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#### Research Article

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# Global Education and Critical Thinking: A **Necessary Symbiosis to Educate for Critical Global Citizenship**

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Abstract: Global Citizenship Education (GCE) is a topic of relevance in current international educational debates, which increasingly focus on the formation of critical citizenship. This makes it necessary to discover from a critical pedagogical perspective the relationships between this pedagogical approach, Critical Thinking (CT), and GCE. Throughout this study, through an extensive theoretical review of the literature, we try to show the characteristics in which critical pedagogy, GCE, and CT converge, giving rise to the Critical GCE towards which we must move today. Therefore, this study is revealing for discovering the path towards which GCE is currently heading by clearly showing the symbiosis between CT and GCE. In conclusion, if we want to educate global citizens, it is necessary not only to have a strong background in GCE but also to develop CT to understand global society critically and the need to act to try to transform the world into one free from oppression and injustice.

Keywords: global citizenship education, global education, critical thinking, critical pedagogy, global citizenship

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#### 1 Introduction

Global Citizenship Education (GCE) in recent years stresses the need to create critical citizens to go beyond putting themselves in the situation suffered by people living in impoverished countries; that is, it is intended that Critical GCE – or for social transformation – instructs literate people who think critically and act to transform society through dialogue and respect (Bosio & Waghid, 2022; País & Costa, 2020; Torres & Bosio, 2020).

Now, what is scientific-critical literacy? The concept of scientific literacy has several interpretations, such as Bybee (1996) points out four types of scientific literacy: nominal, functional, conceptual-processual, and multidimensional; Hurd's (1998) notion, understanding it as a civic competence should develop the ability to think rationally about social, political, economic, or personal issues. Scientific literacy is linked to the development of Critical Thinking (CT) and is understood as the civic competence necessary to think rationally about socioeconomic or personal issues; therefore, a literate person can: differentiate ideas, analyze data, and use scientific knowledge, appreciate the various perspectives (environmental, socioeconomic, and political) from which a problem can be faced, analyze information, apply scientific knowledge, make decisions, and act to solve complex situations (Anderson, 2019; Tenreirovieira & Vieira, 2013).

Educational centers should be aware of the importance of educating literate people who have a global and contextualized vision of social reality. However, this is not usually the case because schools tend to transmit content in a decontextualized and fragmented manner by subject; this results in ending up leaving aside the conflicts that occur in the world and that affect, in one way or another, the daily lives of students (De Castro, 2013; Maithreyi, Prabha, & Viknesh, 2022). This idea is reflected in the International Manifesto on the GCE elaborated by Oxfam (2008), which states that educational processes are related to the "growing complexity of the social, economic and political

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processes of the world in which we live, [...] the school continues to be organized today according to an inefficient educational model that does not always respond to the challenges of our contemporaneity" (Oxfam, 2008, p. 4).

The undeniable role of educational institutions in transforming society from a critical perspective has been one of the topics of pedagogical debates since the end of the twentieth century (Aubert, Duque, Fisas, & Valls, 2004; Balls, 2021; Hodorovská & Rankovová, 2023). Several authors of great pedagogical relevance defend critical pedagogy: Apple (2000, 2002), Dewey (1938), Freire (1967, 1970), Giroux (1980, 1997), Kincheloe (2008), Macedo (1994), or Willis (1988). Among them, it is worth highlighting Giroux (1997) who understands critical pedagogy as an "ethical project with roots in critical theory, so that it incorporates both a vision of how society should be constructed and a theory of how current society exploits, dehumanizes and denigrates certain groups of people" (Scott, 2007, p. 103).

For his part, Freire (1997a,b) does not conceive of an education that does not promote training in values and affirms that the approach to educational reality must be carried out critically in order to transform it and also achieve a change in citizenship. In agreement with this author, Dewey (1938, 1995) defends that from education, people should be trained to understand the need to act to transform social reality (Feinberg & Torres, 2014). For this reason, critical education is constantly evolving to adapt to the changes occurring in the world, and therefore, from the educational field, it should never "lose sight of the fact that its fundamental concern is human suffering" (Kincheloe, 2008, p. 40).

