

# **E-Learning in School Education in the Coming 10 Years**

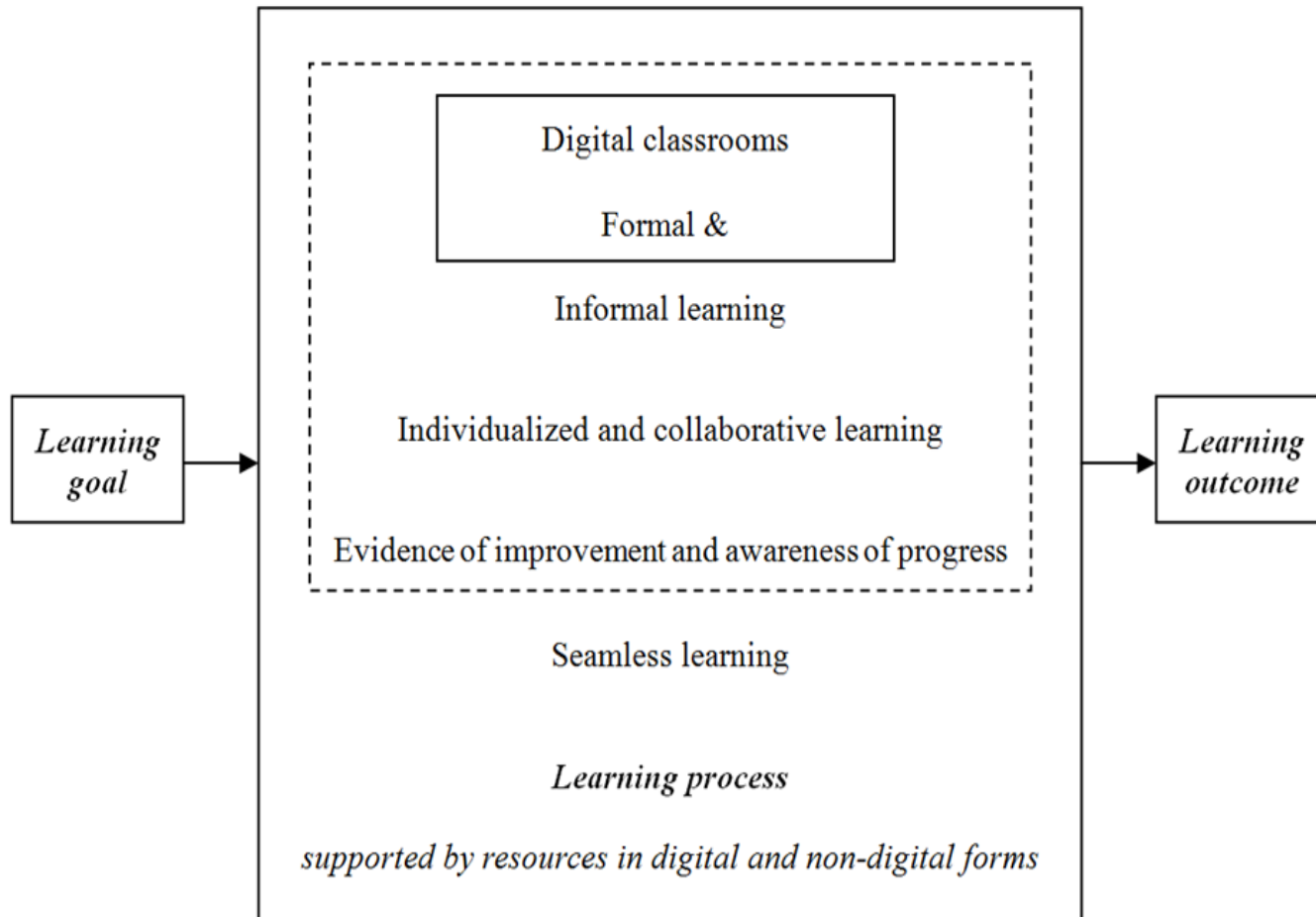
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# E-learning in school education in the coming 10 years



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E learning in school education	Technological support	Research issue	Policy implication
<b>Learning goal:</b> 21st century skills	Digital resources Digital ways of communication	Developing 21st century skills	Policy for setting up curriculum goals for delivering 21st century skills
<b>Learning process:</b> Formal and informal learning Individualized and collaborative learning Evidence of improvement and awareness of progress	Digital classrooms (personal computing devices and wireless connectivity) Digital resources Development/choice of digital learning platforms/tools	Bridging gap between school and society for linking curriculum content to real life Learning models for developing 21st century skills Performing learning analytics for collecting evidence of improvement and building awareness of progress	Policy for bridging gap between school and society for linking curriculum content to real life Policy for availability of personally-owned computing devices and free wireless connectivity for developing 21st century skills
<b>Learning outcome:</b> 21st century skills assessment	Platforms/tools development for assisting assessment of 21st century skills	Assessing 21st century skills	Policy for addressing privacy/legal issues in e-learning process in which learning data are being tracked
<b>Teacher development:</b> Learner-centered learning Active/Constructive/Interactive learning	With or without platforms/tools development for teacher development	Providing teacher development for facilitating learners to develop 21st century skills Scaling up those sustainable teacher development models	Policy for teacher development for pre-service and in-service teachers

# [ (1) Learning goal ]

- Developing learners' 21st century skills

# Research issue 1: Related to “Learning goal”

- Conducting evidence-based research
  - To identify factors that motivate school leaders to change school-based planning priority with regard to the development of 21st century skills
    - Developing 21st century skills
    - Connecting school curriculum with real-life situation

## (2) Learning process

- Formal and informal learning
- Individualized and collaborative learning
- Evidence of improvement and awareness of progress

# Research issue 2: Related to “Learning process”

- Bridging gap between school and society for linking curriculum content to real life
  - promoting K-12 schools to meaningfully link the content of school curriculum delivered to learners and the application of domain knowledge acquired by learners
  - such as creating digital classrooms with the authentic and contextualized learning environments for promoting cognitive engagement, from the perspective of “cognitive realism”

# Research issue 3: Related to “Learning process”

- Investigating e-learning models that inform K-12 schools
  - promising approach to technological use
  - pedagogical designs at classroom level
- For blending formal and informal learning approaches
- For balancing individualized feedback provision and self-directed learning process



# Research issue 4: Related to “Learning process”

- Conducting learning analytics
  - for collecting evidence of improvement
  - for building awareness of progress
  - among learners in authentic learning environments

# (3) Learning outcome

- 21st century skills assessment

# Research issue 5: Related to “Learning outcome”

- Exploring a coherent and formative mechanism for the assessment of 21st century skills in addition to domain knowledge
  - To develop digital platforms/tools which enable teachers to conveniently store, retrieve and comment on the information about learning process and learning outcome among learners
  - To recommend assessment approaches that support teachers on giving learners the timely feedback and continuously assessing learners’ performance in learning process

# (4) Teacher development

- Learner-centered learning
- Active/Constructive/Interactive learning

# Research issue 6: Related to “Teacher development”

- Offering teacher development programs which introduce teachers to the latest development of theoretical frameworks and practical strategies on promoting 21st century skills in e-learning environments
- Investigating the scalable and sustainable teacher development models that foster teachers’ capability to promote learners’ 21st century skills

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**Thank You!**

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