

# Diversity of the Mind as the Key to Successful Creativity at Unilever

Nel M. Mostert

In contrast to the general belief that we need a diversity of people attending the creativity session in order to generate ideas, this article states that it is more important that the participants of the creativity session have a 'diversity of the mind' meaning they have the ability to think creatively. In the R&D environment of Unilever we have encountered many ways in which the diversity of participants and the environment of a creativity session have an impact on the results. Based on four years of experience, this article describes how diversity impacts creativity from a practitioner point of view.

## Introduction

The question that this article addresses is: 'Is diversity the Philosopher's Stone for creativity. Will it lead to the Golden Idea?'. The answer is: 'No'. This article shows that having a 'diversity of people' in your team is not the key guarantee to successful creativity; 'diversity of the mind' is even more important.

The article first defines creativity and diversity from a practitioner point of view. Then creativity is discussed in the context of emotions leading to the conclusion that a too diverse group of participants hinders individual creativity and therefore the flow of a creativity session. The reason is that very creative ideas only emerge in an environment where there is complete trust and safety, even after a creativity session, when all ideas have to lead to that one solution. We show diversity barriers that need to be managed before, during and after a creativity session. The article ends with the conclusion that there is one type of diversity that is most necessary to obtain creative ideas, namely 'diversity of the mind'.

This paper is based on the experiences of the author with facilitating teams in more than 125 creativity sessions and her research on creativity sessions over the past four years in Unilever (Mostert, 2004). Unilever is a fast-moving consumer goods (FMCG) company in both the Foods and Home & Personal Care markets. Unilever's mission is 'To add vitality to life. Unilever meets everyday needs for nutrition, hygiene and personal care with brands that

help people feel good, look good and get more out of life'. 223,000 people work at Unilever spread over 100 countries. Unilever's 400 brands include Knorr, Hellman's, Bertolli, Lipton, Magnum, Dextro, Slim.fast, Omo and Dove.

## What is Creativity?

Before discussing what we mean by diversity, we describe creativity. To describe creativity we first need to make clear what the difference is between creativity and innovation. Creativity is a soft process that starts from when the problem is brought up, including the moment when the idea to solve the problem has been born and ends with the sharing of the idea with others. It is a soft, imaginative process. As soon as an idea is made public, then the hard innovation process starts, where organizations start up a team, prepare a budget and project description, etc.

The four phases of creativity are:

1. getting into contact with the problem,
2. incubation time to think about a solution,
3. the 'aha' moment when you think of an idea and
4. action to share the idea with others.

In a working environment, the company cannot allow employees to take all the time in the world to go through all four phases at their own pace. In particular, the second phase, the incubation time, can be quite considerable. Think of a 'writer's block' when trying to think

of a subject for a next novel; sometimes it can take years to come up with that great idea. That is the reason why creativity sessions are organized: to decrease the incubation time.

A creativity session can have the following steps:

- Start with a problem definition including an explanation of the background of the problem by the problem owner.
- Next the participants generate ideas using creativity techniques that stimulate the creativity of the participants (varying from normal brainstorming to using any other creativity technique that suits the purpose).
- Then a selection of the ideas takes place.
- The chosen ideas are discussed further.
- Finally, action plans are agreed for all ideas that seem worthwhile pursuing.

However, every session is custom-made according to the wishes of the client and the content of the problem. No two creativity sessions are the same.

### What is Diversity?

Diversity in creativity reflects the different backgrounds of the participants in Unilever creativity sessions. The diversity can be manifested in many ways, for example:

- age
- gender
- introvert/extravert
- language
- nationality
- cultural differences
- work level
- science
- function
- expertise (R&D/Marketing/Supply Chain)
- level of expertise
- being part of a large or small team
- years with the company
- years in the current job
- country where the office is located
- internal employees/external persons/consumers.

It is not just the participants that can vary, but also the locations:

- The country where the session is organized.
- The service provided, such as the availability of flipcharts, pens, stimulus material (magazines, etc.), post-its, drinks, coffee, music, good light lunches/dinners and last but not least enough room to move around.
- Does the meeting take place in an internal meeting room at the company or an external venue?

- Is the meeting room located in a creative surrounding (castle) or a dull surrounding (portacabin, or room with no windows)?

