

What influences curriculum developers' decisions during the curriculum-making process?

Research Report

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Executive summary

Curriculum development plays a central role in shaping educational aims, teaching practices and learner outcomes. Recent scholarship conceptualises curriculum-making as a non-linear, multi-layered and socially constructed activity shaped by interactions among diverse actors across supra, macro, meso and micro levels of the education system. Despite this increasingly holistic understanding, there remains limited clarity about the factors that influence curriculum developers' decision-making and the extent to which research evidence and learning theories are meaningfully integrated into their practices.

Responding to this gap, this review synthesises research published between 2014 and 2024 to provide an up-to-date, systematic picture of what influences curriculum developers' decisions during the curriculum-making process. After a comprehensive search of Scopus, Web of Science (WoS) and ERIC databases, followed by screening and an eligibility check with the PRISMA guidelines, 17 studies met the inclusion criteria and were selected for data analysis. These studies span a diverse range of subjects, educational phases, research methodologies and curriculum types, though most represent European, North American and Asian jurisdictions. Employing a thematic synthesis (Thomas & Harden, 2008) methodology, this review analyses both descriptive and analytical patterns relating to curriculum development, key influencing factors and practical uses of research and theory during curriculum-making.

Across contexts, teachers emerged as the main curriculum-makers, often working alongside university academics, curriculum specialists, government agencies, publishers and, in some cases, students. Effective curriculum design within these studies was underpinned by several shared principles, i.e., maintaining internal and external curriculum coherence, grounding design in research and evidence-informed practice, attending to learner needs and learning contexts, supporting and developing teachers' design expertise, and ensuring transparency, accountability and clarity in the decision-making process. These findings align with the growing policy emphasis on teacher agency and collaborative curriculum development.

However, this review also identifies persistent barriers. These include inconsistent or weakly-aligned curriculum components, limited or superficial teacher involvement during curriculum-making, confusion about the division of responsibilities across levels of the curriculum system, insufficient training in curriculum theory, and the absence of clear theoretical frameworks or systematic design methodologies. Such barriers risk producing gaps between intended and enacted curricula and reduce the potential for coherent, evidence-informed curriculum reform.

Multiple influencing factors are also found to shape curriculum-making. At the supra and macro levels, inter-state guidance and policy influenced by transnational organisations, national education goals, and development programmes and assessments strongly drive curriculum decisions, whereas at the micro level, education materials such as textbooks and templates guide teachers' curriculum planning. Broader contextual, institutional and pedagogical factors, including socio-economic and political influences, power dynamics, funding, professional expertise, subject content/organisation, teachers' identity and networks, as well as students' needs and interests, also play an important role. Notably, this

review finds little published evidence about meso-level curriculum-making, signalling a gap in the literature.

Regarding the use of research evidence and learning theories, this review finds frequent reference to research evidence and theoretical knowledge, but rare explicit mentioning of learning theories during practical curriculum-making. This finding also supports earlier research conducted in this field.

Overall, in the future, greater attention to learning theory, teacher preparation, actors/stakeholder collaboration and coherence across levels of the curriculum system will be essential for strengthening curriculum developers' curriculum-making activities.

Introduction

Curriculum development is the cornerstone of education, shaping the knowledge and skills that learners need to acquire. According to Priestley et al. (2025), curriculum-making is a socially constructed process across different layers of the education system rather than a simple implementation or delivery separate from policy and practice. This more holistic understanding of curriculum builds upon the conceptualisation of curriculum-making as an activity happening across multiple levels, i.e., the supra, macro, meso, micro and nano levels¹, involving various actors or stakeholders. For effective and responsive curriculum development, it is important to involve diverse stakeholders (e.g., teachers, professionals from the associated field) and multiple decisions in the curriculum-making process (Huizinga et al., 2014; Vreuls et al., 2022). However, this information remains implicit, and few studies have examined the factors that may affect curriculum developers' decision-making.

Regarding the potential factors influencing the curriculum-making process, we are particularly interested in the use of research evidence and learning theories, as research (see Morrish et al., 2025) has shown that it is difficult to find the extent to which intended curriculum documents are based on learning theories. Even if mentioned, frequently the learning theories were only referred to implicitly through characteristics such as collaboration, adult guidance and support (Ireland & Majewska, 2024). Although Oates (2018) argues that curriculum designers/developers should be able to describe the evidence and models they use to inform their work, it remains unclear how research evidence and learning theories are used during the practical curriculum-making process.

Research questions

To fill the current void, this review therefore aims to answer the following two research questions:

1. What factors influence curriculum developers² when developing curriculum documents?
2. How are curriculum developers using research evidence and learning theories in their work?

¹ In Priestley et al.'s (2025, p16) report, they provided examples of activities happening at multiple levels of curriculum-making. Supra curriculum-making involves (transnational) curricular discourse generation, policy borrowing and lending, and policy learning (e.g., OECD, UNESCO); Macro curriculum-making involves development of curriculum policy frameworks and legislation to establish agencies and infrastructure (e.g., national governments, curriculum agencies); Meso curriculum-making involves production of guidance, leadership of and support for curriculum making, and production of resources (e.g., district authorities, textbook publishers, curriculum brokers); Micro curriculum-making involves school level curriculum making, programme design, and lesson planning (e.g., principals, senior and middle leaders, teachers, students, communities); Nano curriculum-making involves curriculum making in classrooms and other learning spaces, pedagogic interactions, and curriculum events (e.g., teachers, students, communities).

