## How to get steel workers (back) on the learning track



Christian Stamov Roßnagel



## **The Jacobs Centre on Lifelong Learning**

Competence centre for the design of sustainable work-related learning



#### Some of our industry partners

- Airbus
- ArcelorMittal
- Bayer
- BMW

- Bosch
- Daimler
- Deutsche Bank
- Lufthansa

- Michelin
- Otto Group
- Vodafone
- Volkswagen

## How do we get steel workers back on

## the learning track?



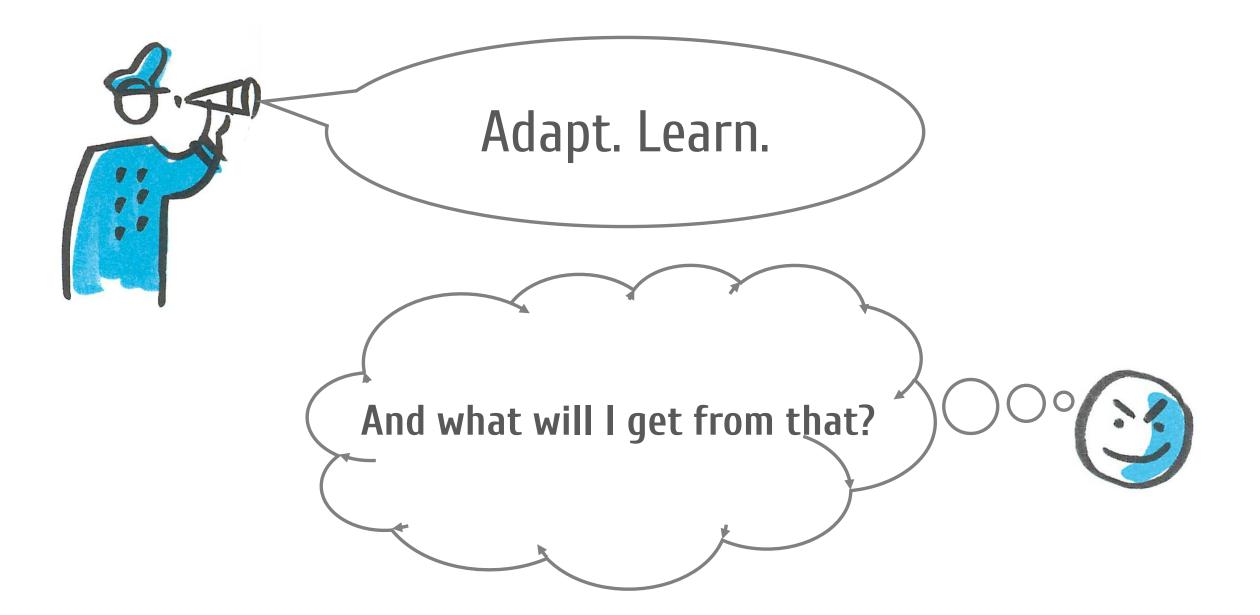
## How did we get them off the learning track?