Currently, critical pedagogy continues to develop from a similar perspective, seeking an understanding of both the world and the educational system that does not focus solely on the mere acquisition of content. Post-critical or post-modern authors (Astolfi, 1999; Morín, 1987, 2000) are situated under this perspective and not only promote renovating currents at the curricular level or the acquisition of knowledge but also emphasize the need to move to action. In this sense, Astolfi (1999) points out that "learning is not only increasing the "stock" of knowledge, but also [...] transforming the ways of conceiving the world" (Astolfi, 1999, p. 65). Another of the postmodern pedagogues mentioned earlier is Morín (1987, 2000), who speaks of complex thinking and indicates a "primordial need to learn to contextualize and, better said, to globalize; that is, to situate knowledge in its organized whole" (Morín, 2000, p. 61).

These ideas, which underlie Morin's approach and those of the referent authors in critical and post-critical pedagogy mentioned above, are reflected in the notion of Critical GCE in current research and in the urgency of moving towards the development of global citizens who think critically (Dill & Zambrana, 2020; Santamaría-Cárdaba, Martínez-Scott, & Vicente-Mariño, 2021). Therefore, Critical GCE seeks to go beyond sensitizing people by promoting the need to act and acquire knowledge in a contextualized manner favoring CT so that everyone understands his or her role in the global society.

## 2 CT: Key to Global Citizenship

CT is essential in education for global citizenship, but for what reasons? What are the characteristics of CT and why are they related to Critical GCE? This section provides answers to these questions, and therefore, before trying to define CT, it is necessary to highlight some of the most relevant ideas on this issue: 1) thinking carries with it the assimilation of content because we always think about something; 2) thinking is the most valuable way in which people assimilate knowledge through 3 operations: perception, acquisition, and retention; 3) obtaining new knowledge is only possible thanks to the inference capacity of our thinking, which initially starts from the notions already acquired.

There are multiple conceptions of what CT is due to the fact that it is an issue present in various academic fields, but none is universally accepted (Paul & Elder, 2002; Philley, 2005; Tenreiro-Vieira & Vieira, 2013). This lack of consensus leads to the consideration of all notions about CT which encourages Delphi studies on the definition of this concept (Facione, 1990). Table 1 shows the definitions proposed by the most relevant authors: Beyer (1985), Ennis (1985, 1987, 1996), Facione (1990, 2007), Halpern (1998, 2006, 2014), Kurfiss (1988), Lipman (1998), McPeck (1981), Paul (1993, 2005) or Paul and Elder (2002, 2003), among others.

After observing the definitions given above, a question arises: is CT considered a skill or a way of thinking and a set of capabilities? If attention is paid to the above definitions, it is possible to understand which notion of CT is defended by each author; specifically, CT as a skill can be seen in the definitions of Beyer (1985), Halpern (1998, 2006, 2014) and McPeck (1981). However, in the idea of CT as a way of thinking and set of skills is found in the definitions of Ennis (1985, 1987, 1996), Facione (1990, 2007), Franco et al. (2017), Paul (1993, 2005), Paul and Elder (2002, 2003), Saiz (2017, 2018), Solbes and Torres (2012), and Tamayo et al. (2016). However, not all definitions of CT can be framed within these two perspectives as is the case of those proposed by Kurfiss (1988) and Lipman (1998).

Table 1: Definitions of CT

Authors	Definition of CT
Beyer (1985)	CT is the ability to analyze any type of information or statement to assess its validity or veracity
Ennis (1985, 1987, 1996)	CT is reflective thinking that aims to foster reasoning in citizens so that they can choose what to do when analyzing different situations, information or results, seeking the veracity of things and issuing reasoned conclusions based on evidence
Facione (1990, 2007)	CT is understood as "the purposeful, self-regulated judgment that results in interpretation, analysis, evaluation and inference, as well as the explanation of the evidential, conceptual, methodological, criteriological or contextual considerations on which that judgment is based"
Franco, Vieira, and Saiz (2017)	CT is a "higher form of thinking that integrates skills, dispositions, knowledge and norms, applicable in everyday life (whether personal, academic, work or social) to think "well", find explanations, make decisions and solve challenges" (Franco et al., 2017, p. 11)
Halpern (1998, 2006, 2014)	CP is involved in the ability to solve problems, make decisions, or draw inferences. CT involves the assessment of thought processes and the evaluation of the reasoning process itself
Kurfiss (1988)	CT is "an investigarion whose purpose is to explore a situation, phenomenon, question, or problem to arrive at a hypothesis or conclusion about it that integrates all available information and that can therefore be convincingly justified" (Kurfiss, 1988, p. 2)
Lipman (1998)	CT is a process in which people, based on their context and purposes, make judgments based on their reasoning, which allows them to differentiate relevant information from insignificant information
McPeck (1981)	CT is "the skill and propensity to engage in an activity with reflective skepticism" (McPeck, 1981, p. 7)
Paul (1993, 2005)	CT consists of thinking about oneself while looking for ways to improve one's ability to reason; therefore, it entails self-improvement through the use of standards that adequately assess thinking
Paul and Elder (2002, 2003)	CT "is that mode of thinking – about any subject, content, or problem – in which the thinker improves the quality of his or her thinking by skillfully taking charge of the structures inherent in thinking and imposing intellectual standards upon them" (Paul & Elder, 2002, p. 35)
Saiz (2017, 2018)	To think critically "is to reach the best explanation for a fact, phenomenon or problem in order to know how to solve it effectively" (Saiz, 2017, p. 19); "it is to reason and decide in order to solve" (Saiz, 2018, p. 25)
Solbes and Torres (2012)	CT is a set of skills that enables people to differentiate valid arguments and to be socially responsible by actively acting on different sociocultural issues
Tamayo, Zona, and Loaiza (2016)	CT is "a dynamic that rejects what is instituted and given as true, placing thinking in a situation of doubt and permanent problematization" (Tamayo et al., 2016, p. 72)

