

# Pathways to basic skills: What does research tell us about challenges and success criteria?

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**die**

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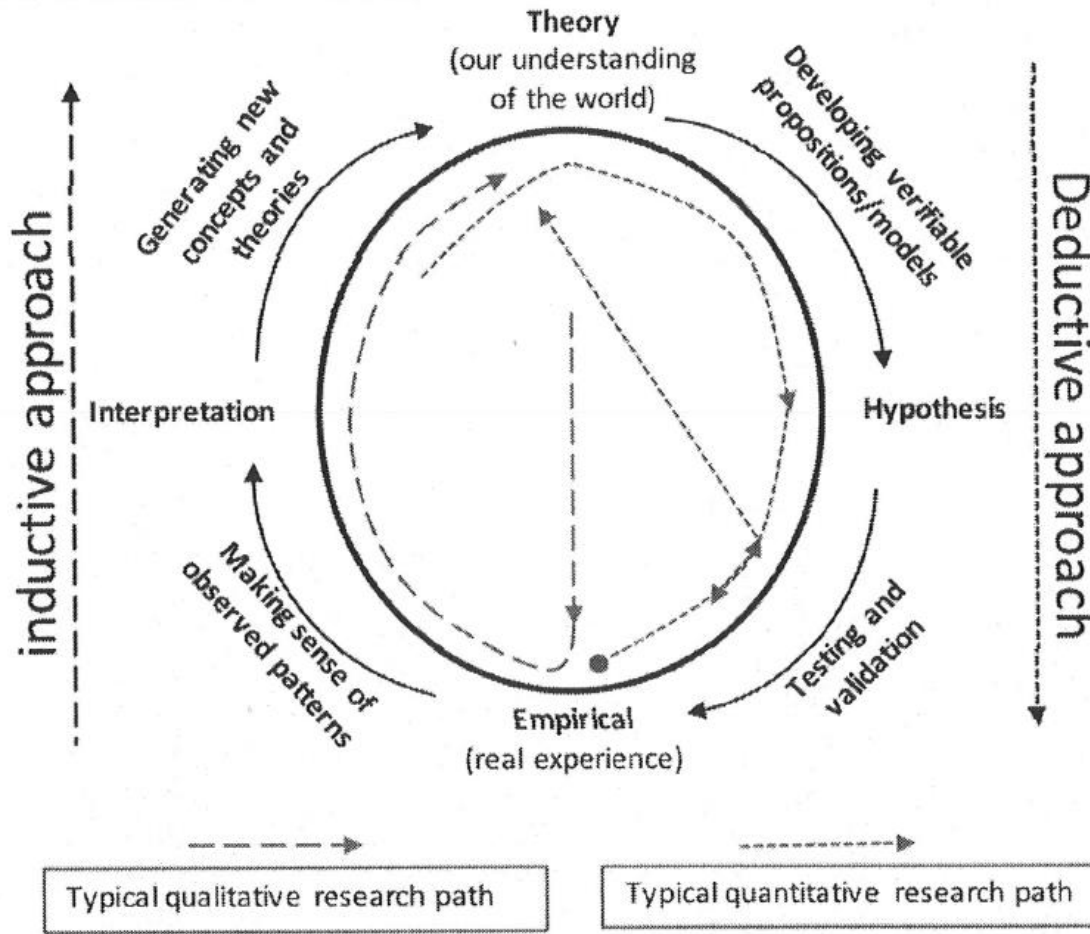
- ➔ Step 1: Participation of adults with low basic skills
- ➔ Step 2: Research strategies and their interconnection
- ➔ Step 3: Quantitative Re-Analyses of PIAAC-Data
- ➔ Step 4: Qualitative Case studies of adult learning systems
- ➔ Step 5: How to interconnect different research strategies: A recent example from Germany

What do we know from international comparative research about successful strategies in order to foster basic skills?

