

# **Educating entrepreneurship**

Insights into the entrepreneurship education research and practice in a school context

**Kick-Off Workshop enterprise+**

**Ruhr Universität Bochum, 21.11.2014**

**Dr. Teita Bijedić**

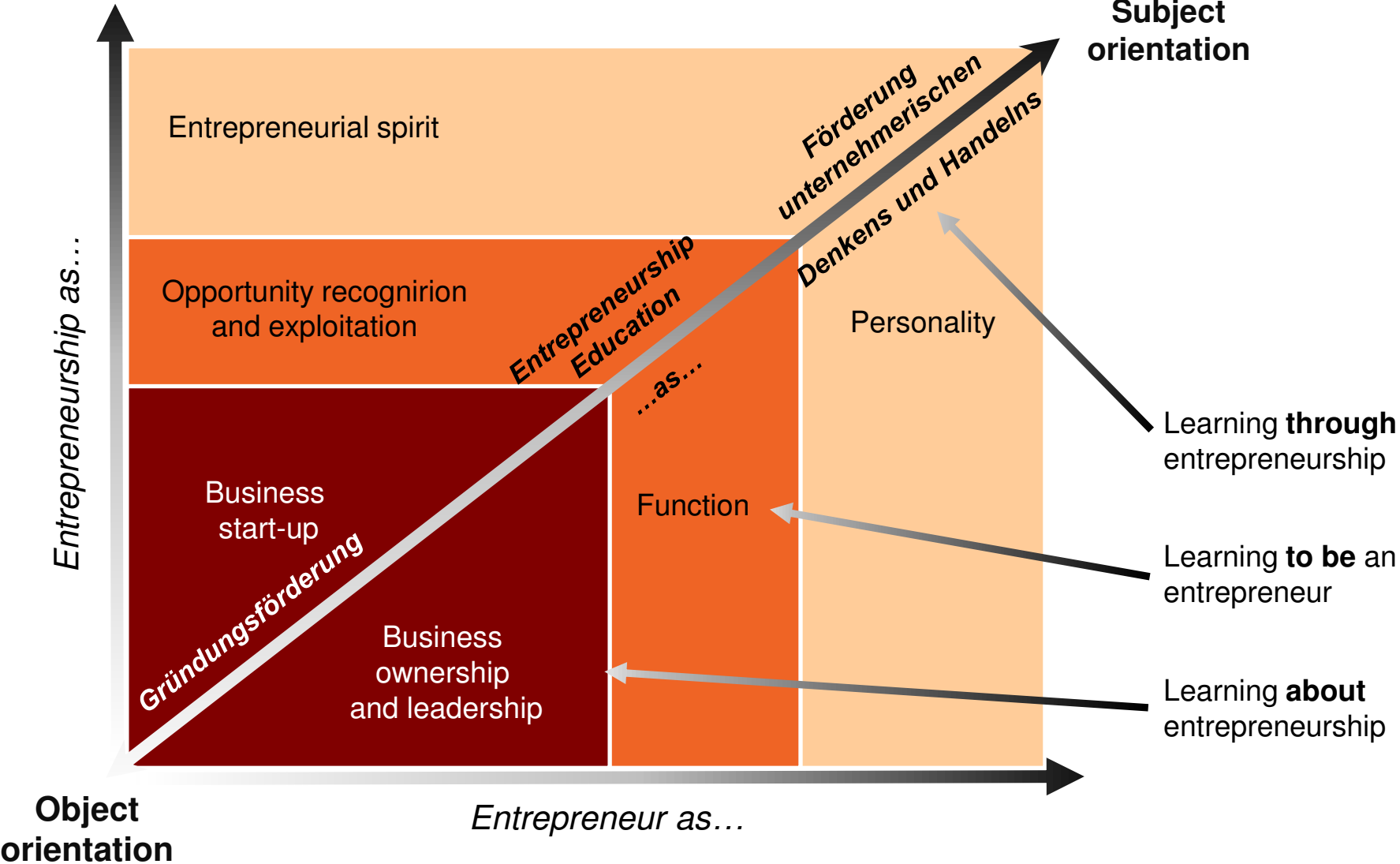
# Agenda

1. What do we mean by Entrepreneurship Education?
2. Why do we need Entrepreneurship Education?
3. What can we expect from Entrepreneurship Education?
4. How to meet the expectations?