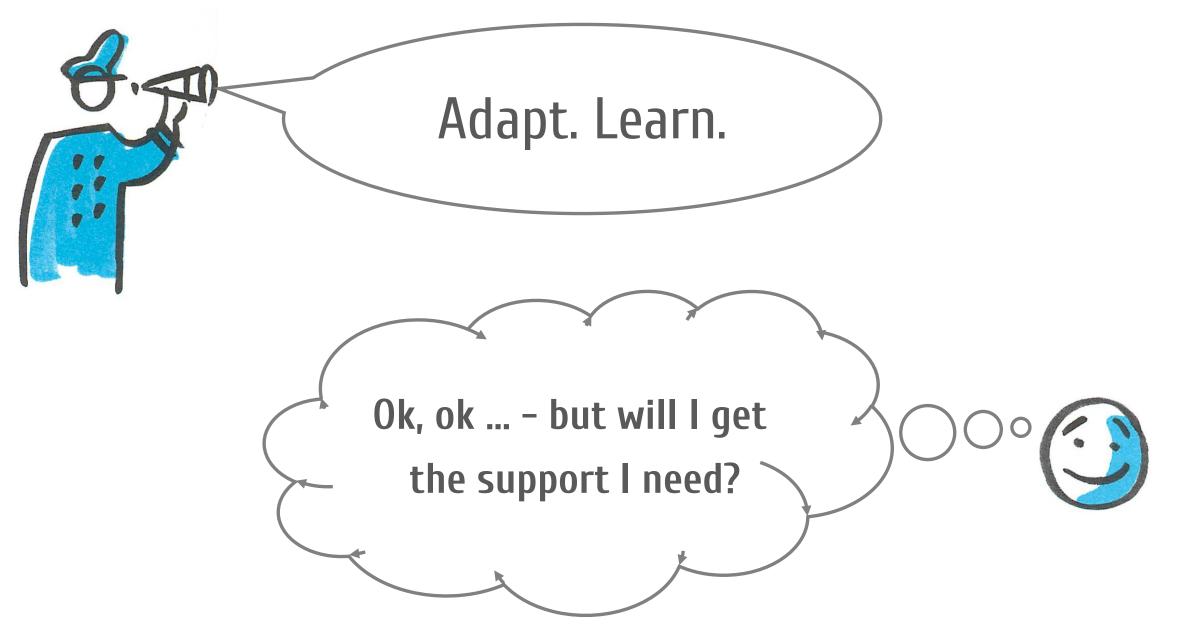
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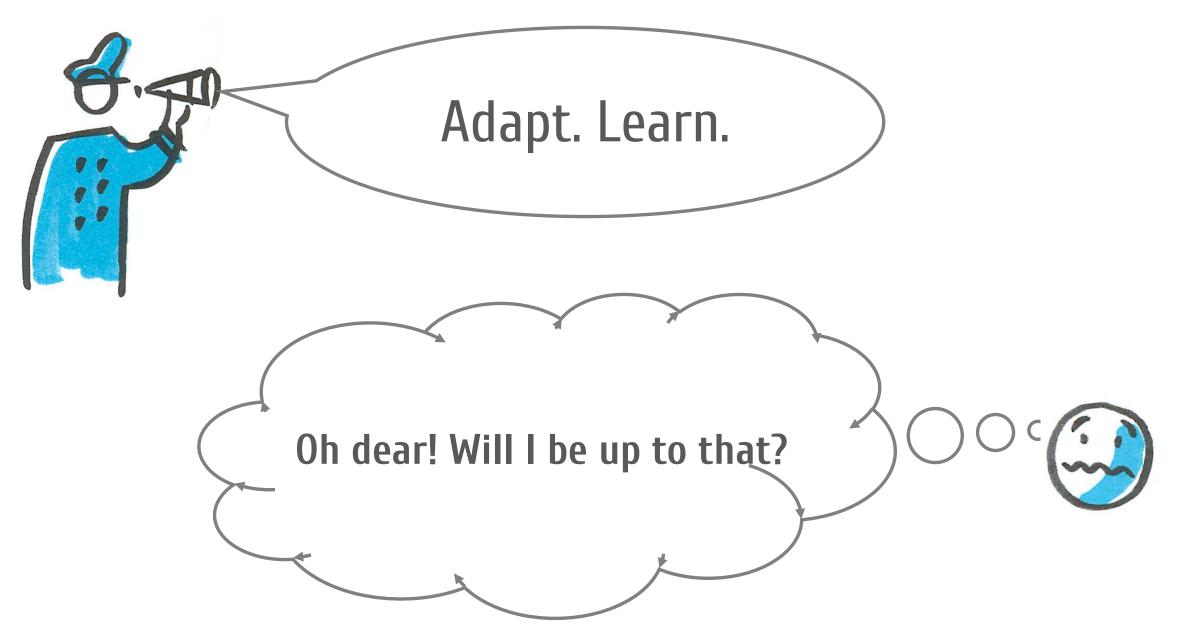
"The workforce [...] must adapt to

- digital transformations and
- changes in production processes (Industry 4.0), as well as [...] to [...]
- new working practices and [...]
- work organisation [...] (Work 4.0)"