² In this review, the term "curriculum makers", "curriculum developers" and "curriculum designers" are used interchangeably.

Methods

Data collection and screening

A literature search was conducted via three databases, i.e., Scopus, WoS (Web of Science) and ERIC (Education Resources Information Centre), covering the past 10 years (2014-2024), as this time range was considered most relevant and manageable. Although the articles retrieved through these databases may not be exhaustive, they are considered comprehensive as representative articles were captured across a diverse range of disciplines and research methodologies relevant to the topic.

Table 1 describes the search criteria for the current review. For all three databases, the phrases “curriculum developer” or “curriculum designer” or “curriculum maker” were searched for in either “Article Title” or “Author Keywords” (Subject-DE for ERIC) through carefully-chosen Boolean operators.

Table 1: Search criteria using Boolean operators.

Database	Search criteria (Boolean operators)
Scopus	TITLE (“curriculum developer” OR “curriculum designer” OR “curriculum maker”) OR KEY (“curriculum developer” OR “curriculum designer” OR “curriculum maker”)
WoS	“curriculum developer” OR “curriculum designer” OR “curriculum maker” (Title) or “curriculum developer” OR “curriculum designer” OR “curriculum maker” (Author Keywords)
ERIC	TI (“curriculum developer” OR “curriculum designer” OR “curriculum maker”) OR DE (“curriculum developer” OR “curriculum designer” OR “curriculum maker”)

Studies were included if they meet the following criteria:

- 1) Publication type: Article
- 2) Publication language: English
- 3) Publication year: 2014-2024
- 4) Context: from early years to upper secondary school (excluding higher education)
- 5) Type of curriculum: intended curriculum

It is worthy of note that the definition of “intended curriculum” here follows what Preedy (2001) referred to as the curriculum which is planned (e.g., the officially stated aims and goals, curriculum expressed in policy documents, syllabi, frameworks and guidelines), rather than on what is taught by teachers (the offered curriculum) or experienced by the students (the received curriculum). Based on this definition, the intended curriculum incorporates teachers’ curriculum planning on a school level before the actual teaching occurs. The design of teachers’ guides was also considered part of the intended curriculum as it articulates prescribed expectations for teaching.

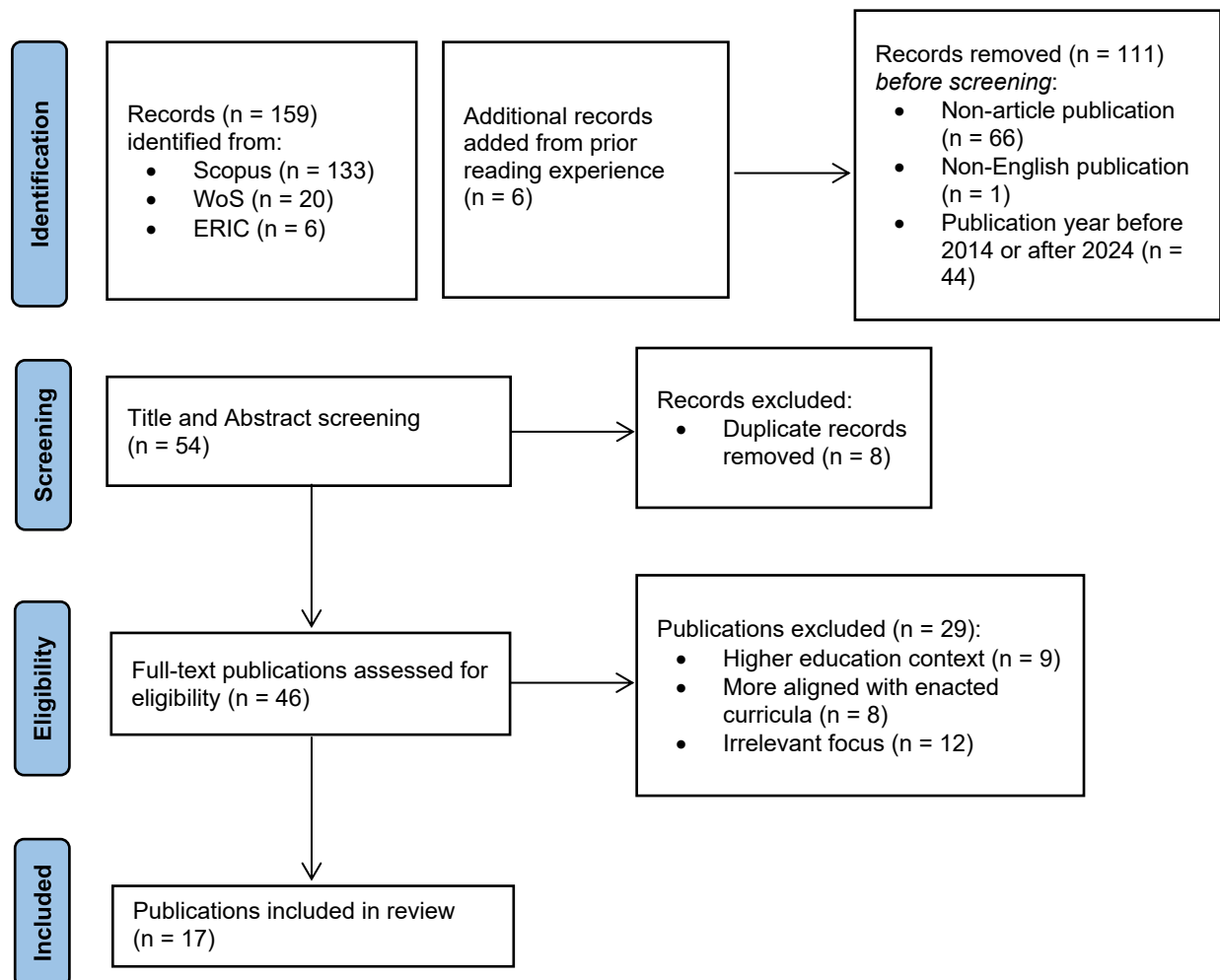
This review followed the PRISMA reporting guidelines (PRISMA, 2020). It is characterised by a well-defined process including literature identification and selection, as well as screening and an eligibility check, as is showcased in the PRISMA flow chart in Figure 1. To be specific, following the literature search criteria (Boolean operator) mentioned above (see Table 1), 133 articles were identified from Scopus, 20 articles from WoS and 6 articles from

