

A systematic review of didactic practices that effectively promote critical thinking

Critical Thinking is a crucial education goal to educate critical citizens who can contribute to the social, economic and political progress of societies and to a more rational and democratic coexistence

(OCDE, 2018; UNESCO, 2016)



How has Critical Thinking been promoted in educational contexts?



Integrative systematic review

(Whittemore & Knafl, 2005)

empirical research published in English, between 2010 and 2019, in open access peer review journals

criteria

1st exclusion
Theoretical articles
(n = 53)

2nd exclusion
No students' involvement (n=8)
Only perceptions of students or teachers (n=21)
No description of the didactic practices used (n = 11)
Publication in other languages (n = 7)
Adult education (n = 5)
(n = 52)

3rd exclusion
Lack or unclear description of the results (e.g., no CT' assessment)
(n = 13)

Articles identified
(n = 127)

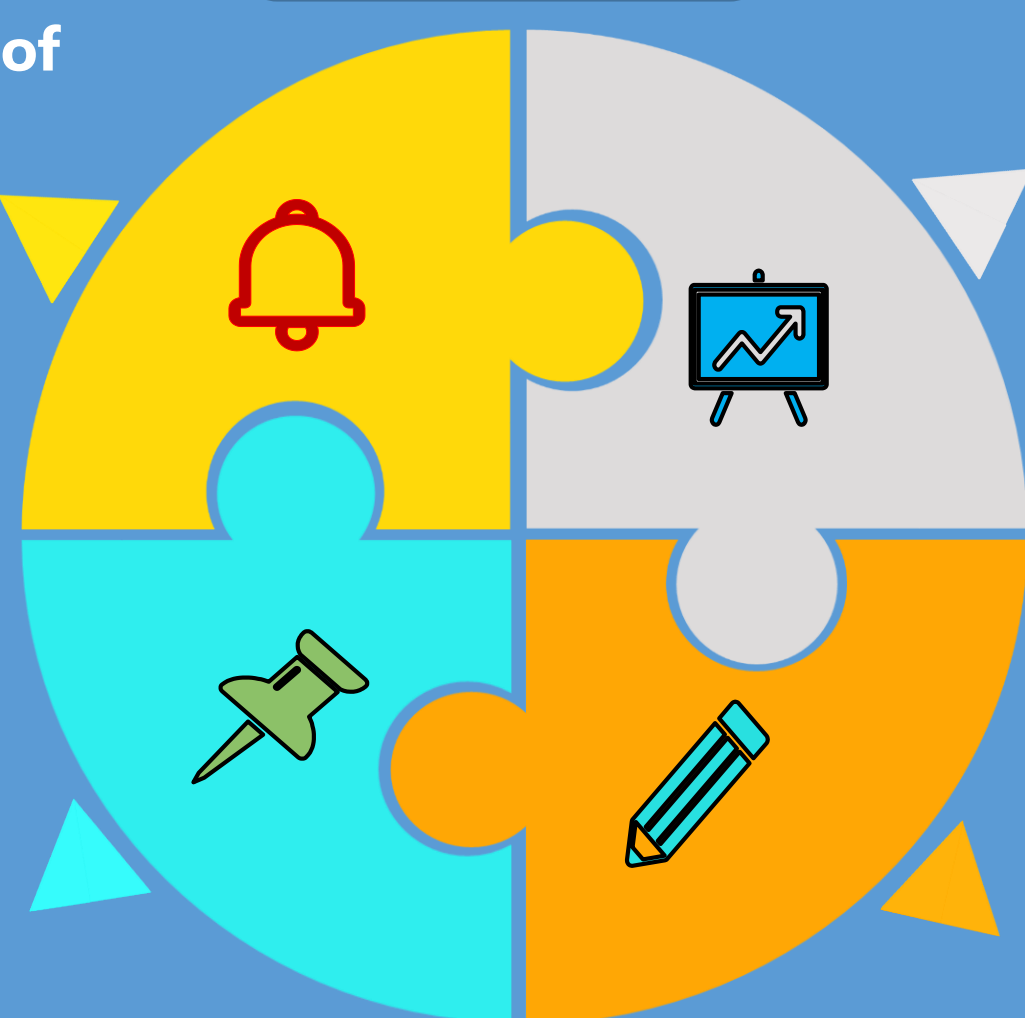
B-On (n = 3)
EBSCO (n = 14)
ERIC (n = 69)
SAGE (n = 8)
SCOPUS (n = 5)
TAILOR & FRANCIS (n = 13)
WEB OF SCIENCE (n = 15)

(n = 9)

Results

Reduced number of empirical studies identified (with relevant evidence to the purpose of this review)

Lack of Rigorous CT' assessment procedures in many studies



CT-oriented teaching strategies and activities that effectively promoted CT' abilities:

- "Role play" (n=4)
- Design of digital games (n=2)
- Problem-based learning (n=2)
- Writing activities (n=1)

- Use of formal and validated measuring instruments (e.g., Critical Thinking Test – Level I)(n=4)
- Use of teachers' own assessment instruments (n=5)
- Control groups (n=4)

Conclusions

Implications for teachers and researchers:

i) need for more research on CT' promotion (long-term research with higher standards on methodologic and descriptive procedures);

ii) need for teachers' specific training so they can integrate CT-oriented teaching strategies in their didactic practices in a systematic and intentional way so students can learn and use structured thinking in their everyday life (Tenreiro-Vieira & Vieira, 2019).