AMENDMENTS
1 - 88

Draft opinion
Łukasz Kohut
(PE648.348v01-00)

Framework of ethical aspects of artificial intelligence, robotics and related technologies
(2020/2012(INL))
Amendment 1
François-Xavier Bellamy

Draft opinion
Paragraph 1

1. Recalls that the creation and the use of artificial intelligence (AI) in the areas of culture, education and information policy raises and will continue to raise a wide range of ethical issues; calls on the European Institutions to engage in long-term thinking about the impact of AI on our democratic debates, our societies and the very nature of human beings, in order to be able to pave the way for a technology that respects our freedom, our way of life and human rights;

Amendment 2
Ibán García Del Blanco, Marcos Ros Sempere, Domèneç Ruiz Devesa

Draft opinion
Paragraph 1

1. Recalls that the creation and the use of artificial intelligence (AI) in the areas of culture, education and information policy raises and will continue to raise a wide range of ethical issues; stresses that the Union should lead the way towards an ethical AI anchored in European values and ensuring the protection of the fundamental rights within a more democratic, fair and sustainable Europe;
Amendment 3
Dace Melbārde

Draft opinion
Paragraph 1

1. Recalls that the creation and the use of artificial intelligence (AI) in the areas of culture, education and information policy raises and will continue to raise a wide range of ethical issues;

Amendment

1. Recalls that the use of artificial intelligence (AI) in the areas of cultural and creative sectors (CCS), education as well as media and online platforms, similar to other sectors, not only has enormous potential, but has also raised and will continue to raise a wide range of ethical issues that need to be addressed; stresses, however, that governance of technology must be implemented in a way that does not disrupt innovation or curtail freedom of expression;

Or. en

Amendment 4
Alexander Bernhuber

Draft opinion
Paragraph 1

1. Recalls that the creation and the use of artificial intelligence (AI) in the areas of culture, education and information policy raises and will continue to raise a wide range of ethical issues;

Amendment

1. Recalls that the creation and the use of artificial intelligence (AI) in the areas of culture, education and security and information policy raises and will continue to raise a wide range of ethical issues; stresses that, in connection with AI, the protection of human dignity must always be taken into account;

Or. de

Amendment 5
Marcel Kolaja

Draft opinion
Paragraph 1

Draft opinion

1. Recalls that the creation and the use of artificial intelligence (AI) in the areas of culture, education and information policy raises and will continue to raise a wide range of ethical issues;

Amendment

1. Recalls that the development and the use of artificial intelligence (AI) in the areas of culture, education and information policy raises and will continue to raise a wide range of ethical issues;

Or. en

Amendment 6
Victor Negrescu

Draft opinion
Paragraph 1

Draft opinion

1. Recalls that the creation and the use of artificial intelligence (AI) in the areas of culture, education and information policy raises and will continue to raise a wide range of ethical issues;

Amendment

1. Recalls that the creation and the use of artificial intelligence (AI) in the areas of culture, education, media and youth raises and will continue to raise a wide range of ethical issues;

Or. en

Amendment 7
Dace Melbārde

Draft opinion
Paragraph 2

Draft opinion

2. Stresses the need to develop criteria for the use of AI in education, media and creative sectors, by developing benchmarks for ethically responsible and accepted uses of AI technologies in these areas; underlines that these criteria must be constantly adjusted to the progress in AI technologies;

Amendment

2. Stresses the need to develop clear, comprehensive and tailored criteria for the use of AI in education, media, CCS and online platforms, by developing benchmarks for ethically responsible and accepted uses of AI technologies in these areas; underlines that these criteria must be constantly adjusted to reflect the progress in AI technologies so as to also responsibly help harness the full potential
of AI; highlights in particular the need to address personal user data collection and privacy concerns in education, as well as liability issues in cases where automated learning processes lead to undesirable outcomes;

Or. en

Amendment 8
François-Xavier Bellamy

Draft opinion
Paragraph 2

Draft opinion

2. Stresses the need to develop criteria for the use of AI in education, media and creative sectors, by developing benchmarks for ethically responsible and accepted uses of AI technologies in these areas; underlines that these criteria must be constantly adjusted to the progress in AI technologies;

Amendment

2. Stresses the need to develop criteria for the use of AI in education, media and creative sectors, by developing benchmarks for ethically responsible and accepted uses of AI technologies in these areas; underlines that these criteria must be constantly adjusted to the progress in AI technologies; recalls that, to provide these algorithms with a sound basis, it is necessary to impose the principles of conformity of a system with its specifications, transparency, good faith and equity;

Or. fr

Amendment 9
Isabel Benjumea Benjumea

Draft opinion
Paragraph 2

Draft opinion

2. Stresses the need to develop criteria for the use of AI in education, media and creative sectors, by developing benchmarks for ethically responsible and accepted uses of AI technologies in these areas;

Amendment

2. Stresses the need to develop criteria for the use of AI in education, media and creative sectors, by developing benchmarks for ethically responsible and accepted uses of AI technologies in these areas;
underlines that these criteria must be constantly adjusted to the progress in AI technologies;

in consultation with the competent ethics committees responsible for helping to lay the groundwork in line with European Union cultural values and legal framework provisions;

Or. es

Amendment 10
Ibán García Del Blanco, Marcos Ros Sempere, Domèneç Ruiz Devesa

Draft opinion
Paragraph 2

2. Stresses the need to develop criteria for the use of AI in education, media and creative sectors, by developing benchmarks for ethically responsible and accepted uses of AI technologies in these areas; underlines that these criteria must be constantly adjusted to the progress in AI technologies;

