

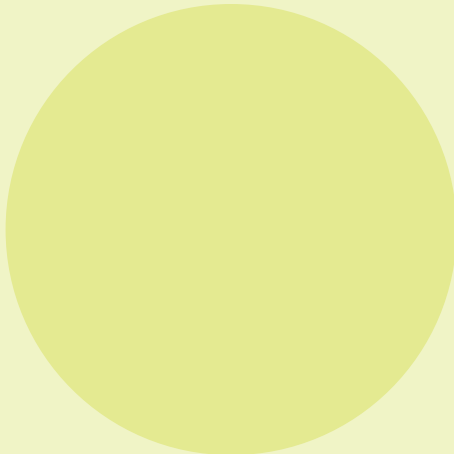
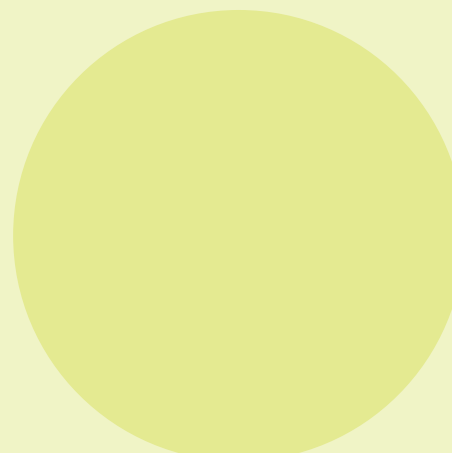
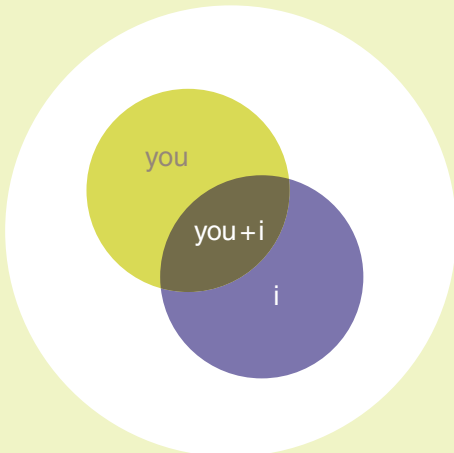
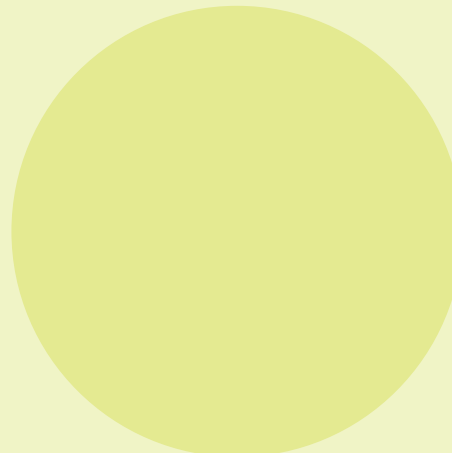
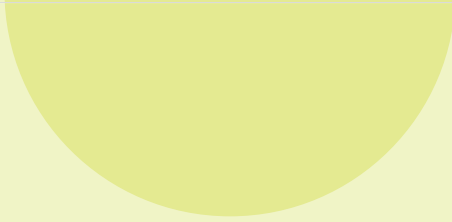
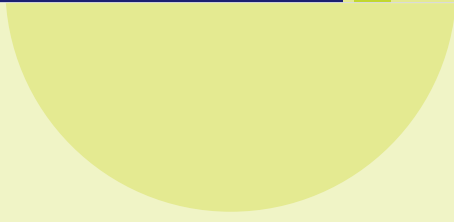
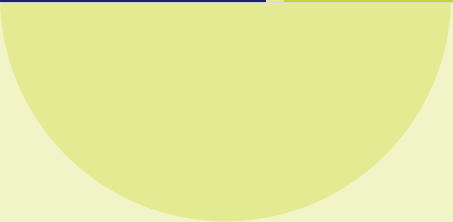
i

you

## THE NEXT EVOLUTION OF THE PERSONAL WORKSPACE

By Mike Firlik

you + i



For decades, there have been two kinds of work spaces: a private office or workstation for one person, and conference rooms and team spaces for groups. Research indicates, however, that most work actually happens through the efforts of pairs of people working together. A significant body of evidence substantiates that working in pairs is the foundation of better learning, improved negotiation, problem-solving, and – most importantly – innovation.