Note. Own elaboration.

Based on the above definitions, it is possible to appreciate traits in common among them and some allusion to the dimensions of CT, which are: knowledge, norms, dispositions, and capabilities (Vieira, 2018). Beyer (1985), Ennis (1985, 1987, 1996), and Lipman (1992, 1998) refer to the capabilities dimension in their definitions by conceiving CT as the ability to analyze information to rely only on reliable sources and to establish reasoned conclusions. Like these authors, Facione (1990, 2007) adds to the performance of information analysis the skills of interpreting, evaluating, and drawing inferences to make informed judgments. For his part, Halpern (1998, 2006, 2014) states that the critical thinker must be able to solve problems and make decisions; even, Saiz (2017) points out that CT requires the ability to reason and decide to solve conflict.

Kurfiss (1988) focuses his definition on the knowledge dimension, commenting on the need to possess all possible information to be able to investigate a problem and propose hypotheses. In turn, Lipman (1998) stresses the relevance of knowing the context being studied in order to

make reasoned judgments. Likewise, Paul (1993, 2005) together with Paul and Elder (2002, 2003) emphasize that CT should consist of knowing oneself to improve the quality of reasoning. Tamayo et al. (2016) propose that CT requires the acquisition of knowledge that allows one to doubt what is established as true to put all issues in doubt and thus place thinking before the need to resolve a conflict.

As McPeck (1981), Solbes and Torres (2012), and Walters (1994) warn, CT requires dispositions, i.e., a critical thinker must be sensitized and informed to act and participate responsibly in society. In this sense, the dimension related to standards is implicit in all the definitions analyzed since a critical thinker must be rigorous, precise, use reliable sources, and be responsible taking into account the social and cultural context of the problem under study. It should be noted that the definition of CT proposed by Franco et al. (2017) compiles these dimensions noting that CT integrates capacities, dispositions, knowledge, and norms to achieve making assessments, deciding, and solving problems.

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In summary, the diversity of definitions provides a wide range of possibilities when it comes to understanding CT. However, if we try to synthesize all the definitions compiled, we could define CT as a way of thinking that comprises various skills to enable people to analyze any situation or problem, differentiate irrelevant information from important information, seek various explanations, establish reasoned and truthful judgments based on evidence, be able to make decisions, and act in search of the

#### 2.1 Components of CT and its Purposes

best possible solution.

After understanding what CT is, it is important to comment on the elements that make up this thinking. Plummer, Kebritchi, Leary, and Halverson (2022) point out the relevance of possessing skills such as interpreting, analyzing, or inferring, although these should not be the objective of CT teaching and assessment. Nowadays, it is considered that the acquisition of skills may not imply CT, since it is likely that they are possessed but that they do not know how to apply them correctly; thus, it is the dispositional or attitudinal component that promotes the ability to adequately apply their skills to think critically. For this reason, most of the reference authors in this field (Ennis, 1996; Facione, 2007; Halpern, 1998; McPeck, 1981) consider, from the philosophical viewpoint, that CT is constituted by two elements: cognitive skills and dispositions or attitudes.

