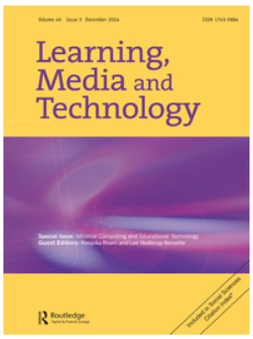

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The EU policy discourse on EdTech and constructing the image of an excellent teacher

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ABSTRACT

This article presents a discourse analysis of European Union (EU) policy documents on educational uses of digital technology (EdTech) from 2015 to 2022. It explores the ideological dimensions of language use and power relations, particularly concerning the teacher's role. Despite increasing critical scrutiny, the policy discourse in this period remains predominantly unidimensional, framing EdTech as a transformative solution. The study combines corpus-assisted analysis with critical discourse analysis and linguistic pragmatics to reveal how EU policy constructs a normative image of an 'excellent' teacher inexorably linked to digital competencies. It shows how this discourse implicitly denies teachers' autonomy in technology adoption, reinforcing institutional power dynamics. The paper offers a critical perspective on the ideological underpinnings of language use in EdTech policy, challenging prevailing normative discourses and emphasising the need for a nuanced understanding of the socio-political implications and power dynamics inherent in the discourse surrounding teachers' engagement with digital technology.

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Edtech; EU policy discourse; image of teacher; ideological language use

Introduction

Over the past 20 years, digitalisation has been at the heart of public and policy debates regarding the transformative role of technology in education. This is evident from a series of international policy documents published by global organisations (e.g., UNICEF, UNESCO, OECD), and international organisations (e.g., Council of Europe), where the focus of advancing digital technology has evolved around various issues, such as the transformation of the pedagogical process, agency and empowerment, social inclusion, risks and security, and the labour market. In the context of European Union (EU), its institutions are considered the most relevant educational policymakers, which the Member States must consider when designing and implementing national educational policies. Following the global and international policy discourse regarding the adoption of technology to improve current and future teaching and learning (e.g., Council of Europe 2019; OECD 2016; UNESCO 2013), in the last ten years, the EU institutions have been eagerly promoting and enforcing digitalisation in education. EdTech, here defined as 'the use of digital technologies to support teaching, learning and educational work' (Facer and Selwyn 2021, 2) has been forwarded as having the undisputed potential to improve learning outcomes and make pedagogical processes more effective (e.g., Eurydice 2019, 125; Kampylis, Punie, and Devine 2015, 23). The language of excitement in the EdTech policy discourse has become even more visible during and after the COVID-19

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pandemic, with EdTech represented as being able to solve educational as well as broader problems of society (Facer and Selwyn 2021; Williamson, Eynon, and Potter 2020; Williamson, Macgilchrist, and Potter 2021). Fuelled by 'a wider learnification of the educational discourse' and with teachers described as 'facilitators of learning' (Biesta 2013, 2), the pressure on teachers to develop digital competencies and transform their teaching methods by implementing digital technology has intensified. Professional development, an essential area of education and EU interest, has become a topic with a highlighted need to develop digital competencies in order to meet the new image of the desirable teacher (e.g., European Commission 2016; Punie and Redecker 2017; for a critical perspective, see Ideland 2020; Macgilchrist 2019).

The unidimensional characterisation of EdTech as 'a transformatory promise' (Clark 2023, 7) has been intensively studied from a critical perspective for the last two decades, with researchers from different fields observing 'the hype surrounding digital technologies and reflecting on their sociopolitical implications' (Macgilchrist 2021, 243). Even earlier, scholars emphasised the problem of reducing new technologies in education to mere technical possibilities, raising questions about EdTech's ideological and ethical issues related to the aims of education and 'whose interest they should serve' (Apple 1986, 442). Drawing on a variety of issues that digitalisation brings to twenty-first-century education, a current critical perspective on EdTech stresses the importance of a relational perspective that considers various aspects of how EdTech is embedded into broader social, cultural, political and economic spheres as well as into school and teaching practice (Castañeda and Williamson 2021; Macgilchrist 2019; Selwyn 2010; 2011; Selwyn, Macgilchrist, and Williamson 2020). Scholarly analysis of the discourse on EdTech has been equally critical of its ideological and vacuous language use, which is above all emotional (Selwyn 2015); conveys neoliberal and consumerist ideology (Clark 2023); presents EdTech in an instrumentalist way (Matthews 2021); produces normative responses to the digitalisation of everyday life (Pangrazio and Sefton-Green 2021); manages narratives and norms to create hype on AI in education (Nemorin et al. 2023), and discursively constructs desired images of teachers (Ideland 2020; Lee and Lee 2023; Macgilchrist 2019).

Critical perspective on educational policy has also received much attention (e.g., Simons, Olssen, and Peters 2009). Policy documents reflect their creation and implementation process and thus represent discursive political struggles for consensus and legitimacy (Fairclough 2013; Howarth and Griggs 2012; Lingard and Ozga 2006). In critical discourse analysis (CDA), which is one of the more frequently used discourse approaches in educational policy research due to its focus on power relations (Brown 2019; Clark 2023; Lee and Lee 2023; Rogers et al. 2005), the studies often highlight how power and ideology in the world are reflected and reproduced in texts (cf. Anderson and Holloway 2020). To this, Rizvi and Lingard (2009) add that we must also be aware of the particular ways in which policy texts create problems (and their solutions): 'the nature of the problem is never self-evident, but is always represented in a specific manner, from a particular point of view' (2009, 6).

Conceptualising policy documents as a type of discourse practice with ideological, practical and legal implications for educational practice (Ball 1993; Anderson and Holloway 2020, 3), this paper is based on an analysis of the EU policy documents crucial to a thorough grasp of the discursive representations of teachers and EdTech. The existing research on educational policy discourse, which includes policy corpora (see Anderson and Holloway 2020), has been so far either comparative (e.g., Ferrante et al. 2024) or has focused on a national level (e.g., Clark 2023). No corpus-assisted discourse analysis of policy documents on EdTech at the EU level has been conducted, despite their influence on the national policies of the EU members.