ERIC. Another 6 articles known to the researchers from prior reading were also included. After further applying the predefined parameters of “Publication type”, “Publication language” and “Publication year”, some articles were excluded for not meeting the first three criteria:

- 1) Publication type: Article (66 references excluded)
- 2) Publication language: English (1 reference excluded)
- 3) Publication year: 2014-2024 (44 articles excluded)

During the screening phase, the title and abstract of each article was manually checked to see if there are any duplicates among the three databases. Eventually, 8 articles were identified as duplicates and further eliminated. When assessing eligibility, all the remaining 46 articles were checked manually from the beginning to the end (the full-text) as some of the articles did not specify the focus of their studies (e.g., education levels, curriculum type) in either the title or the abstract. Accordingly, 9 articles were found to be related to higher education/university contexts and 8 articles were more aligned with the enacted curriculum rather than the intended one³. In addition, 12 articles were thought to be irrelevant to our research questions. Ultimately, altogether 17 articles were included in our data analysis. They were then imported into MAXQDA (version 24.9.1) for subsequent coding.

Figure 1: The PRISMA flow chart for data preparation and screening (adapted from Page et al., 2021).



³ One article (Stavrou & O’Connell, 2022) included both the intended and the enacted curriculum, so we coded only the intended part of it.

Data analysis

After literature search and screening, a thematic synthesis (Thomas & Harden, 2008) methodology was employed to answer the research questions. According to Maeda et al. (2022), thematic synthesis is based on Braun and Clarke's (2006) approach to thematic analysis, which centres on the integration of findings from primary studies to identify descriptive themes through line-by-line coding. These descriptive themes form the basis of analytical themes which further inform future explorations. For the current review, thematic coding was conducted via MAXQDA through both theory-driven and data-driven approaches, relying on both prior empirical data and current research questions. First, a preliminary coding framework was applied based on general reading of 15 relevant articles along with group discussions, with more sub-categories further added during the actual coding process depending on the concrete content of the references (See Appendix A). During this process, descriptive themes were generated regarding the stakeholders, barriers, methods, subject, educational phase, country of focus and the type of curriculum involved in the curriculum-making process. Based on the interpretation of these descriptive themes, more analytical themes were generated aligning with Prestley et al.'s (2021) levels of curriculum-making (supra, macro, meso, micro and nano), resulting in a framework for thinking of the factors in future curriculum-making in broader contexts.

Second, the researchers coded two articles separately to check the intercoder reliability and a high percentage of reliability (90%) was achieved, with all the discrepancies resolved through several rounds of discussions. Specifically, the checking of intercoder agreement was conducted via MAXQDA through the option of "Min- code overlapping rate of X% at the segment level". In this process, each coded segment is examined to check whether the other coder has assigned the same code to the segment. Also, since MAXQDA applies strict criteria for identifying disagreements, sometimes what appeared as disagreement was simply the result of different ways of coding the same information. Thus, after checking interrater agreement in MAXQDA, we manually reviewed each disagreement to see if it was a true inconsistency or simply a different style of coding (e.g., coding the same information within shorter segments or longer segments).

Findings

Characteristics of included studies

After coding the final-included 17 articles, descriptive data were generated regarding various characteristics of curriculum-making, which included 1) country of focus; 2) methodology; 3) school subject; 4) education phase and 5) curriculum type. Details of all the coded articles are provided in Appendix B.

Country of focus

Figure 2: Visualisation of country of focus.