## Participation according to literacy levels in Europe

Literacy skill	Level 1 or below (%)	Level 2 (%)	Level 3 (%)	Level 4/5 (%)
Finland (FI)	39	52	69	83
Netherlands (NL)	42	52	71	79
Sweden (SE)	37	58	71	82
Norway (NO)	43	54	69	77
Estonia (ET)	32	45	59	75
Belgium (BE)	27	37	57	67
Czech Republic (CZ)	34	41	54	64
Slovakia (SV)	13	24	39	55
United Kingdom (UK)	34	46	63	74
Denmark (DK)	40	60	74	83
Germany (DE)	27	45	63	79
Austria (AT)	28	41	58	72
Poland (PO)	18	27	43	60
Ireland (IR)	33	44	57	73
France (FR)	20	31	44	56
Spain (ES)	28	44	60	78
Italy (IT)	14	20	37	53

## The Research Wheel



Source: Desjardins 2017a, p. 53

## Adults with low proficiency in literacy or numeracy

(Grotlüschen, Mallows, Reder & Sabatini, 2016)

**Objektive:** A better understanding of low proficiency populations and how they acquire and use their skills and engage in education provision

### Results:

*How many adults have low proficiency and who are these adults?*

- ➔ On average, 12.3% of adults scored at or below Level 1
- ➔ The proportion varies between 4.9% in Japan and 27.7% and 27.5% in both Italy and Spain.
- ➔ They are not sharply differentiated from the rest of the adult population in terms of socio-demographic characteristics.
- ➔ They are more likely to have not completed upper secondary level education, to have been born in a country other than the country in which the test has been taken, to be of older age, to be unemployed.

### Results:

*How often adults with low proficiency participate in the Adult Education and Training (AET)?*

- ➔ The participation rates of adults with low literacy proficiency in formal and non-formal Adult Education Trainings are much lower than those of highly proficiency adults as well as those of the general population.
- ➔ The gap in participation rates between adults with low and high literacy proficiency is on average 44 percentage (29,7 % compared to 73,6 % respectively) in the case of non-formal AET.
- ➔ In the case of formal education the gap is 12 percentage (5,9 % compared to 18.1 %).
- ➔ In general, countries with higher general rates of AET also have higher participation rates of adult with lower proficiencies in AET.

## Political Economy of Adult Learning Systems

Comparative Study of Strategies, Policies and Constraints (Desjardins 2017b)

<b>Germany</b>	<b>Norway</b>
<b>50 %</b> participating at least once in adult education on an annual basis	<b>61 %</b> participating at least once in adult education on an annual basis
only about <b>12 %</b> of the population has not attained an upper secondary qualification or equivalent	only <b>1,3 %</b> of adults not having attained a lower secondary level qualification (the lowest among the 8 countries)
only <b>0.6 %</b> of adults without upper secondary education participated in formal provision in 2012	<b>2,5 %</b> of adults without upper secondary education participated in formal provision in 2012



## Lessons learned

- Interconnection of different research strategies is necessary to **explain** different participation rates of adults with low basic skills and to develop strategies to foster basic skills
- International-comparative research is indispensable (especially for EBSN)
- And now?

- ➔ Holistic approach; situated literacies (Barton & Hamilton, 2003)

health literacy, food literacy, workplace literacy, digital literacy, financial literacy

- ➔ **Financial Literacy** as „essential life skill“ by PISA-Programme (OECD 2014)



*‘Financial literacy focuses on basic, existential and practical requirements of everyday living in contexts relating to money management.’*

Source: Mania E., & Tröster, M. 2014

A recent example from Germany:

**Project CurVe II:** a research, development and transfer project „Curriculum and Professional Development of Financial Literacy“