The present article presents a discourse analysis of representations of teachers in the EU policy documents on EdTech between 2015 and 2022, marking the period of proliferating public and academic discourses on EdTech before the rise of large language models. It indicates that despite a strong push in critical studies, policy language use throughout the period remains unidimensional. Furthermore, the article introduces a new angle of critique, focusing on discursively constructed

power relations towards teachers through a non-negotiable demand to use digital technology. Macgilchrist (2019) points out that societal expectations for how teachers can or should relate to technology influence their pedagogical process. As vital social actors in implementing EdTech, teachers are also one of the central figures around which policies revolve. Adopting the complementary approaches of corpus-assisted analysis (Partington 2006), linguistic pragmatics (Verschueren 1999), and critical discourse analysis (van Leeuwen 2008), this paper describes how a new image of an 'excellent' teacher has become linked to digital competencies. It further highlights how the normativity and self-evidence of this image are rhetorically constructed as an institutional power relation towards teachers, whose autonomous decision-making regarding the use of digital technology is implicitly denied. The findings are put into a broader context of educational and neoliberal discourses. The paper provides a critical perspective on the ideological aspects of language use in the teacher's role in EdTech, thus offering a counterpoint to the predominantly vacuous and normative discourse.

EdTech discourse and ideology in language use

In the 2015 editorial issue of Learning, Media and Technology, Selwyn emphasises language as a 'key element in informing ideas and shaping actions within any educational context' (2015, 3). However, in the EdTech discourse, language can hardly be 'described as objective, accurate or appropriately nuanced' (2015). Instead, the predominant language use of public discourses and policies on EdTech is value-laden and closer to what Selwyn describes as 'bullshit' (2015), a concept which he borrows from Frankfurt's *On Bullshit* (2005) and which refers to an exaggerated, misleading use of language, which is generally meaninglessly repeated regardless of the facts. He problematises the inherent disconnect from the facts and the contextual realities that the language of EdTech creates through simplified labels of technology in education, that convey a non-alternative imagined future of learning and teaching stripped of any complexity and controversy. In this sense, Selwyn parallels this issue with Giroux's broader notion of the violence of organised forgetting (2014). In an analysis of neoliberal society, Giroux describes citizens as constantly being forced to overlook and ignore the complex historical, political and moral contexts of current events. Instead, dominant interests propagate a preference for jocular, superficial and generally vacuous public speech, with overt critical perspectives framed as threatening and untrustworthy. From this viewpoint, Selwyn sees EdTech as a site of organised forgetting, with its dominant discourses that are not 'promoting language that offers much scope for rational thinking – let alone critical resistance – against the complexities of digital education' (Selwyn 2015, 5), and concludes that scrutiny and constant awareness about language use in education and technology is pivotal for improving their conditions.

Selwyn's account provides a useful framework for critically analysing the language use in EU policy documents focusing on EdTech. Following the linguistic pragmatic theoretical perspective, the term discourse in this paper is understood as language use that reflects, constructs, shapes and reshapes habitual frames of interpretation (Verschueren 2012, 18). Language use as a situated social practice is thus a site of ideological and political struggles, adjustments, and negotiations (conscious or not, planned or not). The notion of ideology as a discursive practice that is centred around generating and changing meanings is operationalised by Verschueren (2012) and underpinned by critical social theory's conceptualisations of ideology as 'meaning in the service of power' (Thompson 1990, 7). Verschueren understands ideology as 'patterns of meaning, frames of interpretation, world views, or forms of everyday thinking and explanation' (Verschueren 2012, 7), with various explicit or implicit discursive manifestations (Verschueren 2012, 16) and often common-sensical and normative beliefs, which may act in the capacity of legitimating or explaining certain attitudes or actions (Verschueren 2012, 19). Therefore, linguistic pragmatics' perspective on ideology provides a useful framework for tackling the vacuous and normative language use on EdTech.

In this paper, not only is such a perspective adopted for understanding ideology, but also provides a framework for analysing discourse. Namely, linguistic pragmatics is commonly understood as an

inherently interdisciplinary perspective on language use as social practice. In addition to offering its own methods, it serves as a metatheoretical framework that productively integrates diverse theories and methods for analysing the dynamics of meaning-generation (Verschueren 1999, 6, 260).

Discourse analysis of EU policy documents on EdTech

Methods and data

Eleven key EU documents on EdTech policies were analysed as the main part of the research. Following the interdisciplinary pragmatic perspective, we combined the complementary approaches of corpus-assisted analysis (Partington 2006), linguistic pragmatics (Verschueren 1999), and critical discourse analysis (van Leeuwen 2008) to ensure quantitative and qualitative assessment of the material. Using methodological triangulation, which includes a vertical-reading corpus analysis methodology based on a search of occurrences of a target item integrated into a horizontal reading of CDA's modes of actor representation and the pragmatics methodology of interpreting individual occurrences within their contextual environments (Rühlemann 2019, 8), we were able to investigate the dynamics of language use in the representation of teachers as well as articulate their role as social actors in the context of discourse on EdTech.

The corpus selection: the macro contextual outline

The investigated corpus includes EU policy documents related to EdTech, which on the macro contextual level fall under EU educational policy discourse. Although education has always remained the responsibility of the individual EU member states, with the Lisbon agenda in 2000 and the Open Method of Coordination (OMC) as the main governance instrument for Europeanisation, the EU partly intervened in national education systems with a soft policy approach by setting commonly agreed objectives, and through peer and informal pressures on the Member States to make and implement proposals, and with the European Commission's monitoring role regarding the output (Symeonidis, Francesconi, and Agostini 2021, 94). As a result of a broader integration process and the emergence of a 'European Education Space' and a 'European Education Policy' that developed within particular historical, economic, political and educational contexts (Symeonidis, Francesconi, and Agostini 2021), a body of interrelated, hierarchically structured formal policy documents are produced with different levels of authority which functions as a governance mechanism 'to align policies of the community in accordance to commonly agreed policy goals' (Symeonidis 2018, 17).

Our corpus comprises eleven policy texts of EU institutions referring to EdTech between 2015 and 2022, all available online. In the online repository of EU publications, documents with keywords 'education', 'digital', and 'teachers' were searched for with the applied author (European Commission, European Parliament, and Council of EU), tags (education policy and information technology), timeframe, and English language filters. All 1869 results were inspected, out of which 11 were selected, considering the manageable scope for the in-depth qualitative analysis, document type diversity, and relevance to the research topic. Less relevant documents, such as those on specific technologies or types like surveys, working documents, and calls, were excluded. For establishing coherence in the emergence of aspects of meaning, different types of documents were selected to identify *horizontal* (i.e., genre) and *vertical* (i.e., structural) variations of discourse (Verschueren 2012, 26): two work/action plans (presenting concrete steps for achieving goals and objectives), one agenda (underlaying a political plan or programme), one resolution (expressing the political will of the Council), four reports (providing a comparative account based on the national and EU policymakers' data), and three frameworks (presenting a conceptual implementation of educational policies).

