Using Collaborative Coding to Study How Research Teams Coordinate Work

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CROW writecrow.org

BACKGROUND

- **Constructive distributed work** (CDW) is a **three-dimensional heuristic for project management and team building** developed by the Corpus & Repository of Writing.
- This analysis is part of a larger study using data from the Basecamp team communication platform (TCP) to analyze **how Crow achieves CDW goals.**
- **We analyzed 68 Basecamp threads** from Crow projects of varying scope.
- Prior to this study, **CDW researchers developed ten codes** describing interactions between Crow researchers using pilot data and an iterative coding process.

Code	Description
Scheduling	Discussion of specific dates and times to meet and collaborate. Also involves establishing concrete deadlines.
Planning	Long-term strategizing and decision-making regarding the approaches and scopes of projects. Includes discussion of distant, fluid deadlines and hypothetical, loosely-defined tasks.
Assigning tasks	Splitting up work and distributing specific responsibilities among team members. Task assignment can occur in question form.
Coordinating access to internal information	Providing references to links, addresses, or information gathered from sources within Crow's immediate network (i.e. website, Google Workspace, Basecamp, GitHub, etc.).
Linking to external information	Sharing of links, addresses, or information from locations outside of Crow's workflow. Includes emails from external sources, links to external websites, and references to feedback from outside origins.
Mentoring and/or training	Advising, offering assistance, or providing feedback to Crow team members. Consists of reminding team members of their tasks and responsibilities, making oneself available to answer questions, and offering praise and encouragement.
Asking for help	Requesting assistance with or further clarification on tasks and assignments.
Writing discussion	Discussion of methods and approaches to writing projects. Includes writing-related questions and requests for feedback.
Discussing technology and/or tools	Conversations involving the use, demonstration, or explanation of technology and/or tools outside of Crow's typical workflow to complete work (e.g. a comment thread that contains a link to an external tool such as Lucidchart or Qualtrics).
Other purposes	Used only if discussion does not match other codes.

METHODS

- Three undergraduate researchers coded this data set **both individually and collaboratively.**
- **A shared spreadsheet (below) tracked both individual and collaborative codes.** Within the tabs, each row contained contextual information about the Basecamp discussion, a link, and drop-down menus used to code data.

Contextual information about Basecamp threads being coded (+example)

Team	To-do list	Task	Link to Basecamp
Crow HQ	Development & prototyping	Finish + summarize 2022 envrn. scans	https://3.basecamp.com/...
Grants	Administration	Budget audit	https://3.basecamp.com/...

Pop up menus for coding
- Scheduling
- Planning
- Assigning tasks
- Coordinating access to internal information
- Linking to external information
- Mentoring and/or training
- Asking for help
- Writing discussion
- Discussing technology or tools
- Other purposes

- A **codebook (table, left) guided individual coding** passes.
- After coding, **researchers wrote individual reflections** about coding that also identified primary findings.
- **Four Zoom meetings facilitated collaborative coding.** Researchers compared each coded datum, returning to Basecamp itself as needed to explain coding choices and interpretations of the codebook definitions.
- **Experienced Crow researchers assisted by taking notes,** and by providing context and insight into team activities represented in Basecamp.