Having facilitated a lot of different teams in a lot of different locations, it is clear that they all have their own energy, communications and emotion. Here are a few examples.

- The first example concerned a creativity session on detergent powders for scientists with various backgrounds, such as microbiologist, flavour technologist, nutritionist, spray expert, etc. They came together to solve the problem of a cluttering powder. Instead of running the agenda and process of a creativity session, the only thing the facilitator had to do was guide the very vivid conversation. There was a free flow of ideas and in-depth scientific discussions because they had a high appreciation of each other's expertise and the atmosphere was open and trusting. The end result was many possible solutions and new contacts between different scientists. Some of them agreed to have these types of sessions more frequently with the aim of learning from each other's expertise.
- Another creativity session with scientists in the field of foods went differently. The atmosphere was dull, concentrated, no laughing, very serious and it just felt like participants were not enjoying themselves that much, or at least they did not show such emotions. Nevertheless, they were working hard and putting ideas on paper. At the end of the session the participants were asked 'Did you enjoy the session?' They said that it was the greatest session they had ever had, they were very happy with the high level of intellectual, creative and professional ideas and the project leader dashed off to the Patents Office to get some ideas filed right away.
- Working with marketers and brand managers/developers is a totally different story. Most of the time the participants are young, vibrant, positive people with lots of energy. However, they are quickly bored with the task at hand as they want to move ahead with the next step in the process. It is hard to keep them under control, and it is just as hard to put the brakes on. High speed, high spirit and lots of ideas and enthusiasm to work on the ideas. In contrast to scientists, marketers have a short-term, high-speed vision and that is definitely reflected in working with them.
- Another team consisted of process and mechanical engineers. Where other teams are tired after 90 minutes of generating ideas, they kept on persistently for more

than two hours! Every creativity technique that was offered to them, made them think of a new method/process or tool they could use to create a new idea. The team was very loud and laughed a lot. The diversity of ideas was enormous; the one session gave enough material for one year of further research. The minds of engineers are truly creative in the sense that they seem to find a solution for everything. This is logical in a way, because if you are constructing a factory or a new machine, there is no way that something turns out to be 'not possible'. There is a mechanical solution to every problem. Typing out all the ideas was very difficult because this team produced a lot of drawings, which had to be scanned.

It is the challenge for the facilitator to set the scene in such a way that within all the variety, participants feel free to generate and express ideas, while taking the diversity into consideration and even trying to exploit it! However, the more sessions we facilitated, the more we became aware that we might be looking at diversity from the wrong point of view. We concluded that the above overview of diversity needed reconsideration because creativity might be in need of a different kind of diversity. For that we need to take a deeper look at personal creativity.

## Personal Creativity

If asked who considers himself a creative person in a group of 20, maybe two or three people dare to raise their hands. Creativity seems to be something to be proud of if you feel and dare to admit that you 'are creative' or if you are considered to be creative by others. That is very strange because it is commonly known that everybody is creative in his/her own way. If you feel you are not creative and you want to be, then you can train yourself. Creativity is a trick of the mind, which everybody can learn to do. Byttebier, CEO of the Belgian COCD (Centre for Creative Thinking), says: 'Everybody can think creatively; you can learn how to do it and you can develop yourself' (Byttebier, 2002) and Brown, CEO of the English ?What If! Consultancy (2006) says: 'You are a creating machine' and gives lessons on how to be creative: 'Brain Basics'.

When you show people how easy it is to trigger more ideas, they learn to their surprise that they can come up with more ideas than they would ever have thought. Mostert and Frijling (2001) witnessed that at the end of a creativity awareness training session, many participants stated that they were relieved to

find out that 'I am creative too!'. Sometimes people feel creativity is almost like a religion, they feel liberated in the mind and free to face the world in a different mindset because they now realize that many business and private problems can be solved using their newly learned skill.

