Using Artifacts in a Virtual Seminar
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The Virtual Environment

- Tapped In (www.tappedin.org) is an online community for teacher professional development.
- Tapped In offers teachers
  – Informal and formal professional activities
  – Spontaneous and planned interactions
  – Synchronous human interaction
  – Community

The Virtual Environment (2)

- Tapped In began in 1996 and has grown to more than 17,000 members (4/2003) from around the world.
- Tapped In has worked with many organizations and individuals to help make online collaboration a possibility for them.
- Tapped In has just released a new online environment that offers new, improved and easier to use features and supports for teachers and online collaboration (www.ti2.sri.com).

The Research

- We begin our preliminary investigation of artifacts in virtual interactions by examining a single seminar held in the Tapped In environment.
- With participant permission, we observed and recorded one of the many seminars held in Tapped In on "Internet Inquiry."
- Following the seminar, we interviewed participants about their experiences in the session, and related experiences both in and out of Tapped In.

The Research (2)

- In Tatar et al. (2002), we described our theoretical framework and methods, focusing on analysis of the verbal discourse.
- In this analysis we examine the use of artifacts in the virtual environment at the “Internet Inquiry” seminar and ask the following questions:
The Research (Part 3)

• What kinds of artifacts are available?
• What role do artifacts play in the session?
• How do session leaders and facilitators use artifacts?
• How do participants use artifacts?
• What skills do session leaders, facilitators, and participants need?

Available Artifacts

• **Inline** artifacts are created outside the synchronous chat area, but inserted into it.
  – Notes are extended pieces of text which may be saved and reused.
• **Online** artifacts are objects that appear on all participants’ screens outside of the chat area.
  – Projections allow the sharing of web pages.
• **Offline** artifacts are created for use after the session.
  – Transcripts are automatically sent to all members present for a discussion.
  – Notes can also become offline objects.

Seminar Content is Structured Around Artifacts

Seminar Discussion

• The body of the seminar is a discussion of a series of web sites.
  – Participants contribute their reactions and thoughts about the projected artifact.
• Presentation of the artifact is prefaced by leader comments explaining why he is presenting it.
• The leader may comment on or question participant contributions.
• The discussion of each artifact goes on for 5-6 minutes.

Negotiating Artifact Use

Facilitator’s Role

• Managing multiple windows can be difficult. Difficulties were handled in this session by a facilitator who focused on new participants.
• The facilitator contributed as many utterances as the session leader.
• The facilitator’s utterances were largely private and directed to particular individuals.

The Participants

18 Participants in the session.
12 were interviewed.
All were or had been teachers (K-12, University, or pre-K).
Participants had varying levels of Tapped In experience.

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Frequent Users

Regular Users

Occasional Users

First time Users

Staff

18 Participants in the session.  
12 were interviewed.  
All were or had been teachers (K-12, University, or pre-K).  
Participants had varying levels of Tapped In experience.
### Negotiating Artifact Use

#### Leader’s Role
- The leader brackets discussion of the artifact with guidance about how to orient towards it.
- The leader structures talk via comments like “it’s time to move on.”
- The leader contributes more utterances than any participant except the facilitator.
- The leader’s contributions are almost all public and general.

#### Participants’ Role
- Participants follow leader guidance. Talk may continue after a request to move on, but is clearly seen as winding down.
  - Two newcomers made comments about a web site. 8 participants report recalling the one made during the heart of the discussion. Only one member remembers the comment made after the leader said “It’s time to move on.”
- Participants orient towards discussion rhythm.
  - Attendees report hurrying back from the “online” artifact to be in time to participate in the discussion.

### Participant Use of Artifacts

#### Change of Plans
Helen announces that she made a relevant website.
- She and the leader discuss plans to project her website through eight public utterances.
- This work makes the plan and helps orient others.
  - The leader also says “Be gentle now, because this is Helen’s website and she’s here.”
  - Everyone in the group is polite about her website.
- They take longer to look at it.
- They ask questions about it.
- Their criticisms are softened.

### Needed Skills for Using Artifacts

#### Skills for a Leader
- An understanding of the importance of artifacts in structuring an online session
- Judging timing and presentation “chunk” size
  - Knowing how to poll the audience for understanding and to track attention
- Creating/locating artifacts to structure the session
  - Pre-planning notes and websites

#### Skills for a Facilitator
- Ability to explain (in an encouraging manner) how to manage artifacts
- Knowledge of the common misunderstandings a new participant may have about synchronous online environments

#### Skills for a Participant
- Knowing when and where to place their attention
- Knowing when and how to manage “online” versus “inline” artifacts
- Knowing how to balance artifact examination and conversation
**Practical Lessons** for using artifacts in synchronous online environments

- Keep things simple in the beginning
  - Multiple windows may be difficult to manage
    - in this case, a facilitator helped novices manage
  - at other times, we have refrained from using “online” artifacts in favor of “inline” artifacts
- Develop patterns of use for the artifacts
  - Rhythmicity of looking and discussion
- Ensure leaders know how to use artifacts
  - Via apprenticeship on virtual collaboration and instruction
- Give the facilitator/leader “control” over attentional demands on participants.

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**Summary**

- “Inline,” “Online” and “Offline” artifacts are available.
- Inline and online artifacts structure seminar sessions.
- Session facilitators help newcomers manage artifacts.
- Session leaders contextualize artifact use.
- Session participants orient activity towards artifact use.

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**Next Steps**

For a better understanding of artifact use in virtual environments, next steps include looking at artifact use in:

- other seminar sessions, with other leaders.
- other genres (e.g., classes or working groups) in Tapped In (not just seminars).
- other synchronous and asynchronous systems.

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**References**


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**Additional Information**

See [http://www.tappedin.org/info/papers.html](http://www.tappedin.org/info/papers.html) for more links to related work.

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