

Impact of Software Teaming



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Insights from Real Teams



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**“The value of
another’s experience
is to give us hope,
not to tell us how
or whether to proceed.”**

Peter Block

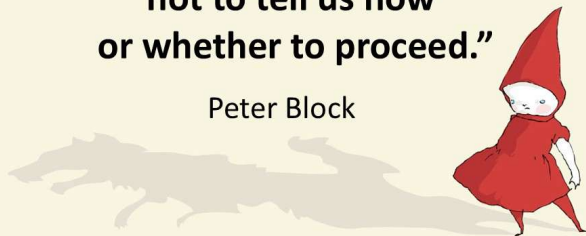
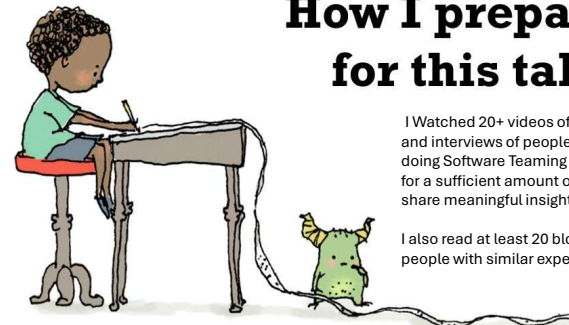


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How I prepared for this talk



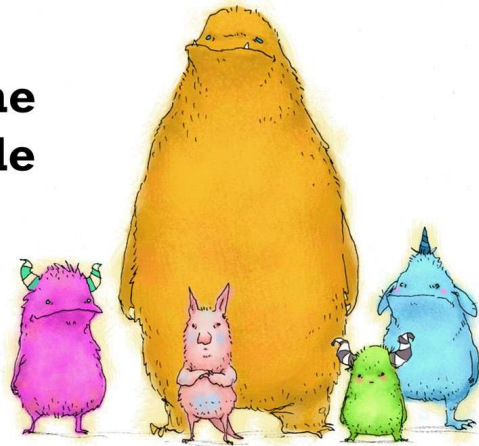
I Watched 20+ videos of conference talks
and interviews of people who have been
doing Software Teaming (Mob Programming)
for a sufficient amount of time to be able to
share meaningful insights.

I also read at least 20 blog post articles from
people with similar experience.

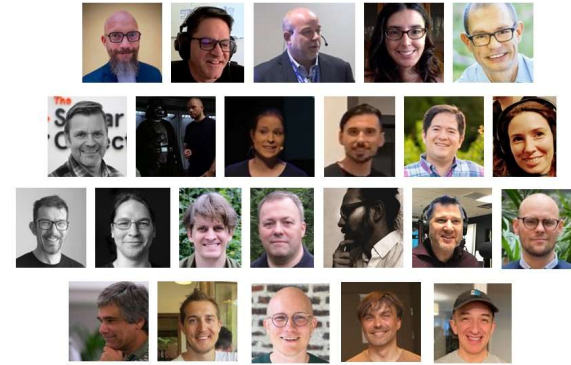
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The people



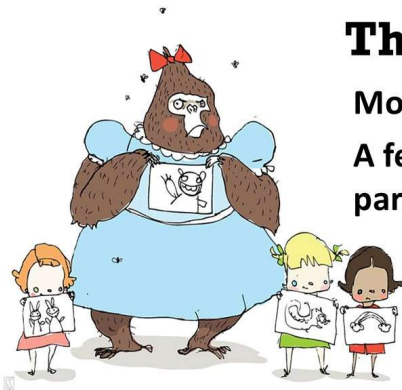
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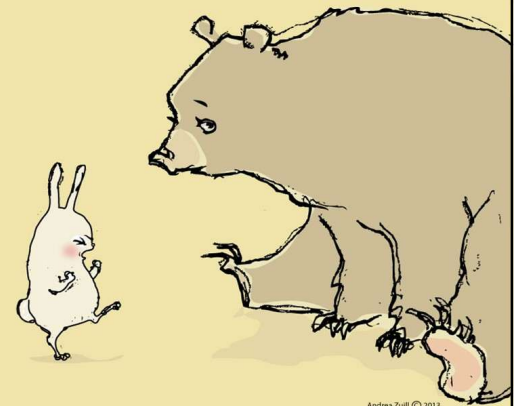
The Quotes

Most are direct quotes
A few are lightly
paraphrased



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The
mistakes
I've
probably
made.

