

# Chapter 41

## Tracer Studies: A Concrete Approach to a Virtual Challenge

**Nancy Brigham**  
*Rosenblum Brigham Associates, USA*

### ABSTRACT

*This chapter introduces Tracer Study methodology, a cost-effective, capacity building tool for evaluating the operations and effectiveness of Virtual Communities of Practice (VCoPs). We make the argument that a VCoP is a dynamic, continually evolving entity, whose characteristics distinguish it in important ways from naturally occurring or purposively planned communities of practice operating in the face-to-face world. As a result, VCoPs lend themselves to evaluation by means of Tracer Studies, a methodology that originated in the field of knowledge utilization, and has been adapted to assess how a VCoP operates and the extent to which it is successful in promoting knowledge use and dissemination. The chapter provides historical background on VCoPs, defines Tracer Studies and demonstrates the types of information that may be derived from a Tracer Study evaluation. We also discuss the application of Tracer Study methodology to the evaluation of VCoPs sponsored by a private education organization.*

### INTRODUCTION

The purpose of this chapter is to introduce an evaluation methodology called Tracer Studies, a relatively straightforward qualitative technique that can be used to follow (or trace) the spread of information from its original source through its full spectrum of impact, determining at every step of the way who used the information, how they

used it, and with what effect. We will illustrate the utility of Tracer Studies in the evaluation of virtual communities of practice (VCoPs) and demonstrate how Tracer Studies can address the three most important questions of funders and sponsors of such communities:

- What knowledge do VCoP members gain from their participation?
- In what ways do members use their knowledge?

DOI: 10.4018/978-1-60960-040-2.ch041

- How and with whom do they share knowledge beyond the VCoP?

The chapter contains two historical discussions. The first follows the evolution and previous use of Tracer Studies. Then, in order to situate Tracer Studies appropriately, we examine the nature of the VCoP phenomenon. Based on our review of the literature, we make the argument that a VCoP is a dynamic, continuously evolving entity that requires an evaluation approach that focuses on process and outcomes rather than characteristics and structure. The specific goals of the chapter are to:

- Define Tracer Study methodology and show how the Tracer Study framework translates into an evaluation plan;
- Explicate the unique nature of VCoPs; and
- Demonstrate the application of Tracer Studies to a specific VCoP evaluation and the value of the results.

## BACKGROUND AND PREVIOUS USE OF TRACER STUDIES

Tracer Studies were developed at Abt Associates (Cambridge, MA) as part of a federally funded study of the dissemination and use of research findings in education (Louis et al. 1985). Tracer Studies were intended to accomplish several goals:

- To understand how knowledge is exchanged and used;
- To explore the degree to which different strategies result in more or less dissemination of knowledge beyond the direct recipients;
- To understand the outcomes and use of knowledge exchange events; and,
- To determine the factors that affect how knowledge is exchanged and used.

Key to understanding Tracer Studies is the notion of a “knowledge exchange event”. According to Louis et al., (1984), such an event occurs when a set of purposively prepared information is communicated to a set of recipients. A knowledge exchange event includes the message (the information itself), a sender, a receiver, a strategy or channel for communicating (e.g. workshops, written products, phone meetings), and a social context for processing the information. All of these are important to the outcome of the knowledge exchange process, which is use. Translating this framework into an evaluation plan involves, determining the message or knowledge to be traced, selecting one or a number of dissemination events, and conducting interviews with a sample of primary and secondary recipients of the information. Ideally, the flow of information is traced from original recipients of information to others with whom information is shared. A Tracer Study follows the message through as many levels within and beyond the original recipients as possible.

The use of snowball sampling is particularly appropriate in Tracer Studies. Snowball sampling involves the initial sampling of respondents by the probability method but the next level of respondents is obtained from information provided by initial respondents (Heckathorn, 2002). Thus, the first level interviews are conducted with those who originally received the information; these are called Level 1 respondents, but subsequent interviews are conducted with people nominated by the respondents themselves and are called Level 2, Level 3 and so on as far as the chain goes. At each level, the interview protocol focuses on the extent to which the respondent received the “message”, the perceived value of the information, the use the respondent has made of it and the extent to which the respondent has shared information. At each level, the interview protocol contains two “tracer questions:”<sup>1</sup>

*Have you shared information with others? If yes: what did you share? Was this a formal or infor-*

12 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:  
[www.igi-global.com/chapter/tracer-studies-concrete-approach-virtual/50371](http://www.igi-global.com/chapter/tracer-studies-concrete-approach-virtual/50371)

## Related Content

---

### Bunker-Room Mnemonics for Second-Language Vocabulary Recall

Alexia Larchen Costuchen, Larkin Cunningham and Juan Carlos Tordera Yllescas (2022). *International Journal of Virtual and Augmented Reality* (pp. 1-13).

[www.irma-international.org/article/bunker-room-mnemonics-for-second-language-vocabulary-recall/304899](http://www.irma-international.org/article/bunker-room-mnemonics-for-second-language-vocabulary-recall/304899)

### A Student Teacher Collaborative Community

Eugenia M.W. Ng (2008). *Encyclopedia of Networked and Virtual Organizations* (pp. 1549-1558).

[www.irma-international.org/chapter/student-teacher-collaborative-community/17791](http://www.irma-international.org/chapter/student-teacher-collaborative-community/17791)

### The Players' Dimension: From Virtual to Physical

Michael Nitsche (2012). *Virtual Worlds and Metaverse Platforms: New Communication and Identity Paradigms* (pp. 181-191).

[www.irma-international.org/chapter/players-dimension-virtual-physical/55407](http://www.irma-international.org/chapter/players-dimension-virtual-physical/55407)

### Teaching and Learning Abstract Concepts by Means of Social Virtual Worlds

David Grioland Zoraida Callejas (2017). *International Journal of Virtual and Augmented Reality* (pp. 29-42).

[www.irma-international.org/article/teaching-and-learning-abstract-concepts-by-means-of-social-virtual-worlds/169933](http://www.irma-international.org/article/teaching-and-learning-abstract-concepts-by-means-of-social-virtual-worlds/169933)

### Exploring Virtual Reality for the Assessment and Rehabilitation of Executive Functions

Elisa Pedrolì, Silvia Serino, Federica Pallavicini, Pietro Cipresso and Giuseppe Riva (2018). *International Journal of Virtual and Augmented Reality* (pp. 32-47).

[www.irma-international.org/article/exploring-virtual-reality-for-the-assessment-and-rehabilitation-of-executive-functions/203066](http://www.irma-international.org/article/exploring-virtual-reality-for-the-assessment-and-rehabilitation-of-executive-functions/203066)