The glorious facial expression of a person who just thought of a great new idea tells it all. It feels so much better to think of an idea yourself than to expand on other people's ideas! The energy and adrenaline that flows through your body at the 'aha' moment feels so good, it makes you laugh and you feel surprised at your own contribution. We believe that people can be creative on their own. You do not need to be in a large group that is sharing ideas. Also Nijstad (2000) found that being alone can trigger as many ideas as working in pairs or in a team, even higher quality ones. It often happens that participants enter the creativity session with a number of ideas already thought of before the session, provided the participants are given and have taken the time to go through the phases of creativity in advance. Einstein understood this too. After his daily work at a Swiss Patent Agency, he spent long nights thinking about his theories, on his own, far away from the world of science. He preferred to work on his own. We have implemented the 'five minutes of silence' in our creativity sessions. After the problem owner has explained the problem, the participants are given five minutes of silence to write down their first ideas. Often we see that participants write down between four and seven ideas. In a group of 12 participants, the first score of 48–84 ideas are harvested in just five minutes. No research has been done yet to investigate if the 'winning ideas' are among the ideas generated in these first five minutes.

## Creativity in Teams: the Limits

We might even reconsider whether we need an organized creativity session where many people sit together to generate ideas at all. There are two main reasons for these doubts.

The first reason is that on your own, you can have what we could call your own 'thought train' rolling. Your thought train has to reach the end station to get the best idea. If another person's thought train crosses your railway, either a collision takes place, or the two trains join to become one new train and drive together. The latter is good, the former not, because if a collision takes place, the end station is not reached, meaning that a potentially perfect idea has crashed. If you are with a large group of people and everybody is

shouting ideas, then a lot of collisions happen and a lot of ideas are crashed. Rietzschel (2005) comes to a similar conclusion: 'Nominal groups generated more ideas, and more high-quality ideas, than interactive groups'. This is why the facilitator should take great care in a creativity session to prevent too many collisions. There are ways to do this as shown in Box 1.

#### *Box 1. Ways to Prevent Collisions*

- *One solution is to let the team work individually and/or in pairs when generating ideas. Never do idea generation with the entire team shouting out ideas!*
- *Of course you must have process tricks that enable all participants to share the ideas with all participants, but doing it in such a way that the thought trains join, instead of crashing. These techniques are: gallery, brain-write, working in pairs and offering the pairs creativity techniques that suit the pair. If the pair is not generating ideas because they do not 'connect' (which sometimes happens), the facilitator can help them, but the pairs must stay the same. The reason is that the two people need to build confidence and trust in each other so that at a certain point they feel comfortable with each other and start to dare to share the most crazy and wild ideas.*

A second reason is that participants can be too different to be able to work together.

- We have introvert and extravert participants. In order to prevent the extraverts from taking over the session, it is better to make small teams, allowing the introverts a safe room to share their ideas. Participants appreciate it when they are all able to be creative, active participants and still build interactively on other people's ideas.
- Working with different cultures on the one hand gives a large variety of different paradigms, but on the other hand cultural diversity might decrease the level of creativity in an idea-generating team. Of course there is the richness of the different paradigms, but there is also the difficulty of finding a common ground in the diverse worlds of all participants and the beliefs they have. Some cultures do not allow employees to have better ideas than their superiors. True cre-

ativity can only happen when there is real respect and connection between two or more people.

### **Creativity in Teams: the Flow**

You might have noticed that in the last sections the words 'confidence, feeling comfortable, trust, share, safe, common ground, respect and connection' appear. These emotions are important in connection to creativity for two reasons. The first is that creativity is all about taking risks. You only dare to take risks if you know that you can trust that the people you are working with will support you and back you up. The second reason is that creativity is all about trust. Creativity requires full openness towards each other to accept each other's ideas. If there is openness and trust between the participants of the session, the most daring, new and creative ideas can be expressed and the group will produce a flow of these ideas.

When facilitating an idea generation session, a good facilitator knows if the team is in the right flow. That is, when ideas emerge that are related to sex. Why? What does creativity have to do with sex? If people are sharing 'sexy' ideas, then they share emotions and risk. A colleague of mine said 'Why is it that creativity feels like sex and the idea is like a new born baby?' Maybe the two are not that far apart because most creativity techniques have the objective of creating new connections between already existing things, and the Dutch Van Dale dictionary even gives the translation for sex as 'multiplication/the ability to propagate'.