The selection period for the texts is limited due to scope considerations and is based on the increased frequency of notions of digitalisation and digital technologies in academic literature and among practitioners after 2015, which is evident from the systematic literature review by

Reis et al. (2020). During this period, numerous policy documents emerged addressing EdTech. Furthermore, the COVID-19 pandemic made EdTech crucial, fundamentally shaping digital technology implementation in education from 2020 onwards. (Symeonidis, Francesconi, and Agostini 2021). The corpus documents' final year is 2022, which represents a post-pandemic year and is closer to the 'normalisation' of the situation in education, with EdTech as an established element of the school environment. At the same time, it is the last milestone before a new tipping point, i.e., the general entry of AI into education, epitomised by the widespread use of large language-based chatbots in schools. It might also represent a historical point of reference regarding language use and the possible global shift in the predominant optimistic characterisation of EdTech from the discourse of excitement and promise to a more calm and reserved language. For example, the latest UNESCO policy document from the 2023 *Guidance for Generative AI in Education and Research* introduces a markedly different attitude towards AI and technology with respect to education. At the beginning, which, rhetorically speaking, is the most relevant place for gaining the audience's goodwill and attention, it calls for an assessment of the 'potential risks GenAI could pose to core humanistic values' (Miao and Holmes 2023, 2). Policy documents from 2015 to 2022 include general remarks and guidelines about safe and responsible use of digital technology in education (Punie and Redecker 2017; Vuorikari, Kluzer, and Punie 2022). However, wordings with a direct appeal to humanistic values and potentially harmful implications on education are not present until 2023 (Table 1).

Corpus-assisted method

Baker (2010, 10) points out that a corpus analysis cannot be done without combining quantitative data with qualitative analysis and that, especially in cases of inspection of concordance lines (i.e., occurrences of a search item in the corpus with its co-text), qualitative research is essential, as it allows exploring individual cases and patterns of meaning (Baker 2010, 21). When corpus analysis is not the sole approach, Partington (2006) refers to corpus-assisted analysis, which uses the corpus as data for linguistic analysis but can also involve other types of data or analysis or incorporate existing linguistic frameworks or categories (Partington 2006, Chapter 6).

Corpus analysis was applied using the LancsBox 6.0 software (Brezina, Weill-Tessier, and McEnery 2021). For some search items, we limited the qualitative analysis of concordance lines due to capacity and timeframe constraints. We set the number of inspected concordance lines based on Hunston's estimate that a researcher can handle up to 100 lines for general linguistic samples and 30 lines for detailed ones (Hunston 2002, 52; in Baker 2010, 21). Thus, when qualitatively analysing many concordance lines for a search item, we limited ourselves to a randomly selected 30 and cross-checked our results with the next 30. Concordance lines that were

Table 1. List of documents selected for analysis (386,023 tokens).

Name of the policy document	Year	Type
Digital Education Action Plan 2021–2027	2021	action plan
Digital Europe Work Programme for 2021–2022	2021	work programme
A New Skills Agenda for Europe 2016	2016	agenda
Council Resolution on a strategic framework for European cooperation in education and training towards the European Education Area and beyond (2021–2030)	2021	resolution
Compulsory Education in Europe 2019/20	2019	report
Digital Education at School in Europe 2019	2019	report
Structural Indicators for Monitoring Education and Training Systems 2022	2022	report
Informatics Education at School in Europe 2022	2022	report
DigComp 2.2: The Digital Competence Framework for Citizens – With new examples of knowledge, skills and attitudes	2022	framework
European Framework for the Digital Competence of Educators: DigCompEdu	2017	framework
Promoting Effective Digital-Age Learning: A European Framework for Digitally-Competent Educational Organisations	2015	framework

contextually irrelevant to the research questions were excluded. Similarly, for inspecting collocations and reviewing the word frequency list, limitations were made to narrow down the content to themes relevant to EdTech.

Linguistic pragmatics method

The theory of linguistic pragmatics that defines language use primarily as a meaning-generation activity is outlined in Verschueren (1999). It is defined as a constant choice-making process that not only takes place at different levels of linguistic structure but also touches upon communicative strategies at the context level. Verschueren stresses that choice-making is a product of an interaction between the explicit and the implicit that characterises language production and interpretation with various degrees of automaticity or consciousness. Some choices may be more discursively marked than others, but all 'evoke or carry along their alternatives by way of contrast' (1999, 58).

In the qualitative analysis of the corpus, the focus is on tracing the dynamics of ideological meaning-generation of the image of teachers in the context of EdTech. Based on Verschueren's theory of pragmatics and his conceptualisation of ideological language use, we identified discursive representations of the image of teachers in the context of EdTech as marked choices when serving the purposes of its legitimation. After inspection of the general contextual aspect at the level of the wider and immediate context captured in the outline of critical perspective on EdTech research (i.e., the context of the investigation) and the macro-contextual outline of document corpus research (i.e., the context of the investigated discourse), we focused on the linguistic context and particularly relevant *structural levels of choice-making* (Verschueren 2012), such as *lexical choices* (e.g., factive verbs, change-of-state verbs, temporal adverbs), *structural or grammatical choices* (e.g., determiners, conjunctions, negation), and *discursive or rhetorical choices* (e.g., metonymy, metaphor, overstatement and understatement, causal linking).

Van Leeuwen's CDA method

The CDA approach examines discourse within social and cultural contexts, focusing on power dynamics. Recently, combining CDA with a corpus-assisted approach has gained prominence, as it reveals repeated patterns of meaning and reduces research bias (Baker 2010, 121–145). The CDA model developed by van Leeuwen explores recontextualising principles 'linked to key elements of social practices: actors and their roles and identities, actions and their performance styles, settings, and timings' (van Leeuwen 2008, vii), which can have legitimising and ideological effects, thus complementing linguistic pragmatics' view on ideology. Stemming from a primarily sociological concept of agency and social semiotics, he developed a complex interconnected network of systems in which social actors can be represented in the discourse. They consist of various linguistic and rhetorical phenomena that belong to lexicogrammatical and discourse-level linguistic systems: transitivity, reference, the nominal group, and rhetorical figures (van Leeuwen 2008, 52–53).