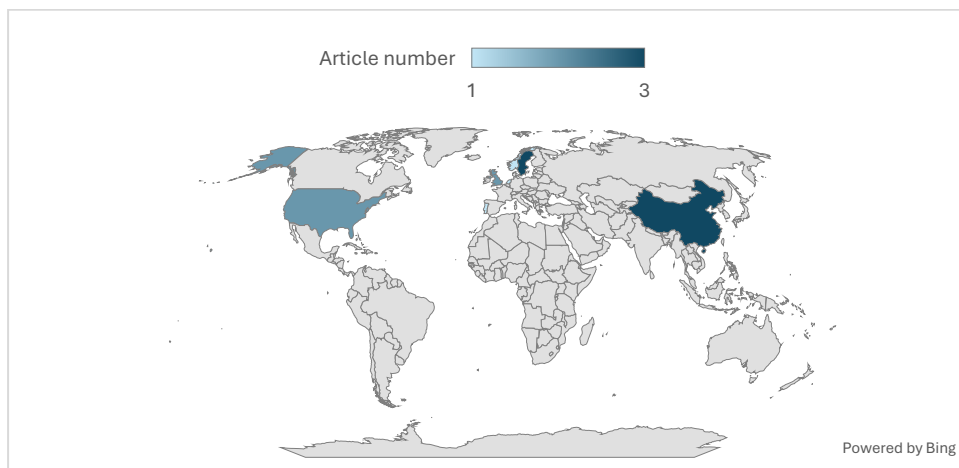
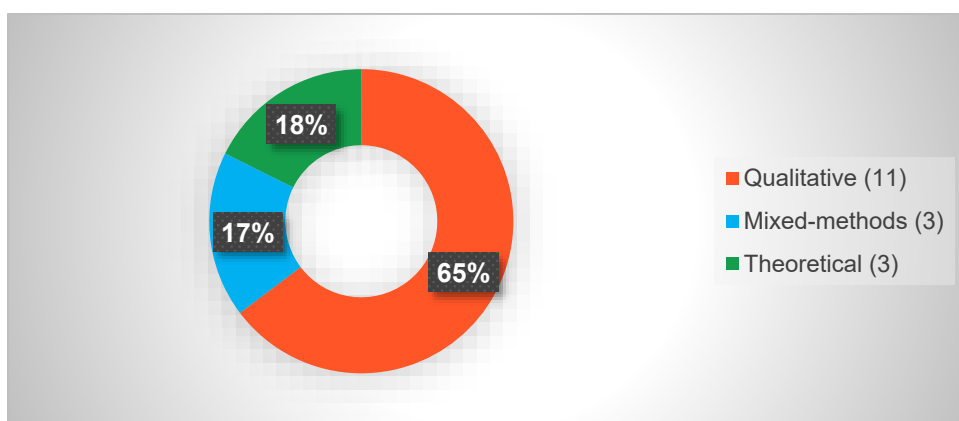


Figure 2 illustrates the country of focus for the coded articles (3 articles are country-agnostic). Among them, 2 articles focused on curricula in the United States, 2 articles centred on curricula in the UK (England and Scotland respectively), 6 articles featured curricula in other European countries (e.g., Sweden, Norway, Portugal and the Netherlands), and another 4 articles discussed curricula in China (n=3) and Israel (n=1).

Methodology

Figure 3: Visualisation of research methodology.

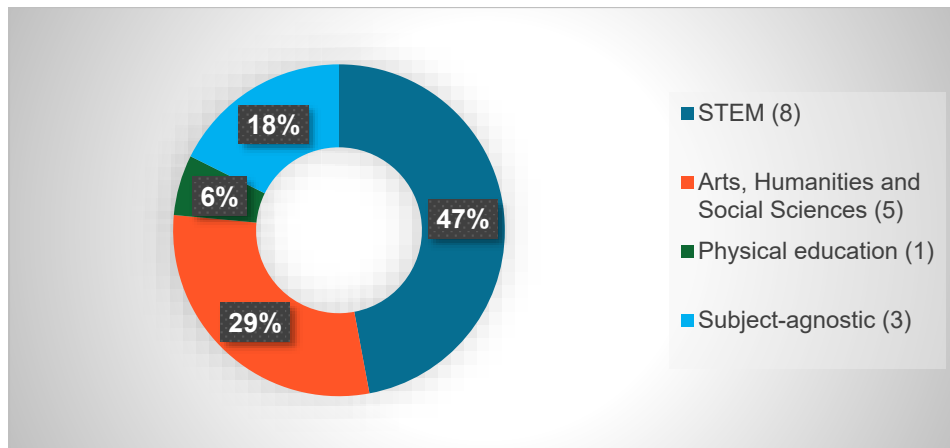


Regarding the research methodology in the coded articles, most studies (11/17) employed a qualitative methodology whereas only 3 studies used a mixed-methods methodology (involving quantitative methods). Interestingly, no study was found to use only quantitative

methodology to explore the curriculum-making process. Specifically, among all the studies using a qualitative methodology, focus groups and semi-structured interviews were common methods employed to explore teachers' experience as curriculum and decision makers during curriculum development. Furthermore, 3 articles were categorised as theoretical papers, position/discussion papers or think pieces (e.g., Roberts, 2021; Foster et al., 2021; Stravrou & O'Connell, 2022), and therefore had no research design.

Subject

Figure 4: Visualisation of Subject.



