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Author(s)

Name: Martin G. Erikson

Position: Associate professor, Chair of the Research and Education Board.

Organisation: University of Borås

Country: Sweden

E-mail address: martin_g.erikson@hb.se

Short bio:

Martin G. Erikson is Associate Professor of Psychology at University of Borås, Sweden. He completed his PhD in Psychology in 2006 at Lund University, Sweden, with a thesis about the self in relation to motivation. His research is currently focused on various aspects of higher education, and the intersection between higher education and science studies. Recent publications have concerned practices and concepts of higher education, covering a wide scope from student motivation to critical thinking, including an interest in consequences of educational practice and academic values for educational policy and educational quality. Erikson has also held an academic leadership position as Chair of the Research and Education Board at the University of Borås since 2012.

Proposal

Title: Supporting Critical Thinking in Higher Education – Considerations for Strategic Discussions

Abstract:

Critical thinking is one of the most central concepts for teaching and learning in higher education, but definitions are manifold and disputed. It is argued that educational management and the professoriate have a shared strategic responsibility to facilitate critical thinking. Issues that should be considered include the arbitrary nature of the concept of critical thinking and the concept's normative nature. The need for realism in definitions is underlined, as well as the need for definitions that can be related to educational practice. In relation to educational practice, the risk of confusing critical thinking and righteous thinking, as well as the risk of confusing critical thinking and the experience of new ways of thinking, are pointed out. It is concluded that teachers' abilities and dispositions are crucial aspects for the understanding of critical thinking in educational practice.

Key words: Critical thinking; Institutional Strategy; Academic credibility; Critique; Academic responsibility

Text of paper:

Critical thinking is one of the most central concepts for teaching and learning in higher education, and it is difficult to imagine a Western institution of higher education not endorsing its importance. The ideas of critical thinking follow a philosophical tradition going back to Socrates but have evolved along the way, and Kant's decree that universities should be free voices in society carried the ideas of enlightenment into university education. This is mirrored in Humboldt's (1970) educational visions from the early 19th century, still influencing modern higher education. This traditional position also guides this paper, making it an exposition based on academic values.

Currently, the plight of fake news and downplay of scientific knowledge have given critical thinking a new relevance (e.g., *Bowell, 2017; Frederiksen, 2017; Peters, 2017*). Critical thinking is also regarded as an important aspect of employability (e.g. *Burman, 2000; Flores et al., 2012; Graduate Outlook, 2015; Williams, 2016*). An amalgamation of these various dimensions is reflected in the purposes of higher education expressed by Council of Europe Committee of Ministers (2007). However, as *Kuhn (1999)* asked, do we know what critical thinking is? Critical thinking is a concept notoriously difficult to define, where a number of definitions and delimitations exists simultaneously (e.g. *Davies, 2013, 2015; Flore et al., 2012; Johnson & Hamby, 2015*). Unless we can agree at least partly on what critical thinking is, it is impossible to tell what capabilities we should promote in our students, and the concept of critical thinking is at risk being reduced to an educational virtue-signal. Therefore, the understanding of the concept critical thinking ought to be relevant for anyone involved in higher education, where the professoriate and the managers have shared a responsibility to facilitate strategic academic discussions on teaching and learning. Here, the concept of critical thinking must retain academic credibility, and must not be tainted by uninformed policy formulations or naïve attempts to create performance indicators. To safeguard such an academic approach to critical thinking is an academic responsibility for everyone from the vice-chancellor and down. This challenge is this must be acknowledged, as *Erikson and Erikson (2018)* showed that critical thinking is not necessarily in harmony with other central models in higher education policies. The purpose of this paper is to present features of critical thinking from the literature with implications for strategic academic discussions about teaching and learning. The paper is intended to be both inspiring and provoking, and to support an informed discussion across disciplinary borders and organizational levels. The paper have three main parts: (1) characteristics of the concept, (2) definitions and demarcations of critical thinking, and (3) challenges in relation to educational practice.

The concept of critical thinking

Table 1 illustrates the complexity of the literature on critical thinking, with its different standpoints. The table is a simplification – in many cases there are at least three opposing positions and some of the positions are in opposition to more than one alternative. For several of the positions, there are also more nuanced varieties, sometimes in conflict, and the table only covers a chance set of examples.