DISCUSSION AND RESULTS

Communication Between Crow Researchers
- **Coordination of internal and external resources** is essential to communication between Crow researchers using Basecamp.
- Crow's goal to achieve a **supportive, collaborative workplace** was apparent in every Basecamp thread.
- When providing **feedback about writing,** Crow researchers' approaches varied, but were **always framed positively.**
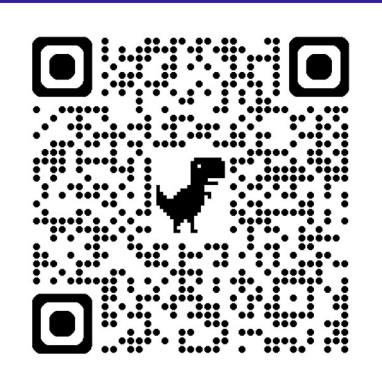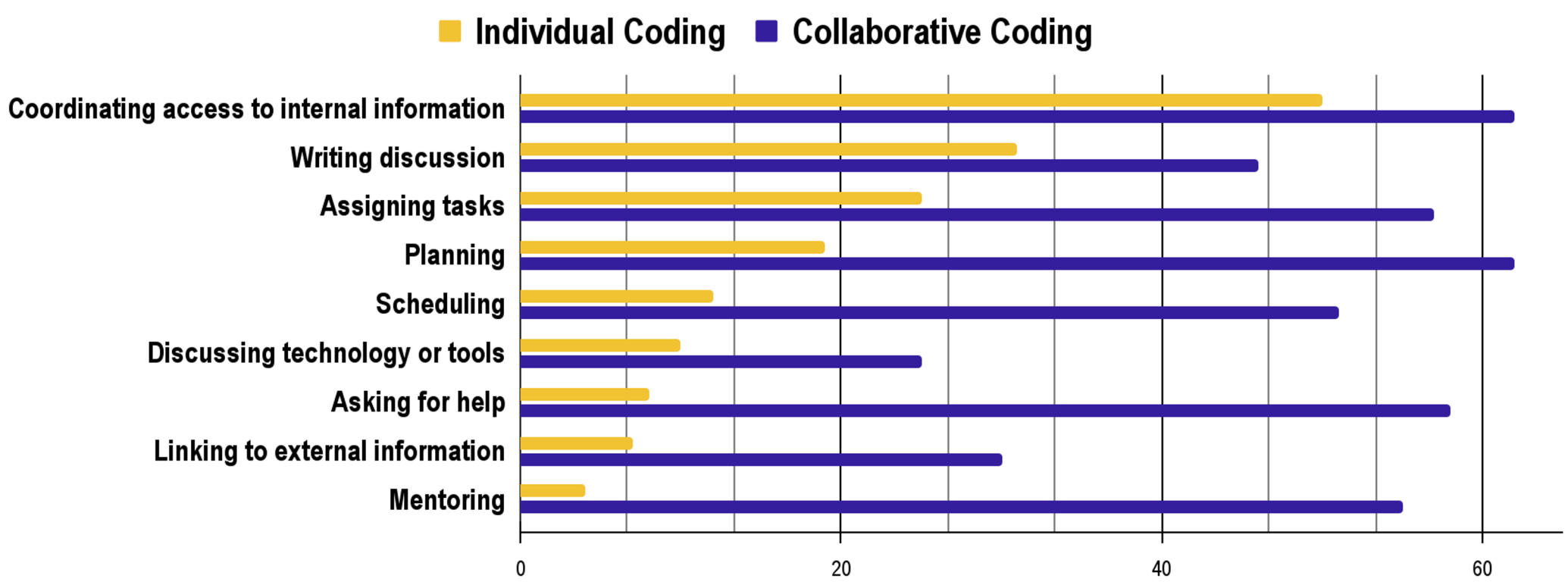- One undergraduate said **coding collaboratively made her feel like part of the team.**

Redefinition of Codes
- **Redefining codes was necessary** to account for **differences in connotation** among researchers.
- **Example:** "assigning tasks" and "planning" codes had not been previously differentiated. We **clarified both** based on specificity and exigence, drafting **codebook updates** accordingly.

Next Steps
- **Develop draft of coding workflow** into formal process to be used team-wide.
- I**ntegrate some coding into onboarding** so new researchers better understand CDW in Crow settings.
- **Facilitate external use of our workflow and codebook** by other academic research teams.

Comparing numbers of codes for both methods

Individual Coding / Collaborative Coding

(bar chart comparing codes: Coordinating access to internal information, Writing discussion, Assigning tasks, Planning, Scheduling, Discussing technology or tools, Asking for help, Linking to external information, Mentoring — axis 0 to 60)