Some examples:

- During a session on new food formats, there was an idea that we could invent a tool with which melted ice cream could be turned into a spray. This would allow the consumer to spray the melted ice cream in the mouth, or (as a participant added) on the body. Another participant joked: 'When I come home with my melted ice cream, I spray it on my body and I will shout to my wife "Honey, I'm home!!!"'.
- Another idea from that session was the 'ice cream condom', resulting in a new 'roll-off' packaging suggestion.
- Or during a session on 'How to make environmentally safe detergents' one participant suggested that all people should walk naked so we would not need detergents at all. Another participant springboarded with the question: 'How do animals keep their fur clean?' and... what could we learn from that?

Table 1. Effectiveness in Problem Solving in Creativity Sessions Run in 2000–2003

	Yes, the problem is solved	Not yet, the problem is not yet solved	No, the problem is not solved	Total number of sessions
Total number of sessions (%)	41 (53%)	16 (20%)	21 (27%)	78 (100%)

## Research on Creative Teams at Unilever

To find out if inviting a mixture of people to a creativity session offers a high chance that ideas are really implemented after the session, we have evaluated 100 creativity sessions by means of a questionnaire. We received 78 completed questionnaires that contained enough information on which to base further analysis. For the remaining 22, it was either no longer possible to contact the problem owners or they did not respond to all the questions in the questionnaire. Most sessions took place at Unilever R&D Vlaardingen (UR&DV), and some took place at other Unilever offices.

Typical examples of problem areas defined for Creativity Sessions organized by Unilever innovation teams are (numbers reflect percentage of 100 investigated sessions facilitated in 2000–2003):

- Area: To solve technical problems (42%)
  - How to improve dispensing of X
  - Think of new applications for ingredient Y
- Area: To start up a project (21%)
  - How to determine alternatives for A
  - Think of ingredients with a C benefit and products to apply it to
- Area: To generate ideas for new products/projects (17%)
  - Think of a next generation P
  - What would a new format of product M look like?
- Area: To tackle consumer-related issues (14%)
  - How to identify signals that communicate benefit H
  - What would a campaign to raise awareness of product S look like?
- Area: Culture and communication (6%)
  - How to have more fun at work

In the R&D environment of Unilever, the creativity sessions typically result in (proposals for) new projects, products, patents and other opportunities. Another benefit of organizing a creativity session is that it results in a more creative attitude of team members.

One to two years after the session took place, we asked the relevant project leaders 'Did the creativity session solve the problem?' The results are shown in Table 1. This shows that out of 78 sessions, 41 (53 per cent) had already produced a solution to a problem. The outcome of 16 sessions (20 per cent) is still work in progress and may lead to solutions later on. With a possible success score of  $53 + 20 = 73$  per cent, we can state that creativity sessions offer project teams a very high chance of finding a solution to their problem.

A total of 21 (27 per cent) of the sessions encountered barriers, resulting in no work being done on those problems. We discuss the reasons for this later.

We also constructed an overview of how the teams were composed (see Table 2). This answers the question 'Is there a relation between the team composition and solving the problem using the ideas generated in the creativity session, after two years or less?'

Looking at this table from a diversity point of view, it could be concluded that the success (success judged as 'The problem is solved') of a session is unexpectedly not dependent on the diversity of the composition of the group. Composition 1 (only URDV project team members) gives the highest rate of immediate success: 70 per cent, whereas compositions 2, 3 and 4 score an immediate success rate after two years of 47–50 per cent. This means that the less diverse the group, the higher chance of success. This could be for a number of reasons.

- Team members know each other well and accept each other ideas more readily.
- Project team members are goal oriented and have the urge to reach the goal, more so than a group that consists of people that are not part of the project team.
- Project team members tend to choose those ideas that they can implement rather than the more creative ideas. Byttebier (2002) calls this the 'creadox', meaning that 'people, when confronted with a very large amount of new ideas, tend to play it safe and to choose those ideas that fit within those thinking patterns that can be realized'.

Table 2. Effectiveness in Problem Solving by Composition of Groups in Creativity Sessions Run in 2000–2003

Composition of participants in the session	Yes, the problem is solved	Not yet, the problem is not yet solved	No, the problem is not solved	Total number of sessions
1. Only URDV project team members	14 (70%)	1 (5%)	5 (25%)	20 (100%)
2. URDV project team members and other URDV members	14 (50%)	8 (29%)	6 (21%)	28 (100%)
3. URDV project team members, other URDV members and other Unilever members	5 (50%)	3 (30%)	2 (20%)	10 (100%)
4. Other Unilever members	7 (47%)	3 (20%)	5 (33%)	15 (100%)
5. Other Unilever members and consumers/externals	1 (20%)	1 (20%)	3 (60%)	5 (100%)

URDV = Unilever Research and Development at Vlaardingen

Barker (1996) emphasizes this: 'Reality that does not fit in our paradigm will have difficulty passing our filters'.