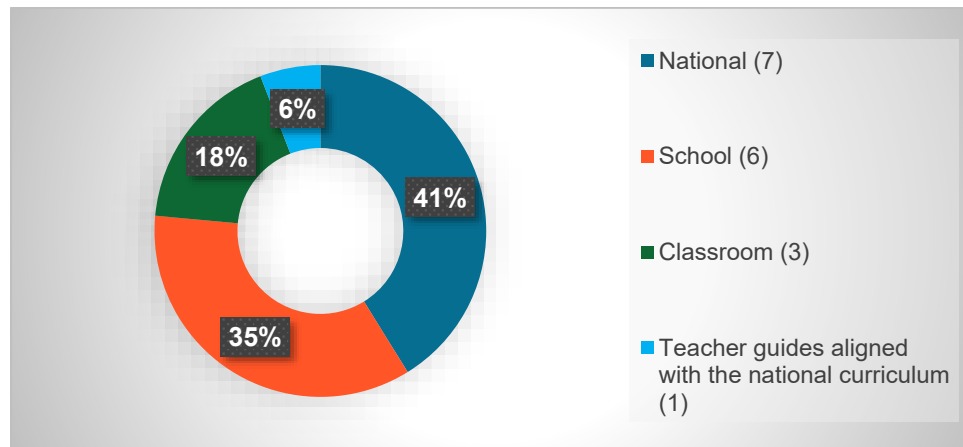
Subjects are well-distributed among the coded articles. Among them, 8 articles focused on curricula in STEM subjects such as science, physics, mathematics, computer science, biology and integrated STEM curricula. Five articles centred on subjects in Arts, Humanities and Social Sciences such as language education, music, history and geography. One article featured physical education in particular, and 3 articles were subject-agnostic as they did not mention the subject involved during the curriculum-making process.

Education phase

In terms of the education phase of the curricula discussed in the coded articles, 10 articles focused on secondary school education, 2 articles on primary education, 2 articles on the phase from primary to secondary education and another 2 articles on K-12 education more aligned with the North American context. One article did not mention the education phase as it was a theoretical paper discussing the future curriculum in general.

Curriculum type

Figure 5: Visualisation of curriculum type.



Similar to the characteristic of subject, curriculum type is also well-distributed among the coded articles. Among them, 7 articles focused on the level of national curriculum, 6 articles discussed the school-level curriculum-making in the micro site of activity, and 3 articles centred on curriculum making in classrooms on a micro level. One article discussed the design of teacher guides in alignment with the national curriculum.

Factors influencing curriculum development (RQ1)

Characteristics of curriculum-makers

School teachers were identified as the main curriculum-makers in the articles that specified their characteristics. In several studies, the curriculum-making process extended beyond teachers to also include curriculum specialists from the school district (e.g., Dai et al., 2023), university academics with subject-matter knowledge (e.g., Dai et al., 2023; Haagen-Schützenhöfer & Hopf, 2020; Hu et al., 2024), a department head (e.g., You & Craig, 2015), as well as school mentors and facilitators (e.g., Hu, et al., 2024; Huizinga, et al., 2014).

Actors/Stakeholders involved in the curriculum-making process

Successful curriculum-making should be a collaborative process involving different actors or stakeholders. Besides the curriculum-makers themselves, it was found that a wide range of actors or stakeholders were involved in the curriculum-making process on different levels in various contexts. These included:

- **Industry/subject/curriculum specialists** (e.g., Guzey, 2016; Rosenlund, 2019; Dai et al., 2023)
- **Experts from academic institutions such as professors/researchers from universities** (e.g., Guzey, 2016; Rosenlund, 2019; Dai et al., 2023)
- **Government agencies such as the Ministry of Education and local Municipal Education Commission** (e.g., Rosenlund, 2019; Huang, 2022; Grundén, 2022; Finnanger, 2024)
- **Education resource publishers** (e.g., Guzey, 2016; Rosenlund, 2019; Foster et al., 2021; Grundén, 2022)

- **Teachers/school staff** (e.g., Huizinga, et al., 2014; Guzey, 2016; Wallace & Priestley, 2017; de Almeida & Viana, 2022; Dai et al., 2023; Foster et al., 2021; Grundén, 2022; Stavrou & O’Connell, 2022; Hu et al., 2024; Finnanger, 2024)
- **Students** (e.g., Guzey, 2016; Grundén, 2022; Stavrou & O’Connell, 2022)

Principles and barriers in curriculum development

It was found from the coded articles that certain principles guided and benefitted the curriculum development process, as suggested by the authors. Some barriers were also identified in the coded articles that can undermine, compromise, complicate or derail the curriculum development process. We believe that capturing these design principles of and potential barriers to curriculum development will help figure out what good practices are for future curriculum-makers.

Principles

Maintaining curriculum coherence

Curriculum coherence is important as a highly coherent curriculum is linked with higher learner attainment. It comprises both “internal consistency” which represents the coherence of curriculum content, and “external consistency” which refers to the alignment between different parts of an education system (e.g., curriculum content, textbooks, pedagogy, exams) (Constantinou, et al., 2021). For the current review, several design principles relating to curriculum coherence were identified.