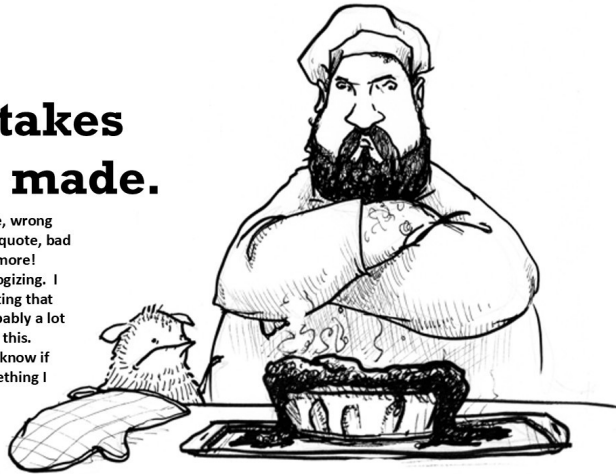


Andrea Zull © 2013

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The mistakes I've made.

Wrong picture, wrong name, wrong quote, bad spelling, and more! I am not apologizing. I am simply noting that there are probably a lot of mistakes in this. Please let me know if you spot something I need to fix.



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A Very Rapid Introduction to Software Teaming

(And the idea of the “Whole Team”)



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**At some point
in all the work we do
we need to interact with others.**



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... so let's get good at it!



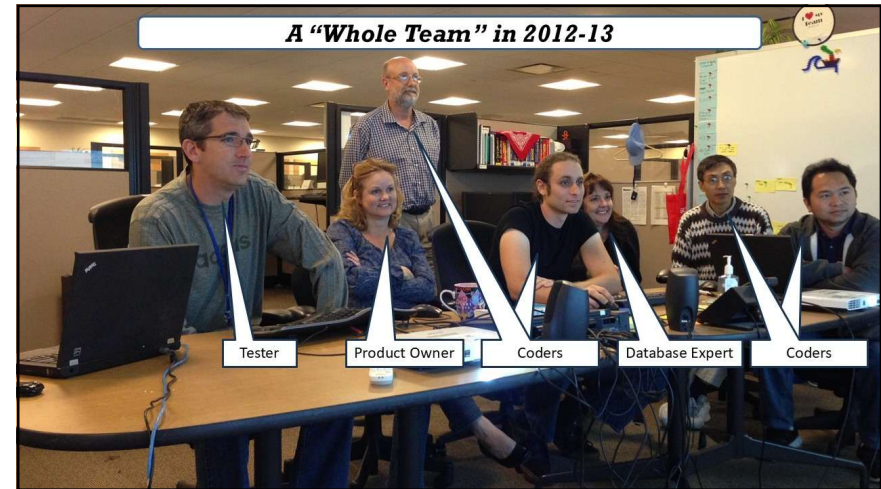
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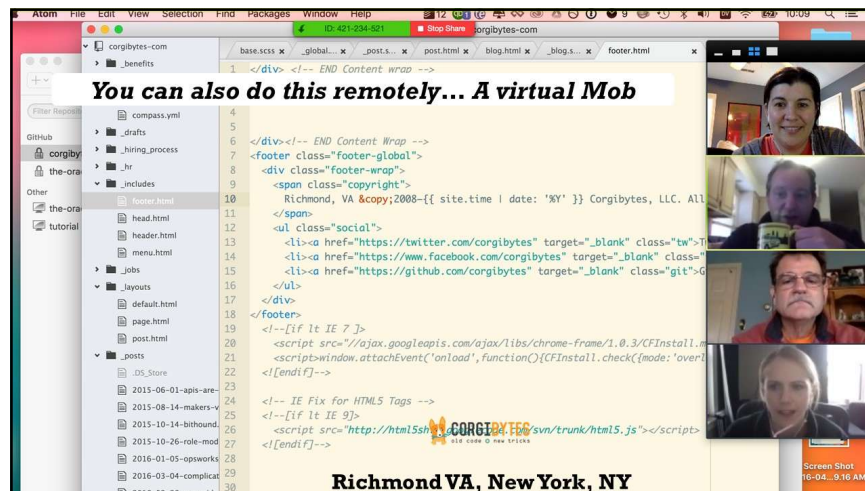
Software Teaming

All the brilliant minds working together
on the same thing...
at the same time...
in the same space...
at the same computer...

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**Teamwork does not replace solo work.
And solo work does not replace teamwork.
Let's learn to be great at both.**



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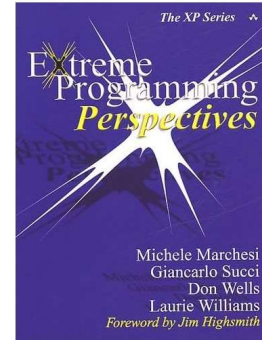
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A very short history

(Of my part of all this)



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2001-2002

Mob Programming and the Transition to XP

Moses M. Bohman, Ph.D.
ThoughtWorks, Inc.
651 W Washington Blvd
Suite 500
Chicago, IL 60661 USA
+1 312 373 1000
mmbohman@thoughtworks.com