Critical thinking according to some...	Critical thinking according to others...
A tool for more trustworthy conclusions ¹	A tentative scepticism ²
A single definition for all disciplines ³	Definitions vary across disciplines ⁴
A matter of applying cognitive processes ⁵	A matter of criteria and outcome ⁶
Logical reasoning ⁷	A process with emotional components ⁸
Includes dispositions ⁹	Delimited to a way of reasoning ¹⁰
Aims at a formulation of critique ¹¹	Aims at a balanced judgement ¹²
Should promote social justice ¹³	Not the same as righteous thinking ¹⁴

Table 1. *Examples of opposing positions found in the use of the concept ‘critical thinking’ in higher education literature. The only common denominator is that the authors regard development of critical thinking as a vital purpose for higher education.* ¹ e.g. Ennis (1993). ² e.g. Lipman (2003). ³ e.g. Davies (2013). ⁴ e.g. Moore (2011). ⁵ e.g. Hersh (2007). ⁶ e.g. Halpern (2002). ⁷ e.g. Mulnix (2012). ⁸ e.g. Halonen (1986). ⁹ e.g. Siegel (1988). ¹⁰ e.g. Coney (2015). ¹¹ e.g. Brookfield (2011). ¹² e.g. Dewey (1910). ¹³ e.g. Howes (2017). ¹⁴ e.g. Johnson & Hamby (2015).

The width of the conceptions shows the necessity to understand conceptual features of critical thinking if it is to be included in strategic educational goals. With the table as a starting point, I suggest that there are two fundamental issues in relation to concept of critical thinking: the definitions are arbitrary and critical thinking is a normative concept.

The contingent nature of critical thinking

There is no such thing as critical thinking existing beyond our theoretical understandings. A definition of critical thinking is akin to a map. To argue that critical thinking is something that exists beyond our theoretical definition is to confuse the map and the terrain, or in other words, a *reification* (see also, e.g., Erikson & Erlandson, 2015). Many authors have made claims about what critical thinking “is”, and while we should not assume that they all have fallen into the trap of naïve reifications, we should be aware of the risk that a teacher or academic leader focused on practice might be led astray. The

arbitrary nature also shows that the 'quality' of a definition is not a question of how well it fits with a real object 'out there', but how well it fits the purposes behind the definition. This nature of the concept is seldom discussed in the literature on critical thinking, though for example Moore (2011) is an exception, but for strategic discussions, conceptual issues cannot be neglected and expounds responsibilities to take an active stand on definitions and to guard against reifications.

Critical thinking as something intrinsically good

Critical thinking is a normative concept (e.g. Bailin, 2002; Siegel, 1987). As pointed out by Moore (2011) and Weissberg (2013), critical thinking is generally seen as something intrinsically good. This can be a problem in an academic discourse, and a possible remedy is to see the concept in a context, such as academic values and purposes of higher education (e.g. Erikson, in press). That would at least to a degree open for a more nuanced discussion of critical thinking, and such a contextualisation ought to come natural to strategic academic discussions. We must not avoid taking a stand for or against interpretations of critical thinking because of its normative nature, and keeping the overall academic values in mind can help us.

Demarcating the phenomena of critical thinking

A caveat about realism

The risk of unrealistic expectations about rationality or 'intellectual superpower' is an aspect of critical thinking theories that deserves more attention. An example is found in Facione et al. (1995), who argued that a critical thinker always should show curiosity, regardless of topic. That is hardly realistic to expect, and perhaps more important; is it even desirable, as it could be argued that critical thinking should include ability to discriminating between important and less important issues? Danvers (2018) argued that the idea of the rational critical thinking student was an oversimplification, and gave an unfair view of the complexities of higher education where thinking is always in a context. For strategic academic discussions, keeping an eye to realism can be both sobering and facilitate a move into practice, beyond theoretical models.

