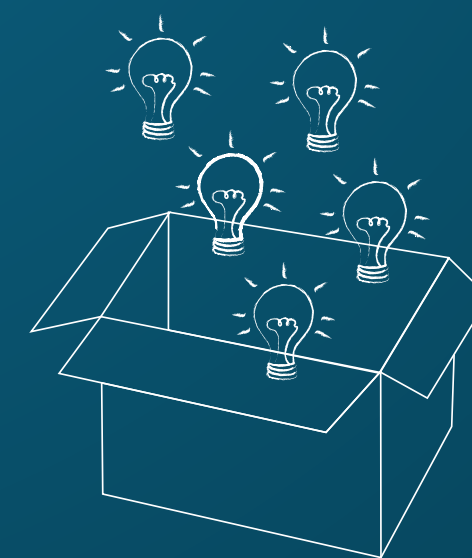


Social Computing



What makes for effective
online communities?

Same Time

Different Time

Collocated
(Same Place)

Remote
(Diff't Place)

Same time / same place

- Face to face interaction
- Roomware
- Shared tables, wall displays
- Group Decision Support Systems (GDSS)
- Single display groupware

Example : same time / same place



Different time / same place

- Message Boards
- Dedicated Team rooms
- Large displays

Example: Ideas for Different Time / Same Place

Airport Display:
Arrival/Departure Information

DEPARTURE	CARRIER - FLIGHT- PARTNER	GATE	TIME	STATUS
Dallas /Ft	AA 1783	B71	4:30P	On Time
Dallas /Ft	QF 4594	B71	4:30P	On Time
Dallas /Ft	UNITED UA 7681 US 7619	A2G	4:50P	On Time
Dayton	UNITED UA 7989 QR 5649	C26	5:30P	On Time
Daytona Beach	DELTA DL 1449	B76	4:06P	On Time
Denver	UNITED UA 517 US 6257	C23	2:40P	On Time
Denver	UNITED UA 903 US 6259	C19	4:22P	On Time
Denver	UNITED UA 937 LH 9058	C4	5:28P	On Time
Denver	SOUTHWEST WN 2683	B50	5:40P	On Time
Detroit	NORTHWEST NW 3721	B72	4:45P	On Time
Detroit	UNITED UA 7348 US 7608	A3	5:09P	On Time
Frankfurt	UNITED UA 916 LH 9051	D3	5:26P	On Time
Frankfurt	Lufthansa LH 419 UA 8832	B49	5:50P	On Time
Frankfurt	Lufthansa LH 419 UA 8832	B51	5:50P	On Time
Ft.Lauderdale	B6 309	B62	3:15P	Delayed
Geneva	UNITED UA 974 LX 3203	C6	5:41P	On Time
Greensboro	UNITED UA 7842 BD 4626	A4	4:46P	On Time
Greenville	UNITED UA 7954 BD 4436	C20	5:28P	On Time
Harrisburg PA	UNITED UA 7952 US 7492	C28	5:25P	On Time
Hartford-BDL	UNITED UA 312 US 6161	D21	5:22P	On Time
Houston	CO 3011	B25	2:35P	On Time
Houston	UNITED UA 965 US 6191	C9	5:22P	On Time
Huntsville AL	UNITED UA 7343 BD 4442	A4	4:50P	On Time
Indianapolis	UNITED UA 7317 US 7150	A2	4:45P	On Time
Jacksonville	UNITED UA 7422 NH 7550	A2	12:15P	Now 3:10P
Jacksonville	UNITED UA 7451 BD 4238	C28	4:45P	On Time
Johannesburg	SA 208 UA 9818	B14	5:40P	On Time
Johnstown, PA	UNITED UA 6937	A5	5:32P	On Time
Kansas City	UNITED UA 7411 US 7902	A1	3:39P	On Time
Knoxville	UNITED UA 7983 US 7406	A6	4:50P	On Time
Las Vegas	SOUTHWEST WN 3674	B50	4:15P	On Time



Same time / different place: Technologies

- Remote interaction
- Video-Conferencing,
- Real-time groupware
- Messaging (Instant messaging, Email)
- Virtual worlds
- Multi-User editors
- Shared Screen (vnc)

Same time / different place: Affordances

- Multi-user participation
- Nonverbal cues
- Differing levels of fidelity (text, voice, avatar)

A logical extension of today's telephone service

Bell System introduces PICTUREPHONE service

Both ends of telephone conversations are identified; people phone by appearance from family-type double-receiver systems.

New York (New York Central Area), Chicago (Posterior Building), Washington (National Geographic Society Building) join service.

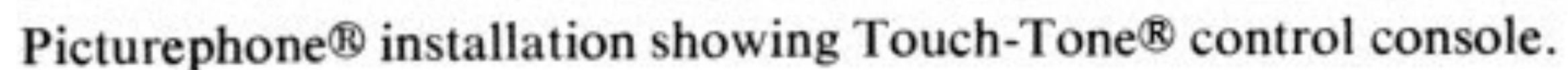
Bell System PICTUREPHONE service lets both ends see as well as talk on the telephone. And "handshakes" if they wish.

