



# The impact of rotating summarizing roles in online discussions: Effects on learners' listening behaviors during and subsequent to role assignment



Alyssa Friend Wise<sup>a,\*</sup>, Ming Ming Chiu<sup>b</sup>

<sup>a</sup> Simon Fraser University, 250-13450 102 Avenue, Surrey, BC V3T 0A3, Canada

<sup>b</sup> Dept. of Educational Studies, Purdue University, 100 North University Street, West Lafayette, IN 47907, United States

## ARTICLE INFO

### Article history:

Available online 3 July 2014

### Keywords:

Computer mediated communication  
Asynchronous discussion groups  
Scripting  
Role taking  
Quantitative analysis of computer-supported collaborative learning  
Temporal analysis

## ABSTRACT

This study investigated whether assigning students summarizing roles in online discussions during specific weeks affects how they attend to the posts of others while playing the role, and in subsequent discussion weeks. Thirty-three students in a large undergraduate course on educational psychology were assigned one of two summarizing roles (Synthesizer, Wrapper) on a rotating basis during six week-long small-group online discussions; demographic and log-file data were collected ( $N = 198$  student-weeks). Multilevel, cross-classification modeling revealed that assigning students summarizing roles increased the breadth of their listening during in-role weeks, but the effect was only weakly sustained after the role was completed. Students taking the Synthesizer role showed some increased depth of listening during in-role weeks but not post-role weeks. Other post-role behavior changes (a reduced number of sessions and review of posts) suggest unintended negative side effects of a role-rotation strategy, possibly due to post-role abdication of responsibility.

© 2014 Elsevier Ltd. All rights reserved.

## 1. Introduction

An important component of productive online discussions participation is attending to others' messages. Previous work has documented that students engage in this activity in different ways (Wise, Hsiao, Marbouti, Speer, & Perera, 2012; Wise, Perera, Hsiao, Speer, & Marbouti, 2012; Wise, Speer, Marbouti, & Hsiao, 2013). A separate line of research has demonstrated that students assigned summarizing roles at the midpoint or end of a discussion often make posts that contribute at higher levels of knowledge construction compared to other students (De Wever, Van Keer, Schellens, & Valcke, 2007; Schellens, Van Keer, De Wever, & Valcke, 2007; Schellens, Van Keer, & Valcke, 2005). This study unites these two lines of research to examine if assigning students summarizing roles at the midpoint or end of a discussion affects how they attend to others' posts. In this way we posit part of the mechanism by which summarizing roles may enrich post quality. Furthermore, the effects of these roles are examined as they are assigned to all students in rotation. This allows us to investigate if role-induced

effects are sustained once the role is no longer assigned and identify any other post-role changes.

### 1.1. Attending to others' posts in online discussions

Asynchronous discussion forums are often used as a vehicle for student-to-student interaction in online courses. Various models of computer-supported collaborative learning provide frameworks for thinking about the learning that can occur at both the group and individual level (e.g. Jonassen, Davidson, Collins, Campbell, & Haag, 1995; Swan & Shea, 2005; Weinberger & Fischer, 2006). In common, they all point to the importance of learning from and with others in dialogue, which requires attention to the comments made by others. Wise and colleagues have conceptualized the process of accessing others' contributions in an online discussion as online "listening" (Wise, Marbouti, Speer, & Hsiao, 2011). Notably, this notion is differentiated from prior work on online "lurking" in that listening is considered to be a productive behavior conducted by the same individuals who make posts (Wise, Speer et al., 2013). Online listening is also differentiated from the more generic act of reading due to the particularities of interacting with discussion forum text which is segmented, contributed by multiple authors and developed over time (Wise, Marbouti, Hsiao & Hausknecht, 2012). Empirical work has shown that students attend to the

\* Corresponding author. Tel.: +1 778 782 8046; fax: +1 778 782 8119.

E-mail addresses: [alyssa\\_wise@sfu.ca](mailto:alyssa_wise@sfu.ca) (A.F. Wise), [mingmingchiu@purdue.edu](mailto:mingmingchiu@purdue.edu) (M.M. Chiu).

discussion posts of others in a variety of ways (Wise, Perera et al., 2012; Wise, Speer et al., 2013), some theoretically more productive than others (Wise, Hsiao et al., 2012). Among commonly cited problems with online discussions are that students engage shallowly with the conversation, post few comments and attend minimally to the comments of others (Dennen, 2008; Hamann, Pollock, & Wilson, 2009; Hewitt, 2003; Thomas, 2002). In addition, some students treat discussions primarily as a vehicle for demonstrating their understanding to the instructor; in this case they may post thoughtful stand-alone comments, but pay little attention to their peers' posts and do not continue the existing dialogue (Knowlton, 2005; Wise, Hsiao et al., 2012; Wise, Perera et al., 2012).

