criteria such as problem-solving ability, feasibility, simplicity and so on. The working style is examined according to Kantorovich’s theory of blind creativity which says that novelty in science is a result of tinkering.

Since the idea of tinkering as a working style for creative researchers might not be familiar to research leaders or those who take charge of such a course we have developed the above mentioned workshop. In it we introduce Kantorovich’s theory. Research leaders, supervisors and teachers are trained in the identification of creativity in their own work and field according to Kantorovich’s theory. This abbreviated interactive session in the Thinking Conference covers some key aspects of this workshop.

Creativity is often defined as the ability to make or otherwise bring into existence something new. This, however, is broad definition and by no means the only one. Several definitions of creativity are common in psychology. Several personality types who tend to show high creativity can also be identified. However choosing candidates for postgraduate studies on personality type alone is difficult to defend. We argue that it is important to clearly identify indicators for creativity while at the same time matching them with other characteristics such as academic performance, social and cultural compatibility and the motivation and the means to carry out a higher degree.

In the case of defining and identifying creativity we argue that Kantorovich’s theory on the evolution of science is particularly useful. The central claim of Kantorovich is that novelty in science is generated through events dominated by serendipity and tinkering. Based on this claim, a candidate with a serendipitous and tinkering working style may reach novel and creative solutions to scientific problems and be a good candidate for research study. In this workshop we will present this and other ideas for increasing the recruitment of creative thinkers for PhD studies. We will also, in an interactive way, demonstrate how those ideas can be put into practice.