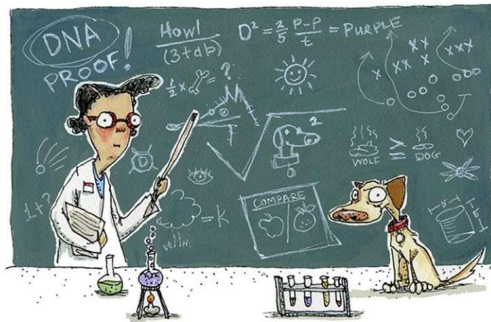
Andrew C. Slocum, M.S.
ThoughtWorks, Inc.
651 W Washington Blvd
Suite 500
Chicago, IL 60661 USA
+1 312 373 1000
acslocum@thoughtworks.com

ABSTRACT
Extreme Programming (XP) development practices emphasize the importance of developer communication. Our team is currently in a transition toward using many of XP's suggested lightweight practices. As part of and in order to facilitate this transition, we have been developing a collaborative method we call mob programming. The term "mob programming" is whimsically derived from the term "pair programming," and indicates the practice of reflecting code in groups larger than two developers. The

Since then, the team as a whole—not just the developers—has begun to take the first steps toward XP. We now have iterations and continuous integration, we are writing unit and acceptance tests, and we have dabbled in pair programming. Since our team is unfamiliar with and therefore unsure of XP's benefits, it is useful for us to find ways to experiment with and eventually to reinforce beneficial XP development practices. To this end, we have identified long term and short term goals. Regular developer meetings are unable to achieve all

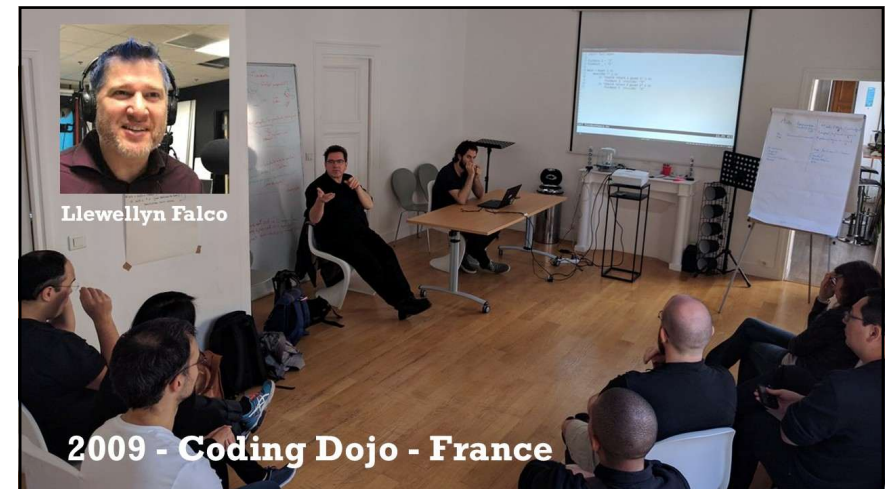
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2002-2009 - Many experiments



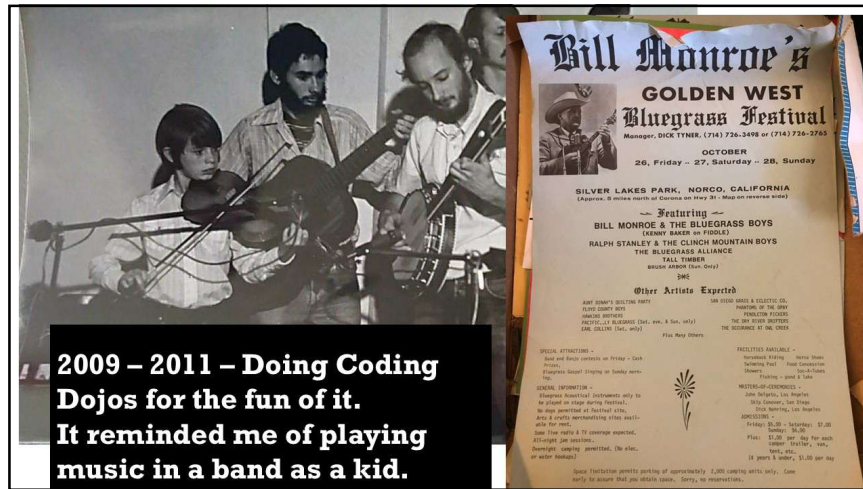
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2009 - Coding Dojo - France