When students do attend to others' messages, how they do so can vary across several dimensions (Wise, Speer et al., 2013). At a basic level students can differ in the breadth and depth with which they view their classmates' contributions. For example a student who opens a large percentage of their classmates' posts but spends little time on them may be trying to survey the conversation, either to make sure they do not miss any content, or out of a sense of social responsibility (Wise, Hsiao et al., 2012). In contrast a student who attends to only a portion of the discussion posts but who does so deeply may be taking a focused or concentrated approach (Wise, Speer et al., 2013). Finally, there are some students who attend both broadly and deeply to the discussion, taking a thorough and interactive approach to their participation (Wise, Hsiao et al., 2012; Wise, Perera et al., 2012). The ways in which students attend to existing posts in the discussion can also vary along other dimensions, such as temporality (how frequently and for how long students log-into the discussions and read others' posts; Jeong, 2005; Wise, Speer et al., 2013) and degree of reflectivity (reviewing of one's own and others' posts; Knowlton, 2005; Wise, Speer et al., 2013).

In general, greater breadth, depth and reflectivity of listening in online discussions should be more desirable for supporting interactive dialogue and the development of personal understandings. Students who seek to learn and improve their understanding of the subject matter may naturally engage in such activities (Darnon, Butera, & Harackiewicz, 2007); however, educators might need to explicitly encourage other students to do so.

### 1.2. Using summarizing roles to support discussion participation

A separate literature has substantially established the benefits of assigning students summarizing roles in online discussions (De Wever et al., 2007; Schellens et al., 2005; Schellens et al., 2007; Wise & Chiu, 2011). Role assignment is a scripting technique that gives students particular guidance about how to engage in discussion to support their individual thinking and collective interactions (Dillenbourg, 1999; King, 2007; Strijbos, Martens, Jochems, & Broers, 2004). A role can be assigned to one, some, or all, group members in a given discussion, with assignment often rotated across students over multiple discussions. However, past studies have shown that not all roles lead students to make more productive contributions to the discussion (De Wever et al., 2007; Schellens et al., 2005; Schellens et al., 2007). Conceptualizing roles in terms of the conversational functions they ask learners to perform, Wise, Saghaian, and Padmanabhan (2012) describe a *summarizing* function, that has consistently been shown to result in student posts that contribute at advanced phases of knowledge construction (De Wever et al., 2007; Schellens et al., 2005; Schellens et al., 2007; Wise & Chiu, 2011). The summarizing function has primarily been elicited by "Wrapper" type roles targeted at the end of discussions (e.g. Schellens et al., 2005; Schellens et al., 2007; see also Hara, Bonk, & Angeli, 2000; Zhu, 1998); however, Wise and Chiu (2011) demonstrated the additional benefits of

eliciting the function midway through a discussion, thus allowing other students to make subsequent posts that build on the summary.

While the benefits of summarizing roles for discussion contributions are well-documented, their effects on how students attend to the ideas of others have not yet been studied. Roles including a summarizing function ask learners to compile and synthesize the existing ideas in a discussion (Wise, Saghaian et al., 2012), thus we might expect that students asked to perform such roles would attend thoughtfully and comprehensively to comments of others in order to ensure that they create a synthesis that faithfully represents the existing discussion. Following this logic, part of the mechanism by which summarizing roles enrich post quality may be through encouraging students to attend more broadly and deeply to the existing conversation. In addition, mid-way summarizers may be encouraged to revisit their summarizing post reflectively later in the discussion, as it captures their synthetic understanding of the discussion up to that point. Potential effects on the temporal aspects of discussion participation are less clear. It is possible that as part of their summarizing role, students may feel responsible for keeping track of the growing discussion and thus check in on it more often. On the other hand, they might viably employ a concentrated strategy of using a single extended session to read all the posts and compose a synthesis.

### 1.3. Role-rotation and post-role effects

A common strategy for assigning summarizing (and other) roles is to rotate them across students over a series of discussions. This strategy gives all students the opportunity to take on one or more roles and benefit from them in the ways described in Section 1.2. Furthermore, after a student has finished a turn in a summarizing role, the consequent changes in listening behaviors may persist. In previous work De Wever and colleagues found some evidence that elevated levels of knowledge construction induced by assigning students online discussion roles could be sustained after these roles were no longer assigned (De Wever, Van Keer, Schellens & Valcke, 2009; De Wever, Van Keer, Schellens & Valcke, 2010). They suggest that students might internalize posting activity related to these roles. If similar internalization occurs with role-induced changes in listening behaviors, these changes would be sustained post-role, either at the same levels as during the role week or at a reduced intensity, depending on the degree to which the listening behaviors have been internalized. However, a group's collective activity when role-assignment is discontinued may differ from the behaviors of individuals who have completed their role responsibilities while others have not. In the latter case (not examined by De Wever et al.'s studies) whether students internalize or abdicate their responsibilities remains an open question. It is possible that after having worked hard during their assigned role week, students may feel that their main responsibility to the group has been fulfilled and thus they are entitled to put in less effort in subsequent weeks. This is a potential problem for any role-rotation strategy; however to the best of our knowledge, it has not been investigated empirically.

## 2. Research questions

1. Does being assigned a summarizing role impact students' listening behaviors in an online discussion during their assigned role week?
2. Are any effects of summarizing roles sustained in subsequent weeks when the role is no longer assigned?
3. Are there any other changes in listening behaviors in weeks subsequent to that of the role-assignment?

Download English Version:

<https://daneshyari.com/en/article/350635>

Download Persian Version:

<https://daneshyari.com/article/350635>

[Daneshyari.com](https://daneshyari.com)