In line with this idea from the perspective of psychology, Saiz (2018) considers that CT has two types of components: cognitive and non-cognitive. The cognitive ones are associated with skills and are only "the processes of perception, learning, and memory [...], thinking is an acquisition process, inferential in nature, which encompasses any form of reasoning" (Saiz, 2018, p. 21). While the non-cognitive or motivational ones are linked to feelings, emotions, or attitudes. The components of CT are interrelated in such a way that "we reason and decide to solve, and we solve to achieve" (Saiz, 2018, p. 24); that is, people act to change a situation that is unsatisfactory to them and prevents them from achieving well-being.

Therefore, the purpose possessed by the development of CT capabilities is linked to the formation of an active citizenship that understands and acts critically in various "contexts and situations of everyday life, from understanding the meaning of a news item [...]; through decision making and personal problem solving [...]; to participation in decision-making on public issues" (Vieira, Tenreiro-Vieira, & Martins, 2010, pp. 101–102). For this reason,

didactic resources should be designed based on the dimensions mentioned earlier to promote CT citizenship.

# 2.2 Capacities, Dispositions, and Difficulties of CT

The complexity of defining the term CT is also reflected when it comes to agreeing on the skills that a critical thinker must develop; in this situation, Tenreiro-Vieira and Vieira (2000) have been used as a reference and the skills that must be possessed to think critically according to the most relevant authors in the area of CT have been synthesized in Table 2.

In summary, what are the skills that a critical thinker should possess? The most relevant skills that make CT based on Paul (2005) and Santiuste et al. (2001) are 1) understanding (identifying the problem and discovering the existing relationships); 2) analyzing (analyzing the information available on the problem, causes, effects, etc.); 3) inferring (inferring data or information that does not appear explicitly on the problem); 4) proposing solutions (being able to formulate solutions to problems and overcome obstacles), and 5) making decisions (choosing a plan of action to achieve a proposed objective).

Before concluding this section, the existing difficulties in proceeding to think critically should be pointed out, which according to Solbes and Torres (2012) are 1) assuming science as a distant and decontextualized knowledge, which entails not being aware of current social problems; 2) questioning opinions and beliefs based on dominant discourses and ignoring indirect interests; 3) analyzing socio-scientific problems encompassing all their dimensions (scientific, ethical, cultural, social, etc.); 4) to make value judgments on socio-scientific and technological issues in terms of their contribution to the resolution of global problems; and 5) to avoid comfortable and passive attitudes.

Therefore, the formation of a critical global citizenship involves the acquisition of a scientific-critical literacy and is the key to the GCE, by trying to create people capable of thinking for themselves, questioning everything, analyzing both their local and international contexts, comparing the different existing perspectives, and acting by making their own decisions in the face of any problem or situation of injustice.

# 3 GCE from a Critical Pedagogical Perspective

Education plays a leading role in developing CT to promote democratic citizenship that acts against inequalities and situations that cause suffering to people (Jamatia, 2022;

Table 2: CT capabilities according to different conceptual definitions

Author	CT capabilities			
Ennis (1987)	1. Elementary classification	Asking questions; A	Analyzing arguments; Responding to questions with	
	2. Basic support	•	bility of information; Making observations and	
	3. Inference		and inductions; Creating value judgments	
	4. Elaborated classification	-	nd provide definitions; Identify responsibilities	
	5. Strategies and tactics	•	on an action; Interacting with people	
Beyer (1985)	•	-	apply; 6. analyze; 7. synthesize; 8. validate	
Halpern (2014)	1. Apply verbal reasoning; 2. Ana	alyze and express arg	gued conclusions; 3. Formulate and test hypotheses; 4.	
	Evaluate the different existing p	oossibilities; 5. Make	decisions and solve problems	
Paul (1993, 2005)	1. Affective capabilities	Think independently, be impartial, develop humility, courage, integrity, and intellectual perseverance, explore thoughts emerging from feelings and <i>vice versa</i>		
	2. Cognitive capabilities	Elementals	Compare ideas, think precisely, know similarities and differences, make inferences and interpretations, collect contradictions	
		High level	Avoiding simplification, comparing analogous situations, clarifying issues, analyzing arguments, thinking dialogically and dialectically	
Lipman (1992, 1998)	1. Formulate concepts accurately; 2. Generalize appropriately; 3. Establish cause-effect relationships; 4. Make inferences from one or more ideas; 5. Know the rules; 6. Recognize contradictions; 7. Formulate questions; 8. Identify underlying issues; 9. Act appropriately in the face of ambiguities; 10. Attend to important considerations; 11. Recognize vague words, fallacies, and relationships between ends and mear 12. Give reasons13. Make differentiations and similarities; 14. Discover alternatives; 15. Formulate hypotheses; 16. Analyze values; 17. Identify and use criteria in value judgments; 18. Value different perspectives			
Gubbins (Tenreiro-Vieira & Vieira, 2000)		Identify problem; Clarify the problem; Formulate hypotheses and questions; Generate related ideas; Propose alternative solutions; Apply and choose the best solution; Make conclusions		
	2. Decision-making	Establishing an objective and its obstacles; Identifying, examining, and organizing alternatives; Selecting the best alternative; Evaluating actions		
	3. Inferences	Inductive thinking	Knowing cause and effect; analyzing problems; drawing inferences; differentiating relevant information; solving problems intuitively	
		Deductive thinking	Using logic; identifying contradictory information; solving complex problems	
	4. Divergent thinking	Creating multiple, of information	Creating multiple, different, detailed, and original ideas; Synthesizing information	
	5. Evaluative thinking	Differentiate between facts and opinions; Check the validity of a source of information; Identify focal points and issues; Detect trends or stereotypes; Anticipate consequences; Plan alternatives; Classify data; Compare similarities and differences		
		Compare similaritie	es and differences	