# (Perceived) Learning readiness = Utility x Resources x Ability (self-perception)

## (Perceived) Learning readiness = Utility x Resources x Ability (self-perception)

#### Workers will learn if they know that

the benefits of learning will outweigh its costs (Perceived utility)

they have informational and social support (Resources)

they can learn successfully in any format (Ability self-perception)

## The motivation equation can be the backbone of a comprehensive checklist

## **Perceived utility**

Utility of high learning reading	ess
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- Better job
- More flexibly employable
- Secures my status

#### Costs of high T&D readiness

- Time-consuming
- Stressful, must leave comfort zone
- Those who learn must take over 'anything'

Utility of low T&D readiness	Costs of low T&D readiness
<ul> <li>Everything stays the same</li> </ul>	• Worse job
<ul> <li>No effort required</li> </ul>	
• No failure	

## **Perceived utility**

Utility of high learning readiness

Costs of high T&D readiness

Do we know what our workers expect from learning?

• More flexibly employable

• Stressful, must leave comfort zone

Secures Companies often take utility of learning for granted rangehing

whilst workers can't see their actual benefits.

Utility of low T&D readiness

Costs of low T&D readiness

• Everything stays the same (and supervisors are often 'sandwiched' ...)

No effort required

• No failure



## "After this training, you will ...

## What will participants learn in those

#### trainings?

#### Well, that's hard to tell!

#### III-defined learning outcomes

... understand the rationale of our e-mobility

#### strategy

.... be familiar with contemporary approaches

to CO<sub>2</sub> emission reduction

... have developed awareness of the effects of

global warming on international migration

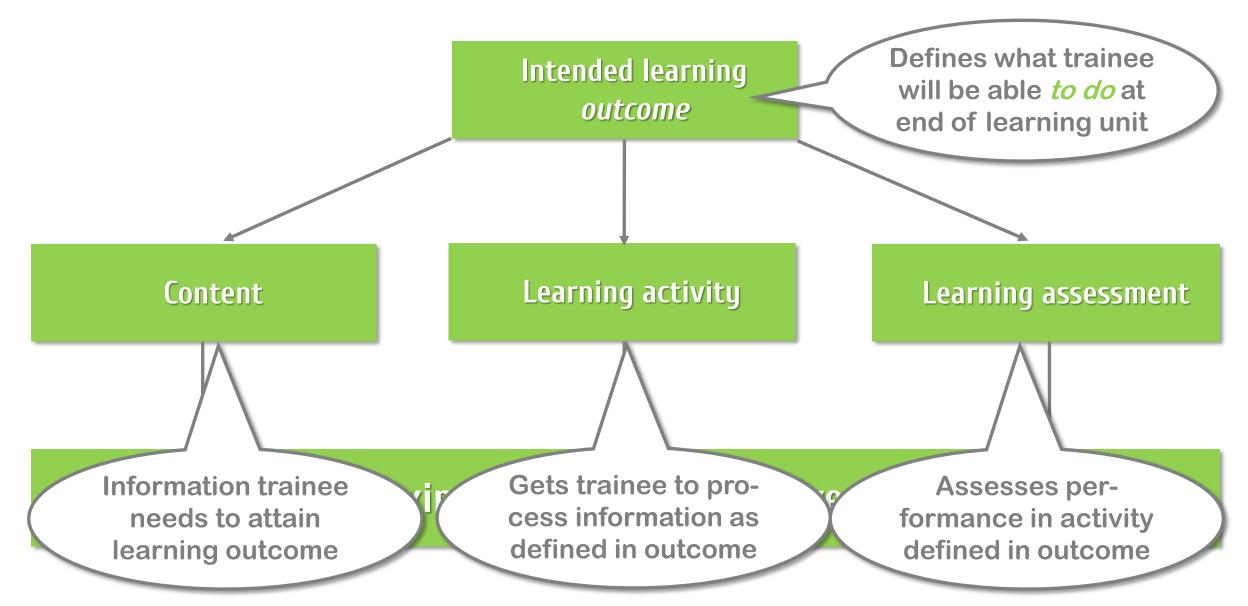


## "After this training, you will be able to ...

Well-defined outcome	III-defined learning outcomes
classify reactions as exothermic and	understand the rationale of our e-mobility
endothermic	strategy
modify manufacturing guidelines to enable	be familiar with contemporary approaches
tighter quality control	to CO <sub>2</sub> emission reduction
explain how to select adhesives for high-	have developed awareness of the effects of
temperature environments	global warming on international migration

Iearning outcome defines how to assess if that outcome has been reached.