It also seems to be more difficult to get ideas quickly implemented if they are invented in a team that (also) had other URDV and or Unilever members. This is shown with all compositions because they have 20 per cent or more of the session's ideas still in progress whereas in composition 1 only 5 per cent of the sessions have ideas still in progress. The reason could be that if the team works with only their own team members, there are no problems with the 'not invented here syndrome' meaning that ideas are accepted more easily and turned into actions quickly.

We can conclude that inviting 'outsiders' to the session has a benefit that is not directly related to the success of the session itself. This is very surprising because the entire objective of inviting a diversity of people to the session is the expected higher success of the session. We have to conclude that inviting a diversity of people to the session is not a guarantee that your problem will be solved. Other factors are responsible for that, which we elaborate on later.

Having said this, it needs to be stressed that having a diversity of people does have other advantages. Our experience shows that participants appreciate a mixture of types of expertise for reasons of getting to know each other and to meet people who look at the problem from a different angle. New contacts are made during creativity sessions, broadening the network. Often the people agree to meet again after the session because they want to learn

more about each other's expertise and to benefit from sharing knowledge.

### Results on Need for Diversity

With 20 per cent of the sessions still having work in progress, Table 2 also shows that a creativity session does not give the team the Philosopher's Stone for the Golden Idea. Although the research shows that 90 per cent of the problem owners stated that 'useful ideas came out of the session', the output of the session in most cases does not include the one Big Idea that is the solution to all the problems or immediately leads the team into a brilliant new innovation. Instead, the session gives different directions or routes in which possible solutions might be found. A creativity session sometimes causes more problems than there were before the session. The reason is that the team has to work on the output of the session, investigating all ideas that are worthwhile pursuing to solve the problem. Only after a couple of months or longer the team might have found a solution and in hindsight they see that the solution is a combination of ideas that have resulted from the earlier creativity session. This means that a creativity session leads the minds of the project team members in directions that might offer a solution to the problem. With work in progress, even more barriers need to be taken into account.

On the way from idea to innovation, Table 2 shows that 27 per cent of the sessions have not resulted in a solution to the problem. The research shows that these teams have encountered six types of barriers after the creativity

session that prevented the ideas from being pursued. These are, in rank order (percentages reflect the number of remarks/reasons noted down from the 21 failed creativity sessions):

- lack of ownership (32%),
- no budget available to work on the ideas (14%)
- quality of the ideas is too high/overdone (NASA technology) for the project (12%)
- the project changed scope, thus the ideas became useless (17%)
- the technical composition of team was not equipped to deal with the ideas (19%)
- a lack of time to work on the ideas (6%).

This list of barriers is of high value. Mostert and Bruins Slot (2004) report that the barriers are now used to manage the expectations of project leaders who organize a creativity session and to warn them that successful teams are those teams that do not encounter these barriers, or that are able to use their motivation and passion for the idea to overcome or anticipate the barriers, and turn them into enablers.

Another specific barrier when working with the Background Scientist is the fact that an ambitious scientist has two main goals in life:

1. To be the first author of the article,
2. To be the first name on the Patent.

These two goals might be the reason that true creative scientific innovations are not shared at an early stage because scientists want to keep the idea to themselves until it is sufficiently protected by Intellectual Property Rights (patents) and he/she is recognized as the idea generator and owner.

Summarizing the outcomes of our findings so far, we can conclude the following:

- Creativity is a skill you can learn.
- Prior to a creativity session the barriers that might prevent the ideas from being implemented need to be identified.
- You don't need a large group of people to generate creative ideas, working alone or in pairs is sufficient; as long as you know how to do it.
- Creating ideas together with people only works if you know and trust them.
- Having a diversity of people in the creativity session is no guarantee of quick success.

