

Das Pädagogische Model Learn STEM und Tools für MINT-Innovationen



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**Founder & Director of eLC, the European
Institute for Learning, Innovation & Cooperation**





My experiences

**> 20 years E-Learning
in business & academia**



**Research Institute leadership
and strategic development**



**> 20 years design, realization, evaluation &
optimization of study programs and courses**



**100+ International Projects: with > € 50 Mio.
budgets and > € 4.8 Mio. own funding**



Open School Education

www.Learn-STEM.org



Explorative Pedagogies

The four phases of Oh, DEAR!

Teacher cycle



Learner cycle



What is *Learn* **STEM** ?

**STEM = Science,
Technology, Engineering,
& Mathematics (= MINT)**

We are

Learn

STEM



Learn STEM network



EEKHOUT
- ACADEMY -



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Learn STEM for you

Results from Mixed Methods research:

- Pedagogical Model
- Teacher Training Programme
- Open Online Course (March 2020)



Free to use & to adapt!

www.Learn-STEM.org

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Pedagogical Model

COMPLEX

PROCESS-ORIENTED

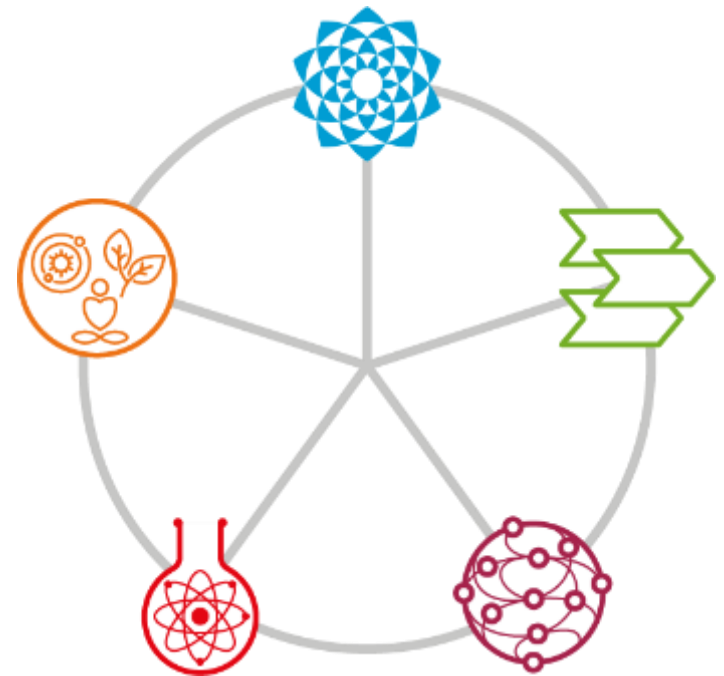
HOLISTIC

PRACTICAL

SOCIAL

Free & open download:

www.Learn-STEM.org/Model



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Learn STEM Trainings

Free teacher trainings in 6 countries
Full programme = 4 modules on
pedagogicals, didactics & assessment

In Germany at FH Wildau:
17th of February 2020

www.Learn-STEM.org

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Learn STEM MOOC

MOOC = Massive Open Online Course

Start: 26th of March 2020

4 weeks plus intro (start: 1st March 2020)

Register for free today:

www.competencedevelopment.eu

www.Learn-STEM.org

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Learn STEM events

**Learn STEM Conference in Roermond
26th of March 2020 (full day) in the
most innovative Agora school
Join us! Programme online at:**

www.Learn-STEM.org/conference

www.Learn-STEM.org

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**Kostenlose Instrumente
und Tools
für innovativen
MINT-Unterricht**



Source: <https://www.flickr.com/photos/opensourceway/>

Learn STEM PM Annex 1

STEM lessons: 2, 3, 17, 23, 27

STEM challenges: 1, 4, 6, 7, 14, 18

STEM projects: 5, 8

STEM events: 9, 12

STEM training: 16

STEM lab: 20, 24

STEM network: 21

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Learn STEM ILP: 12 tools

Mobile games: 1, 2

Mini computer: 3, 6

Classroom poll: 4

Programming: 5

IoT card game: 7

Engineering lessons: 8

Experiments: 9, 10, 11

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Tools for STEM education

Edu offers: Microsoft Education, Google Classroom, Apple Education, GoConqr

Videos: Lumen, animaker, powtoon, flipgrid, screencast-o-matic, moovly, screencastify

Quizzes: Kahoot, Mentimeter, Vizia, Quizizz, Edpuzzle, Socrative, slido

Website builder: wix, H5P

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Let us cooperate!



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Interaktiver Teil

Interaktive session:

- 1. Drei Kleingruppen**
- 2. Alternative: Diskussion
zu MINT-Innovationen**

Drei Kleingruppen: Gruppenarbeit

Learn STEM for you

Kleingruppen:

1. Pädagogisches Modell "Learn STEM" von Lehrer*innen in der Praxis genutzt?
2. Pädagogisches Modell "Learn STEM" von Schulleiter*innen für Leitlinien?
3. Instrumente und Tools für innovativen (MINT-)Unterricht in der Praxis?

Drei Kleingruppen: Plenum

**Alternative:
Diskussion zu
MINT-Innovationen**

Pedagogical Model

COMPLEX

PROCESS-ORIENTED

HOLISTIC

PRACTICAL

SOCIAL



Free & open download:

www.Learn-STEM.org/Model



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**Learn STEM Checklist
zu 5 Dimensionen
und Aspekten:
Was halten SIE
davon?**

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