To analyse representations of social actors in the EU policy corpus, van Leeuwen's network (2008, 23–54) was applied. According to van Leeuwen (2008, 28–30), when actors are discursively presented as *excluded,* they are either *backgrounded* (i.e., indirectly discernible as actors) or *suppressed* (i.e., not mentioned at all). If they are presented as *included*, several categories of representation are discernible. For example, social actors can be *activated*, (i.e., presented as perpetrators of an act), or *passivated*, (i.e., on the receiving end of it). Passivated actors can be further presented as *subjected* (i.e., treated as objects in representation) or *beneficialised* (i.e., the act social actors are subjected to is represented as beneficial to them). They can also be presented as *objectivated*, (i.e., realised by a metonymical reference), *individualised*, (i.e., represented as a single, identifiable individual), *aggregated*, (i.e., represented as a statistical entity), etc. The categories are not clear-cut and mutually exclusive; their boundaries are blurred in order to achieve 'specific representational effects' (van Leeuwen 2008, 53).

Analysis

The image of a new/excellent teacher: a corpus-assisted linguistic pragmatic analysis

The word frequency list was produced in LancsBox. For analysis of concordance lines and co-text, words connected to education and digital technology were selected from the most frequent ones (Table 2). Parts of the text referring to teachers in connection to EdTech were identified through topical analysis (an example using the search node *digital** is shown in Table 3).

After inspecting the relevant concordance lines in their co-text, the identified discursive construction of 'a digitally competent teacher' indicated an association with positively connotated terms such as 'excellent', 'creative', 'motivating', 'innovating', etc. Combined with the image of 'new teachers', these descriptions are implicitly constructed as the antithesis of the image of 'old' teachers, who are represented as lacking digital competencies and are thus seen as problematic. This dynamics of meaning-generation becomes evident from the in-depth linguistic pragmatics analysis. Below, the analysis of two examples is presented to illustrate the results of our broader pragmatic analysis of concordance lines in their co-text.

The first example is an extended passage from A New Skills Agenda for Europe, a document published in 2016 by the European Commission, focusing on 'equipping Europeans with the right skills to respond to changes in labour market requirements' (European Commission 2016, 5). The selected example refers to EU efforts in modernising the teaching profession and is a part of the chapter on increasing learning opportunities and professional development related to EdTech.

(1)

a) Learners at all ages need *excellent educators* to develop the broad set of *skills and attitudes* they need both for life and future work. Variation in learners' achievements in education and training depends mainly on individual characteristics and family background. However, in educational institutions, it is teachers and trainers who have most impact on learners' performance. They can *inspire* and *help* learners to acquire higher and more relevant skills. They also *play a key role in introducing new teaching and learning methods*, in *stimulating creativity and innovation*, in *overcoming biases and in bringing out the best in increasingly diverse classrooms*.

b) […] *Developing the competences of teaching staff, including those who have been in the profession for a long time*, is also an *ongoing and increasingly urgent priority* throughout the EU.

c) The Commission *will support* the *sharing* of best practices in this area among Member States and stakeholders through cooperation and mobility opportunities. Particular attention will be given *to innovation in pedagogy*; this will include *supporting flexible curricula, promoting interdisciplinary and collaborative approaches within institutions, and supporting professional development to enhance innovative teaching practice, including ways of using and bringing digital tools into the classroom and stimulating entrepreneurial mindsets.* (European Commission 2016, 15; emphases by the authors)

The first paragraph (1a) generates an image of an 'excellent' teacher through the definition of their professional tasks ('inspiring students to acquire skills and attitudes', 'bringing new teaching methods', 'stimulating creativity', 'bringing out the best in classrooms') and in a heavily marked style by the intensified use of expressions of the high or highest level of activity or characteristics: 'play a *key* role', '*overcoming* biases', 'bringing out *the best*'; or by duplication and intensification of

Table 2. A selection of words with their frequencies and dispersion across documents.

Word	Frequency (occurrences)	Dispersion (documents)
digital	6047	11/11
education	3761	11/11
competence	1175	11/11
teachers	1025	11/11
students	885	11/11
skills	855	11/11
knowledge	427	10/11

Table 3. A selection of concordance lines for *digital**.

LEFT	NODE	RIGHT
recommendations on the assessment of prospective teachers'	***digital***	*competences exist in less than a quarter*
To help teachers evaluate their level of	***digital***	*competence and thereby define their development needs,*
have set up networks specifically dedicated to	***digital***	*education. Digital communities of teachers usually operate*
learning outcomes. Thus, the development of teachers'	***digital***	*competence is a critical component if investment*
digital resources by teachers lacking the appropriate	***digital***	*skills may form a distraction for pupils*
education authorities to ensure that teachers are	***digitally***	*prepared to enter the profession and can*

meaning: 'creativity and innovation'. These expressions carry positive connotations, while simultaneously depicting requirements for the teacher's profile which are intangible and unrelated to learning content. For example, a teacher's stimulation of students' creativity cannot be meaningfully measured, nor is it always suitable for achieving learning goals; as a self-evident qualifier, it functions as a strategy for strengthening and legitimising demands for 'newness' and 'excellence'.

The second paragraph (1b) addresses the issue of the ageing population of teachers. Developing teachers' competencies, 'including those who have been in the profession for a long time', is represented as an 'ongoing and increasingly urgent priority'. With the parenthesis referring to experienced teachers, the older generation is represented as having 'experience' but lacking the competencies of 'new' teachers. Such representation presumes that the pedagogical process without 'new' competencies is necessarily lower quality and less desirable. Implicit here is a condescending attitude towards 'old' teachers whose experience is no longer recognised as a sufficient trait.

The third paragraph (1c) presents the EC's commitment to support the sharing of 'best practices' and to devote special attention to the 'innovation' of the pedagogical process. Among activities, the focus is on supporting the professional development of teachers to enhance innovative teaching practices. Meaning-generation in (1c) is centred around three ideas, *professional development*, *EdTech*, and *market needs*. The professional development of teachers, as already highlighted in (1b), is explicitly defined here as the only way to ensure that innovative pedagogical practices and EdTech are aligned with the labour market (*entrepreneurial mindset)*. The demand for 'new' *skills* and *attitudes*, but not *knowledge*, which is already evident from (1a), is also significant in 'innovating' an educational system which serves the market's needs, thus preferring an instrumentalist attitude towards education's aims and goals, i.e., forwarding skills. The absence of an emphasis on knowledge is particularly telling in the representation of professional development: on the one hand, it legitimises the idea that knowledge is a less significant part of learning goals (1a), and on the other hand, it implies that knowledge (for example, knowledge of the learning content) is no longer a relevant part of a teacher's qualifications (1c). Instead, significant emphasis is given to the teacher's skill, i.e., actions which are not directly related to teaching the learning content (e.g., the use of digital technologies, stimulation of creativity, innovation, and entrepreneurial mindset).