First, to maintain internal curriculum coherence which involves the coherence of curriculum elements and its alignment with schools’ vision and students’ needs, it was suggested that teachers as curriculum-makers should create well-balanced and well-aligned materials (Huizinga et al., 2014). Dai et al. (2023) also pointed out the necessity to follow a curriculum alignment approach for curriculum design to guarantee that the components are consistent with each other. In their study, the design of a curriculum on artificial intelligence was both vertically and horizontally aligned with students’ learning paces and expectations⁴. The 10 learning modules were designed to be consistent with the curriculum aims while remaining independent of each other to match students’ levels and to allow more flexibility for teachers to choose the appropriate contents. Moreover, Rosenlund (2019) recommended curriculum-makers to specify the desirable inclusion of vertical knowledge and the degree of curriculum framing (the distribution of control of the curriculum content) and classification to avoid possible inconsistencies from the beginning. Furthermore, the strategic use of consistent representations and contexts were deemed useful as mentioned by Foster et al. (2021). In their study, coherent curriculum resources on mathematics were developed through cycles of iterated trialling and refining with lessons observed 3-5 times during each of the two cycles of development. They also emphasised collaborative refinement of curriculum and resource design principles which require the gathering of experts to discuss and resolve difficult choices and the coherent incorporation of good lesson resources. Second, to guarantee external curriculum coherence, Huizinga et al. (2014) suggested involving

⁴ In Dai et al.’s (2023) article, they followed the curriculum alignment approach suggested by Anderson (2010). Horizontal and vertical alignment describe how the alignment works across subjects and over time.

teachers and relevant stakeholders during the early stages of the curriculum design process to ensure that their perceptions on the desirable outcomes and ways to achieve them are fully manifested.

Linking research with practice (e.g., learner needs, learning contexts)

As school teachers were identified as the main curriculum-makers, another design principle suggested by many is the linkage between research and practice during the curriculum-making process. Foster et al. (2021) pointed out that associating research with classroom practice is essential for effective curriculum and resource design. They also put forward four relevant design principles⁵ for better mathematics curriculum design, i.e., 1) harnessing and developing the skills and expertise of teachers; 2) balancing the teaching of fluency, reasoning and problem solving; 3) giving explicit attention to important errors and misconceptions, and 4) comparing and contrasting alternative methods. In addition, the provision of documents and checklists on key concepts and curriculum assessment, along with a template or theoretical framework for curriculum change at the very beginning, was also crucial for quality curriculum design (de Almeida & Viana, 2022).

More specifically, learner need is an important practical factor that needs to be considered during curriculum-making. Haagen-Schützenhöfer and Hopf (2020) suggested several general curriculum design principles that address the theoretical aspects of teaching and learning underpinned by research evidence. These include 1) developing curriculum based on research on learners' perspectives and conceptions; 2) providing student-centred learning activities that promote active learning; 3) supporting successive learning and conceptual change through continuous strategies; 4) making learning obstacles explicit in the learning process to prevent incorrect thinking; 5) developing abstract subject matter principles from personal experiences tied back to individual perceptions; 6) embedding context into learning to attract students; 7) using learner-friendly forms of representations to promote concept development; 8) arranging content structure on the meso- and macro-level sensible to learner needs.

Context is yet another important practical factor to consider during curriculum-making. For example, when developing an integrated STEM curriculum, Guzey et al. (2016) introduced the STEM integration framework including the use of motivating and engaging context⁶ to help students make sense of the unit activities. Huang (2022) incorporated local, national and global contexts into the design of a glocalised school-based curriculum for K-12. This also included the analysis of various contextual factors such as historical, cultural and political influences. Similarly, Hu et al. (2024) also emphasised the necessity to create localised curriculum artefacts and to achieve localised reconstruction of curriculum contents. Furthermore, Roberts (2021) mentioned the significance of context (e.g., public health messages and contemporary examples such as Covid-19) in the biology curriculum development. She put forward two key principles for the next iteration of intended biology

⁵ In Foster et al.'s (2021) article, they put forward five design principles in total. Since the final principle was more aligned with curriculum coherence, it was not mentioned here.

⁶ Guzey et al. (2016) defined "motivating and engaging context" as the inclusion of realistic situations, handling of issues that are meaningful to students, incorporation of issues that are relevant to students with a variety of backgrounds, and provision of a compelling purpose for doing STEM integration activity.

curricula. First, the curriculum should focus on the most important aspects of the subject and be changed as infrequently as possible. Second, as knowledge alone does not lead to behavioural change, curriculum developers should also convey to learners the knowledge and skills they need to evaluate health information.

Supporting and developing skills in teacher curriculum-makers

As mentioned earlier, most coded articles discussed the process of curriculum-making with teachers being the principal curriculum-makers. However, several authors called for more support from curriculum and subject specialists for future collaborative curriculum design. For instance, Huizinga et al. (2014) suggested that the Ministry of Education needs to support teachers with expertise from curriculum specialists in all stages of curriculum design, focusing on enhancing teachers' skills and knowledge in curriculum design expertise, pedagogical content knowledge and curriculum consistency. Also, Rosenlund (2019) recommended that researchers who are familiar with the subjects should be included in the curriculum design team as well.

Another important principle is to develop skills and confidence in teachers who serve as curriculum designers. Grundén (2022) found in her study that teachers tended to believe that they were less competent than actors with formal power in deciding the structure of teaching, and teachers wanted more curriculum-making activities in the macro and meso sites. Moreover, curriculum-making process in the supra site also needs to be made visible and discussed among teachers.