For the first time, people can make a visual telephone call to another city — the latest example of the research, invention and development that are constantly improving the communication we provide.

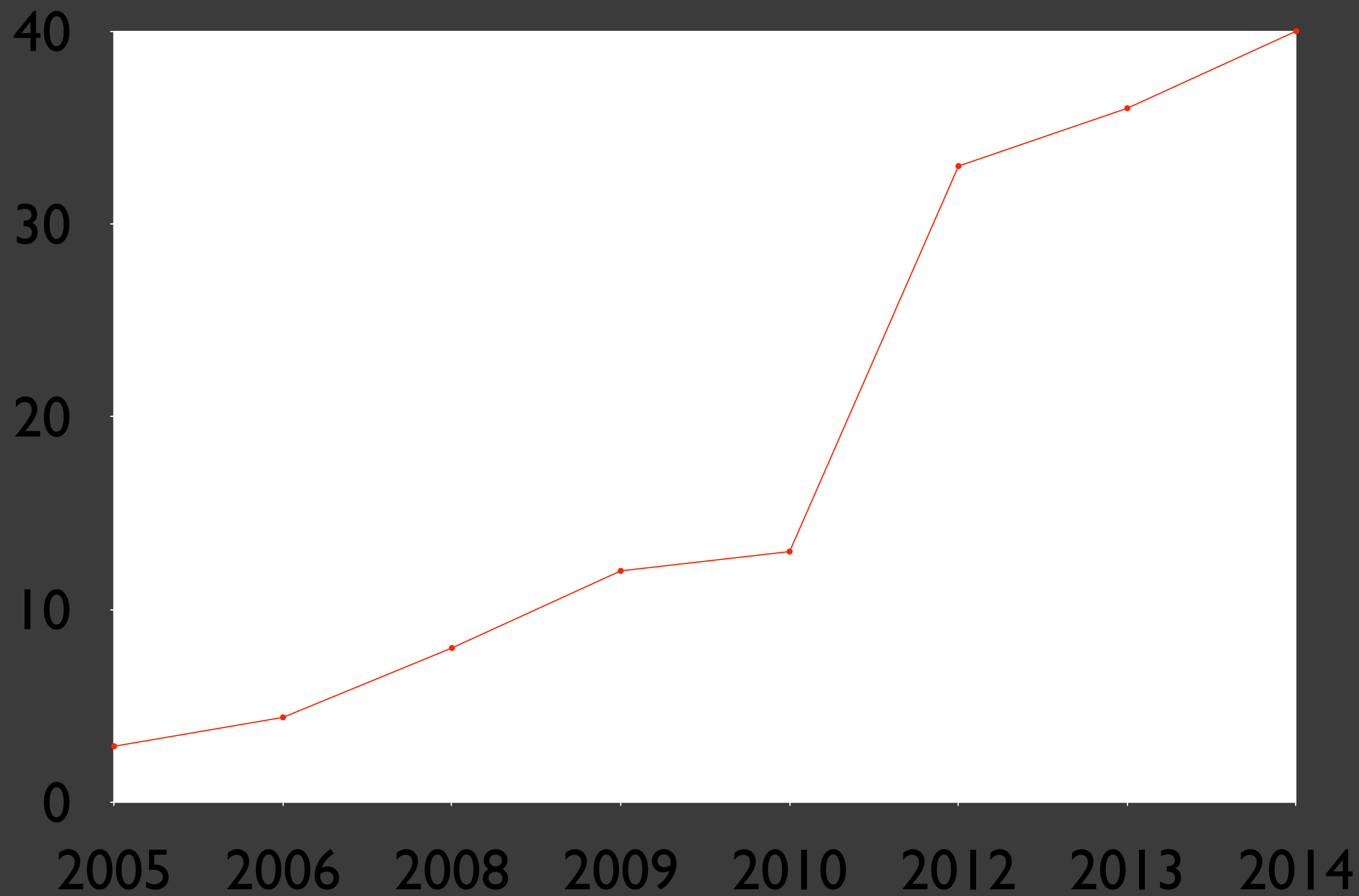
This new service is being offered in the cities listed at the left. Bell System installations at each local center will feature major "meeting" facilities for people with friends or relatives in other cities at the same time.

Further development of PICTUREPHONE service is still in the future. But the service is heading out toward the goal of providing you with better service, more easily accessible communication by telephone.