The second example is a part of the Framework for Digitally-Competent Educational Organisations from 2015, a year of intensified policies and public debates on EdTech. The primary purpose of the framework is described as offering a conceptually and terminologically unified platform to educational organisations for self-assessment and evaluation of the use of EdTech.

2)

a) A rethinking of roles and pedagogical approaches takes place
The organisation *empowers and expects* staff and students to adopt and adapt effective and innovative pedagogical practices made possible by the use of digital learning technologies and to use these practices in diverse learning settings (inside and outside the organisation) and for various purposes (formal and informal).
b) Staff are partners in change
The organisation aims to establish a culture where staff (and including students as

> appropriate) are *considered as partners* in change and *are encouraged and incentivised* to take measured risks and to explore new approaches that actively contribute to the integration and effective use of digital learning technologies for comprehensive learning outcomes. (Kampylis, Punie, and Devine 2015, 23; emphases by the authors)

In (2a), an apparent contradiction between empowerment and oppression emerges. The organisation (i.e., the school institution) is supposed to empower teachers on the one hand so they can use new pedagogical approaches made possible by digital technology. On the other hand, because organisations provide 'empowerment' to teachers (in an implied dominant form), teachers should carry out the expected actions. Thus, empowerment, which means the possibility of free, autonomous action, including the possibility of refusing to use digital technology, turns into its opposite. Namely, what the 'empowered' staff are supposed to do is precisely what is expected of them 'from above'.

A similar contradiction appears in (2b), where staff are described as 'partners in change'. On the other hand, they are 'encouraged' and 'incentivised to change', which implies an unequal position between the 'partners'. The norm of change does not come from the staff; otherwise, encouraging and incentivising them would not be necessary. Finally, using the term 'encouraged' implies teachers' (possible) fear of (or opposition to) change, and therefore, those who reject it or do not participate courageously or 'explore' enough need to be emotionally motivated. Specific emotionally charged roles are assigned to the empowered staff in EdTech (mentors, orchestrators, facilitators, role models), all to secure a positive attitude towards digital technologies. Although the verb 'to experiment with' implies usages that are not fully controlled, the adjectives 'creative' and 'innovative' determine the expected mode of engagement. Furthermore, with the implied authority in the verb 'use', the possibility of critical inspection, rejection, or even general reluctance to use EdTech based on autonomous professional reflection is already excluded from the start. The talk about empowerment and staff being understood as equal partners, therefore, reads as a somewhat cynical and poorly disguised demand for innovation.

The quantitative and qualitative inspection of the concordance lines shows that the meaning-generation of teachers' professional development is permeated with the image of the 'new' and 'excellent' technologically qualified teacher, which is value-laden and depicted as desirable through the rhetorical strategies of positive representations of the outcomes of EdTech. Forwarding such an image simultaneously establishes an implicit contrast to the 'old' teacher, who presumably does not use digital technology and is implicitly constructed via negative connotations such as lacking efficiency and innovation. The teachers' professionalism is thus primarily framed with the (non-)use of technology in the pedagogical process. Digital technology carries the normalised, non-problematic meanings of a self-evident benefit, enabling teachers to be more efficient and innovative in the pedagogical process.

Discussion. The discourse of the necessity of changes to and innovation in pedagogical practices has been dominant in education for a long time. Critical authors like Furedi (2009) and Biesta (2013) problematise the imperative of innovation as an end in its own right and challenge the construction of the distinction between 'traditional' and 'progressive' pedagogy. In the corpus, the necessity or desirability of (innovative) changes in the pedagogical process related to EdTech is presented as commonsensical, thus legitimising digitisation in education. Although preceding digital technology, the requirement for constant change and pedagogical innovation in the context of the 'digital transformation' is predominantly fulfilled through the implementation of EdTech.

Similarly, the discourse of efficiency is part of the established pedagogical discourse. Biesta (2013, 58, 129) illustrates how the discourse of an efficient pedagogical process undermines education itself, as efficiency is neither possible nor desirable, for it negatively impacts the subjectification of students. Moreover, Popkewitz remarks that in the pedagogical discourse, the value-added image of an 'effective teacher' becomes a determinate category to eliminate the dysfunctions of youth with the 'achievement gap' and is thus to solve the 'until-now mysteries of children's failure

in school' (Popkewitz 2013, 443). This image comprises the achievement scores of their students, but also the teacher's mode of life, e.g., commitment, agency, well-being etc. (Popkewitz 2013). Nonetheless, in the established policy discourse, where efficiency is a norm and digital technology is characterised as having an inherent potential for efficiency (for a critical perspective, see Castañeda and Williamson 2021; Selwyn 2010; Selwyn, Macgilchrist, and Williamson 2020), EdTech becomes an unquestioned demand. Our findings show that this 'potential' of EdTech is inscribed in the ideological meaning generation of the role of the teachers, depicted as efficient, innovative and creative solely by their use of digital technology. The assumption of the inherent potential of EdTech is thus turned into a normative image of a 'new', 'excellent' teacher.

An 'excellent' teacher is a 'passivated' teacher: A corpus-assisted CDA analysis of social actors

The discursive construction of the EdTech-based image of a teacher in the EU policy corpus can further be elaborated through the rhetorical mechanisms of exclusion and inclusion (van Leeuwen 2008, 23–54). We explored how teachers as social actors in implementing EdTech are represented in the corpus by searching for collocates of the node *teacher|teachers* (setting statistics to 05 – MI3 and span to 5 on each side). As a next step, van Leeuwen's scheme of social actors' representations was applied to analyse concordance lines in their co-text for the collocation with *digital* and collocations with selected verbs.

Collocation with digital. The collocate *digital* appears 213 times in 9/12 documents, in 201 separate concordance lines. Of these, 54 were excluded, as they appeared as adjectives or as part of a name or title (Table 4).

