



Evaluation Method

*Trust and Empathy*

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# Evaluating Trust and Empathy

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## ***Description of factor***

For online teams to perform effectively, all members must feel comfortable with sharing their thoughts, ideas and opinions, whilst also relying on others to behave in accordance with the commitments and stated aims of the group. It is therefore important that teams behave cooperatively and all members can be trusted to work with integrity throughout all phases of a collaborative project. Research shows that teams with high degrees of trust are more proactive, more focused on task output, more optimistic, more frequently initiate interactions, and provide more substantive, productive feedback (Jarvenpaa, Knoll & Leidner, 1998; Clark, et al., 2010; Feng et. al. 2004; Paul & McDaniel, 2004). As such, it is vital that the learning environment can support and cultivate interpersonal trust between team members, especially when working collaboratively on creative design projects. It must also be noted that the level of trust in online teams is influenced by ways in which empathy is supported, both in terms of empathic accuracy (which refers to the ability to accurately infer the specific content of other people’s thoughts and feelings), as well as the facilitation of supportive responses (which involves building a rapport, responding compassionately and thoughtfully to others, particularly useful when delivering peer-feedback and developing social bonds). It is therefore important to evaluate how trust and empathy may be facilitated and cultivated in online learning environments, especially in those instances where teams do not have access to additional face-to-face interaction to supplement their relationships.





## ***Description of method***

The trust and empathy survey employs both quantitative and qualitative questioning through a mix of psychometric testing and open-ended questions.

A 7-point Likert scale will be used for the self-assessment of respondents' subjective experiences of trust and empathy in the online learning environment (1 = Very strongly disagree, 7 = Very strongly agree).

The open-ended questions provide an opportunity for respondents to qualify their answers and provide more detailed information about their experiences.

The following trust factors — *Trustworthiness, Integrity, Ability, Benevolence* — have been adapted from 'Trust in Global Virtual Teams' measurement scale by Jarvenpaa, Knoll & Leidner (1998). Two additional trust factors have also been adapted: *Empathy/Relational Trust* (see Paul & McDaniel; Feng & Preece, 2003) and Cooperative Behaviours (see Costa & Anderson, 2011).

## ***Why to use (especially in context of creative online collaboration)***

This survey can be run during or after the course cycle. Running at the mid-point of course can help to identify and correct any issues that could potentially affect team performance for the remaining phases of a collaborative project. Running the survey after the course has completed can help to identify any critical issues that need to be addressed for the next run of the course/future collaborative projects. This would enable course instructors to make iterative adjustments and improvements to the course, whilst it also provides students an opportunity to reflect on collaborative team performance.



## How to analyse

Statistical analysis can be applied to questions 1-24 (see Jarvenpaa, Knoll & Leidner, 1998). Questions 4, 8, 12, 20, 24 are reversed scored.

Qualitative analysis can be applied to the two open-ended questions (25 & 26). It is recommended that the following coding scheme, adapted from Curtis & Lawson (2001) and Bulu & Yildirim (2008), be used to analyse factors that positively or negatively affected online collaboration:

Behavior Categories		Codes	Description
Leadership		GS	Group skills: A generic code applied to expression that encourages group activity and cohesiveness.
	*	OW	Organizing work: Planning group work; setting shared tasks and deadlines.
	*	IA	Initiating activities: Setting up activities such as chat sessions to discuss the progress and organizing group work.
	*	Ef	Advocating effort: Urging others to contribute to the group effort.
	*	ME	Monitoring group effort: Comments about the group's process and achievements.
Feedback	*	FBS	Feedback seeking: Seeking feedback to a position advanced.
	*	FBG	Feedback giving: Providing feedback on proposals from others.
Task oriented interaction	*	RI	Exchanging resources and information to assist other group members.
	*	SK	Sharing knowledge: Sharing existing knowledge and information with others.
	*	Ch	Challenging others: Challenging the contributions of other members and seeking to engage in debate.
	*	Ex	Explaining or elaborating: Supporting one's own position (possibly following a challenge).
		FBS	Feedback seeking: Seeking feedback to a position advanced.
		FBG	Feedback giving: Providing feedback on proposals from others.
Social interaction	*	SI	Social interaction: Conversation about social matters that is unrelated to the group task. This activity helps to 'break the ice'.
Enthusiasm	*	EG	Eagerness: Expressions that contain excitement and enthusiasm about group project.
	*	GS	Group skills: A generic code applied to expressions that encourage group activity and cohesiveness.
Technical/Task uncertainties	*	FT	Facing/having technical problems.
	*	HeS	Help seeking: Seeking assistance from others about task, confusing about task.