Note. Own elaboration.

McLaren & Kincheloe, 2008; Peach & Clare, 2017). For this reason, educational centers should enhance the critical literacy of students so that they understand the situations of injustice and contradiction present in today's world; that is, they should develop a democratic and critical view of reality at both global and local levels to transform the world (Giroux, 2003; Jones & Manion, 2023).

The Critical GCE seeks to avoid passivity in citizenship, promoting consciences that do not accept existing inequalities and favoring their protagonist in individual and collective actions to try to curb social injustices. Therefore, the aim is to create critical global citizenship, which is why it is argued that education should promote egalitarian societies in which any type of discrimination or oppression should be sold (Leite, 2022; Melber, Bjarnesen, Lanzano, & Mususa, 2023). In addition, the training provided by schools should not be limited to the memorization of content, since practical exercises should be used to prepare people to live in today's society (Borghi, 2012; McArthur, 2023). In other words, if the aim is to educate people who actively participate in transforming society, they must learn by doing.

Thus, if the aim is to build an active global citizenry that participates in today's democratic society, it is imperative that people do not merely understand issues superficially and that they reflect to make informed judgments (Naiditch, 2010; Peach & Clare, 2017). As Kitts (2022) warn, critical pedagogy must be contemplated in educational curricula to be more effective for teachers and students.

However, what are the features of critical citizenship? Table 3 shows these characteristics according to Johnson and Morris (2010, 2012) who base themselves on the four objectives of citizenship education proposed by Cogan, Morris, and Print (2002): "the knowledge, skills, values, and dispositions of citizens" (p. 4).

In accordance with the above characteristics, it can be seen that education for social transformation requires citizens to know both the reasons for social inequalities and their rights and to be aware of their capacity to act on reality (Mata, Ballesteros, & Padilla, 2013). Andreotti (2006) adds, as previously mentioned, that it is essential to make students critically literate in order for them to understand social reality and North–South inequalities since critical literacy is a key dimension for Critical GCE.

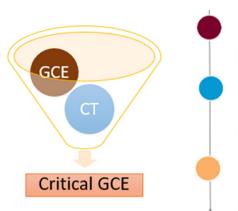
This same author, after studying the arguments on global citizenship proposed by Dobson (2005, 2006) and analyzing the effects of colonialism on North–South relations according to Spivak (2003, 2004), made a comparison between the soft GCE and the critical GCE. In this sense, recent studies such as those by Andreotti (2022), Bosio and Waghid (2023), Giroux and Bosio (2021), McLaren and Bosio (2022), or Stein, Andreotti, Suša, Ahenakew, and Čajková (2022) analyze from a decolonial perspective the importance of educating people who question the information they receive and can think critically from the perspective of GCE.

Understanding Critical GCE in the same way as DeLeon (2006), as both consider that advocates of critical pedagogy understand education as an act of public character through which they seek to "transform schools towards the pursuit of social justice [...] and use education to generate social change and empower educational actors" (DeLeon, 2006, p. 73). This vision of education as a means to transform society permeates the current GCE, since the Critical GCE requires that people possess the ability to think critically to understand the causes of inequality and social injustices so that they can act to transform society and defend human rights.

