A Literature Review on Teaching Ethical Creativity in Primary Education

Abstract
As the world emerges from the COVID-19 pandemic and continues to struggle with armed conflicts, creative and ethical solutions to the controversial issues of recent years are needed globally. While creativity is necessary, it must also be ethically sound. Today, discussing creativity in relation to its ethical dimensions has also been emphasized in the perspective of sustainable development, but research on the teaching and learning of ethical creativity remains limited. Therefore, the aim of this paper is twofold: 1) to describe how primary schools engage students on ethical creativity and 2) to suggest a didactic model for ethical creativity based on the teaching strategies found in a literature review. Internationally, creativity and ethics have been addressed in curricula and studied within the field of education. However, research on the ethical dimensions of creativity (ethical creativity) is limited. Based on a literature review, five teaching strategies for engaging primary school students on ethical creativity have been identified. The common features among the five teaching strategies relate to the use of 1) digital tools/media, 2) art and literature, 3) real problems and dilemmas, and 4) enquiry-based learning. A three-step teaching model is suggested for teaching ethical creativity.
The implications of the paper relate to enhancing ethical creativity among our children, who are both future citizens and leaders in various professions in the global society.

*Keywords*: ethical creativity, teaching, primary education, literature review

**Introduction**

In the last decade, researchers have begun discussing creativity in relation to its ethical dimensions (Moran et al., 2014) and sustainable development (Bryden & Gezelius, 2017; Cheng, 2019; Franck & Osbeck, 2017). However, research on the teaching and learning of ethical creativity remains limited. As we have seen in recent years, now that the world emerges from the COVID-19 pandemic and continues to struggle with armed conflicts, creative and ethical solutions to controversial issues are needed, both nationally and internationally. While creativity is necessary, it must also be ethically sound; thus, we use the term “ethical creativity” in this paper to awaken stakeholders’ awareness of sustainability issues. Being based on a literature review, the aim of the paper is twofold: 1) to describe how primary schools engage students in ethical creativity and 2) to suggest a didactic model for ethical creativity based on the teaching strategies reviewed in the literature.

**Is Creativity Always Positive?**

According to Sandri (2013), creativity, innovation, and divergent thinking are important skills that are expected to move society forward by providing alternative ways of thinking about and dealing with existing problems. Cropley (2014) claims that “creativity is crucial for the economic, social and personal welfare of society” and that “technologically advanced societies have now reached the stage where mere ability to store knowledge and make logical connections and draw obvious, correct conclusions can easily be done by information technology” (p. 250). In our paper, we are interested in shedding light on the importance of creativity and how much education has done to enhance children’s creative thinking.
We argue that education should prioritize didactic models centered on creativity in addition to transferring established knowledge to children. That said, Masschelein and Simons (2013) believe it is problematic that a “belief in tradition and transfer [in a school context] has been replaced by a belief in the creative power of the individual and in the uniqueness of the learner” (p. 92). A consequence of this is the learner becoming restricted to their own life-world and experiences, having insufficient traditional knowledge to lift them up. Cropley (2010) takes the critique one step further, arguing that writings on creativity have mainly focused on the positive aspects, consequently ignoring the “dark side,” whether that be the fruits of creativity that deliberately hurt people or the unintended consequences of well-intentioned acts. Niepel et al. (2015) and Sahlin (2001) point out that creativity is generated from breaking rules, which may lead to unethical outcomes. The important question here is how we can prevent unethical outcomes of creativity. According to Cropley and Cropley (2013), a teacher who wants to train students to be creative needs to develop a deep understanding of what this means in order to deal with it effectively; this comes with a high price tag. Consequently, it is an oversimplification to say that schools should shift their pedagogy to foster creativity without considering the associated ethical questions.

The Challenges of Engaging Ethical Creativity in School Education

Schools are responsible for transmitting knowledge, values, attitudes, and skills to our future citizens (Skolverket, 2019). In modern society, creativity is considered an important skill in the workplace, but little is known about how to teach for creativity. It is therefore important to look at teachers’ strategies for addressing creativity and their underlying assumptions. For example, the literature asks whether creativity is domain-general or domain-specific (Delière & Richelle, 2006), whether there are differences between creativity and productivity (Sahlin, 2001), and what the relationship between creativity and ethics is (Cropley, 2010). The literature speaks to the importance of teachers being adequately trained to support the development of creativity (Cropley & Cropley, 2013), but provides few examples of how they should be prepared to do this.
While research on creativity has a long history, especially in psychology and cognitive science, it has been studied primarily through experiments and case studies by prominent figures in art and science (Csikszentmihályi, 2013). Although its role in psychological development and pedagogy has been known for almost a century (Phye, 1992; Vygotskij, 1995), only in recent decades has creativity been recognized in the primary education curricula of Sweden (Skolverket, 2019) and other countries (Cheng, 2010). It has also been highlighted as one of the key competences in initiative and entrepreneurship (Gordon et al., 2009) and as one of the so-called 21st-century skills, together with innovation (Terås et al., 2020).