# Agenda

- 1. What do we mean by Entrepreneurship Education?**
2. Why do we need Entrepreneurship Education?
3. What can we expect from Entrepreneurship Education?
4. How to meet the expectations?

# Entrepreneurship - Entrepreneur - Education

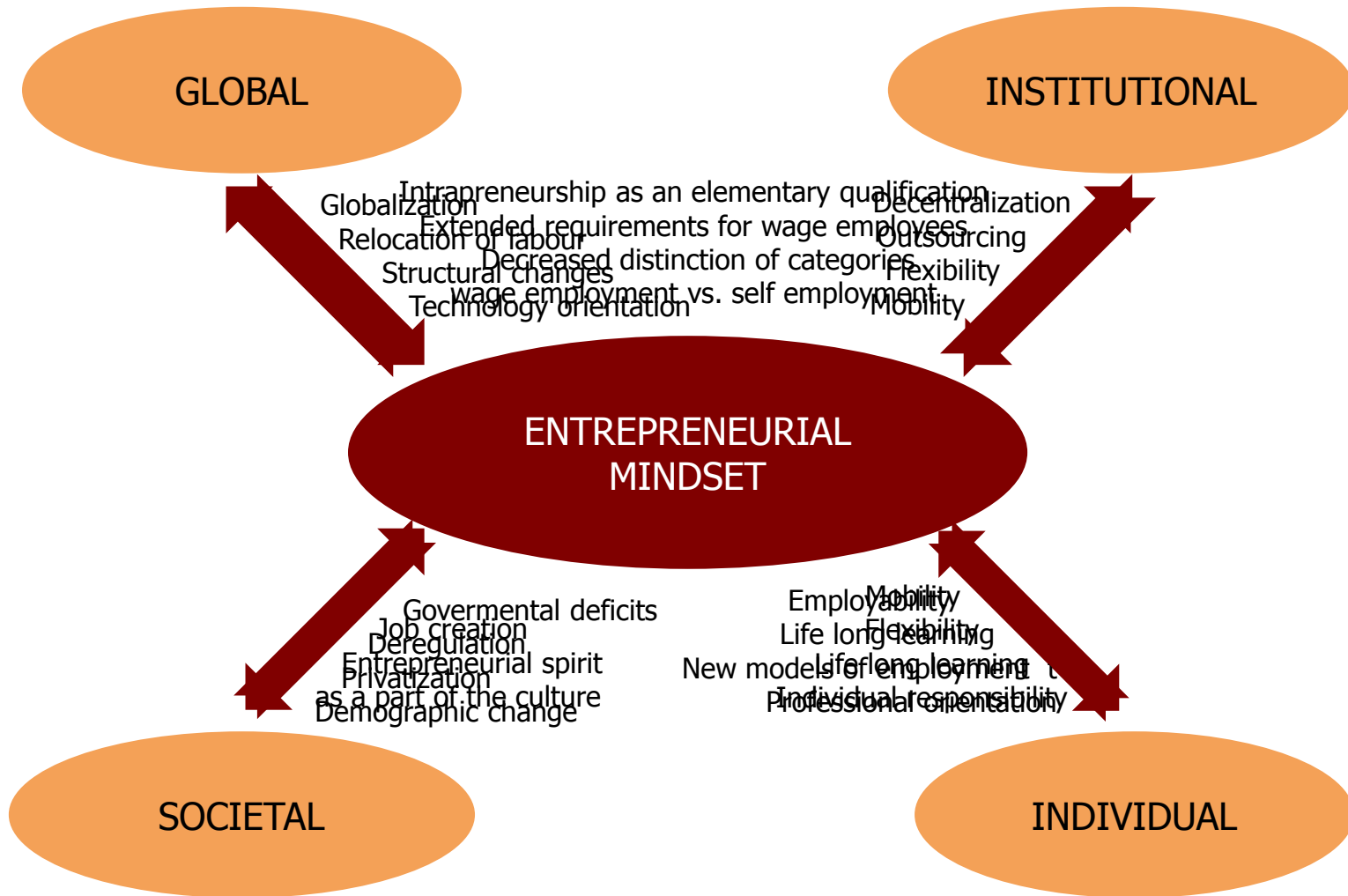


# Agenda

1. What do we mean by Entrepreneurship Education?
- 2. Why do we need Entrepreneurship Education?**
  - 2.1 Increased uncertainty requires new approaches**
  - 2.2 Born or made – empirical evidence for a development perspective
3. What can we expect from Entrepreneurship Education?
4. How to meet the expectations?

# Increasing complexity and uncertainty

*Increasing complexity and uncertainty on different levels...  
 Entrepreneurial spirit as answer to the challenges...*



# Entrepreneurship as educational goal

- European Commission states entrepreneurship as an education goal
- Requirements of the labour market
  - Intrapreneurship
  - Entrepreneurial mind-set as a premise for entrepreneurial behaviour in different contexts
- GEM (2012): Germany's educational system lacks entrepreneurial spirit
  - Barely represented in text books and curricula
  - Inconsistent image of entrepreneurs
  - Deficient early awareness is highest barrier for entrepreneurial propensity

# Agenda

1. What do we mean by Entrepreneurship Education?
- 2. Why do we need Entrepreneurship Education?**
  - 2.1 Increased uncertainty requires new approaches
  - 2.2 Born or made – empirical evidence for a development perspective**
3. What can we expect from Entrepreneurship Education?
4. How to meet the expectations?



# Born or Made – Personality Research

- Results from Twin Studies
  - Genes and environment impact the personality in multiple, complex and inseparable interactions
  - Genetic predispositions come to effect dependent on environmental influences
  - Similar in personalities = similar genes + similar environment
  - Non-shared environment has a stronger impact on personality development than shared environment
  - Personality development is observable even in adult age, dependent on the depth of the personality trait, age and extent of developing treatment