The analysis shows that teachers in connection with *digital* are represented as passivated in most cases, i.e., on the receiving end of social action. Of these, there are several cases where they are subjectivated, i.e., subjected to some action (e.g., they are assessed, encouraged). There are fewer cases where they are beneficialised, i.e., the action they are subjected to is presented as positive for them. These cases are mainly about helping teachers use digital technologies or develop and assess their digital competencies. Often, a teacher's agency is ascribed to digital competencies. Here actors are also predominantly passivated, i.e., subject to monitoring, development, etc. In cases where teachers are activated, they are represented in terms of the general utility and effectiveness of EdTech. However, these representations do not depict the actors as experts capable of critical reflection who can autonomously decide whether and how to implement EdTech. Thus, despite the seemingly nuanced depictions, within the logic of teacher representations, their autonomous agency is denied.

Table 4. Representations of teachers as social actors in collocation with *digital* (emphases added by the authors).

Type of actor representation/ Frequency	Examples from concordance lines inspection
Passivation/ Subjectivation (51)	• evaluation *tool for teachers* and schools about their digital competences • *provides teacher training* and manages online platforms • *the role is assigned to ICT teachers* or teachers specialised in digital education
Passivation/ Beneficialisation (32)	• *guidance is provided to teachers* to assess digital competences in the classroom • *enables* teachers to acquire and/or develop digital skills • *support* teachers in the assessment of digital competences • *help* teachers create digital learning resources
Objectification (21)	• identifying *gaps in teachers' digital competences* • to *develop teachers' digital competences* • the *prime factor is teachers' digital competence*
Activation (43)	• teachers *use* digital technologies to facilitate learning • teachers *collaborate* in determining how digital technologies can be used effectively • digitally competent teacher *knows and understands* how digital developments

Table 5. Representations of teachers as social actors in collocation with the most frequent verbs.

Verb	Frequency	Analysed conc. lines	Passivated	Activated
Provide	59	38	21 (beneficialised)	17
Support	45	38	35 (27 occurrences are related to teachers' professional development)	3 (in relation to their colleagues)
Develop	40	23	19 (developing teachers' competences or professional development)	4 (teacher in relation to students; in some cases, teachers are active as well as on the receiving end of the act – developing their competences)
Assess	28	25	14 (subjectivated; teachers being assessed)	11 (teachers assessing students)
Help	24	23	20 (beneficialised)	3 (teacher helping students)

Collocations with selected verbs. A notable use of verbs stood out during the analysis of social actors: in the second step of the analysis, collocations of verbs in relation to teachers were searched for, and their concordance lines were inspected. Relevant verbs for the representations of actors were selected, considering their frequency and the EdTech context: *provide, support, assess, help,* and *develop*. Concordance lines where the analysed verb was unrelated to teachers were excluded.

In collocations with *provide, support, assess, help* and *develop*, in most cases, teachers are presented as *passivated*, i.e., as those who need support and help, who need to be assessed and whose competencies need to be developed. To a much lesser extent, teachers are represented as the ones who perform these actions in the classroom (i.e., some examples with teachers who develop competencies and help or assess students) (see Table 5).

Discussion. In analysing the social actors, three points stand out. Firstly, teachers are predominantly represented as passivated concerning digital technology, i.e., either subjectivated or beneficialised. Teachers' agency is not only suspended, but the suspension is also legitimised by the assertion of its being beneficial to teachers. The rhetorical effect of such representation is that the action cannot be argued against: how can one object to being helped and supported when these two are perceived as positive acts? Secondly, teachers' competencies, or rather, digital competencies, are represented as insufficient and subject to constant development, assessment, and monitoring. The image of an insufficient teacher, needing help and support and having to develop digital competencies, aligns with the neoliberal image of an 'unfinished but desirable teacher' (Ideland 2020, 11). Ideland, following Castañeda's figuration of the child as a 'human in an incomplete form' (Castañeda 2002), describes teachers in a digitalised classroom as 'an incomplete potentiality in the making'; in other words, '[t]o discursively produce the teacher as unfinished and in need of professional development regarding digitalized education, s/he becomes a possible object for a change. […] The narratives not only describe a desirable teacher but produce ways in which we can think and do education' (Ideland 2020, 2). Through such discourse, the power is re-localised from teachers to digital technology (Ideland 2020, 11). This is accompanied by a 'backstaging' of teachers (see Macgilchrist 2019), who are no longer seen as gatekeepers between students and media providers but instead turned into 'behaviour managers' (Ideland 2020, 98). The transformation of teachers' roles in the context of EdTech corresponds with Biesta's description of the process of 'learnification' in education, where a shift from teaching to individualised learning takes place, reconceptualising teachers' role as 'scaffolding' or 'supporting' student learning. Biesta challenges this as contrary to the idea of education with teaching as transcending the learner's self in its core (Biesta 2013, 46).

The backstaging of teachers and deconstruction of the traditional hierarchy between teachers and students are widely present in pedagogical discourse (Furedi 2009, 10, 69). However, in the present corpus, they are explicitly articulated concerning teachers' roles in the implementation of EdTech. Teachers' use of digital technology is normalised and presented as the necessary precondition for teachers to be 'effective'. As such, the question is never whether to use digital technology in the classroom but how to ensure that all teachers will use it.

Conclusion

Based on the analysis of selected EU policy documents, we have argued that the representations of teachers and EdTech in the corpus are ideological and normative. Firstly, by applying linguistic pragmatic analysis, we have identified the construction of a positively and emotionally marked image of a 'new', 'excellent' and 'digitally competent' teacher, juxtaposed to its negatively evaluated opposition of a teacher that does not use (enough) EdTech. Secondly, we have challenged the presumed emancipation of teachers, which discursively obscures a demand to use EdTech, where any critical reflection or possible rejection on professional grounds is omitted. Thirdly, in contrast to the image of an emancipated and innovative teacher, the analysis of social actors has shown that teachers are predominantly represented as passivated, needing guidance, help, and support in using EdTech, or their digital competencies need to be assessed and developed. Where teachers are represented as activated, their social action is demonstrated in their use of EdTech, not in deciding whether or not to use it.

This paper thus reveals a significant gap between the theoretical critiques of EdTech discourse and the language employed in policy formulation. The EU policy documents perpetuate this trend by portraying EdTech as a panacea without adequately addressing the multifaceted challenges and implications. Thus, the problem of an *a priori* 'inadequate' teacher, constantly lacking digital competencies, is discursively constructed as commonsensical. Simultaneously, the solution to the problem is imposed as an implicit demand to use EdTech, neglecting and suppressing the complexity of EdTech, as addressed by critical research.