**What happens when these psychological and behavioral insights are systematically applied to workplace design?**

Steelcase has completed extensive research to answer that question. Building on the work of psychologists, sociologists and other social scientists, Steelcase conducted interviews, video ethnography, observation and testing to rethink the individual workplace.

The result is a substantial body of knowledge on supporting the work of pairs, plus new product innovations and patent-pending designs that support not just individuals, but also dyads, or pairs. These breakthrough yet simple solutions make it easy for people to transition smoothly between “I” work and “You and I” work, reflecting the ways they spend nearly 80% of their workday.

It's a transforming way of looking at the workplace that has far-reaching implications for how personal work spaces are designed, furnished and used. This article is an overview of Steelcase's research and key findings.





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### **The Proven Power of Pairs**

The power of dyadic work lies in the nature of how people work in pairs. When pairs collaborate, they build on each other's thoughts and ideas in a process that psychologists call “laddering.” This process starts when we're young and is critical to how we learn. Dr. Charles Crook, a British psychologist and researcher, notes that how much people can learn is limited when they work alone, and that learning can be taken farther if people work and learn together. “Collaboration is critical to learning,” he says.

Examples jump to mind: parent & child, tutor & student, business neophyte & experienced mentor. The power of pairs comes from focused, face-to-face interaction, intimate communication and working together. <sup>1</sup>

### **Three's a Crowd**

The addition of a third person dramatically changes the equation. This was recognized in seminal work by Swiss sociologist Georg Simmel in the early 20th century. In a dyad, each participant is confronted by the other, not a collective group. The pair bonds and forms a unit. Neither can deny responsibility by shifting it to the group. Interaction is more intense, more frequent. Individual expression is open and informal.

But add a third person and behavior changes. Interaction is more mediated and formal. There are more avenues of social interaction. The triad restricts opportunities for individual expression, and the dynamic is fundamentally changed. <sup>2</sup>

In work today, the “third person” could be a computer. Crook notes that computers can help or hinder how people collaborate and says “material environments will constrain and facilitate a whole range of social interactions that can occur within them.” <sup>3</sup> Additional research has shown that displays and input devices have a major impact on the effectiveness of dyads since they significantly change ergonomic conditions and workspace requirements.

### **The Case for Business**

People not only learn better in pairs, they can more creatively solve problems in pairs. One project that helped prove this was a University of Pittsburgh study of 22 dyads. It showed that people solve more problems correctly when they collaborate, especially when the tasks are conceptual or complex. Another investigation, a six-month study of travel agents who often work in pairs with their clients, showed measurable benefits to supporting dyadic work. The study addressed typical issues for travel agencies and key travel agent/customer transactions. Separated by a desk, paper and brochures are



difficult for both parties to use. Technology and display are oriented to one person only, hampering collaboration. Customers have difficulty keeping detailed information straight.

When a better workspace was created that allowed side-by-side collaboration and supported multi-connected displays, the results were clear:

- + privacy was increased for the pair
- + customers were more engaged and active
- + customers could more easily track itineraries and costs
- + redundant work was eliminated
- + transaction costs decreased
- + customers reported a better experience and more satisfaction due to the physical set-up
- + transaction time was reduced to 5-10 minutes vs. the typical 30 minutes <sup>4</sup>

Finnish researchers Aino Halinen, Asta Salmi and Virpi Havila investigated the dynamics of business networks and published their findings in the *Journal of Management Studies*. These researchers found that dyads play a central role in the mechanics of business. Dyads, they contended, can impact change the most and overcome the inertia that often exists in corporations. In fact, these researchers concluded that all entrepreneurial and strategic actions within companies come from dyadic work.