Amendment

2. Stresses the need to develop criteria for the development, the deployment and the use of AI in education, media and the cultural and creative sectors, by developing benchmarks for ethically responsible and accepted uses of AI technologies in these areas; underlines that these criteria must be constantly adjusted to the progress in AI technologies and must aim to promote the ultimate common public good and wellness of the society;

Or. en

Amendment 11
Laurence Farreng, Ilana Cicurel, Irena Joveva, Vlad-Marius Botoş, Bernard Guetta, Radka Maxová, Morten Løkkegaard, Monica Semedo

Draft opinion
Paragraph 2

2. Stresses the need to develop criteria for the use of AI in education, media and creative sectors, by developing benchmarks for ethically responsible and accepted uses of AI technologies in these areas;

Amendment

2. Stresses the need to develop criteria for the use of AI in education, media and creative sectors, by developing benchmarks for ethically responsible and accepted uses of AI technologies in these areas,
underlines that these criteria must be constantly adjusted to the progress in AI technologies; including a clear liability regime for products resulting from AI use; underlines that these criteria must be constantly adjusted to the progress in AI technologies;

Amendment 12
Victor Negrescu

Draft opinion
Paragraph 2

Draft opinion

2. Stresses the need to develop criteria for the use of AI in education, media and creative sectors, by developing benchmarks for ethically responsible and accepted uses of AI technologies in these areas; underlines that these criteria must be constantly adjusted to the progress in AI technologies;

Amendment

2. Stresses the need to develop criteria for the use of AI in education, media, youth and creative sectors, by developing benchmarks for ethically responsible and accepted uses of AI technologies in these areas; underlines that these criteria must be constantly adjusted to the progress in AI technologies in order for the benefits of AI to be accessible to everyone;

Amendment 13
Sabine Verheyen, Tomasz Frankowski

Draft opinion
Paragraph 2

Draft opinion

2. Stresses the need to develop criteria for the use of AI in education, media and creative sectors, by developing benchmarks for ethically responsible and accepted uses of AI technologies in these areas; underlines that these criteria must be constantly adjusted to the progress in AI technologies;

Amendment

2. Stresses the need to develop tailor-made criteria for the use of AI in education, media and creative sectors respecting the different needs and specifications of each area to ensure for ethically responsible and accepted uses of AI technologies in these areas; underlines that these criteria must be constantly adjusted to the progress in AI technologies;
2. Stresses the need to develop criteria for the use of AI in education, media and creative sectors, by developing benchmarks for ethically responsible and accepted uses of AI technologies in these areas; underlines that these criteria must be constantly adjusted to the progress in AI technologies;

Or. de

Amendment 15
Marcel Kolaja

Draft opinion
Paragraph 2

Draft opinion

2. Stresses the need to develop criteria for the use of AI in education, media and creative sectors, by developing benchmarks for ethically responsible and accepted uses of AI technologies in these areas; underlines that these criteria must be constantly adjusted to the progress in AI technologies;

Or. en

Amendment 16
Ibán García Del Blanco, Marcos Ros Sempere, Domènec Ruiz Devesa, Łukasz Kohut

Draft opinion
Paragraph 2 a (new)
Draft opinion

2 a. Notes that every child enjoys the right to public quality education at all levels; therefore, calls for the development, the deployment and the use of quality AI systems that facilitate and provide quality educational tools for all at all levels and stresses that the deployment of new AI systems into schools should not lead to make a wider digital gap in society;

Or. en

Amendment 17
Dace Melbärde

Draft opinion
Paragraph 3

Draft opinion

3. Notices that AI personalised learning systems are increasingly being deployed in schools and universities, which is changing the role of teachers in the learning process to one more of facilitation; stresses that this shift should be reflected in curricula;

Amendment

3. Recognises the enormous potential that AI and robotics can contribute towards education, in particular in easing teachers’ workload and addressing the increasing shortage of educational staff; notices, however, that AI-based applications for teaching and learning are, albeit slowly, being deployed at various levels of education, which is not only changing the role of teachers in the learning process, but the processes themselves; stresses that this gradual shift should be reflected in curricula and in methods used to deliver instructions; considers that teachers’ skills need to be upgraded beyond the basic ICT competencies in order to not only harness the full potential of AI, but to also understand its limitations and to help identify the potential ethical concerns in education;

Or. en
Amendment 18
François-Xavier Bellamy

Draft opinion
Paragraph 3

3. **Notices** that AI personalised learning systems *are increasingly being deployed in schools and universities*, which *is changing the role of teachers in the learning process to one more of facilitation*; stresses that this shift should be reflected in curricula;

Amendment

3. **Notes** that AI personalised learning systems *cannot take the place of the educational relationship involving teachers, as assistance to pupils and students presupposes a human connection and experience of teaching methods which cannot be provided by any algorithm*; considers furthermore that, in the context of the development of the digital environment, it is more essential than ever to pass on a general culture, to guarantee the freedom of people in their relations with digital tools, making it more necessary than ever for teachers to transmit it to the younger generation;

Or. fr

Amendment 19
Marcel Kolaja

Draft opinion
Paragraph 3

3. **Notices** that AI personalised learning systems are increasingly being deployed in schools and universities, *which is changing the role of teachers in the learning process to one more of facilitation*; stresses that this shift should be reflected in curricula;