The word creativity has several meanings, the most established definition in the literature being the ability to create something new and valuable (Runco & Jaeger, 2012). However, it is important to acknowledge that opinions about what to judge as creative – or less creative – could vary between contexts. Someone in one context may perceive something as creative, while another person in an expert context could consider the same thing to be not creative (Boden, 2004). It is also possible to study creativity from the perspective of the four Ps: person, process, product, and press (social context; Cropley, 2014). Since the phenomenon of creativity is studied from different perspectives, it is understandable that there is no single definition in the literature (Ismayilova & Bolander Laksov, 2022). This could also explain why there is a lack of consensus about the meaning of creativity when comparing the use of the word in curriculum documents between different countries (Patston et al., 2021).

Since our interest in this paper is the ethical aspect of creativity, it is possible to depart from the standard definition and to emphasize the word *valuable*. Ethics are value-laden and it is common to talk about ethical values. The fruits of creativity can be assessed in relation to ethical values as well as social, political, economic, or aesthetic values (Jørgensen & Bozeman, 2007). In the Swedish school system, pupils should develop both creativity and ethical values (Skolverket, 2019), but creativity is not connected to the question of ethics in the curriculum and these are treated as two separate things; it is up to the teacher to connect them.
Through the literature review presented in this paper, we try to fill a gap by looking at publications that address teaching strategies for combining creativity and ethics for students’ development.

**Methodology**

We used the scoping method (Arksey & O’Malley, 2005) in our literature review to map the relevant articles about teaching for ethical creativity in primary education. The Education Resources Information Center (ERIC) database was searched on December 14, 2021 for keywords in two categories: ethical creativity AND primary school or elementary school OR primary education OR elementary education. 

Peer-reviewed, English-language, academic journals were used as the inclusion criteria, returning forty-three articles. A thematic analysis was conducted to compare similarities and differences across the five major themes that emerged from the articles. This shifting between analyzing the parts from the perspective of the whole and analyzing the whole from the perspectives of the parts is similar to doing a puzzle and is described as such in the literature on hermeneutics (Gadamer et al., 2004). The aim is to find patterns in the material and then to organize these patterns in a meaningful way so as to draw conclusions.

**Results**

Although it was the keyword in our literature search, we found few empirical studies that focused on ethical creativity. Of those articles we did find, most discuss the ethical aspects of creativity from a philosophical point of view without providing concrete examples of teaching. It is also apparent that researchers discuss ethical questions from different standpoints, for example, how to teach students about ethics, ethical issues arising from working with particular teaching methods, and questions about teacher ethics.
However, several teaching strategies were identified: 1) multimedia engagement with digital imagery and audio/video tools (Ormiston et al., 2017), 2) art-related teaching and learning via theatre (Musacchio et al., 2015), 3) reading fiction as a way to initiate discussions about ethical questions and dilemmas (Serriere et al., 2017), 4) tackling real-world problems outside the classroom (Beghetto, 2017), preferably with enquiry-based learning, and 5) rule exploration through the invention of new physical games, which promotes ethical discussions about how game rules may include or exclude students (Butler, 2013). In addition to these didactic models, there were numerous articles discussing obstacles to working with creativity from an ethical point of view.

(1) Multimedia Engagement with Digital Imagery and Audio/Video Tools

Here, students are tasked with designing something new through actively experimenting with tools and physical materials or their digital equivalents. Ashbrook (2020) gives examples of how younger children work with idea generation and problem-solving processes to design new things with the help of craft tools and materials such cardboard. O’Donell (2018) emphasizes that experimenting with and exploring natural materials helps to develop a child’s sensibility. Alternatively, Ormiston et al. (2017) discuss ways to work with digital tools and multimedia. This includes working with digital photos, videos, and audio and how to arrange the media into a presentable form. The training includes basic exercises, such as how to manage computer keyboards, touchscreens, and other control units, how to solve technical problems, how to take photos and record audio and video, how to arrange media into engaging products, and how to share materials on digital platforms such as learning management systems and the Internet. This also involves questions about how to behave on digital platforms, digital integrity, and copyright issues. According to Hobbs and O’Donnelly (2011), activities such as composing multimedia products with texts, pictures, and music develop digital literacy. In this case, the student becomes a producer of multimedia instead of a mere consumer. Students thus develop a deeper understanding of how
multimedia content is made, which can be used to critically examine others’ products and to discuss ethical questions about digital citizenship. This theme focuses on teaching strategies where students create products with the help of physical or digital tools and materials.