Cognitive models of critical thinking

One tradition in the definition of critical thinking is to see it in more or less strict psychological cognitive terms (an overview of cognitive approaches is found in Davies, 2015). Definitions in cognitive terms can appear to have academic credibility by being rooted in well-researched cognitive theories. However, cognitive definitions are too abstract to be of much help in creating tasks for training students and the cognitive processes cannot be observed if we want to assess students' abilities (e.g. Bailin, 2002; Davies, 2015). In addition, cognitive processes or skills are at best only examples – it is difficult to argue that such a skill always must be present in critical thinking (e.g. Bailin, 2002). A final problem with definitions based on cognitive theories is the risk of losing the focus on cultural, social and emotional aspects of critical thinking.

Critical thinking as criteria and/or outcome

By defining critical thinking in terms of criteria or outcome, the definition can point to phenomena being observable in practical educational settings. These definitions can also more easily be related to emotional, social and cultural aspects of critical thinking. As an example, I will use Ennis' definition, stating that critical thinking is "reasonable reflective thinking focused on deciding what to believe or do" (Ennis, 1993, p. 180). Ennis's definition is a normative set of criteria that should be met once an outcome is reached. A further advantage with such a definition is that critical thinking becomes possible to relate to content. Critical thinking is contextual, as argued by Bailin (2002), and different objects for critical thinking are found in different disciplinary contexts (Davies, 2015; Moore, 2011). A brief and general definition such as Ennis's can provide a common reference, making it possible to discuss critical thinking across disciplinary borders, also for those without expertise in educational theory, which is vital for the kind of strategic academic discussions this paper calls for. Here, the notion of 'reasonable' can be used to create awareness about unrealistic expectations on rationalism.

Dispositions and motivation in critical thinking

An ability to think critically is of little value if it is not put to use. It is therefore reasonable to include dispositions and motivation when demarcating critical thinking. It would at a minimum include the disposition to recognize situations where critical thinking is called for, and the motivation to engage in critical thinking once such situations are recognized. These dispositions, guiding and motivating the critical thinker, are what Siegel (1988) called a 'critical spirit' (see also Cuypers & Haji, 2006; Facione et al., 1995; Sawaya, 2012). As shown by Davies's (2015) review, a wide range of dispositions has been defined in relation to critical thinking, and Davies even created a taxonomy of such dispositions. Also Ennis's definition above implies dispositions (Ennis, 2011).

Dispositions can also concern communication, both as dispositions to argue as well as to seek clarifications (e.g., Andrews, 2015; Barnett, 2011, 2015; Ennis, 2015). As Bohlin (2009) noted, disagreements are important for realizing the different perspectives of others, and taking these into account is a vital part of critical thinking. Andrews (2015) further expanded critical thinking to the disposition to be willing to take criticism, and in line with that, a communicative dimension to critical thinking can be expanded to the inclination to seek input from others. Wals and Jickling (2002) added to this, by arguing that as we better come to understand the complexity of human nature and the complexity of the social and natural world, "we must seek more, not less diversity of thought" (p. 129). An increased awareness about such dispositions can support strategic development, and contextualize critical thinking in educational practice.

Notions of 'critical' and 'critique'

As Johnson and Hamby (2015) pointed out, the distinction between critical thinking and critique must not be lost (see also, e.g., Booker, 2002). Being able to take a stand and actually criticise something should be part of critical thinking, in particular if communication is seen as a part. However, critique does not refer to a singular phenomenon, and as argued by Biesta and Stams (2001), we must

distinguish between positions where critique is an expected outcome, which is not questioned, and positions where critique is a potential outcome, and in itself can be an object for critique. Biesta and Stams exemplified the former position with emancipatory traditions, whereas the latter is close to Kant's ideal of free thinking, for example in terms of critique against contradictions in arguments. Both these positions on critique offer valid academic pursuits, but the position of free thinking is the one being in line with the perspective on critical thinking in this paper. Awareness of the different connotations of 'critique' is important for discussions across disciplinary borders but also for making critical thinking a possible contribution to educational environments. As Roth (2010) pointed out, a student culture where critique an intellectual stance can be seriously destructive.