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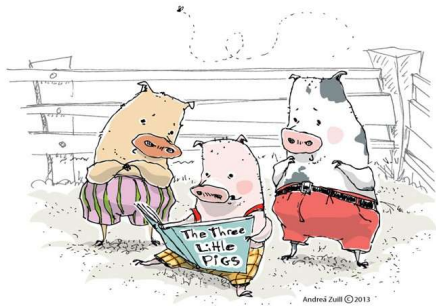
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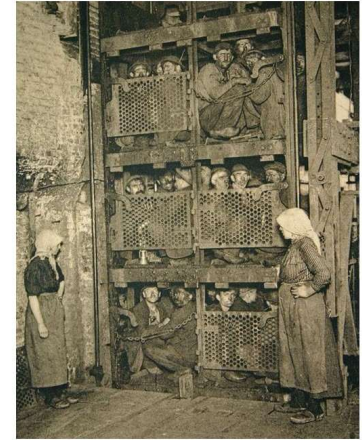
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**And 13 years
since we started
sharing this at
conferences**

25

**Now lot of
people are
doing
Software
Teaming all
over the world**



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**What do
we mean by
impact?**

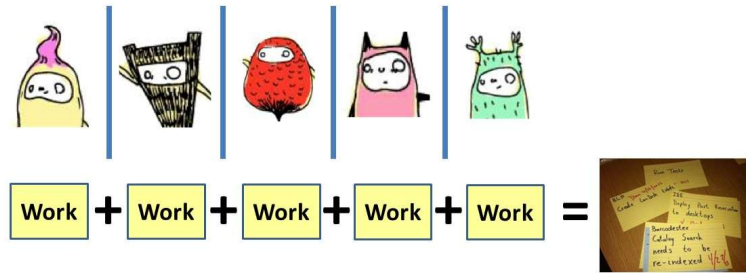


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**When we first started
working this way, here is
what we noticed**

28

Working Separately



29

But working together



30



VS



Not just more stuff
The more meaningful stuff
It was better done
And of higher quality

31

But rather than sharing
what I think “impact” is
let’s hear from people doing
Software Teaming

32



**Mikael Helldén,
H & M, Stockholm**

Mikael shared this short list of possible benefits of Mob Programming in 2015 or so...

**Shorter lead times
Fewer bugs / Higher Quality
Better knowledge transfer
Happier co-workers who know and trust each other better
Fewer status/planning meetings
A climate that encourages contribution and learning
Shorter feedback loops
Amplified learning
More effective onboarding**

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Shorter lead times



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**~Dave Batten,
Pluralsight**

“We reduced our cycle time dramatically.

Instead of waiting days or weeks for something to get done, we were finishing things in the same session we started them.”

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“We could go from a problem to a fix in production the same day.

That kind of turnaround was unthinkable before we started working this way.”



**~Ulrika Malmgren,
“Half a Decade of Mob Programming”**

36



~Matt Ferguson
"Mob Programming: A Systems Approach"

"We started moving things to production much faster."

There was no handoff, no waiting. Just straight from idea to delivered software."

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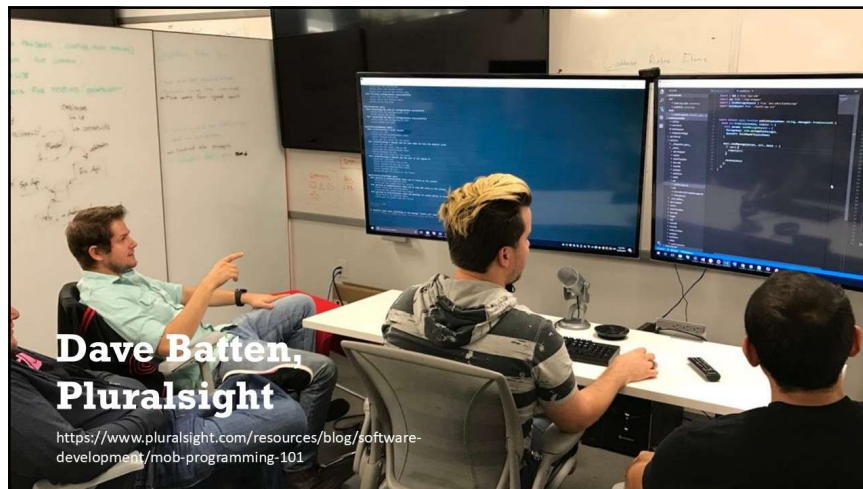
"The time from starting something to having it ready was much shorter."

We noticed things were just flowing."