Amendment

3. **Notices** that technology and AI-driven learning systems are increasingly being deployed in schools and universities; *emphasises that education should empower citizens to develop new forms of thinking, including AI literacy and algorithm awareness and the ability to evaluate the impact of AI on information, knowledge, and decision-making*; stresses that this should be reflected in educational curricula;

Or. en
Amendment 20
Loucas Fourlas

Draft opinion
Paragraph 3

3. Notices that AI personalised learning systems are increasingly being deployed in schools and universities, which is changing the role of teachers in the learning process to one more of facilitation; stresses that this shift should be reflected in curricula;

Amendment

3. Notices that AI personalised learning systems are increasingly being deployed in schools and universities, which is changing the role of teachers in the learning process to one more of facilitation; stresses that this shift should be reflected in curricula, while at the same time pointing out that financial and technological support must be provided for individuals seeking to acquire appropriate skills and also specialised training in information and communications technology;

Or. el

Amendment 21
Laurence Farreng, Ilana Cicurel, Irena Joveva, Vlad-Marius Botoş, Bernard Guetta, Radka Maxová, Morten Løkkegaard, Monica Semedo

Draft opinion
Paragraph 3

3. Notices that AI personalised learning systems are increasingly being deployed in schools and universities, which is changing the role of teachers in the learning process to one more of facilitation; stresses that this shift should be reflected in curricula;

Draft opinion

3. Notices that AI personalised learning systems are increasingly being deployed in schools and universities, which is changing the role of teachers in the learning process by individualising monitoring and teaching; stresses that this shift should be reflected in school curricula, as well as in teacher training; recalls that AI should always be a support and not a replacement for the education provided by teachers;

Amendment

Or. en
3. Notices that AI personalised learning systems are increasingly being deployed in schools and universities, which is changing the role of teachers in the learning process to one more of facilitation; stresses that this shift should be reflected in curricula;

Amendment

3. Notices that AI personalised learning systems are increasingly being deployed in schools and universities, which is changing the role of teachers in the learning process to one more of facilitation; stresses that this shift should be reflected in curricula and that the necessary specific training must be provided for professionals in the field of (formal and informal) education and for students;

Or. es

3. Notices that AI personalised learning systems are increasingly being deployed in schools and universities, the role of teachers in the learning process is transitioning to facilitators and tutors; stresses that when students' curricula reflects this shift it should be anchored by human centric values which allow for human control and teachers' supervision;

Or. en

Victor Negrescu
Draft opinion
Paragraph 3

3. Notices that AI personalised learning systems are increasingly being deployed in schools and universities, which is changing the role of teachers in the learning process to one more of facilitation; stresses that this shift should be reflected in curricula;

Amendment

3. Notices that specialised robotics and AI personalised learning systems are increasingly being deployed in schools and universities, which is changing the educational process; stresses that this shift should be reflected in curricula; stresses the need for a set of guidelines for the ethical aspects in education;

Or. en

Amendment 25
Sabine Verheyen, Tomasz Frankowski

Draft opinion
Paragraph 3

3. Notices that AI personalised learning systems are increasingly being deployed in schools and universities, which is changing the role of teachers in the learning process to one more of facilitation; stresses that this shift should be reflected in curricula;

Amendment

3. Notices that AI personalised learning systems are increasingly being deployed in schools and universities, which is gradually changing the role of teachers in the learning process to one more of facilitation; stresses that this shift should be assessed throughout and, if necessary, reflected in curricula;

Or. en

Amendment 26
Alexander Bernhuber

Draft opinion
Paragraph 3

3. Notices that AI personalised learning systems are increasingly being
deployed in schools and universities, which is changing the role of teachers in the learning process to one more of facilitation; stresses that this shift should be reflected in curricula;

deployed in schools and universities, including specialised universities, which is changing the role of teachers in the learning process to one, inter alia, of facilitation; stresses that this shift should be reflected in curricula;

Or. de

Amendment 27
Dace Melbārde

Draft opinion
Paragraph 3 a (new)

3 a. Stresses that where machine learning is used in the selection of potential students, adequate safeguards must be implemented, including informing applicants of these procedures and their rights in this regard; notes that the relevant algorithms need to be trained on broad data sets in order to prevent the algorithms from unfairly discriminating against certain groups; is of the view that the relevant decisions taken with the help of automated processes need to be explainable, including, if necessary, to the rejected students;

Amendment

3 a. Calls for an AI, robotics and related technologies strategy at Union level in order to transform and update our educational systems, prepare our

Amendment

3 a. Calls for an AI, robotics and related technologies strategy at Union level in order to transform and update our educational systems, prepare our
educational institutions at all levels and equip teachers and pupils with skills and abilities; considers that the framework on ethics should also provide a set of ethical recommendations in order to help deal with AI, robotics and related technologies in education;

Amendment 29
Ibán García Del Blanco, Marcos Ros Sempere, Domèneç Ruiz Devesa

Draft opinion
Paragraph 3 a (new)

Draft opinion

3 a. Stresses that children need special protection measures related to the data that might be gathered by AI technologies, and recalls the need to adopt an ethical regulation to ensure an adequate protection level and privacy standards, in particular with regard to their educational path;

Amendment 30
Loucas Fourlas

Draft opinion
Paragraph 3 a (new)

Draft opinion

3a. Emphasises that teachers have a significant role to play in the educational process and must be familiar with the artificial intelligence systems they will be using for this purpose without, however, sidelining their role and physical presence;
Amendment 31
Victor Negrescu