Project term: 01/2016 – 11/2020

## CurVe II aims at

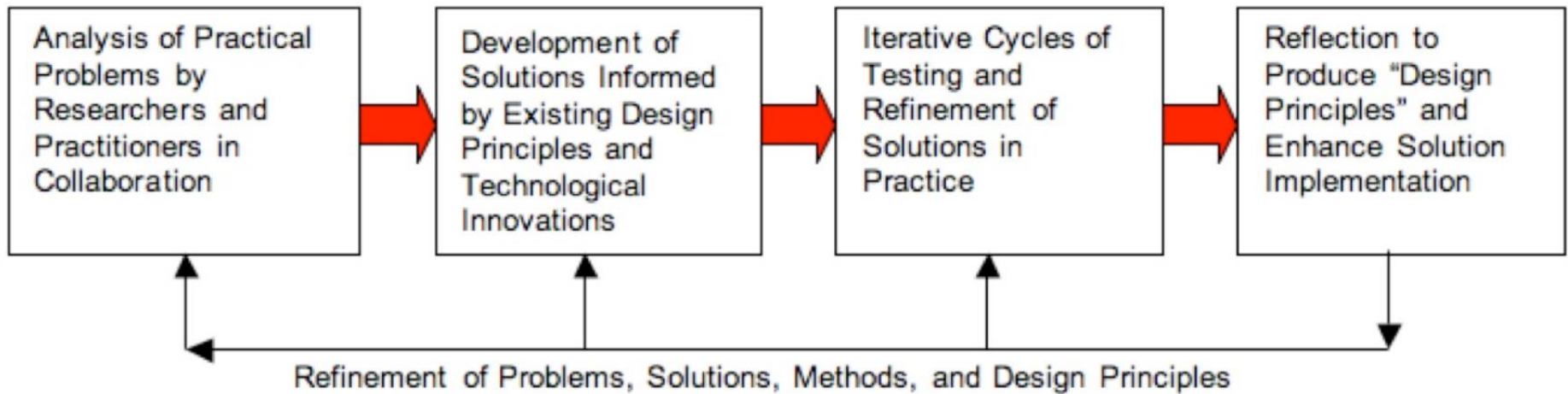
- ➔ providing a scientifically approved learning approach in the form of a curriculum manual and an educational game
- ➔ analysis of new networks and transitions
- ➔ further development and consolidation of suitable strategies for addressing potential learners
- ➔ professional training of teachers and information providers

## Curve II curriculum research focus

- ➔ Design-based research
- ➔ Development of learning materials: Anchored Instruction
- ➔ Research: Mixed methods design



### Design-Based Research



Source: Reeves, 2006, p. 59

Basis from previous project:

## The Financial Literacy Competence Model



Competence domains financial literacy	Knowledge	Reading	Writing	Numeracy
1. Revenue				
2. Money and payments				
3. Expenditure and purchases	<b>Everyday requirements</b>			
4. Budgeting				
5. Borrowing money and debts				
6. Making provisions and insurance				

Source: Mania & Tröster, 2015

Download of the complete model: [http://die-curve.de/content/PDF/DIE\\_Kompetenzmodell\\_engl.pdf](http://die-curve.de/content/PDF/DIE_Kompetenzmodell_engl.pdf)

## Curve II Professional Development

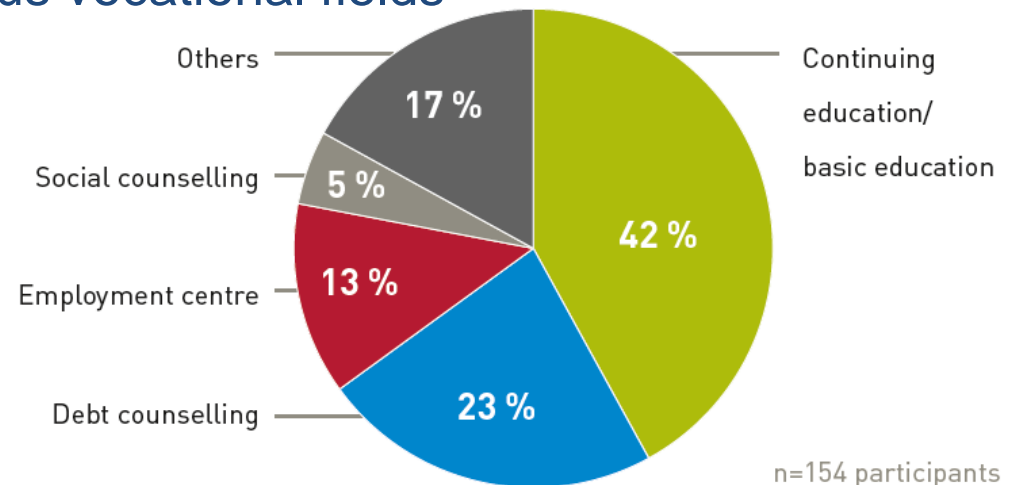
Access - participation - networking: awareness-raising workshops for multipliers in the field of (financial) literacy



Development, implementation and evaluation of the workshops  
(Stufflebeam 2002, 2007; Kirckpatrick 2010)