~Aryella Lacerda
"10 Things I Learned After 6 Months of Mob Programming"

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Dave Batten, Pluralsight

<https://www.pluralsight.com/resources/blog/software-development/mob-programming-101>

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**“We had fewer
production issues,**

**and when we did, we often fixed them on the
spot—together.”**

~Thomas Much

“Mob Programming: Learn
Together. Deliver Together”

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**“Defects were
caught immediately**

**because we were all looking at the same
code, at the same time.”**



~Giovanni Asproni

Remote Mob Programming in a High
Stakes

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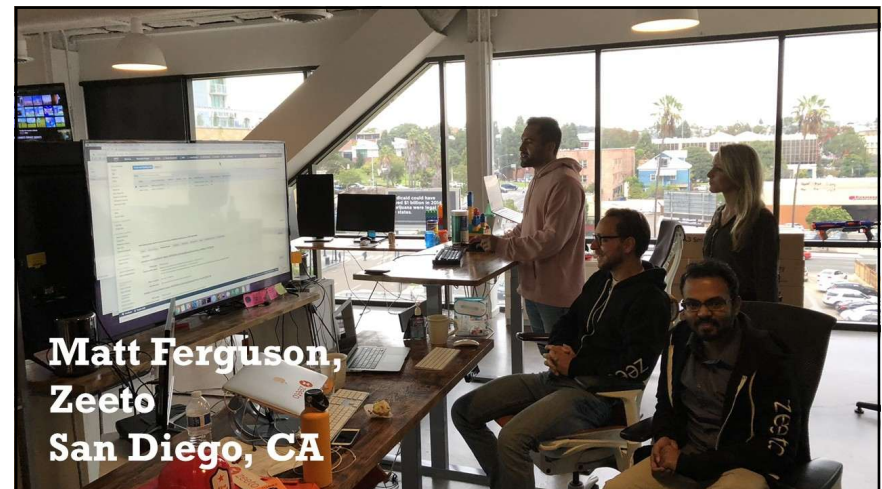
**“Our quality went up
immediately.**

**We were catching issues as we wrote the code, not
after.”**

~Matt Ferguson

“Mob Programming: A Systems
Approach”

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**Matt Ferguson,
Zeeto
San Diego, CA**

44



Better Knowledge Transfer

45



"Knowledge sharing happened naturally."

Everyone was learning from each other, all the time."

~Aryella Lacerda
"10 Things I Learned After 6 Months of Mob Programming"

46

"Everyone's expertise was constantly flowing."

Even if someone left, the knowledge stayed with the team."



~Cenny Davidsson
Linero Tech Webinar

47



"It creates this more holistic understanding"

of what is actually going on within the product."

~Rickard Westman
SVT

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Rapid Feedback



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~Hrvoje Rancic
Blog: "Why Would Anyone Do
Something as Absurd as Mob
Programming?!"

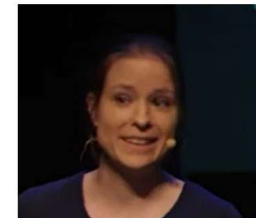
"We had the feedback instantly.

Instead of sending code off for review or waiting on QA, we had the feedback instantly. It just happened as part of the work."

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"We got immediate feedback

not only on the code but also on our communication, our assumptions, and how we collaborate."



~Lisi Hocke
A Story of Mob
Programming, Testing,
and Everything"

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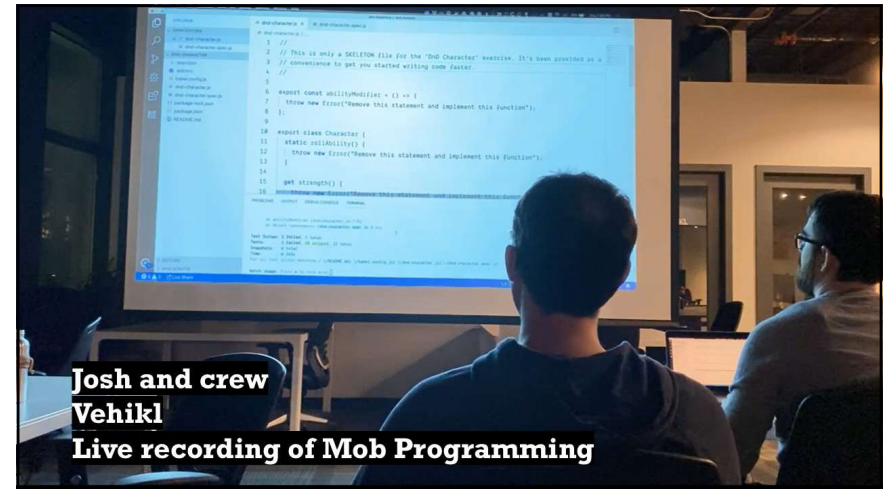
~Josh
Vehiki

From a video recording of a live “teaming” session:

“We were able to get unstuck really quick...

like you saw twice we went a different direction immediately.”