Draft opinion
Paragraph 3 b (new)

Draft opinion

3 b. Underlines the importance of using AI, robotics and related technologies in schools and universities thereby enabling them to adopt new, more efficient learning methods that will increase the success rates of pupils and students; underlines the importance of training teachers, pupils and students with the know-how regarding the ethical aspects of AI, robotics and related technologies;

Or. en

Amendment 32
Ibán García Del Blanco, Marcos Ros Sempere, Domènec Ruiz Devesa

Draft opinion
Paragraph 3 b (new)

Draft opinion

3 b. Notes that there is a need to clarify the concept of arts and cultural and creative works, as well as the role of humans as creators and artists, when AI technologies are involved in the creation of the works; stresses the need to clarify the framework of intellectual property rights applicable to AI-generated works;

Or. en

Amendment 33
Victor Negrescu
Draft opinion
Paragraph 3 c (new)

Draft opinion

Amendment

3 c. Stresses that open and equal access to AI, robotics and related technologies across the Union and within Member States is of utmost importance; considers that the Union support for AI, robotics and related technologies innovation and research should be widely available across the Union; stresses the importance, in this framework, of special support that should be given to tech developers and beneficiaries from disadvantaged and disabilities groups;

Or. en

Amendment 34
François-Xavier Bellamy

Draft opinion
Paragraph 4

Draft opinion

Amendment

4. Acknowledges the great potential of AI in the areas of information and media; underlines that, if not regulated, it might have also ethically adverse effects by spreading fake news, creating information bubbles and exploiting biases incorporated into AI algorithms;

4. Acknowledges the great potential of AI in the areas of information and media; underlines that, if not regulated, it might have also ethically adverse effects by spreading fake news, creating information bubbles and exploiting biases incorporated into AI algorithms; recalls that a free and complete education is a necessary condition to enable citizens to take full advantage of the fundamental human right referred to in Article 19 of the Universal Declaration of Human Rights, which stipulates that 'Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontier';
Amendment 35
Dace Melbārde

Draft opinion
Paragraph 4

Draft opinion

4. Acknowledges the great potential of AI in the areas of information and media; underlines that, if not regulated, it might have also ethically adverse effects by spreading fake news, creating information bubbles and exploiting biases incorporated into AI algorithms;

Amendment

4. Acknowledges the growing potential of AI in the areas of information, media and online platforms, including as a powerful tool to fight disinformation; is concerned, however, about its dual use in the sector, especially the potential to manipulate public opinion online and the rise of AI-enabled computational propaganda and false information; underlines that if AI is not properly understood and regulated, it might also have ethically adverse effects such as creating information bubbles and exploiting biases incorporated into AI algorithms;

Amendment 36
Victor Negrescu

Draft opinion
Paragraph 4

Draft opinion

4. Acknowledges the great potential of AI in the areas of information and media; underlines that, if not regulated, it might have also ethically adverse effects by spreading fake news, creating information bubbles and exploiting biases incorporated into AI algorithms;

Amendment

4. Acknowledges the great potential of AI in the areas of information and media; underlines that, if not regulated, it might have also ethically adverse effects by spreading fake news, creating information bubbles and exploiting biases incorporated into AI algorithms; calls for the ethical use of AI technologies in the field of media; warns about the risks of technology-driven censorship and the
need for the ethical framework to protect the freedom of speech;

Or. en

Amendment 37
Ibán García Del Blanco, Marcos Ros Sempere, Domèneo Ruiz Devesa

Draft opinion
Paragraph 4

Draft opinion

4. Acknowledges the great potential of AI in the areas of information and media; underlines that, if not regulated, it might have also ethically adverse effects by spreading fake news, creating information bubbles and exploiting biases incorporated into AI algorithms;

Amendment

4. Acknowledges the great potential of AI in the areas of information and media; underlines that, if not regulated, AI technologies might have ethically adverse effects by exploiting bias in data and algorithms that may lead to disseminating disinformation, creating information bubbles and spreading fake news;

Or. en

Amendment 38
Sabine Verheyen, Tomasz Frankowski

Draft opinion
Paragraph 4

Draft opinion

4. Acknowledges the great potential of AI in the areas of information and media; underlines that, if not regulated, it might have also ethically adverse effects by spreading fake news, creating information bubbles and exploiting biases incorporated into AI algorithms;

Amendment

4. Acknowledges the great potential of AI in the areas of information and media; underlines that particular attention must be given to the danger of misuse and possible ethically adverse effects by spreading disinformation, fake news, creating information bubbles and exploiting biases incorporated into AI algorithms;

Or. en
4. Acknowledges the great potential of AI in the areas of information and media; underlines that, if not regulated, it might have also ethically adverse effects by spreading fake news, creating information bubbles and exploiting biases incorporated into AI algorithms;

4. Acknowledges the great potential of AI in the areas of information and media; underlines that, if not used responsibly, it might have also ethically adverse effects by spreading fake news, creating information bubbles and exploiting biases incorporated into AI algorithms;

Or. de

4. Acknowledges the great potential of AI in the areas of information and media; underlines that, if not regulated, it might have also ethically adverse effects by spreading fake news, creating information bubbles and exploiting biases incorporated into AI algorithms;

4. Acknowledges the great potential of AI in the areas of information and media; underlines that, if not regulated, it might have also ethically adverse effects by generating and spreading fake news, creating information bubbles and exploiting biases incorporated into AI algorithms;