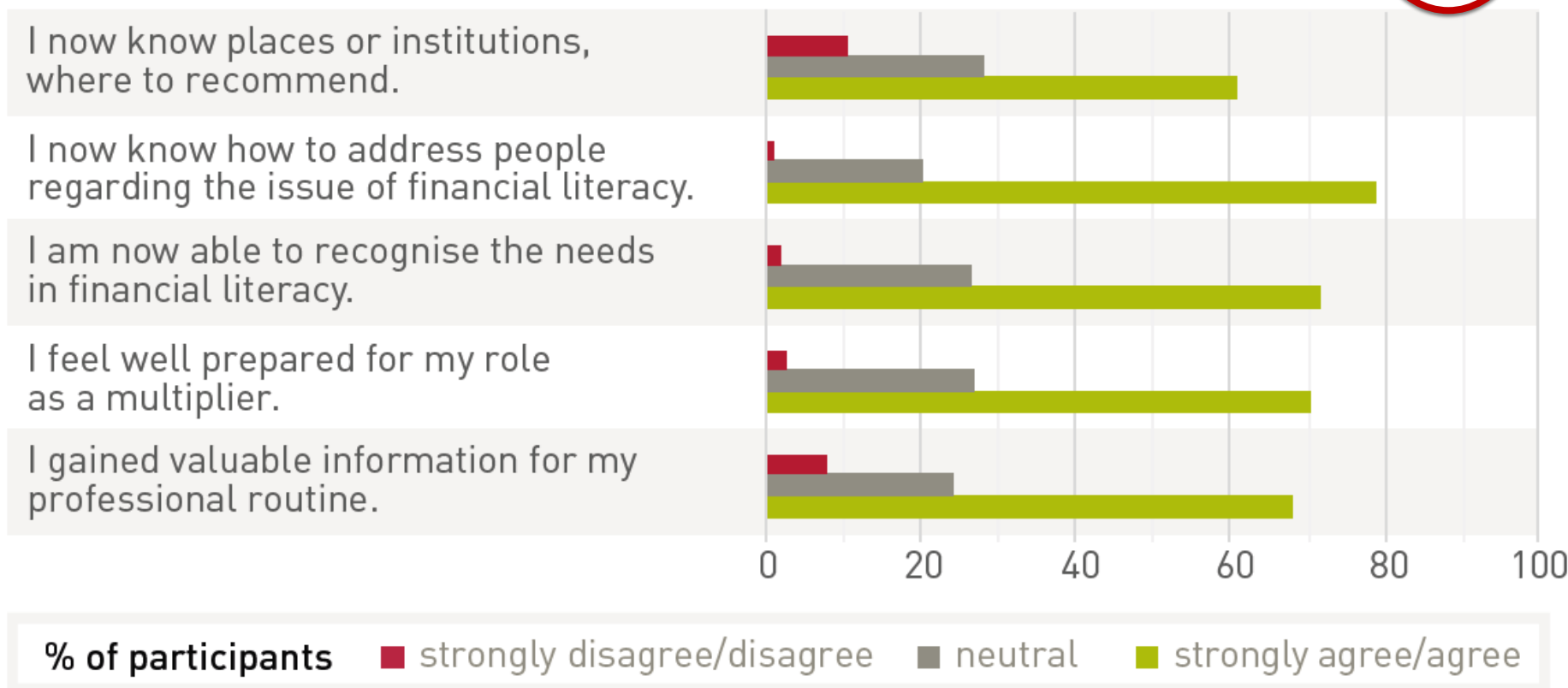
## Results

- ➔ 8 awareness-raising workshops in Germany
- ➔ 166 participants from various vocational fields
- ➔ 29 cooperation partners



Source: Tröster, M., Bowien-Jansen, B. & Mania, E. (2018).

## Recognise needs, address, act



Source: Tröster, M., Mania, E. & Bowien-Jansen, B. (2018)

## The next steps of our project



- ➔ Implementation of the CurVe II curriculum and the developed learning materials
- ➔ Scientific exploration: effectiveness and benefits of the curriculum/materials
- ➔ Professionalisation and development of advanced trainings
- ➔ ...



# Time for your questions...

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# Thank you for your attention!