Critical thinking in educational practice

Critical thinking and righteous thinking

Johnson & Hamby (2015) argued that we must be careful not to confuse critical thinking with 'good thinking', or what might be called righteous thinking. Righteous thinking is about conformity to social norms. For example, Facione et al. (1995) argued that tolerance of others is essential in a multi-cultural society, and therefore should be a desired aspect of critical thinking. Another example is when critical thinking is seen as a tool for promotion of social justice and for redressing power inequities, as argued by for example Brookfield (2011) or Howes (2017). The confusion of critical thinking and righteous thinking also concerns conceptions where our students deserve to be given the opportunity to make up their own minds. An example of the latter is 'sustainability', as discussed in this context by Wals and Jickling (2002). This is a matter of showing respect to the student as an adult, as argued by Macfarlane (2014, 2017), who also argued that if the purpose of higher education is to foster individual critical analysis, we cannot expect students to just adopt the teacher's perspectives. Here, Burman (2000, p. 156) wrote: "Critical thinking does not come naturally, for through time, there is a social tendency to conform, to accept familiar and wide-spread notions, to indulge in selective learning, and to refrain from controversy and debatable issues." It can even be argued that a good teacher in higher education should challenge students that hide themselves in the safety of righteous thinking – a challenge that can be a way to actually promote critical thinking. It is argued by for example Biesta (2005) and Barnett (2011) that uncertainty and even confusion are vital for promoting learning, and how and why students are to be pushed out of their comfort zones ought to be a central theme in strategic discussions of critical thinking.

Critical thinking, new ways of thinking, and theoretical understanding

We must not confuse critical thinking with students' ability to use a new methodological or conceptual tool for analysing the world. Critical thinking and new ways of thinking can not the least be confused by the students themselves because of the fascination of suddenly seeing the world in a new light – in particular if this tool leads to question of previous assumptions. Such tools might vital for their education, but it does not make the students critical thinkers if they just think like they have been taught to think.

As Maslow (1966) and others have observed, in case a hammer is your only tool, it is tempting to treat everything as a nail - an observation sometimes called the *Law of the instrument*. If statistical analysis were the only tool we are giving our students, it would be more difficult for them to see or take interest in phenomena that cannot be analysed by numerical means. If the students' only tools are norm-critique and power-analysis, their world will tend to be made up by norms and power relations. A possible conclusion, with strategic implications, is that if we give our students more than one tool and expect them make a choice between them, we can facilitate critical thinking further.

Implications for teaching

Unless the teacher is able to distinguish critical thinking when it occurs, the students will not receive adequate support, fruitful feedback or a fair assessment. In other words, when discussing critical thinking in a wider strategic framework of teaching and learning, we need to include also the teachers' abilities, dispositions and motivation. The teacher needs a disposition to recognize critical thinking in their students whenever it occurs, as well as the ability to distinguish arguments from opinions or sentiments in their students work. This includes situations where the teacher disagrees with their students' conclusions. A teacher might not like when students disagree, but taking critical thinking seriously means that students must be encouraged to formulate their own opinions (e.g. Andrews, 2015; Macfarlane, 2017). As Bohlin (2009, p. 202) wrote, "In such cases, we cannot avoid the— notoriously difficult—question whether they or we are right; whether we should learn from them or they from us." To take that question seriously is a matter of actually making the students co-producers of knowledge, in line with the educational ideals of Jaspers (1959). In fact, a teacher in higher education ought to be able to recognize critical thinking also when the teacher regard the conclusions as wrong on ethical or ideological grounds, and the student who really dares to argue for an inconvenient idea might deserve particular praise.

Final conclusions

The purpose of this paper was to present some features of critical thinking with implications for institutional strategic discussions about teaching and learning. Some issues might deserve more attention, such as the role of students' disciplinary and professional knowledge for critical thinking, as well as emotional and cultural aspects of critical thinking, but the format of this paper is limited. We can also see that a simple definition of the concept can be sufficient for strategic discussions, such as "reasonable reflective thinking focused on deciding what to believe or do" (Ennis, 1993, p. 180). By going beyond mere discussions of definitions, and setting critical thinking in a wider educational context, we see the need for academic managers to take responsibility for the use of the concept and its practical implications. In particular, these implications show the need to include the teachers' capabilities in the discussion of critical thinking, and the need for managers to support the creation of educational environments facilitating teachers' development. Finally, we must not forget that critical thinking is not an end for itself even in the educational setting. As Burman (2000) argued, when a capability for critical thinking has been developed, it has a potential to further support learning, not just being a result of it.

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