Promoting transparency, accountability and clarity in decision-making

As the curriculum-making process usually involves various actors/stakeholders, Finnanger (2024) emphasised the importance of transparency, accountability and clarity in decision-making. To be specific, she mentioned that when multiple stakeholders are involved in the curriculum-making process, strong transparency helps clarify the influence of various actors and identify instances where authorities act independently. Ensuring that authorities are accountable for their decisions supports the inclusion of diverse perspectives in the final curriculum, which in turn enhances its legitimacy among educators and facilitates smoother implementation within the school system. Clarity is also deemed important for curriculum-making as clearly defined roles at the start of the process will help participants understand what is expected from them and what they can expect from others, reducing chances of misunderstandings about the task and confusions about duties. Interestingly, Finnanger's study also discovered that teachers who had previously worked with authorities would be likely to react more positively to the finalisation of the curriculum documents. It is also crucial to clarify the practical realities of macro curriculum-making and the responsibilities of different actors from the early start.

Barriers

Lack of curriculum consistency

The maintenance of curriculum coherence is essential for effective curriculum-making (e.g. Rosenlund, 2019). However, the lack of curriculum consistency also remains a potential barrier in the current curriculum development process as reported by many.

According to de Almeida and Viana's (2022) study in the Portuguese context, the internal consistency of the curriculum benchmark⁷ (part of the intended curriculum) was very low and there was no external consistency, perhaps principally due to poor operationalisation of curriculum design and lack of subject-specific theoretical perspectives. Foster et al. (2021) mentioned that apparent consistency in textbook layout can mask problems in teaching methods and the learning logic. They also pointed out that as the textbook is often written by different authors, there's little opportunity for collaborative discussion or redrafting. This has further led to the inconsistency of curriculum resources which may end up with contradictory content. Similarly, Rosenlund (2019) realised that the presence of vertical knowledge (structured, cumulative, disciplined-based knowledge) discourses in the Swedish history curriculum was inconsistent with loosely-framed curriculum aims and asymmetrical relationships between different parts. This could be caused by the exclusion of educators on history education in the curriculum-making process.

Teachers' confusion and exclusion in the curriculum-making process

One of the biggest barriers for teacher curriculum-makers, as reported by many, is their confusion with different sites of activity (see Priestley et al., 2021, p.13) and their exclusion in decision-making during the curriculum-making process. In Grundén's (2022) study, she found that teachers had confusions regarding in what site the curriculum-making activities occur. Also, teachers made assumptions about the relationship between actors, e.g., the textbook and the curriculum agency, as well as the textbook and the national curriculum, that actually did not exist. Moreover, it was discovered that teachers desired a detailed intended curriculum while also valuing the freedom to design their teaching based on their experience and student needs, which can lead to significant differences between the intended curriculum and the curriculum actually planned by individual teachers. Likewise, Rosenlund (2019) argued that as the Swedish history curriculum was found to be loosely-framed, the curriculum aims did not specify what content should be covered in the classroom, which may lead to confusions among the teachers.

Regarding the role of teachers, Ahl et al. (2017) analysed how curriculum developers communicated with teachers through the language of teacher guides, a core component of the intended curriculum, for lower secondary schools in Sweden. Examples were identified where the voice of the teacher guide did not go beyond the students' textbook and did not take into account teachers' previous work and experience, thereby distancing teachers from the actual learning context. This bypass of teachers as mediators and participants in the making of teacher guides as part of the intended curriculum may gradually decrease teacher agency in their professional practices in the long term. Finnanger (2024) also found that in the Norwegian context, the national curriculum-making process remained largely governed and regulated by the central authorities. Teachers remarked that they had some degree of influence on the final curriculum, but their voices were largely excluded from the final decision-making. Document analysis also showed that the teacher's mandate⁸ was vaguely described, which was aligned with teachers' perceptions. This would cause further barriers

⁷ "Curriculum benchmark" was defined in the Portuguese context as a set of defined standards or essential learnings that serve as guiding reference points within the national curriculum framework.

⁸ Mandate here refers to the combination of authority and responsibility that members of the curriculum committees were given by central authorities to act as macro curriculum makers (Finnanger, 2024, p.3).

to curriculum-making because although teachers were involved in the macro curriculum-making process, it did not necessarily mean that their participation would significantly influence the curriculum-making outcome compared with other “more important” actors/stakeholders in education reform.

Lack of knowledge and training in curriculum development

Another barrier reported by many teachers as curriculum-makers is that they lack knowledge of curriculum development and there is also a lack of training to develop such expertise. Katz (2015) calls for more deliberate attention to teachers’ professional learning as part of the curriculum-making process as most educators in Israel lack preservice education. de Almeida and Viana (2022) reported that the main barrier for Portuguese teachers, in their role as curriculum-makers, is a lack of solid knowledge in curriculum theory, which is often implicitly stated in curriculum policies. This in turn increases the workload of teachers when designing the curriculum benchmark. Difficulties were also reported regarding the writing of pedagogical strategies linking different subject content, which could be traced to the initial training of teachers, the overreliance on textbooks, as well as the lack of collaboration habits among teachers.