## How to interpret and use for improving online collaboration

The results of the survey can identify specific trust factors that may affect online collaborative performance. Low scores (1-3) can identify specific aspects of the learning environment or team composition that need addressing, whilst low scores across the range of questions would indicate significant issues that course instructors need to address.



The survey is divided into 6 groups of questions relating to a separate trust factor (trust factors are interrelated so there could be some overlap between these categories)

### **Trustworthiness**

- These questions are designed to evaluate levels of ,trustworthiness‘ within collaborative teams. These are general feelings of trust within the group and can indicate issues of team composition and bonding
- Improvements may include developing closer, more empathic team relations (especially if there are also significant issues with relational trust)

### **Integrity**

- These questions are designed to evaluate levels of trust within collaborative teams that all members will act with ,integrity‘. This can indicate levels of engagement, consistency and predictability within a team.

### **Ability (Competence Trust)**

- These questions are designed to evaluate levels of competency trust within collaborative teams (that other members of the group are trusted to have the necessary abilities to do perform collaborative tasks). Working collaboratively means trusting the ability of your team members.
- Instructors/teams might develop ways to better exploit and promote the skills of each team member.

### **Benevolence (Calculative Trust)**

- These questions are designed to evaluate levels of calculative trust within collaborative teams (that the team will work in consideration and good faith to deliver according to agreed objectives). ‘Calculative trust‘ is a form of contractual agreement where parties can be relied on to deliver according to the details of the contract.
- This is a ‘results‘ driven criteria that relates to a desire to strive for a goal or accomplish a task, and could be further supported by incenti





vising collaborative tasks and facilitating social interaction between team members.

### **Empathy (Relational Trust)**

- These questions are designed to evaluate levels of relational trust and empathy within collaborative teams. ‘Relational trust’ is the extent to which a person may feel a personal attachment with their team members and is therefore motivated to do good by the other party.
- This can be used to identify the informal, social factors that can either support or hinder successful team relations.

### **Cooperative Behaviours**

- These questions are designed to evaluate levels of trust related to working cooperatively within a team.
- Can identify issues relating to the collaboration and communication methods a group might adopt, highlighting potential problematic positive aspects of team composition and dedication of group members.

## **Material**

Addendum: *Trust & Empathy Evaluation Questionnaire*

## **Literature**

**Bulu, S. T., & Yildirim, Z.** (2008): Communication Behaviors and Trust in Collaborative Online Teams. *Educational Technology & Society*, 11 (1), 132-147.

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**Curtis, D. D., & Lawson, M. J.** (2001): Exploring collaborative online learning, *Journal of Asynchronous Learning Networks*, 5 (1), 21-34.

**Feng, J., Lazar, J., Preece, J.** (2004): Interpersonal Trust and Empathy Online: A Fragile Relationship, *Behaviour & Information Technology* Volume 23, 2004 - Issue 2

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**Pauleen, D.** (2014): *Virtual Teams: Projects, Protocols and Processes*, London: Idea Publishing



# Trust and Empathy in Online Collaboration

This questionnaire has been developed by the OnCreate project in order to provide a diagnostic tool for evaluating trust and empathy in online collaboration and virtual teamwork.

## Methodology

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The following survey employs both quantitative and qualitative questioning through a mix of of psychometric testing and open-ended questions.

A 7-point Likert scale will be used for the self-assessment of respondents' subjective experiences of trust and empathy in the online learning environment (1 = Very strongly disagree, 7 = Very strongly agree).

The open-ended questions provide an opportunity for respondents to qualify their answers and provide more detailed information about their experiences.