# Born or Made – Entrepreneurship Research

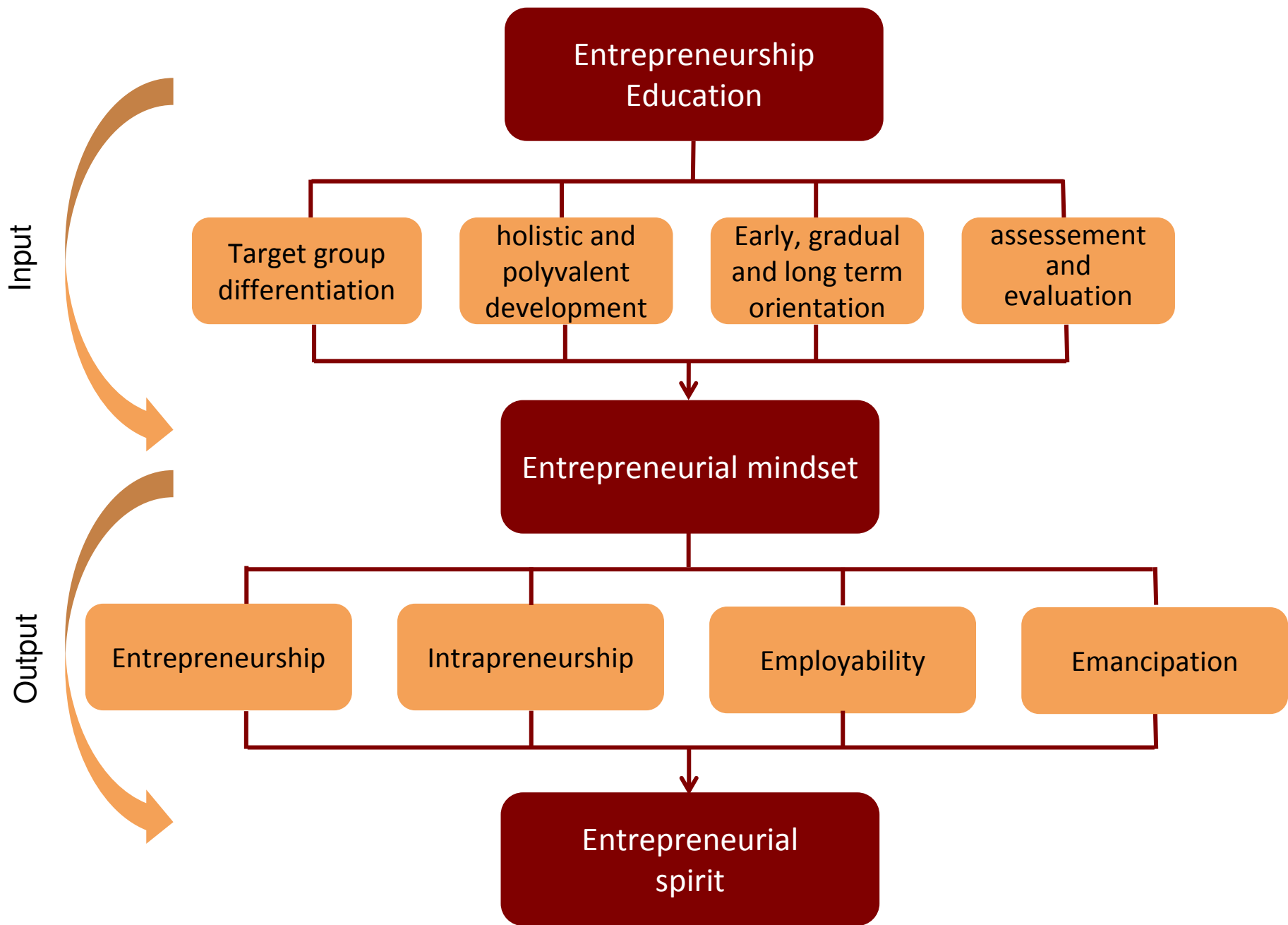
- Selection hypothesis vs. adaption hypothesis
- Earlier research favored selection hypothesis, but studies bear methodological deficits:
  - Lack of longitudinal research
  - Disregard of environmental influences

# Born or Made – Entrepreneurship Research

- Empirical support for adaption hypothesis:
  - Cultural differences within entrepreneurial personality traits as well as in the definition of entrepreneurial personality
  - Significant effect of methodical trainings for some traits (e.g. need for achievement, self-efficacy, biased cognitive patterns)
  - Development is dependent on the depth of the particular trait and possible until early adulthood
  - Socialization during childhood and adolescent years as most striking influence
  - Longitudinal studies report entrepreneurial personality development during the entrepreneurial activity
- Conclusion: short-term stability and long-term development potential of entrepreneurial personality

# Agenda

1. What do we mean by Entrepreneurship Education?
2. Why do we need Entrepreneurship Education?
- 3. What can we expect from Entrepreneurship Education?**
  - 3.1 Desiderata for a holistic entrepreneurship education approach**
  - 3.2 Current entrepreneurship education programmes and their evaluation
1. How to meet the expectations?



# Agenda

1. What do we mean by Entrepreneurship Education?
2. Why do we need Entrepreneurship Education?
- 3. What can we expect from Entrepreneurship Education?**
  - 3.1 Desiderata for a holistic entrepreneurship education approach
  - 3.2 Current entrepreneurship education programmes and their evaluation**
    1. How to meet the expectations?