Table 3: Features of education for critical citizenship

	Politics/Ideology	Social/Collective	Self/Subjectivity	Praxis/engagement
Knowledge	Knowledge and understanding of histories, Awareness of the interconnections between oppressions and injustices, power culture, power, and transformation; nonstructures, and macrostructural relations dominant writings and ideas in addition to dominant discourses	Awareness of the interconnections between culture, power, and transformation; nondominant writings and ideas in addition to dominant discourses	Awareness of one's own position, cultures, and context, sense of identity	Knowledge of how to collectively effect systemic change; how knowledge itself is power; how behavior influences society and injustice
Capacities	Critical social analysis skills: capacity to politicize notions of culture, knowledge, and power; ability to investigate deeper causes	Skills in dialogue, cooperation, and interaction; skills in critically interpreting other perspectives; thinking holistically	Capacity for critical reflection on one's own "status" within the community and society, independent CT	CT Skills and active participation; skills to act collectively to challenge the status quo; ability to imagine a better world
Values	Commitment to values against injustice and oppression		Concern for social justice and self- esteem	Informed, responsible and ethical action and reflection
Citizens' provisions	Active questioning; critical interest in society and public affairs; seeks out and acts against injustice and oppression	Active questioning; critical interest in society Socially aware; cooperative; responsible to self and public affairs; seeks out and acts against and others; willing to learn with others injustice and oppression	Critical outlook, autonomous; responsible in thought, emotion, and action; forward-looking: in touch with reality	Commitment and motivation to change society; civic courage; accountability for decisions and actions

Note. Own elaboration; own adaptation from the study by Johnson and Morris (2010, p. 90).



GCE: educational process aimed at creating a global citizenship committed to the defense of a more equitable, just and supportive world. **Dimensions:** awareness-raising, education, research, and policy advocacy.

CT: a way of thinking that comprises various skills for people to analyze problems, differentiate important from irrelevant information, establish reasoned judgments and act in search of the best solution. Dimensions: knowledge, thinking criteria, attitudes, and capabilities.

Critical GCE: educational process aimed at promoting an autonomous and critical global citizenship that acts in defense of human rights and social justice in favor of a supportive, sustainable, and just world. **Dimensions**: knowledge, values, dispositions, and capabilities.

Figure 1: Critical GCE as an area of confluence between GCE and TC. Note: Own elaboration.

The critical citizenship referred to in this study must possess a high level of social responsibility, think critically, and be aware of global problems. This same concept of critical global citizenship is used by Oxley and Morris (2013) to refer to people who focus on reducing inequalities and actively advocating for social justice; likewise, these authors include the notion of social global citizenship to allude to citizenship that is grounded in critical and postcolonial ideas. However, Jooste and Heleta (2017) use another different denomination when referring to critical global citizenship as "scholarly" citizenship, which they differentiate from "closed-minded" citizenship being the one that does not care about people living in other areas of the world or possessing another religious ideology.

Today's changing society makes it necessary for people to acquire various competencies in order to act appropriately in complex situations, and the way forward is CT. Therefore, the formation of critical global citizenship carries with it the development of CT by focusing on "inequality and oppression, critiquing the role of current power relations and economic agendas" (Goren & Yemini, 2017, p. 171). Authors such as Johnson and Morris (2012) already announced that CT was directly related to critical pedagogy; in this line, Lipman (2003) and Moon (2008) emphasize that the acquisition of new knowledge and the ability to make a judgment are two key aspects of CT and conscientization because "it involves the discovery that one is oppressed and the judgment that such hegemonic power exists in society" (Johnson & Morris, 2012, p. 286).

#### 4 Conclusion

The GCE that is currently emerging seeks the formation of global and critical citizens, giving rise to a union between the characteristics of the GCE and those of CT, which configures the Critical GCE. Figure 1 illustrates the convergence between the definition and dimensions of both issues; specifically, the definition of

GCE and the dimensions proposed by Ortega (2007, 2008) are included, and a definition of CT is shown together with the dimensions established by Vieira (2018), and the result of this union is captured in the definition of Critical GCE, and the dimensions proposed by Johnson and Morris (2010).

As can be seen in the previous figure, the vision of Critical GCE already implies the need to think critically and has dimensions similar to those of CT, since, although it does not have a dimension called thinking criteria, all of them are implicit in the dimensions of Critical GCE.

In conclusion, critical global citizenship needs not only to have solid training in GCE but also to develop its CT as a necessary symbiosis to understand society from a critical perspective, thus aiming to act against injustices and promote a change towards a more sustainable and just society.

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