Or. en
4 a. Considers that the use of certain types of AI, such as facial recognition and behaviour detection systems, may have a damaging effect on the role of media and journalists as watchdogs of democracy; underlines, therefore, that the use of those systems in public spaces should be prohibited;

Or. en

Amendment 42
Marcel Kolaja

Draft opinion
Paragraph 5

Draft opinion

5. Emphasises that education should empower citizens to develop new forms of critical thinking, including ‘algorithm awareness’ and the ability to reflect on the impact of AI on information, knowledge, and decision-making;

Amendment

deleted

Or. en

Amendment 43
Sabine Verheyen, Tomasz Frankowski

Draft opinion
Paragraph 5

Draft opinion

5. Emphasises that education should empower citizens to develop new forms of critical thinking, including ‘algorithm awareness’ and the ability to reflect on the impact of AI on information, knowledge, and decision-making;

Amendment

5. Emphasises that media competence is crucial in order to be able to critically assess and understand these new developments; thus, calls on the Member States to invest in media competence education so that all citizens, including the vulnerable social groups, are able, from an early age, to develop new forms of critical thinking, including ‘algorithm awareness’ and the ability to reflect on the
impact of AI on information, knowledge, and decision-making and so that everyone in Europe can benefit from the AI transformation of the Union economy;

Or. en

Amendment 44
Dace Melbärde

Draft opinion
Paragraph 5

Draft opinion

5. Emphasises that education should empower citizens to develop new forms of critical thinking, including ‘algorithm awareness’ and the ability to reflect on the impact of AI on information, knowledge, and decision-making;

Amendment

5. Emphasises the need to raise awareness and understanding in the general public about the role and impact of AI through formal and non-formal education, including about the use of algorithms and their impact, inter alia, on jobs and privacy; considers that education should empower citizens to develop critical thinking and digital literacy, including ‘algorithm awareness’ and the ability to reflect on the impact of AI on information, knowledge, and decision-making;

Or. en

Amendment 45
Victor Negrescu

Draft opinion
Paragraph 5

Draft opinion

5. Emphasises that education should empower citizens to develop new forms of critical thinking, including ‘algorithm awareness’ and the ability to reflect on the impact of AI on information, knowledge, and decision-making;

Amendment

5. Emphasises that education should empower citizens to develop new forms of critical thinking, including ‘algorithm awareness’ and the ability to reflect on the impact of AI on information, knowledge, and decision-making; recommends that the Commission promote AI-, robotics- and technology-related formats of
education and continuous education;

Amendment 46
François-Xavier Bellamy

Draft opinion
Paragraph 5

5. Emphasises that education should empower citizens to develop new forms of critical thinking, including ‘algorithm awareness’ and the ability to reflect on the impact of AI on information, knowledge, and decision-making;

Amendment

5. Emphasises that education should empower citizens to develop new forms of critical thinking, including ‘algorithm awareness’ and the ability to reflect on the impact of AI on information, knowledge, and decision-making, and give them an understanding of the place occupied by IT systems in selecting, interpreting, storing and representing data;

Or. fr

Amendment 47
Isabel Benjumea Benjumea

Draft opinion
Paragraph 5

5. Emphasises that education should empower citizens to develop new forms of critical thinking, including ‘algorithm awareness’ and the ability to reflect on the impact of AI on information, knowledge, and decision-making;

Amendment

5. Emphasises that education should empower citizens to develop new forms of critical thinking, including ‘algorithm awareness’ and the ability to reflect on the impact of AI on information, knowledge, and decision-making; such qualities are, in any case, required for the study of the humanities and should continue to be cultivated;

Or. es
Amendment 48
Ibán García Del Blanco, Marcos Ros Sempere, Domèneç Ruiz Devesa

Draft opinion
Paragraph 5

5. Emphasises that education should empower citizens to develop new forms of critical thinking, including ‘algorithm awareness’ and the ability to reflect on the impact of AI on information, knowledge, and decision-making;

Amendment

5. Emphasises that education should empower citizens to develop new forms of critical thinking; calls for the establishment of digital literacy tools at all levels of education which include ‘algorithm and data awareness’ and the ability to reflect on the impact of AI on information, knowledge, and decision-making;

Or. en

Amendment 49
Laurence Farreng, Ilana Cicurel, Irena Joveva, Vlad-Marius Botoş, Bernard Guetta, Radka Maxová, Morten Løkkegaard, Monica Semedo

Draft opinion
Paragraph 5

5. Emphasises that education should empower citizens to develop new forms of critical thinking, including ‘algorithm awareness’ and the ability to reflect on the impact of AI on information, knowledge, and decision-making;

Amendment

5. Emphasises that education should empower citizens to develop new forms of critical thinking, including ‘algorithm awareness’, an understanding of the functioning of AI and its inherent biases, and the ability to reflect on the impact of AI on information, knowledge, and decision-making;

Or. en

Amendment 50
Isabel Benjumea Benjumea

Draft opinion
Paragraph 5 a (new)
5a. Considers that special attention must be given to upholding the rights of minors, given the particular influence of education on their future, specifically the right to privacy and access to education, ensuring equal opportunities in every case;

Or. es

Amendment 51
Isabel Benjumea Benjumea

Draft opinion
Paragraph 6

6. Emphasises the importance for transparency and accountability of algorithms used by media streaming companies, in order to ensure access to culturally and linguistically diverse content; stresses that such algorithms should be designed in such a way that they do not privilege specific works by limiting their 'personalised' suggestions to the most popular works;