# Entrepreneurship Education in German schools

- German secondary schools:
  - since late 1990
  - Heterogeneous durations and methods
  - Action oriented programmes
  - Well established within the extra-curricular repertoire
- Goals in secondary schools:
  - multi-disciplinary skills
  - vocational training and orientation
  - entrepreneurial mindset
  - additional qualifications

# Evaluation of current Entrepreneurship Education programmes in schools

## Students:

- + Experiential learning and practical orientation
- Time consuming

## Teachers:

- + Suitable alternative for existing programmes for vocational orientation
- + Soft skills
- + Action and application oriented economic education
- Time consuming preparation, realization and organization
- Deficient support for implementation



# Evaluation of Entrepreneurship Education in schools

## Positive effects towards:

- Image of entrepreneurship and small business ownership
- Self-efficacy
- Problem solving strategies
- Entrepreneurial propensity

## Critical remarks:

- High methodical complexity
- Time consuming and short-term oriented
- Timing does not meet requirements for curricular use
- Strenuous and non-incentivized efforts for teachers
- Action orientation without reflection bears the risk of overconfidence

# Agenda

1. What do we mean by Entrepreneurship Education?
2. Why do we need Entrepreneurship Education?
3. What can we expect from Entrepreneurship Education?
- 4. How to meet the expectations?**

# Don'ts

- Contents
  - Mono disciplinarity
  - Invariable lessons
  - “One concept fits all”
- Methods
  - Action orientation without reflection
  - Action orientation without factual input
  - Factual lectures without practical reference

# Don'ts

- Goals
  - No pre-defined goals
  - Non-verifiable goals
  - Output orientation (e.g. start up frequency or propensity)
- Assessment
  - No assessment
  - Assessment without links to goals

# Dos

- Contents
  - Modular concepts
  - Modifiable lessons for different groups
  - Contents with links to different subjects
  - Curricular timing
- Methods
  - Method mix suitable for the goals and contents
  - Methods are means to an end, not an end in themselves