Focusing on EU policy documents means the findings might not entirely reflect national policy complexities and variations. While EU documents offer a comprehensive framework, national implementation and interpretation may vary significantly. Further research is needed to explore how EU policy discourses are adapted and enacted in specific national contexts.

This paper represents a first step in understanding the discourse on EdTech in the EU context and underscores the need for constant critical engagement with educational policy, including less explicit levels of meaning-generation. Such scrutiny is crucial for fostering a more nuanced and comprehensive perspective on EdTech policies that transcends mere technological solutions and addresses broader societal, economic, cultural, and technological issues in a relational and complex manner.

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References

Anderson, Kate T., and Jessica Holloway. 2020. "Discourse Analysis as Theory, Method, and Epistemology in Studies of Education Policy." *Journal of Education Policy* 35 (2): 188–221. https://doi.org/10.1080/02680939.2018.1552992.

Apple, Michael. 1986. "Is the New Technology Part of the Solution or Part of the Problem in Education?" In *The Critical Pedagogy Reader*, edited by Antonia Darder, Marta Baltodano, and Rodolfo D. Torres, 440–458. London, New York: Routledge Falmer.

Baker, Paul. 2010. *Sociolinguistics and Corpus Linguistics*. Edinburgh: Edinburgh University Press.

Ball, Stephen J. 1993. "What is Policy? Texts, Trajectories and Toolboxes." *Discourse: Studies in the Cultural Politics of Education* 13 (2): 10–17. https://doi.org/10.1080/0159630930130203.
Biesta, Gert J. J. 2013. *Beautiful Risk of Education*. New York: Routledge.
Brezina, Vaclav, P. Weill-Tessier, and A. McEnery. 2021. "#LancsBox." V 6.0. [software package]. Lancaster University. http://corpora.lancs.ac.uk/lancsbox/.
Brown, Cheryl. 2019. "Critical Discourse Analysis and Information and Communication Technology in Education." In *Oxford Research Encyclopedia of Education*. https://doi.org/10.1093/acrefore/9780190264093.013.794.
Castañeda, Claudia. 2002. *Figurations: Child, Bodies, Worlds*. Durham: Duke University Press.
Castañeda, Linda, and Ben Williamson. 2021. "Assembling New Toolboxes of Methods and Theories for Innovative Critical Research on Educational Technology." *Journal of New Approaches in Educational Research* 10 (1): 1–14. https://doi.org/10.7821/naer.2021.1.703.
Clark, Daniel. 2023. "The Construction of Legitimacy: A Critical Discourse Analysis of the Rhetoric of Educational Technology in Post-Pandemic Higher Education." *Learning, Media and Technology* 49 (1): 414–427. https://doi.org/10.1080/17439884.2022.2163500.
Council of Europe. 2019. *CM/Rec(2019)10*. https://search.coe.int/cm?i=090000168098de08.
European Commission. 2016. *A New Skill Agenda for Europe*. https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:52016DC0381.
Eurydice. 2019. *Digital Education at School in Europe*. Publications Office of the European Union. https://op.europa.eu/en/publication-detail/-/publication/d7834ad0-ddac-11e9-9c4e-01aa75ed71a1/language-en/format-PDF/source-105790537.
Facer, Keri, and Neil Selwyn. 2021. "*Digital Technology and the Futures of Education: Towards 'Non-Stupid' Optimism*." Paper commissioned for the UNESCO Futures of Education report. https://unesdoc.unesco.org/ark:/48223/pf0000377071.
Fairclough, Norman. 2013. "Critical Discourse Analysis and Critical Policy Studies." *Critical Policy Studies* 7 (2): 177–197. https://doi.org/10.1080/19460171.2013.798239.
Ferrante, Patricia, Federico Williams, Felix Büchner, Svea Kiesewetter, Godfrey Chitsauko Muyambi, Chinaza Uleanya, and Marie Utterberg Modén. 2024. "In/Equalities in Digital Education Policy – Sociotechnical Imaginaries from Three World Regions." *Learning, Media and Technology* 49 (1): 122–132. https://doi.org/10.1080/17439884.2023.2237870.
Frankfurt, Harry G. 2005. *On Bullshit*. Princeton, NJ: Princeton University Press.
Furedi, Frank. 2009. *Wasted: Why Education Isn't Educating*. London: Continuum.
Giroux, Henry. 2014. *The Violence of Organized Forgetting: Thinking Beyond America's Disimagination Machine*. San Francisco, CA: City Lights.
Howarth, David, and Steven Griggs. 2012. "Poststructuralist Policy Analysis: Discourse, Hegemony, and Critical Explanation." In *The Argumentative Turn Revisited: Public Policy as Communicative Practice*, edited by Fran Fisher and Herbert Gottweis, 305–342. Durham: Duke University Press. https://doi.org/10.2307/j.ctv11smfm4.13.
Hunston, Susan. 2002. *Corpora in Applied Linguistics*. Cambridge: Cambridge University Press.
Ideland, Malin. 2020. "Google and the end of the Teacher? How a Figuration of the Teacher is Produced Through an Ed-Tech Discourse." *Learning, Media and Technology* 46 (1): 33–46. https://doi.org/10.1080/17439884.2020.1809452.
Kampylis, Panagiotis, Yves Punie, and Jim Devine. 2015. *Promoting Effective Digital-Age Learning – A European Framework for Digitally-Competent Educational Organisations*.
Lee, Sejin, and Kyungmee Lee. 2023. "Smart Teachers in Smart Schools in a Smart City: Teachers as Adaptive Agents of Educational Technology Reforms." *Learning, Media and Technology* 49: 456–477. https://doi.org/10.1080/17439884.2023.2207143.
Lingard, Bob, and Jenny Ozga. 2006. "Introduction: Reading Education Policy and Politics." In *The Routledge Falmer Reader in Education Policy and Politics*, edited by Bob Lingard and Jenny Ozga, 1–8. London: Routledge. https://doi.org/10.4324/9780203567203.
Macgilchrist, Felicitas. 2019. "Backstaging the Teacher: On Learner-Driven, School-Driven and Data-Driven Change in Educational Technology Discourse." *Kultura-Społeczeństwo-Edukacja* 12 (2): 83–103. https://doi.org/10.14746/kse.2017.12.4.
Macgilchrist, Felicitas. 2021. "What is 'Critical' in Critical Studies of Edtech? Three Responses." *Learning, Media and Technology* 46 (3): 243–249. https://doi.org/10.1080/17439884.2021.1958843.
Matthews, Adam. 2021. "Sociotechnical Imaginaries in the Present and Future University: A Corpus-Assisted Discourse Analysis of UK Higher Education Texts." *Learning, Media and Technology* 46 (2): 204–217. https://doi.org/10.1080/17439884.2021.1864398.
Miao, Fenhchun, and Wayne Holmes. 2023. *Guidance for Generative AI in Education and Research*. Paris: UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000386693.
Nemorin, Selena, Andreas Vlachidis, Hayford M. Ayerakwa, and Panagiotis Andriotis. 2023. "AI Hyped? A Horizon Scan of Discourse on Artificial Intelligence in Education (AIED) and Development." *Learning, Media and Technology* 48 (1): 38–51. https://doi.org/10.1080/17439884.2022.2095568.