Or. es

Amendment 52
Sabine Verheyen, Tomasz Frankowski

Draft opinion
Paragraph 6

6. Emphasises the importance for transparency and accountability of algorithms used by media streaming companies, in order to ensure access to culturally and linguistically diverse content; notes the important distinction between transparency of algorithms and transparency of the use of algorithms, emphasises the importance for transparency and accountability of
content; stresses that such algorithms should be designed in such a way that they do not privilege specific works by limiting their ‘personalised’ suggestions to the most popular works; algorithms used by AI-enabled systems such as, for example, media streaming companies, in order to ensure access to culturally and linguistically diverse content; stresses that such algorithms should not replace nor limit users’ choice and should be designed in such a way that they do not privilege specific content by limiting their ‘personalised’ suggestions to the most popular content, but further enhance offers by enabling platforms to organize and present their content under different categories and on the basis of multiple factors;

Amendment 53
Laurence Farreng, Ilana Cicurel, Irena Joveva, Vlad-Marius Botoş, Bernard Guetta, Radka Maxová, Morten Løkkegaard, Monica Semedo

Draft opinion
Paragraph 6

6. Emphasises the importance for transparency and accountability of algorithms used by media streaming companies, in order to ensure access to culturally and linguistically diverse content; stresses that such algorithms should be designed in such a way that they do not privilege specific works by limiting their ‘personalised’ suggestions to the most popular works;

Amendment

6. Emphasises the importance for transparency and accountability of algorithms used by media streaming companies, in order to ensure access to culturally and linguistically diverse content; believes that every user should be properly informed when an algorithm is used to recommend content and optimise his or her choices; stresses that such algorithms should be designed in such a way that they do not privilege specific works by limiting their ‘personalised’ suggestions to the most popular works; considers that any user should also be able to disable content recommendation by AI;

Amendment 54
6. Emphasises the importance for transparency and accountability of algorithms used by media streaming companies, in order to ensure access to culturally and linguistically diverse content; stresses that such algorithms should be designed in such a way that they do not privilege specific works by limiting their ‘personalised’ suggestions to the most popular works;

6. Emphasises the importance for transparency and accountability of algorithms used by media streaming companies, in order to ensure access to culturally and linguistically diverse content; stresses that such algorithms should be designed in such a way that they reflect the cultural diversity of our societies and avoid privileging specific works by limiting their ‘personalised’ suggestions to the most popular works; proposes also that this transparency of algorithms could eventually lead to the promotion of more European works;

Or. en

Amendment 55
Victor Negrescu

6. Emphasises the importance for transparency and accountability of algorithms used by media streaming companies, in order to ensure access to culturally and linguistically diverse content; stresses that such algorithms should be designed in such a way that they do not privilege specific works by limiting their ‘personalised’ suggestions to the most popular works;

6. Emphasises the importance for transparency and accountability of algorithms used by media streaming companies, in order to ensure access to culturally and linguistically diverse content; stresses that such algorithms should be designed in such a way that they do not privilege specific works by limiting their ‘personalised’ suggestions to the most popular works; calls for full transparency on the algorithms used regarding creative sectors; recalls the importance of copyright protection and data protection in ethics;

Or. en
Amendment 56
Marcel Kolaja

Draft opinion
Paragraph 6

6. Emphasises the importance for transparency and accountability of algorithms used by *media streaming companies*, in order to ensure access to culturally and linguistically diverse content; *stresses that such algorithms should be designed in such a way that they do not privilege specific works by limiting their ‘personalised’ suggestions to the most popular works;*

Amendment

6. Emphasises the importance for transparency and accountability of algorithms used by *video-on-demand and television broadcasting services*, in order to ensure access to culturally and linguistically diverse content;

Or. en

Amendment 57
Dace Melbārde

Draft opinion
Paragraph 6

6. Emphasises the importance for transparency and accountability of algorithms used by *media streaming companies*, in order to ensure access to culturally and linguistically diverse content; stresses that such algorithms should *be designed in such a way that they do* not privilege specific works by limiting their ‘personalised’ suggestions to the most popular works;

Amendment

6. Emphasises the importance of understanding algorithms used by *video and music streaming services as well as spoken audio services and online e-book e-commerce stores*, in order to ensure that the users also benefit from access to culturally and linguistically diverse content *based on their interests*; stresses that such algorithms should not privilege specific works by limiting their ‘personalised’ suggestions to *solely* the most popular works;

Or. en
Amendment 58  
Marcos Ros Sempere, Domènec Ruiz Devesa, Łukasz Kohut

Draft opinion  
Paragraph 6

6. Emphasises the importance for transparency and accountability of algorithms used by media streaming companies, in order to ensure access to culturally and linguistically diverse content; stresses that such algorithms should be designed in such a way that they do not privilege specific works by limiting their ‘personalised’ suggestions to the most popular works;

Amendment

6. Emphasises the importance for transparency and accountability of algorithms used by media streaming companies, in order to ensure access to culturally and linguistically diverse content; stresses that such algorithms should be designed in such a way that they reflect the cultural diversity of our societies and avoid privileging specific works by limiting their ‘personalised’ suggestions to the most popular works;

Or. en

Amendment 59  
François-Xavier Bellamy

Draft opinion  
Paragraph 6

6. Emphasises the importance for transparency and accountability of algorithms used by media streaming companies, in order to ensure access to culturally and linguistically diverse content; stresses that such algorithms should be designed in such a way that they do not privilege specific works by limiting their ‘personalised’ suggestions to the most popular works;