## Trustworthiness

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These questions are designed to evaluate levels of 'trustworthiness' within collaborative teams

### 1. Overall, the other members of my team were very trustworthy

*Mark only one oval.*

	1	2	3	4	5	6	7	
Very Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very Strongly Agree

### 2. I could rely on my team members throughout the project

*Mark only one oval.*

	1	2	3	4	5	6	7	
Very Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very Strongly Agree

### 3. Most people in my team do not hesitate to help and support others

*Mark only one oval.*

	1	2	3	4	5	6	7	
Very Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very Strongly Agree

### 4. You feel uncomfortable working and collaborating with the other members of your team

*Mark only one oval.*

	1	2	3	4	5	6	7	
Very Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very Strongly Agree



## Integrity

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These questions are designed to evaluate levels of trust within collaborative teams that all members will act with 'integrity'

**5. The other members of my team displayed a solid work ethic throughout the project**

*Mark only one oval.*

	1	2	3	4	5	6	7	
Very Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very Strongly Agree

**6. You could trust other team members to contribute to the project in a fair and honest fashion**

*Mark only one oval.*

	1	2	3	4	5	6	7	
Very Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very Strongly Agree

**7. The other team members were strongly committed to the project**

*Mark only one oval.*

	1	2	3	4	5	6	7	
Very Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very Strongly Agree

**8. I am never sure if other members of the team will deliver on what they promised or not**

*Mark only one oval.*

	1	2	3	4	5	6	7	
Very Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very Strongly Agree

## Ability (Competence Trust)

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These questions are designed to evaluate levels of competency trust within collaborative teams (that team members can be trusted to have the necessary abilities for effective collaboration)

**9. The members of my team are equipped with the necessary qualifications for this project**

*Mark only one oval.*

	1	2	3	4	5	6	7	
Very Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very Strongly Agree

**10. Other members of my team have specialised skills and knowledge that can help improve our performance***Mark only one oval.*

	1	2	3	4	5	6	7	
Very Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very Strongly Agree

**11. Within my team we have complete confidence in each other's ability to perform tasks.***Mark only one oval.*

	1	2	3	4	5	6	7	
Very Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very Strongly Agree

**12. I am often uncomfortable letting other team members take responsibility for tasks which are critical to the project***Mark only one oval.*

	1	2	3	4	5	6	7	
Very Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very Strongly Agree

**Benevolence (Calculative Trust)**

These questions are designed to evaluate levels of calculative trust within collaborative teams (that the team will work in consideration and good faith to deliver according to agreed objectives)

**13. The outcomes of the project were important to the rest of my team***Mark only one oval.*

	1	2	3	4	5	6	7	
Very Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very Strongly Agree

**14. The other team members would not knowingly do anything to disrupt the project***Mark only one oval.*

	1	2	3	4	5	6	7	
Very Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very Strongly Agree

**15. The other team members do everything in their capacity to help our team perform***Mark only one oval.*

	1	2	3	4	5	6	7	
Very Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very Strongly Agree

**16. I can rely on others to behave in accordance with the commitments and stated goals of the group***Mark only one oval.*

	1	2	3	4	5	6	7	
Very Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very Strongly Agree

**Empathy (Relational Trust)**

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These questions are designed to evaluate levels of empathy and relational trust within collaborative teams

**17. The people in my team are friendly and usually considerate of each other's feelings***Mark only one oval.*

	1	2	3	4	5	6	7	
Very Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very Strongly Agree

**18. Within my team, personal and cultural values are usually respected by others***Mark only one oval.*

	1	2	3	4	5	6	7	
Very Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very Strongly Agree

**19. We take each other's ideas and opinions into consideration when making a decision***Mark only one oval.*

	1	2	3	4	5	6	7	
Very Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very Strongly Agree

**20. I often hold back ideas because of a lack of effort or respect within the team***Mark only one oval.*

	1	2	3	4	5	6	7	
Very Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very Strongly Agree

**Cooperative Behaviours**

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These questions are designed to evaluate levels of trust related to working cooperatively within a team

**21. You feel comfortable with the shared ownership of ideas within the team?**

*Mark only one oval.*

	1	2	3	4	5	6	7	
Very Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very Strongly Agree

**22. In this team we address issues or problems openly**

*Mark only one oval.*

	1	2	3	4	5	6	7	
Very Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very Strongly Agree

**23. Most people in my team are open to advice and help from others**

*Mark only one oval.*

	1	2	3	4	5	6	7	
Very Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very Strongly Agree

**24. There is no 'team spirit' in my group**

*Mark only one oval.*

	1	2	3	4	5	6	7	
Very Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very Strongly Agree

**25. Please state the ways in which you feel trust and empathy is supported by the learning environment (how did this positively affect collaborative performance?)**

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**26. Please state the ways in which you feel trust and empathy is hampered by the learning environment (how did this negatively affect collaborative performance?)**

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