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## References

- Barton, D., Hamilton, M. & Ivanic, R. (Eds.). (2003). *Situated literacies. Reading and writing in context* (Literacies). London: Routledge.
- Desjardins, R. (2017a). A Perspective on the Use of Large Scale Efforts in Comparative Adult Education Research. In: M. Schemmann: *Internationales Jahrbuch der Erwachsenenbildung. Band 40. International Comparative Adult Education Research*. Köln, Weimar, Wien: Böhlau Verlag
- Desjardins, R. (2017b). *Political Economy of Adult Education Learning Systems. Comparative Study of Strategies, Policies and Constraints*. London, New York: Bloomsbury Academic.
- Grotlüschen, A., Mallows, D., Reder, S. & Sabatini, J. (2016). *Adults with low low proficiency in literacy or numeracy. Education Working Paper No. 131*. Online available: [http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=EDU/WKP\(2016\)5&docLanguage=En](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=EDU/WKP(2016)5&docLanguage=En)
- Kirkpatrick, D. L. & Kirkpatrick, J. D. (2010). *Evaluating training programs. The four levels* (3<sup>rd</sup> ed.). San Francisco: Berrett-Koehler Publishers.
- Mania, E. & Tröster, M. (2014). Finanzielle Grundbildung - Ein Kompetenzmodell entsteht. *Hessische Blätter für Volksbildung*, 64(2), p. 140.
- Mania, E. & Tröster, M. (2015). *Finanzielle Grundbildung. Programme und Angebote planen*. Bielefeld: Bertelsmann Verlag.
- Nienkemper, B. & Grotlüschen, A. (2016). *Erreichbarkeit und Kompetenznutzung von Erwachsenen mit niedrigerer Lesekompetenz. Sekundäranalysen aus PIAAC*. Heft 2. Universität Hamburg: Hamburg.

- ➔ OECD-Organisation for Economic Co-operation and Development. (2014). *Pisa 2012 Results: Students and Money: Financial Literacy Skills for the 21st Century*. Volume VI, Pisa, OECD Publishing. Online available: <http://www.oecd.org/pisa/keyfindings/PISA-2012-results-volume-vi.pdf>
- ➔ Rammstedt, B. (2013). *Grundlegende Kompetenzen Erwachsener im internationalen Vergleich Ergebnisse von PIAAC 2012*. Münster, New York, München, Berlin: Waxmann Verlag.
- ➔ Reeves, T.C. (2006). Design research from a technology perspective. In J. van den Akker, K. Gravemeijer, S. McKenney & N. Nieveen (Eds.), *Educational design research* (p. 52-66). London: Routledge.
- ➔ Stufflebeam, D. L. (1983). The CIPP Model for Program Evaluation. In G. F. Madaus, M. S. Scriven & D. L. Stufflebeam (Eds.), *Evaluation Models. Viewpoints on Educational and Human Services Evaluation* (p. 117–141). Dordrecht: Springer Netherlands.  
[https://doi.org/10.1007/978-94-009-6669-7\\_7](https://doi.org/10.1007/978-94-009-6669-7_7)
- ➔ Stufflebeam, D. L. (2002). The CIPP Model for Evaluation. In D. L. Stufflebeam, G. F. Madaus & T. Kellaghan (Eds.), *Evaluation Models* (p. 290–317). New York: Kluwer Academic Publishers.
- ➔ Stufflebeam, D. L. (2007). *Checkliste für das CIPP-Evaluationsmodell. Ein Instrument, um die Fünfte Version des CIPP-Modells auf langfristige Vorhaben anzuwenden*. Zur Nutzung vorgesehen für Evaluatorinnen und Evaluatoren.
- ➔ Tröster M., Bowien-Jansen, B. & Mania, E. (2018 i.V.). Zugang über Multiplikator/inn/en als Strategie der Teilnehmendengewinnung. *ALFA-Forum* (1), 35-39
- ➔ Tröster, M., Mania, E. & Bowien-Jansen, B. (2018). MultiplikatorInnen als TüröffnerInnen zu Angeboten der Grund-/Basisbildung. Erste Erfahrungen mit Sensibilisierungsworkshops. *Magazin erwachsenenbildung.at. Das Fachmedium für Forschung, Praxis und Diskurs* (34) 8-1 – 8-12.