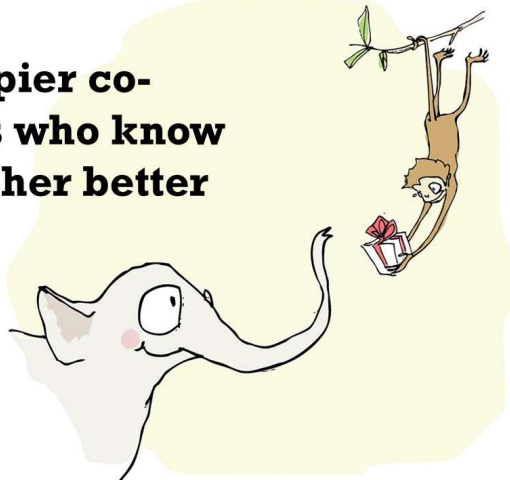
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**Josh and crew
Vehiki
Live recording of Mob Programming**

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**Happier co-
workers who know
each other better**



55

**“The mobbing format
helped us build real
human connections.**

**We knew each other better and worked better
together.”**



~Ulrika Malmgren
“Half a Decade of Mob Programming”

56



~Philippe Bourgau
Blog: "3 Long-Term Benefits of Mob Programming"

"It's weird to say, but we laughed a lot."

It didn't feel like work—it felt like creating something with friends."

57

"There was psychological safety, and it made a huge difference."

Everyone was free to contribute"



~ Cenny Davidsson
Linero Tech Webinar

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Improved ability to contribute well



60

**“We used to struggle
with silos and
knowledge gaps.**

Now we’re continuously learning and shipping
better software together.”



~Marcus Hammarberg
Salt Bootcamps

61

**“You get a layering of
perspective—someone
thinks out loud, someone
else questions, and a third
person builds on it.**

The ideas become richer because nobody’s
working in isolation.”



~Lennart Fridén
Stockholm, Sweden

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**“People felt safe to ask
questions, suggest
changes, and even say
‘I don’t know’,**

that wasn’t the case before.”

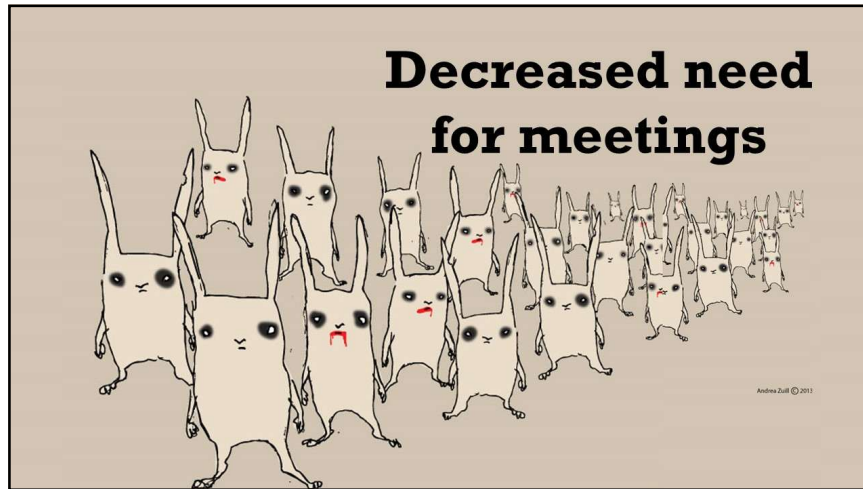


~ Cenny Davidsson
Linero Tech Webinar

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65

“We didn't need daily standups anymore.
Everyone knew what was going on—we were doing it together.”



~Dave Batten
Mob Mentality Show
Interview

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“We stopped needing most of our meetings
We knew what was going on because we were doing it together”

~Thomas Much
JCON 2020

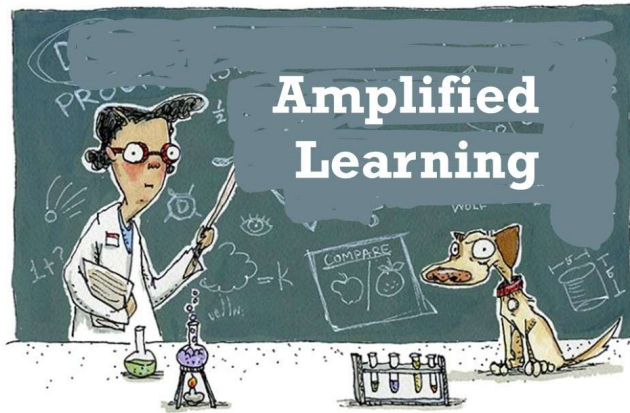
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We don't need as many planning or handoff meetings anymore
because we're all on the same page, all the time.”



~Rickard Westman
SVT

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“If I know the most in the mob about X, I shouldn’t be doing it—I should be coaching the rest.”