Amendment

6. Emphasises the importance for transparency and accountability of algorithms used by media streaming companies, in order to ensure access to culturally and linguistically diverse content; stresses that such algorithms should be designed in such a way that they do not privilege specific works by limiting their ‘personalised’ suggestions to the most popular works; recalls that transparency of these algorithms is essential in order to avoid potentially negative repercussions of increased concentration of cultural data in the hands of major platforms for continuous media coverage, thereby ensuring access to genuine cultural openness and guaranteeing freedom of creation;
Amendment 60
Marcel Kolaja

Draft opinion
Paragraph 6 a (new)

6 a. Emphasises that educational institutions should only use AI systems for education purposes that have been audited and certified as ethical, beneficial and acting consistently with human rights principles; reminds that open source software and open technologies are best suited for such purposes;

Amendment 61
Laurence Farreng, Ilana Cicurel, Irena Joveva, Vlad-Marius Botoş, Bernard Guetta, Radka Maxová, Morten Løkkegaard, Monica Semedo

Draft opinion
Paragraph 6 a (new)

6 a. Insists that user data collected by AI, such as cultural preferences or educational performance, cannot be transmitted or used without the owner's knowledge;

Amendment 62
Ibán García Del Blanco, Marcos Ros Sempere, Domèneç Ruiz Devesa, Łukasz Kohut

Draft opinion
Paragraph 6 a (new)
Draft opinion

6a. Notes that AI systems developed, deployed and used in the Union need to reflect its cultural diversity and its multilingualism;

Or. en

Draft opinion

Amendment 63
Dace Melbärde
Draft opinion
Paragraph 7

Draft opinion

7. Notes that the use of AI technologies is increasingly raising questions of fair competition in sport; stresses that this area needs a regulatory framework.

Amendment

7. Notes that sport has always embraced technological innovation; considers, nevertheless, that the use of AI technologies is increasingly raising questions of fair competition in sport whereby those teams with the most financial resources can acquire the best technology, thus potentially giving them an unfair advantage; stresses, in this regard, the need to make the relevant technology widely accessible; is of the view that further monitoring is needed to understand whether a regulatory framework in this area may be necessary in the future;

Or. en

Amendment 64
Victor Negrescu
Draft opinion
Paragraph 7

Draft opinion

7. Notes that the use of AI technologies is increasingly raising questions of fair competition in sport;

Amendment

7. Notes that the use of AI technologies is increasingly raising questions of fair competition in sport;
stresses that this area needs a regulatory framework.

stresses that this area needs a regulatory framework; calls for full transparency on the algorithms and technologies used in sports in order to ensure fair grounds for competition;

Or. en

Amendment 65
Ibán García Del Blanco, Marcos Ros Sempere, Domènec Ruiz Devesa

Draft opinion
Paragraph 7

Draft opinion

7. Notes that the use of AI technologies is increasingly raising questions of fair competition in sport; stresses that this area needs a regulatory framework.

Amendment

7. Notes that the use of AI technologies is spreading rapidly into sports competitions; therefore, it is increasingly raising questions of fair competition in sport; stresses that this area needs a regulatory framework which applies ethical and human centric criteria in their development and use;

Or. en

Amendment 66
Sabine Verheyen, Tomasz Frankowski

Draft opinion
Paragraph 7

Draft opinion

7. Notes that the use of AI technologies is increasingly raising questions of fair competition in sport; stresses that this area needs a regulatory framework.

Amendment

7. Notes that the use of AI technologies is increasingly raising questions of fair competition in sport; emphasises that these developments have to be closely monitored in order to assess whether this area needs a regulatory framework;

Or. en
7. Notes that the use of AI technologies is increasingly raising questions of fair competition in sport; *stresses that this area needs a regulatory framework.*

Amendment 67
Marcel Kolaja

Amendment 68
Victor Negrescu

Amendment 69
Alexis Georgoulis

7 a. *Recommends the involvement of the civil society, universities, trade unions and employers associations in the process of drafting a framework on ethics and underlines the important added value of these stakeholders in the drafting of any regulatory framework; stresses the involvement of youth organisations in the process, knowing the impact this technologies will have on their future;*

7 a. *Strongly believes that transparency*
levels should be as high as possible and proportionate to the severity of adverse human rights impact; stresses that the use of algorithmic systems in decision-making processes that carry high risks to human rights should be accompanied by particularly high levels of explainability of processes and outputs;

Amendment 70
Elżbieta Kruk, Ryszard Antoni Legutko, Andrey Slabakov

Draft opinion
Paragraph 7 a (new)

Draft opinion

Amendment

7 a. Emphasises that opportunities provided by digitisation and new technologies, including artificial intelligence, should not lead to negligence in conservation of originals and to the disregard of traditional access to original heritage and traditional forms of promoting culture;

Amendment 71
Alexis Georgoulis

Draft opinion
Paragraph 7 b (new)

Draft opinion

Amendment

7 b. Strongly believes that there is an urgent need to examine how time-honoured human rights frameworks and conventions, as well as the obligations that derive from those commitments, can guide actions and policies relating to digital cooperation and digital technology and how human rights can be
meaningfully applied to ensure that no gaps in protection are caused by new and emerging technologies;

Amendment 72
Elżbieta Kruk, Ryszard Antoni Legutko, Andrey Slabakov

Draft opinion
Paragraph 7 b (new)