 **Bell System** *Working together*
American Telephone & Telegraph Co. and Associated Companies



Example: Skype

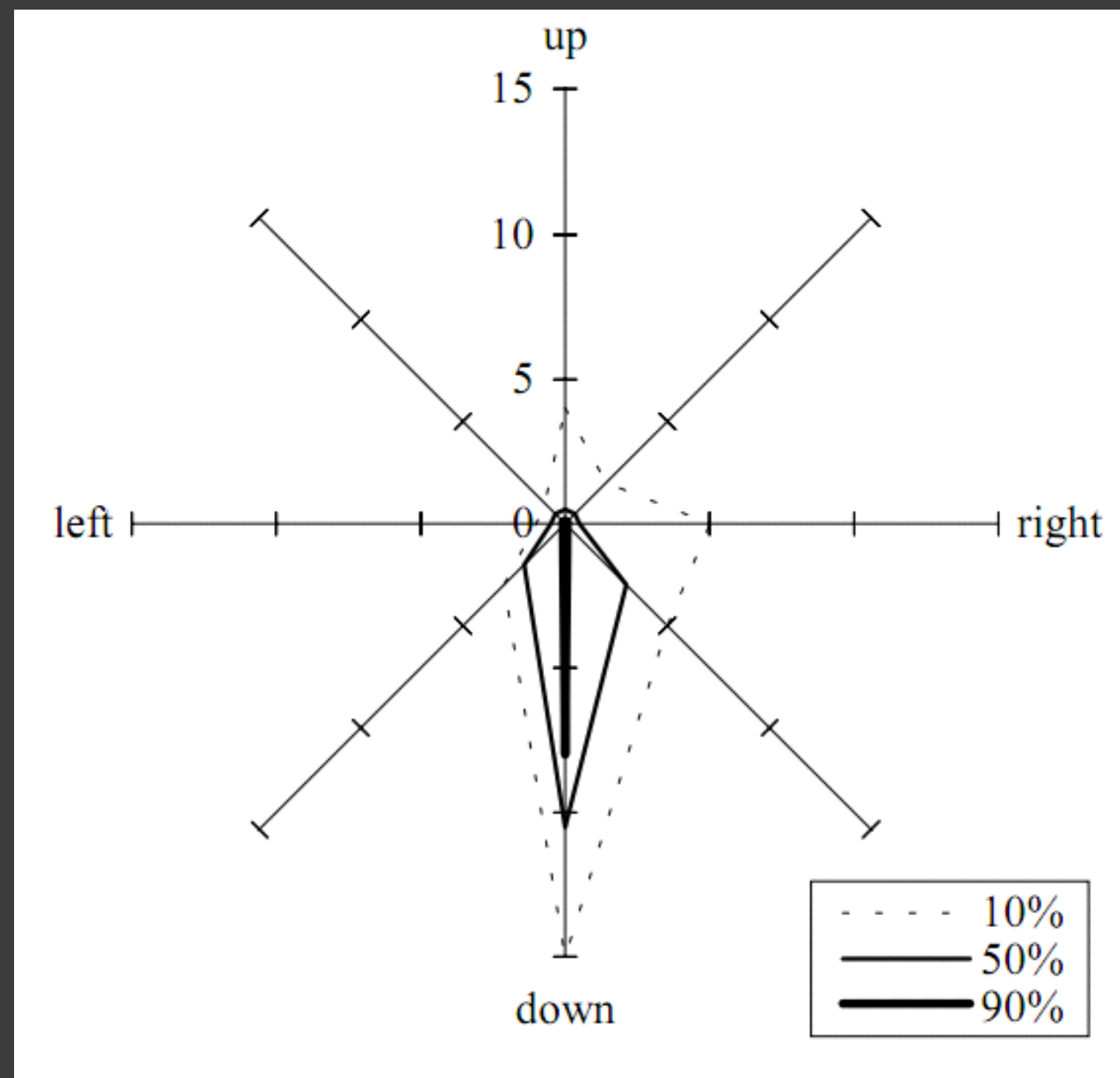


Year	International call market share
2005	2.9% ^[62]
2006	4.4% ^[62]
2008	8% ^[61]
2009	12% ^[60]
2010	13% ^[63]
2012	33% ^[64]
2013	36% ^[65]
2014	40% ^[66]

Source: Wikipedia.

Gaze Parallax

- “we are an order of magnitude less sensitive to eye contact when people look below our eyes than when they look to the left, right, or above our eyes.” –Milton Chen





Always-On: Portholes and Media Spaces



Source: http://people.cs.vt.edu/~srh/Media%20Space%20Home_files/Media-Space-office-meeting.jpg

Calling While Driving

Different time / different place

- Social Networks, like Facebook
 - Communication + Coordination
 - Wiki
 - Blogs
 - Workflow
 - Version Control
-
- Shared participation over time
 - Geographically world wide

Document Collaboration: Track Changes

Participants with low-bandwidth connections generally assumed the spectator role and often used the text chat feature in the Google Hangout to “speak” in the discussion. Speakers (usually the moderator) would notice the text, and speak it aloud to the other participants. Both speakers and spectators used text-chat to demonstrate active listening without interrupting the speaker via audio (for example, a student wrote, “Working in [company] must be really cool. Thanks for sharing :)”).

A shared video channel forces a single conversation. Still, students sometimes used text-chat as a way for non-discussion related talk, such as exchanging contact information or LinkedIn profiles.

STUDY 1: DO DISCUSSIONS HELP PERFORMANCE?

It is not obvious that the **benefits of peer discussions** [6, 46] would transfer to an online environment. In these environments, peers have vastly different backgrounds and no prior interaction with each other. Therefore, our first study measures the benefits of participation in online discussions. Later experiments measure how these benefits vary with geographic diversity in discussion groups.

Michael B..., 10/30/2014 11:39 AM ✓ ✕

Deleted: Peer-discussions can lead to better critical thinking, retention, interest and motivation [6, 46]

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