#### Resources





#### Intended learning

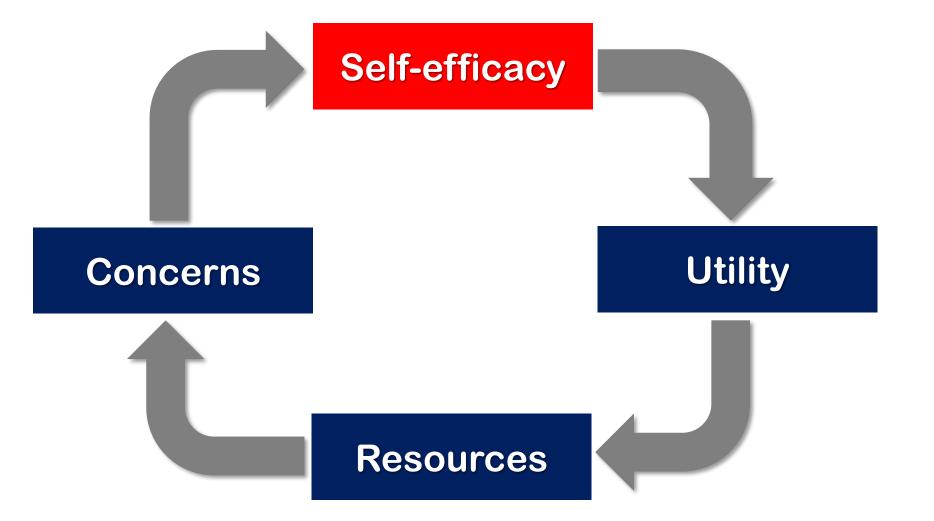
## Are our trainings designed along that rationale?

#### A classroom-style mix of essentials and 'somehow relevant' factoids Content can undermine learning motivation

## (and even fuel fears ...) Maximises learning effectiveness

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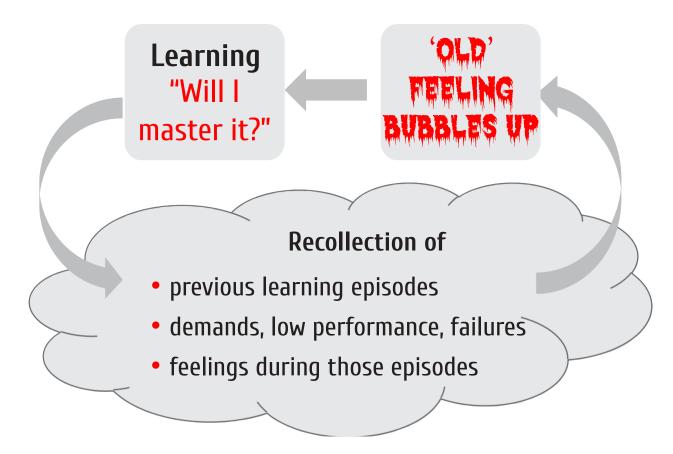
## **Ability self-perceptions**



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## **Ability self-perceptions**

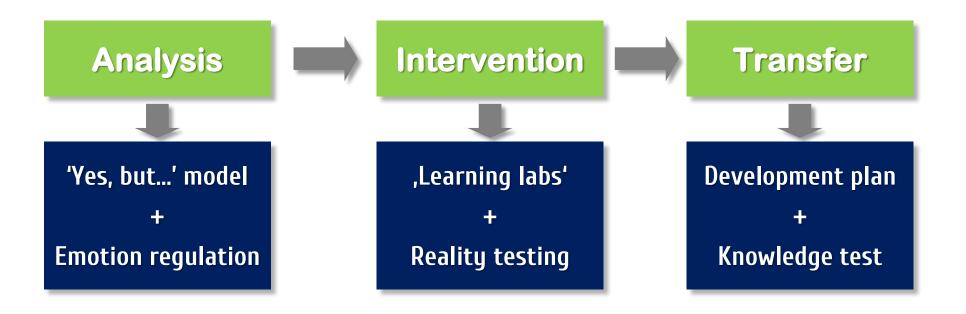
'Old' learning 'colours' upcoming learning