~Lennart Fridén
Stockholm, Sweden

70



~Kenny Baas-Schwegler
Linero Tech Webinar

“We noticed that knowledge spread faster and more thoroughly than it ever had before”

71

“Learning is exponential when we mob. One person’s insight becomes everyone’s insight.”



~Philippe Bourgau
“3 Long-Term Benefits of Mob Programming That Make It Cost-Effective”

72

“Austins Story here..”

~Austin Chadwick

73

Effective on-boarding



74



**“New folks were
productive in their first
week**

They picked up everything by working with the team from day one.”

~Mike Bowler
Blog Post on Junior Teams and
Ensemble Workd

75

**“Onboarding new
team-members became
so much easier**

They join the mob day one and become
productive (really productive) within days or
weeks”



~ Lukas Edenfelt
TUI Nordic

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~ Aryella Lacerda

"A new developer joined us and was able to contribute to production code on their first day."

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Factors that lead to success



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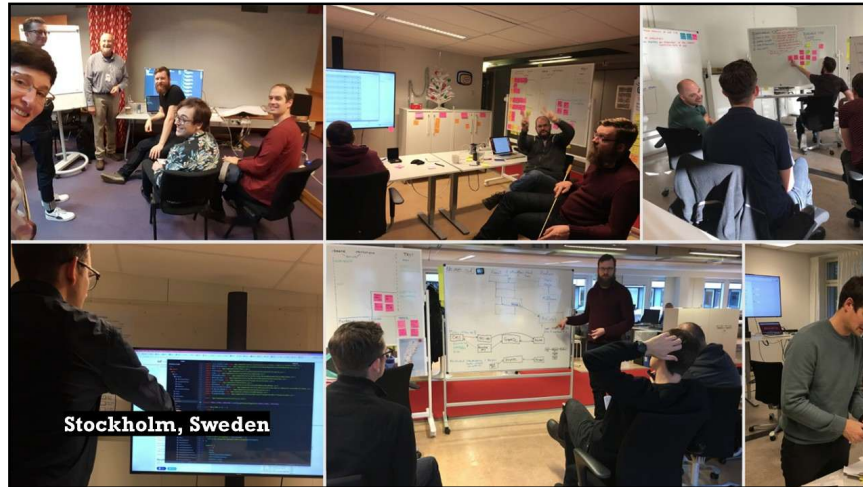
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"You can't force collaboration—but you can create an environment where collaboration is easy."

~ Llewellyn Falco

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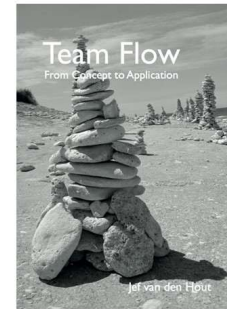
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Team Flow

Prerequisites

- Collective ambition
- Common goal
- Aligned personal goals
- High skill integration
- Open communication
- Safety
- Mutual commitment
- Sense of unity
- Sense of joint progress
- Mutual trust
- Holistic focus

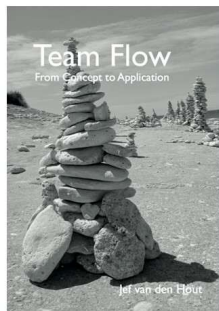
Characteristics



Jef van den Hout

82

Team Flow



Have a shared
cognitive space
and the
willingness to
work well
together.

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Collective Ambition

A shared drive to achieve something
meaningful together



~Ulrika Malmgren
"Half a Decade of Mob Programming"

"We did it because we thought
this would make us better
developers.

We didn't do it for productivity."

84

Common Goal

A clearly defined, mutual objective that unites the team

“We had a very strong shared purpose.

Everybody was there to help each other succeed and to get better as a team.”



~Lisi Hocke
Mob Programming,
Testing and Everything

85

Aligned Personal Goals

Individual motivations align with the team's collective purpose



~Aryella Lacerda
10 Things I Learned After 6 Months
of Mob Programming

“Even the most junior members knew their contribution mattered.

Their personal goals aligned with what the team needed.”

86

High Skill Integration

The team effectively combines and utilizes individual skills

“Everyone brought something different to the table,
and we learned to orchestrate those strengths like a band rather than soloists”



~Thomas Much
Learn Together. Deliver Together

87

Open Communication

Free exchange of ideas, thoughts, and feedback



~Matt Ferguson
Mob Programming: A Systems
Approach

“You say something, and it immediately gets interpreted and responded to—it’s a real-time feedback loop between minds.”

88

Safety

Psychological safety, trust, and space to be vulnerable

"You could fail in front of the team and feel safe. It was never a problem. That safety allowed us to take risks and try wild ideas."

~Cenny Davidsson, Linero Tech Webinar



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Mutual Commitment

A strong, shared dedication to the team and its objectives

"No one disappears. Everyone's present. We stay focused and help each other stay focused too."

