

Search Strategy (Web of Science & Scopus & CNKI)

I. Web of Science Core Collection

The Web of Science (WoS) search strategy was designed using Topic Search (TS), which includes Title, Abstract, Author Keywords, and Keywords Plus. The search aimed to identify studies related to digital transformation in basic education, and factors contributing to successful implementation.

Search String (TS):

```
TS = (
  ("digital transform*" OR "digital transition" OR "digital reform" OR "digital innovation"
  OR digitalization OR "ICT transformation" OR "education informatization" OR "education
  digitalization" OR "smart education" OR "education 4.0" OR "Internet + education" OR
  "ICT in education" OR "Educational technology integration" )
  AND
  ("basic education" OR "foundational education" OR "primary and secondary
  education" OR "K-9" OR "K-12" OR "k12" OR "compulsory education" OR "primary
  education" OR "secondary education" OR "elementary education" OR "elementary
  school" OR "primary school" OR "grade school" OR "grammar school" OR "school
  education" )
  AND
  ("critical success factor*" OR "critical factor*" OR "success factor*" OR "CSF*" OR "key
  success factor*" OR "key factor*" OR "key determinant*" OR "KSF*" OR "enabler*" OR
  "driving factor*" OR "influencing factor*" OR "determinant*" OR "barrier*" OR
  "framework" OR "model" OR "conceptual model" OR "transformation framework" OR
  "implementation" OR "successful implementation")
)
```

Refinements:

- Timespan: 2012–2025
- Document Types: Article
- Language: English OR Chinese

II. Scopus

The Scopus database search was conducted using TITLE-ABS-KEY fields, ensuring coverage of titles, abstracts, and author keywords.

Search String:

```
(TITLE-ABS-KEY (
```

"digital transform*" OR "digital transition" OR "digital reform" OR "digital innovation"
OR digitalization OR "ICT transformation" OR "education informatization" OR "education
digitalization" OR "smart education" OR "education 4.0" OR "Internet + education" OR
"ICT in education" OR "Educational technology integration"

)

AND

(

"basic education" OR "foundational education" OR "primary and secondary education"
OR "K-9" OR "K-12" OR "k12" OR "compulsory education" OR "primary education"
OR "secondary education" OR "elementary education" OR "elementary school"
OR "primary school" OR "grade school" OR "grammar school" OR "school education"

)

AND

(

"critical success factor*" OR "critical factor*" OR "success factor*" OR "CSF*" OR "key
success factor*" OR "key factor*" OR "key determinant*" OR "KSF*" OR "enabler*" OR
"driving factor*" OR "influencing factor*" OR "determinant*" OR "barrier*" OR
"framework" OR "model" OR "conceptual model" OR "transformation framework" OR
"implementation" OR "successful implementation"

)

AND

(

China OR Chinese OR " mainland China "

))

AND PUBYEAR > 2011 AND PUBYEAR < 2026

AND (LIMIT-TO(DOCTYPE, "ar"))

AND (LIMIT-TO(LANGUAGE, "English") OR LIMIT-TO(LANGUAGE, "Chinese"))

III. CNKI

SU=('数字转型' + '数字化转型' + '数字化改革' + '数字创新' + '数字化' + 'ICT 转
型'+ '信息化' + '智慧教育' + '教育 4.0' + '教育中的 ICT' + '教育技术整合') AND
SU=('基础教育' + '中小学教育' + 'K-9' + 'K-12' + 'k12' + '义务教育' + '小学教育'
+ '中学教育' + '小学' + '初中') AND SU=('关键成功因素' + '关键因素' + '成功因
素' + '关键决定因素' + '推动因素' + '驱动因素' + '动因' + '影响因素' + '决定因素'
+ '障碍' + '框架' + '模型' + '成功实施')

AND YE BETWEEN (2012,2025)