## Ability self-perceptions aren't cast in stone ...

## **Learning fitness trainings**

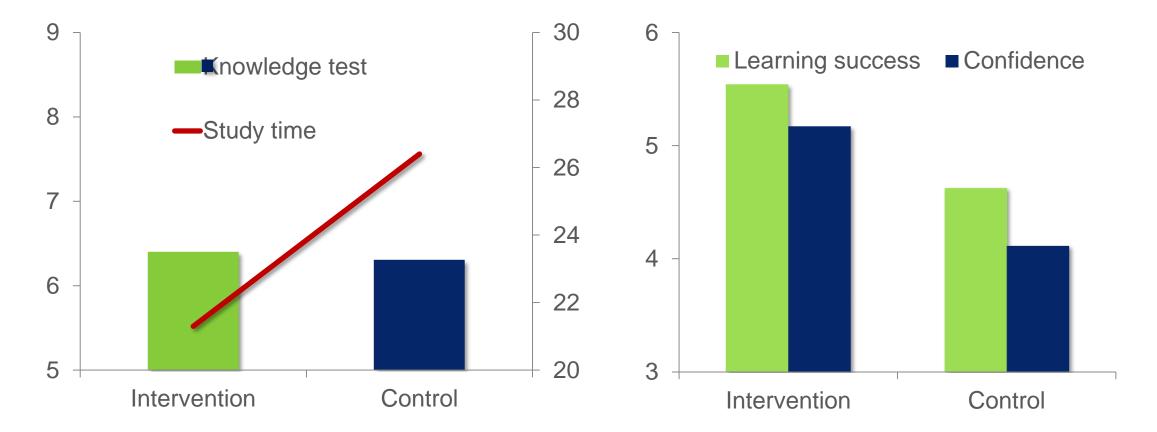
Boost learning motivation in 3 x 3 hours



## **Typical training effects**

Learning time down by 20%

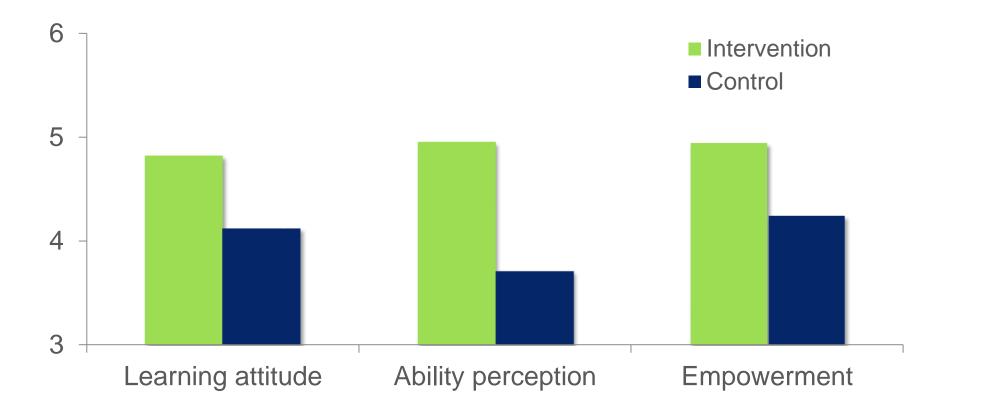
Confidence in learning significantly up



## **Typical training effects**

More favourable attitudes towards learning, higher ability self-perception

and sense of empowerment in intervention group



## In sum

- Learning readiness can't be 'made' for workers
  - but built together with them
- Pep talk alone won't cut it
- No rocket science is required, just solid work let's roll <sup>up</sup> the sleeves!



Prof. Dr. Christian Stamov-Roßnagel

Jacobs University Bremen Campus Ring 1 D-28759 Bremen

+49-421-200-4770 c.stamovrossnagel@jacobs-university.de

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