~Lisi Hocke, Mob Programming, Testing and Everything



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Sense of Unity

Feeling deeply connected with teammates.

"We felt like one brain with many hands."



~Oscar Strömsäter
, Bootcamp via Mob Programming

91

Sense of Joint Progress

Shared feeling of moving forward together.

"It's such a satisfying feeling to move forward together."

We often said, "We really built this together.",



~Dave Batten
Pluralsight, Utah, USA

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Mutual Trust

Confidence in each other's intentions and capabilities.

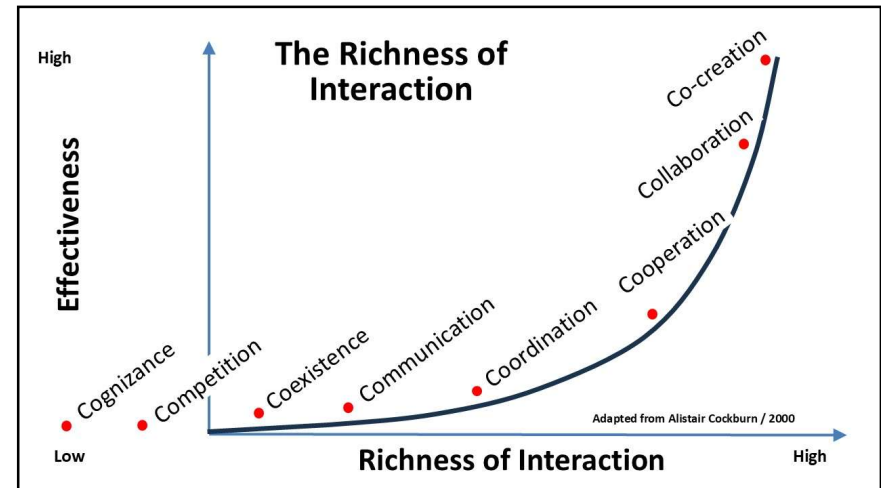
**"Trust builds quickly
when you're collaborating
all the time**

**You see each other's intentions, and you
know people have your back."**



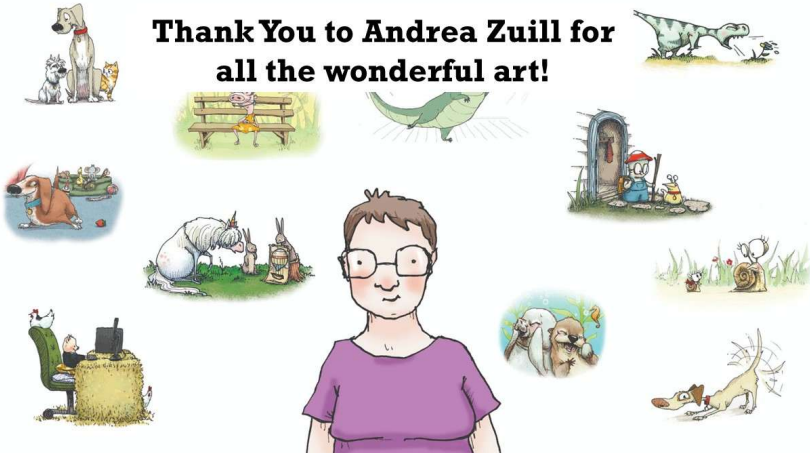
~Dave Nicolette

93



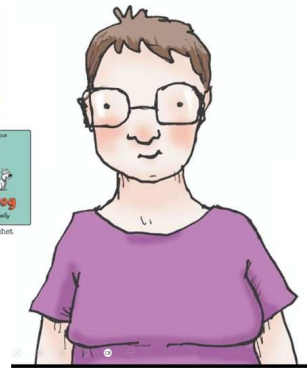
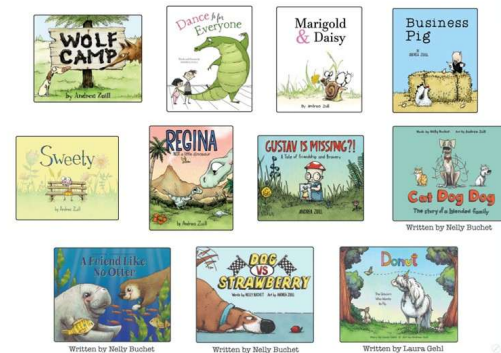
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**Thank You to Andrea Zuill for
all the wonderful art!**



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**Andrea writes and illustrates
children's picture books**



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Dziękuję bardzo



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Thank you!



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Tack så mycket!



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Muito Obrigado!



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Merci beaucoup!



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Ontzettend bedankt!



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どうもありがとうございます。



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Thanks so much!



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