OECD. 2016. *Innovating Education and Educating for Innovation: The Power of Digital Technologies and Skills*. Educational Research and Innovation. Paris: OECD Publishing. https://doi.org/10.1787/9789264265097-en

Pangrazio, Luci, and Julian Sefton-Green. 2021. "Digital Rights, Digital Citizenship and Digital Literacy: What's the Difference?" *Journal of New Approaches in Educational Research* 10 (1): 15–27. https://doi.org/10.7821/naer.2021.1.616.

Partington, Alan. 2006. *The Linguistics of Laughter: A Corpus Assisted Study of Laughter Talk*. London: Routledge.

Popkewitz, Thomas S. 2013. "The Sociology of Education as the History of the Present: Fabrication, Difference and Abjection." *Discourse: Studies in the Cultural Politics of Education* 34 (3): 439–456. https://doi.org/10.1080/01596306.2012.717195.

Punie, Yves, and Christine Redecker, eds. 2017. *European Framework for the Digital Competence of Educators: DigCompEdu*. Luxembourg: Publications Office of the European Union.

Reis, João, Marlene Amorim, Nuno Melao, Yuval Cohen, and Mário Rodrigues. 2020. "Digitalization: A Literature Review and Research Agenda." In *Proceedings on 25th International Joint Conference on Industrial Engineering and Operations Management - IJCIEOM*, 443–456. Cham: Springer. https://doi.org/10.1007/978-3-030-43616-2_47.

Rizvi, Fazal, and Bob Lingard. 2009. *Globalizing Education Policy*. London: Routledge. https://doi.org/10.4324/9780203867396.

Rogers, Rebecca, Elizabeth Malancharuvil-Berkes, Melissa Mosley, Diane Hui, and Glynis O. Joseph. 2005. "Critical Discourse Analysis in Education: A Review of the Literature." *Review of Educational Research* 75 (3): 365–416. https://doi.org/10.3102/00346543075003365.

Rühlemann, Christoph. 2019. *Corpus Linguistics for Pragmatics: A Guide for Research*. London, New York: Routledge.

Selwyn, Neil. 2010. "Looking Beyond Learning: Notes Towards the Critical Study of Educational Technology." *Journal of Computer Assisted Learning* 26 (1): 65–73. https://doi.org/10.1111/j.1365-2729.2009.00338.x.

Selwyn, Neil. 2011. *Schools and Schooling in the Digital Age: A Critical Analysis*. New York: Routledge.

Selwyn, Neil. 2015. "Minding Our Language: Why Education and Technology is Full of Bullshit … and What Might be Done About it." *Learning, Media and Technology* 41 (1): 1–5. https://doi.org/10.1080/17439884.2015.1115769.

Selwyn, Neil, Felicitas Macgilchrist, and Ben Williamson. 2020. *Techlash #01. Digital Education after Covid-19*. https://der.monash.edu/wp-content/uploads/2020/06/TECHLASH-01-COVID-education.pdf.

Simons, Maarten, Mark Olssen, and Michael A. Peters. 2009. "The Critical Education Policy Orientation." In *Re-Reading Education Policies*, edited by Maarten Simons, Mark Olssen, and Michael A. Peters, 1–35. Rotterdam, Boston, Taipei: Brill.

Symeonidis, Vasileios. 2018. "Revisiting the European Teacher Education Area: The Transformation of Teacher Education Policies and Practices in Europe." *Center for Educational Policy Studies Journal* 8 (3): 13–34. https://doi.org/10.26529/cepsj.509.

Symeonidis, Vasileios, Denis Francesconi, and Evi Agostini. 2021. "'The EU's Education Policy Response to the Covid-19 Pandemic: A Discourse and Content Analysis.' Special Issue." *Center for Educational Policy Studies Journal* 11:89–115. https://doi.org/10.26529/cepsj.1137.

Thompson, John B. 1990. *Ideology and Modern Culture: Critical Social Theory in the Era of Mass Communication*. Cambridge: Polity Press.

UNESCO. 2013. *The Future of Mobile Learning: Implications for Policy Makers and Planners*. https://unesdoc.unesco.org/ark:/48223/pf0000219637.

van Leeuwen, Theo. 2008. *Discourse and Practice: New Tools for Critical Discourse Analysis*. New York, NY: Oxford University Press. https://doi.org/10.1093/acprof:oso/9780195323306.001.0001.

Verschueren, Jef. 1999. *Understanding Pragmatics*. London: Arnold; New York: Oxford University Press.

Verschueren, Jef. 2012. *Ideology in Language Use: Pragmatic Guidelines for Empirical Research*. Cambridge: Cambridge University Press.

Vuorikari, Riina, Stefano Kluzer, and Yves Punie. 2022. *DigComp 2.2, The Digital Competence Framework for Citizens – With new Examples of Knowledge, Skills and Attitudes*. Luxembourg: Publications Office of the European Union. https://data.europa.eu/doi/10.2760115376.

Williamson, Ben, Rebecca Eynon, and John Potter. 2020. "Pandemic Politics, Pedagogies and Practices: Digital Technologies and Distance Education During the Coronavirus Emergency." *Learning, Media and Technology* 45 (2): 107–114. https://doi.org/10.1080/17439884.2020.1761641.

Williamson, Ben, Felicitas Macgilchrist, and John Potter. 2021. "Covid-19 Controversies and Critical Research in Digital Education." *Learning, Media and Technology* 46 (2): 117–127. https://doi.org/10.1080/17439884.2021.1922437.