(2) Art-Related Teaching and Learning Via Theatre

This teaching strategy centers on using aesthetical expressions to engage students. Musacchio et al. (2015) describe a project where children in primary and secondary school are invited to see a play about the interior of the earth which merges science, entertainment, and ethical issues. The theatre was set up in collaboration between a theatre company and a research institute. One of the project’s tasks was to stimulate children’s curiosity by focusing on the emotional aspects of learning. The researchers argue that instead of starting from concepts, which is more common in natural science subjects, theatre is a good way to start the learning process from emotions. The didactic model can be summarized in the following way: Children are supposed to be engaged in a story with characters with whom they empathize and through whom they will learn scientific facts. The children’s curiosity and imagination are stimulated, which is important in problem-finding and problem-solving processes. According to Bland (2016), imagination is closely related to creativity, because it signifies the “spark” of a creative process. Disaffected students who have lost interest in schoolwork may benefit from the use of a didactic model that focuses on imagination to engage them. Silverman (1995) also emphasizes that didactics focusing on imagination and insight rather than acquisition is a suitable way to engage gifted students.

(3) Reading Fiction to Initiate Discussions About Ethical Questions and Dilemmas

This is a strategy discussed by Serriere et al. (2017), where the teacher reads a novel to the students and they discuss ethical questions arising from the text. It is important that the teacher enables a conducive environment for a discussion, where different perspectives can take shape. The challenge is to pose questions that open the discussion up rather
than ending it too early with premature conclusions. If the question already presents the right answers, which have been decided in advance, the dialogue will not explore possible options and it will not be a creative exploration. Johnson (2013) presents a variant of the exercise in which the class reads a fictional book and builds a scene with physical materials in a terrarium. In this way, the story takes on a physical shape.

(4) Tackling Real-World Problems Via Enquiry-Based Learning

According to Beghetto (2017), one way to teach ethical creativity is to base a didactic model on solving real-world problems using legacy projects, where students collaborate with partners outside of the classroom to identify problems to solve, for example, in the local community. One important stage in such a process is identifying the problem and the stakes involved in not solving the problem. After the project is finished, questions arise about how to solve the problem in a sustainable way. This means that task design is open-ended, with an ill-structured task rather than the well-structured tasks often found in student’s textbooks. Ill-structured tasks are generally harder to work with and require more creative solutions than well-structured tasks (Hong, 1998). Another similar didactic idea is to work with enquiry-based problem-solving within organizations (Moore, 2007).

(5) Rule Exploration Through the Invention of New Physical Games

In this model, students are given the task of creating new physical games (Butler, 2013). During the inventive phase, they are also encouraged to discuss the underlying rules of the game. This is an opportunity to discuss ethical questions, such as how teams are constructed, how participants are chosen and for what roles, and whether everyone can participate in the game. These questions affect whether students are included – or in some cases, excluded – from the game. According to Butler, the rules of all games and sports used in physical education also express underlying values. Games from the past might therefore rest on historical ethical values. However, when the students invent new games, it starts a process of reflecting on how rules are made up and what their
ethical consequences might be. Reflections about how rules express values can later be transferred to reflections on other activities in society. If pupils learn how to negotiate rules in physical education, they are better equipped to negotiate rules in the real world.

**Challenges to Working With Creativity From an Ethical Point of View**

Two major obstacles appear when teachers want to use teaching strategies that focus on creativity. The first issue is related to teacher competence. Cheng (2010) suggests that teachers may struggle to step out of their ordinary teacher role, with established teaching materials and standardized tests. Their willingness to change their teaching can be further impeded if they lose control of the class while trying out a new exercise. Butler (2013) agrees that a creative classroom always teeters on the edge of instability and that the teacher must be involved and ready to support the students if the situation calls for it so as to not lose control. This supports Cropley and Cropley's (2013) view that teacher needs to be competent enough to guide the creative process. If the teacher fails to guide the process, there could be negative outcomes for the students. This requires teacher training and therefore the involvement of teacher training programs.