## Diversity of the Mind

Having a diversity of people attending a creativity session is not the key to success. The key to success in solving problems in a creative way lies in each individual. The diversity of the individual mind enables people to be creative

and to push ideas to implementation. Diversity of the mind opens up the opportunity to run into ideas 'by coincidence'. How do you meet with 'coincidence'? The answer is: 'By making sure you are there at the right time in the right place with the right question'. If you have a seemingly non-solvable problem, you can find answers and solutions everywhere. These can be with people you meet, places you visit, books you read, seminars you follow, a television programme you are watching, attending a dull meeting, a picture you look at, a dog you see running, a child you see playing. Creativity takes place in your own mind. Your mind is responsible for making the 'click', the 'vital link' or 'linking pin' between problem and solution, in other words: get out of your comfort zone, breaking out of the limits of your paradigms. Organizing a creativity session with a lot of different people is just one way to try to find the 'coincidence'. Taking a walk, having a coffee, some minutes of 'window shopping' can do the same trick. As long as you allow your own brain the opportunity, time and space to think.

Another small but very valuable experiment shows how this works. We ask the participants to stand in line according to the time of day when they are most creative. Surprisingly, on average half of the people stand in the morning zone (waking up, at the toilet, taking a shower, travelling to work), half of the people stand in the evening zone (exercising, falling asleep, driving home). Only a very few participants claim to be creative during the day and when asked in more detail it showed that only one or two of them claim to be creative at the office during working hours (during meetings, talking with colleagues). Almost all participants get their best creative ideas outside working hours. This little exercise clearly shows that the office just does not allow your brain the time to think, to step back from the problem. You have to let your mind flow (almost like in hypnosis), concentrate and listen to what is happening around you, while inside you your mind is making new connections between already existing things.

There is only one way to do that: you have to do that yourself! You have to find your own time and place during the day where you are most creative. To become more creative, you have to build diversity into your own mind. You have to have diversity of the mind.

## Conclusion

This article describes the many ways in which the participants and the environment of a creativity session have an impact on the results. It

is commonly believed that 'diversity of the people' stimulates creativity. However, from a practitioner's point of view 'diversity of the mind' of the participants is the real key to creativity.

If the management of a company wants to achieve a truly creative culture, the starting point is to invest in time. Time is needed to raise the awareness of employees of what creativity actually is, how they can learn to be creative and how they can use creativity to their benefit both in business and in private life. The management of an organization needs to create a culture where there is space to 'think things over' in order to get diversity of the mind.

## References

- Barker, J.A. (1996) *Paradigms*, Scriptum Books, Schiedam.
- Brown, C. (2006) *How to Have Kick-ass Ideas*, Harper-Element, London, pp. 38, 56.
- Byttebier, I. (2002) *Creativiteit Hoe? Zo!* Lannoo, Tielt, pp. 23, 167.
- Mostert, N.M. (2004) *What did 83 Creativity Sessions deliver?* Unilever R&D Vlaardingen, The Netherlands.
- Mostert, N.M. and Bruins Slot, H.J. (2004) 'Creativity, the Knowledge Connector', *Knowledge Management Chronicles, Travelogue 2*. Elsevier Butterworth-Heinemann, Burlington, pp. 255-69.
- Mostert, N.M. and Frijling, L. (2001) 'Creativity in Organisations can be Measured and Acquired', *Chemical Innovation*, 31 (11), 50-53.
- Nijstad, B.A. (2000) 'How the Groups Affects the Mind: Effects of Communicating in Idea Generating Groups', *InterUniversity Centre for Social Science Theory and Methodology*, University of Utrecht, pp. 151-2.
- Rietzschel, E. (2005) 'From Quantity to Quality; Cognitive, Motivational and Social Aspects of Creative Idea Generation and Selection', *University of Utrecht*, p. 35.

Nel Mostert (nel.mostert@unilever.com) is an innovation process facilitator for the Facilitation Unit at Unilever Research Vlaardingen, The Netherlands. Her work is linked to culture changes, people behaviour and facilitating teams and individuals during organizational transformation phases. She provides support for Unilever innovation project teams world-wide with the aim of accelerating the innovation process. This support consists of facilitation and training, offering processes, tools and techniques in the fields of creativity, strategy development, project planning, project management, project risk assessment and team building.