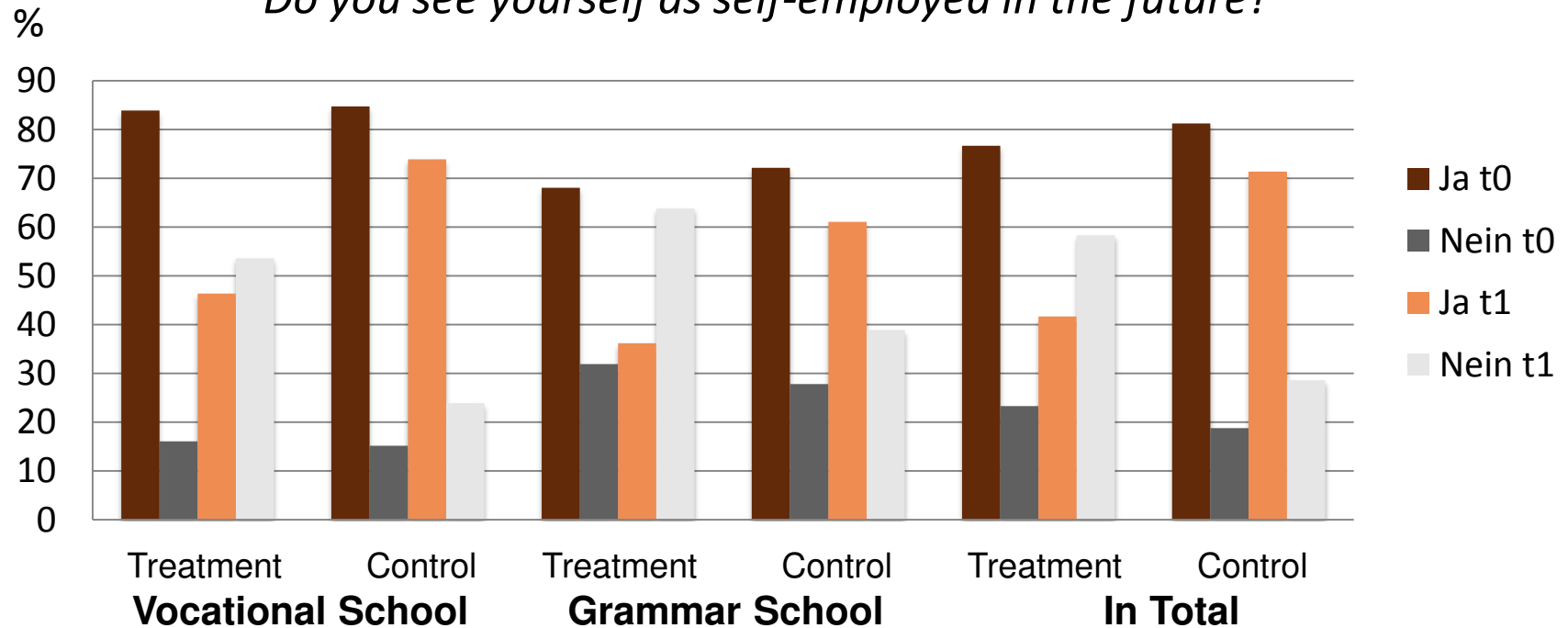
# Dos

- Goals
  - Subordinate goals according to contents
  - Verifiable goals
- Assessment
  - Valid and standardized assessment methods
  - Education in assessment and treatment effects

# Some examples for non-obvious effects

## Entrepreneurship education and entrepreneurial propensity

*Do you see yourself as self-employed in the future?*



## Development of interdisciplinary skills using action orientation:

- Lower rates in the experimental group by self-assessment
- Higher rates in the experimental group by teachers' assessment

# References

- Bijedić, Teita (2013): Entwicklung unternehmerischer Persönlichkeit im Rahmen einer Entrepreneurship Education – Didaktische Lehr-Lern-Konzeption und empirische Analyse für die Sekundarstufe II, München/Mering.
- Bosma, Niels / Wennekers, Sander / Amorós, José E. (2012): Global Entrepreneurship Monitor. 2011 extended report: Entrepreneurs and entrepreneurial employees across the globe, Babson Park et al. URL: <http://gemconsortium.org/docs/download/2200>.
- European Commission (2006): Green paper, entrepreneurship in Europe. In: Commission of the European Communities, Brüssel.
- Josten, Martina / van Elkan, Marco (2010): Unternehmergeist in die Schulen?! Ergebnisse aus der Inmit-Studie zu Entrepreneurship Education-Projekten an deutschen Schulen. Herausgegeben vom Ministerium für Wirtschaft und Technologie, Reihe Mittelstandspolitik, Existenzgründungen, Dienstleistungen, Berlin.
- Sternberg, Rolf / Brixy, Udo / Vorderwülbecke, Arne (2012): Global Entrepreneurship Monitor. Unternehmensgründungen im weltweiten Vergleich. Länderbericht Deutschland 2011, Hannover/Nürnberg. URL: [http://www.wigeo.uni-hannover.de/fileadmin/wigeo/Geographie/Forschung/Wirtschaftsgeographie/Forschungsprojekte/laufende/GEM\\_2011/gem2011.pdf](http://www.wigeo.uni-hannover.de/fileadmin/wigeo/Geographie/Forschung/Wirtschaftsgeographie/Forschungsprojekte/laufende/GEM_2011/gem2011.pdf).



# Thank you!

## Contact

Dr. Teita Bijedić  
Institut für Mittelstandsforschung Bonn  
Maximilianstr. 20  
53111 Bonn

Tel.: +49 - 228 - 72 99742  
Email: [bijedic@ifm-bonn.org](mailto:bijedic@ifm-bonn.org)