However, it is also possible to discuss obstacles that are related to the overarching values of a society and how these are transmitted in the school system. Lee and Misco (2016) discuss how ideas about creativity and self-expression are situated within the moral framework of a society – for example, Confucian morals versus Kantian morals, which present different views about the question of responsibility. Cheng (2010) discusses the difference between a testing culture focused on preparing students for exams and a creativity culture focused on preparing students to solve problems, which cannot be tested with regular exams. Actors within the educational system – such as administrators, teachers, and students – develop expectations of the system and plan strategies based on these morals and it can be hard for a single teacher to change these views. For example, if a teacher focuses on teaching creativity and the students in their class consequently lag behind schedule and get
low scores on standardized exams, it is harder for the teacher to intro-
duce creative teaching strategies: the teacher will likely be criticized by
both students and parents. Cheng (2010) also discusses the situation
where students who are steeped in a testing culture mindset might find
it difficult to engage in more loosely defined tasks. In such an environ-
ment, it is even more important that the teacher is adequately educated
about how to teach for ethical creativity.

Conclusions and Discussion

In this review study, we identified five teaching strategies for en-
gaging primary school students in ethical creativity and four common
features among these strategies, namely, the use of digital tools/media,
art and literature, real problems and dilemmas, and enquiry-based learn-
ing. These common features align with teaching and learning strategies
based on socio-scientific issues (SSI), for example, the three-step model
(Figure 1) and the SEE–SEP model (Figure 2) developed within the SSI
context (Chang Rundgren & Rundgren, 2010). The three-step model,
which was developed in an EU FP7 project – PROFILES (2010–2014;
Rundgren & Chang Rundgren, 2018) – and which aimed to promote en-
quiry-based science education, includes contextualization (introducing
SSI), de-contextualization (conducting scientific or socio-scientific en-
quiry), and re-contextualization (making decisions and argumentation).
The four common features mentioned above can be embedded in the
first step to provide a context for enquiry-based learning as a whole. The
SEE–SEP model (Chang Rundgren, 2011) covers the subject areas of sci-
ence, economics, ethics/morality, social culture, environment, and policy
(named SEE–SEP, accordingly) and includes individuals’ knowledge, val-
ues, and experiences (Chang Rundgren & Rundgren, 2010). The aspects
of creativity and ethics embraced in the SEE–SEP model are used in
the second step, de-contextualization, to find methods for the in-con-
text solution-seeking and decision-making in the final step, re-contextu-
talization.
Figure 1. The three-step model

Contextualisation (SSI)
1 lesson

De-contextualisation (Scientific/socioscientific enquiry)
1–2 lessons

Re-contextualisation (Decision-making & Argumentation)
1 lesson

Figure 2. The SEE–SEP model (Chang Rundgren & Rundgren, 2010, p. 11)

Economy (E) Science (S)

Environment (E) Ethics/Morality (E)

Sociology/Culture (S) Policy (P)

Knowledge Value Personal experience
Combining the SEE–SEP and three-step models makes it possible to address ethical aspects of creativity during the enquiry process by explicitly including discussions with students about ethical dilemmas. This then supports ethical creativity in the classroom in line with the curriculum (Skolverket, 2019). One can argue that practicing creativity is necessary from an ethical point of view in order to develop a democratic citizen who can take part in everyday life, or that it is justifiable because it awakens the interest of more students or encourages them to be more active and thus contributes to a more inclusive classroom – all of which is in line with SSI-based teaching and learning (Chang Rundgren & Rundgren, 2010).

While the importance of ethical creativity is recognized in the literature, empirical studies on ethical creativity in school education remain limited. We argue for the development of more teaching strategies for ethical creativity in school via digital tools/media, art and literature, solving real problems and dilemmas, and enquiry-based learning. More imaginative strategies for ethical creativity teaching will be developed through teacher collaboration, so professional development for in- and pre-service teachers ought to be prioritized.

It would be interesting to know how different teaching strategies impact the development of students’ ethical creativity. By using the concepts from Variation Theory (Lo & Marton, 2012), it is possible to say that the object of learning is ethical creativity and the means of variation are the different teaching strategies. The object of learning in this case is considered static, while there are multiple ways to vary it by combining ethical discussions with, for example, crafting and creating, reading or writing fiction, constructing games, or working with creative problem-solving. A range of creative activities can shed light on several aspects of ethical questions or indeed give rise to new ethical questions. Today, we are facing various challenges to sustainability globally, and teaching for ethical creativity can be regarded as one solution to this crucial problem.
References