## Problems for Pairs

Among its customers ranging from large multinationals to smaller firms of less than 100 employees, and within its own facilities, Steelcase has amassed evidence of many significant benefits of collaboratively working in pairs, if the work is actively and properly supported. For example, Pittsburgh-based communications design firm Agnew Moyer Smith, Inc. (AMS) last year opened a new workplace that promotes a free exchange of ideas, frequent brainstorming and work sessions, and peer critiques – work that's most often done by pairs of people working together.

“The differences have been immediate and apparent,” says Don Moyer, AMS principal. “We see more collaborative work sessions, clients spending more time here, more work on display and under discussion. Productive conversations happen at the coffee station. Across the board, I see us getting better results faster.”

The firm used Steelcase's in-depth Workplace Effectiveness measurement tools to gauge the effect of the workplace on the firm's people and work processes. The results: networks that encourage collaboration are now 14% healthier. Innovation measures are up 15%, and the effectiveness of work processes is up 37%.



Many business professionals believe people already work in pairs in their organization. Yet most companies don't recognize working in pairs as uniquely different from working individually or as part of a group. As a result, they unwittingly place many obstacles in the way of the kind of "You + I" collaboration that leads to innovation. These obstacles include:

- + difficulty in displaying and sharing information
- + inadequate seating in personal workspaces for visitors, or none at all
- + few ways to accommodate how pairs want to work
- + awkward physical workplace arrangements
- + furniture that discourages casual conversation, the way dyadic work often begins.

Adding to the challenge: the needs of working pairs and how they interact vary by job type. For example, a pair of software engineers may require multiple displays while working together, while industrial designers working with paper and three-dimensional prototypes need larger workspaces for shoulder-to-shoulder collaboration.

## 8 Ways Pairs Work

Dyadic work takes various forms. Steelcase has identified eight major types – from "talking over the fence," an informal social exchange that evolves into information sharing, to co-creation work that's planned and may last for long periods of time. In each case, space changes from "I space" (a person working alone in the workstation, for example) to "You and I" space (such as when a coworker leans over a panel to confer or visits

someone to kick around ideas). Sometimes the pair moves to another space, moving their "You and I" space to another locale.

People in pairs share information and ideas, work together to create things, mentor and learn, and support and coordinate each other's work. Good ideas build on each other (laddering), important information is shared, tested, altered, retested, and solidified. From "what do you think?" through every step of the process of discovery and invention, the dyad drives innovation.

## The Care and Feeding of Pairs

After observing and categorizing the various ways people work in pairs, Steelcase researchers were equipped to actively investigate strategies and solutions for supporting dyadic work. Their work led to a set of conclusions that was at once revolutionary and practical. To leverage the power of pairs, the researchers concluded that workplaces need to provide for these basic essentials:

- + quality interaction between workers, not just social communications
- + easy transitions between individual work and dyads, and back again
- + worker control over the duration and type of dyadic interaction
- + guest amenities, such as information display, space to work, adequate seating, etc.
- + positive interruptions for the individual that result in productive dyadic work

When obstacles and “workarounds” are removed and the dyadic process is supported and encouraged, the results include more learning, more speed, and more innovation – business results definitely worth pursuing.

### Application for Innovation

Supporting dyadic work is about both the application of product and the product itself. Design can have a powerful impact on dyads, sometimes by adding only a few items of new furniture or technology to a space.

Key design issues for dyadic spaces include:

- + preserving the effectiveness of the individual
- + accommodating various types of guest behavior
- + democratizing dyadic interactions.

Communication in the workstation is improved through clear visual access, while balancing acoustical and visual privacy needs. If the space allows the worker to position themselves in their workstation in a way that signals their availability for dyadic work, it helps preserve the individual's effectiveness. There are different types and degrees of interaction as well, suggesting support for seated, standing, leaning, perching and various other alternative postures. Lightweight guest chairs for impromptu dyads, standing-height worksurfaces for short-term work with another person and places to perch for quick consult – these are all appropriate applications.