7 b. Stresses, despite numerous advantages, opportunities and benefits presented by digitisation, new technologies and artificial intelligence, the importance of traditional forms of education and their associated social benefits; encourages Member States to promote, support and preserve traditional forms of education;

Amendment 73
Alexis Georgoulis

Draft opinion
Paragraph 7 c (new)

7 c. Emphasises the need to continue the fight against fake news and asks the Member States to take measures against the spread of "deepfakes" in audiovisual media;

Amendment 74
Elżbieta Kruk, Andrey Slabakov
Draft opinion
Paragraph 7 c (new)

7 c. Encourages Member States to promote and support citizens’ participation in traditional cultural activities;

Or. en

Amendment 75
Elżbieta Kruk, Andrey Slabakov

Draft opinion
Paragraph 7 d (new)

7 d. Stresses the importance of retraining workers in industries most affected by the automation of tasks and by AI; stresses that new education programmes should focus on developing skills and on the reskilling of workers so that they can seize job opportunities within the new jobs created by AI; encourages lifelong learning and the development of digital literacy programmes in order to help workers adapt to technological changes;

Or. en

Amendment 76
Alexis Georgoulis

Draft opinion
Paragraph 7 d (new)

7 d. Stresses the need to ensure an anthropocentric approach to AI
technologies and to ensure that benefits are shared without discrimination and are accessible to all;

Or. en

Amendment 77
Elżbieta Kruk

Draft opinion
Paragraph 7 e (new)

Draft opinion

Amendment

7 e. Calls on the Commission and the Member States to promote cooperation between the public and private sectors and academia in order to reinforce knowledge sharing, and to promote education and training on ethical implications, safety, and respect for fundamental rights, on the use of robotics and artificial intelligence, with a particular focus on human rights, safety and data privacy;

Or. en

Amendment 78
Alexis Georgoulis

Draft opinion
Paragraph 7 e (new)

Draft opinion

Amendment

7 e. Emphasises that AI technologies should clearly not reflect on any sort of profiling bias whether regarding identity, race, age, colour, gender or sexuality or disability;

Or. en

Amendment 79
7 f. Recognises the need to ensure that the teams that design, develop, test and maintain, deploy and procure AI systems reflect the diversity of uses and of society in general, and that they are diverse in terms of gender, culture and age in order to mirror all essential elements of society and avoid bias;

Or. en

7 g. Highlights the role that educational systems can play in fostering and developing an ethical mindset by making people aware and informing them about AI and its use, as well as fostering AI literacy across society; underlines that educating the public to ensure proper skills should be viewed as a prerequisite before the widespread use of AI;

Or. en
7 h. Notes that along with AI technologies, education systems should also provide measures against technology addiction and lack of personal engagement and measures for responsible use by individual users;

Or. en

Amendment 82
Alexis Georgoulis

Draft opinion
Paragraph 7 i (new)

Draft opinion

Amendment

7 i. Recognises the threat that automation and AI might pose to employment and reiterates the need to maintain jobs as a priority, including in the cultural and creative sectors;

Or. en

Amendment 83
Alexis Georgoulis

Draft opinion
Paragraph 7 j (new)

Draft opinion

Amendment

7 j. Emphasises the need to examine thoroughly, properly regulate and efficiently ban the deployment of AI and the automation in political spaces, which include facial recognition, emotion recognition systems, Internet restrictions and controls to limit and restrict opposition views, controlling distributing access to public and social services, as well as disinformation or fake news, data collection, censorship and automated surveillance;
Amendment 84
Alexis Georgoulis

Draft opinion
Paragraph 7 k (new)

Draft opinion

7 k. Strongly believes that AI could have a detrimental impact on the rule of law, democracy and peoples' right of self-determination with respect to their rights to freely determine their political status and to hold opinions without interference, to exercise the right to freedom of expression, including the freedom to seek, to receive, and to impart information and ideas of all kinds;

Amendment

Or. en

Amendment 85
Alexis Georgoulis

Draft opinion
Paragraph 7 l (new)

Draft opinion

7 l. Notes that AI systems are software-based displaying intelligent behaviour based on the analysis of their environment; stresses that this analysis is based on statistical models of which errors form an inevitable part, sometimes with feedback loops that replicate, reinforce and prolong pre-existing biases, errors and assumptions; notes the need to ensure that systems and methods are in place to allow verification of the algorithm, explicability of the algorithm and access to remedies;

Amendment

Or. en
Amendment 86
Alexis Georgoulis
Draft opinion
Paragraph 7 m (new)

7 m. Highlights the need to ensure that there are binding regulations laying down the rules for a whole spectrum of activity of AI, regulating all possible aspects and ensuring that principles of transparency, accountability and non-discrimination are preserved;

Or. en

Amendment 87
Alexis Georgoulis
Draft opinion
Paragraph 7 n (new)

7 n. Reiterates the 2019 Ethics Guidelines for Trustworthy AI and the seven key requirements for trustworthiness of AI which are (a) human agency and oversight (including fostering informed decision-making that is respectful of the individual) (b) technical robustness and safety; (c) privacy and data governance; (d) transparency; (e) diversity, non-discrimination, and fairness; (f) societal and environmental well-being; and (g) accountability;

Or. en

Amendment 88
Alexis Georgoulis
7 o. Recognises that AI and automation will have an effect on the globalised economy which might be detrimental by entrenching existing inequalities and prompting regulatory arbitrage;