# INTELLIGENT TEAMS PERFORM

19 August 2011

## Build 'collective intelligence' in your team

1. A group's average individual intelligence is not a strong predictor of group intelligence – but it is a factor.

How many times do you hear of organisations that invest a fortune in buying the best talent, only to find that it doesn't deliver according to expectations?

You hear much less about organisations putting together teams in a thoughtful manner, including factors beyond direct subject matter competence. Are you prone to a similar oversight?

2. When individuals dominate groups there is lower collective intelligence.

UGM research shows that it can be beneficial to institute turn-taking in teams. How accurately do you think you could predict the amount of time each person contributes to your team discussions? It's worth checking, because perceptions are not always reality!

3. Social sensitivity and turn-taking increase collective intelligence.

Our research on shared team leadership identified eight influencing behaviours that can be contributed by different people in a team.

How widely are leadership behaviours shared among your team?

### Group intelligence and performance?

Group Intelligence? Firstly, you may wonder, "Is there such a thing?" Secondly, "Can it be measured?" Thanks to a late 2010 study by Carnegie Mellon and MIT researchers, the answers are "yes" and "yes".

You may also have asked yourself, "Why should I care?" That answer is simple and compelling. Group intelligence predicts group performance.

In terms of prediction, it's not much different from the individual measure of general intelligence. An individual's general intelligence is a good predictor of cognitive performance across a range of mental tasks. Anita Williams Woolley and fellow researchers argue that this effect is probably "the most replicated result in all of psychology".

Why should you care about cognitive performance in the first place? Well, in the knowledge age, much of the value you generate is created by using your brain. Performing cognitive tasks. In the workplace you do this alone and also often in team contexts. Given the near universality of Performance Appraisals or equivalents, performance obviously matters.

### Collaborating on individual IQ tests

The novel aspect of the collective intelligence research study was small groups working together to complete IQ tests, normally administered only to individuals. This delivered scores of 'collective intelligence'. The randomly selected groups then tackled a complex architectural design challenge, giving them a performance rating for a real task.

Individuals also completed similar intelligence tests, to establish individual IQs. Additionally some, who were not part of any group, worked on the design challenge alone. This probed the link between individual IQ and performance.

### No surprise - intelligence predicts performance

Firstly, researchers confirmed that individual intelligence was a good predictor of individual performance on the complex challenge. Overall, a higher IQ resulted in higher performance on the real life task. Not surprising, we've known this for decades.

A more interesting finding was that a group's collective intelligence correlated strongly with its performance. Smart groups performed better.

But, most surprisingly, this had only a moderate amount to do with the average intelligence of group members or the intelligence of the smartest member. Simply averaging individual IQ scores or learning the IQ of the smartest person was not nearly as good a performance predictor as 'collective intelligence'.

### What creates collective intelligence?

What factors contribute to collective intelligence? Let's remember, smarter groups perform better and that's the reason for the interest in collective intelligence.

Researchers ruled out a number of likely suspects, including the cohesiveness of the group, motivation and satisfaction. None of these were found to be good predictors of collective intelligence. As an aside, you'll probably also be recognising that these are usually things on which organisations focus.

Three factors were significantly correlated with collective intelligence. Firstly, average social sensitivity in the group (measured by a specific test). This relates to how sensitive or aware members were of others in the group. Higher awareness of others among members led to better collective intelligence scores.

Secondly, there was a negative correlation with speaking turns. In a nutshell, groups that were dominated by a few did less well than those where more members had a chance to contribute. This finding mirrors UGM research findings, published previously.

Finally, researchers found that performance was "positively and significantly correlated" with the number of women in the group. Groups with more women had higher collective intelligence – and higher performance! But they also found that groups of women only performed less well than groups with some gender diversity.

Two diversity issues arise from the finding about women and collective intelligence. Firstly, women scored much higher than men on social sensitivity. So this was seen as very important. Secondly, teams with gender diversity scored better than all male or all female teams. Diversity of perspective is also a contributor to collective intelligence and performance.

### Implications for you and your team

The researchers actually conducted two separate studies as part of their research. In each they found similar results. This gives a reasonable level of confidence that it's worth thinking about their findings on collective intelligence. Who doesn't want to lift team performance?

The easiest check you can make is whether you have a healthy helping of diversity in your team. Among others, this may come from different: genders; professional cultures; national cultures; sexual orientation; and even organisational divisions. Then, you could monitor how many people get a speaking chance and contribute. Finally, you might think more closely about social sensitivity.