### Be My Guest

When guests drop by for dyadic work, longer work surfaces support shoulder-to-shoulder collaboration. Access to information is important in any dyad, so

physical and technological barriers should be addressed with white boards, monitor arms, display tools and other methods.

Democratizing dyadic work is important to both individuals in a dyad. Establishing an equal footing promotes information sharing and the laddering of ideas. Some ideas for supporting equality in dyadic interactions: a centrally located island for quick stand-up collaborations, easily reconfigured worksurfaces (mobile or with adjustable height, for example) and small touchdown spaces. Egalitarian spaces quickly become places for powerful collaboration, learning and innovation.

### Two for One

The power of pairs is a fact, identified by independent researchers and verified by historic examples ranging from Orville and Wilbur to Hewlett and Packard. In today's workplace it's proven every time two people lean over a desk to swap ideas, share insights and continue the search for something simpler, faster, better.

The space where pairs work is key to their output and productivity, so the workplace should support pairs just as effectively as individuals and groups. When obstacles and “workarounds” are removed and the dyadic process is supported and encouraged, the results include more learning, more speed, and more innovation – business results definitely worth pursuing.

### End notes

<sup>1</sup> Charles Crook Computers and the Collaborative Experience of Learning, 1994, Rutledge, New York, NY <sup>2</sup> Georg Simmel, “Quantitative Aspects of the Group” 1908

<sup>3</sup> Crook, *ibid* <sup>4</sup> Mike Scaife and John Halloran, “Let's work together: supporting two-party collaboration with new forms of shared interactive representations” University of Sussex, University of Brighton, 2002

# Super 8

Steelcase researchers have identified eight ways that people work in pairs. Can you match the picture to the dyad?

## 1. Talking Over the Fence

Unplanned, informal sharing across a panel or work space. Two individual spaces become one larger dyadic space as people share verbal and written information. Each person stays in his or her own personal work space, as these sessions range from one minute up to a half-hour.

## 2. Progressive Dinner

Starts as a dyad, with a visitor seeking information. It quickly changes to three or more and then back to two, as people walking or sitting nearby join the party. Each person shares knowledge and ideas. The host often loses control as the group grows, until the interaction moves with the initial guest to a different space.

## 3. Advise and Consent – Short Term

A short, unplanned mentoring session. “Student” usually hosts the “teacher.” The host controls the computer, which supports learning by doing. Usually, the visitor will stand behind the host, which means a short visit, but the situation can feel like “backseat driving.”

## 4. Advise and Consent – Long Term

A planned learning session of an hour or more. Either the “student” or the “teacher” may host. When the teacher is the visitor, tools (papers, books, etc.) are usually brought along. Visitor needs a place to camp.

## 5. Pumping Ideas

A co-creation dyad. Each person needs equal footing. These tend to be long, planned sessions and take place in a traditional “I” space. Can also involve “secondary guesting,” where a guest engages with others in the host’s space. The borrowed work space becomes a temporary home base for the guest.

## 6. Two for the Road

When a dyad moves out of an individual work space to continue the interaction, such as when sharing a presentation. They can move to a variety of spaces: a large conference room, an enclave/mid-sized space, or even a traditional “I” space. These planned sessions are long-term and often require tools such as a laptop and projector.

## 7. Reluctant Host

Unplanned, doesn’t take long, and the host wants it that way. The visitor stays standing, while the host stays seated and maintains control of his or her workspace.

## 8. Mi Casa, Su Casa

Tends to be unplanned, frequent and short in duration. Host is often a support person for the guest or a close co-worker. Typically, the host offers up temporary ownership of the tools and space to enable faster progress.



A



B



C



D



E



F



G



H

ANSWER: 1 - C, 2 - G, 3 - F, 4 - B, 5 - A, 6 - E, 7 - D, 8 - H.