Lack of explicit theory and consistent methodology

The lack of explicit theory or theoretical framework and the lack of a consistent methodology were also reported by many as barriers to effective curriculum-making. Haagen-Schützenhöfer and Hopf (2020) argued that Physics curriculum design has long been criticised for inconsistent methodologies due to unclear links between theory and practice and poor translation of learning theories into the curriculum and curricula materials. They also pointed out that although there existed many articles on curriculum design, only a few of them illustrated the translation of learning theories into the shaping of curriculum design in practice. Through their own practices in integrating the two, Haagen-Schützenhöfer and Hopf revealed the challenging and time-consuming nature of developing theory-driven and evidence-based curricula. For instance, carefully-designed instructional components can sometimes fail completely, requiring a restart from the beginning. The need to break learning processes into very small segments for detailed analysis also made the curriculum-making process very time-consuming. To ensure that the designed curriculum will be practical for educators rather than merely describing idealised situations in the curriculum documents remains yet another challenge.

Influences on curriculum development

Through coding all the relevant articles, several factors were found to exert an impact on the overall curriculum-making process. These include sites of activity, as well as contextual, institutional and pedagogical factors.

Sites of activity

According to Priestley et al. (2025), curriculum-making is conceptualised as an activity that can happen across multiple layers of education system, or what is called different “sites of activity” comprising the supra, macro, meso, micro and nano levels. The current review did not examine the nano level of activity as it is usually concerned with curriculum-making and pedagogical interactions inside the classroom as part of the enacted curriculum, which is out of the scope of the current review.

On a supra level, it was found that inter-state guidance and policy have somewhat shaped the curriculum-making process under the influence of transnational organisations. Specially, de Almeida and Viana (2022) pointed out that transnational organisations, such as OECD and UNESCO, have produced guidelines that stressed the importance of curriculum autonomy, which in turn prompted a rhetorical shift towards a model of curriculum autonomy in the specific national context. In their study, the outlook of the curriculum benchmark (“Essential Learning”) was inspired by the OECD’s *Future of Education and Skills 2030* project and then adapted in the Portuguese context at the local level.

Also, several factors were found to impact curriculum-making on a macro level, including the national education goals, the national development programme and the national tests/exams. First and foremost, national education goals constitute a significant role in influencing curriculum-making. de Almeida and Viana (2022) found that the re-launch of curriculum autonomy policies for primary and secondary education by the Portuguese government calls for the development of a new curriculum benchmark due to its prior discontinuity. Moreover, Grundén (2022) found that teachers implicitly referred to *the Education Act*, which is the main legal framework governing the Swedish education system, during their mathematics curriculum planning to cater to different student needs. She also found that teachers were influenced by the national development programme provided by the *National Agency of Education* when planning the curriculum. Furthermore, mandatory national tests and assessment materials were found to exert a great influence on teachers’ curriculum planning at both organisational and content levels.

In terms of micro-level curriculum-making, education materials such as textbooks were found to be an important factor influencing the curriculum development process. For example, the content and structure of the textbook often formed the basis for teachers’ curriculum planning, providing inspirations and re-assurance (to make sure everything would be covered), as discovered by Grundén (2022) and Dai et al. (2023). Huizinga et al. (2014) also reported that curriculum materials, such as templates, curricular frameworks and evaluation guidelines, served as essential tools in supporting teachers’ curriculum design.

However, it is noteworthy that no information was found in the coded articles regarding curriculum-making in the meso site of activity, e.g., the production of curriculum guidance and resources, and the leadership of curriculum-making, which warrants further discussion.

Contextual factors

Curriculum decisions are not made in a vacuum, but deeply rooted in the social, economic, political and cultural contexts in which they are derived. Among all the relevant coded articles, the curriculum-making process has also been influenced by socio-economic elements, power relationships and the location of learning. In Roberts’ (2021) article, it is suggested that developers of intended national curricula on biology need to take socio-economic factors into account to ensure that all children are equipped with the knowledge required to make informed choices and respond to future crisis. Power also remains a salient factor influencing curriculum-making. For instance, Dai et al. (2023) noted that the central government’s emphasis on computer science education along with the advocacy of it in cascaded national policies have aroused public attention, which further prompted teachers’ participation in curriculum-making on artificial intelligence. As mentioned earlier, Grundén (2022) found that teachers were influenced by other actors with informal and formal

power when planning the curriculum, and this power relationship is worthy of further discussion and critical examination. Political aims and ambitions, as pointed out by Finnanger (2024), also have roles to play in the teachers' macro curriculum-making process.

Institutional capacity

Differences in institutional capacity, particularly in funding and professional expertise, greatly influenced curriculum-making. Dai et al. (2023) mentioned in their study that the AI curriculum development was sponsored by a seed grant from the school district. The competence and skills of curriculum developers—who in most studies are identified as school teachers—also had a substantial influence on the overall curriculum-making process. Huizinga et al. (2009, 2014) identified three categories of design expertise that teachers need to embrace during curriculum-making, i.e., curriculum design expertise, pedagogical content knowledge and curricula consistency expertise. These categories of design expertise were further echoed and adapted by de Almeida and Viana (2022) to form a theoretical model comprising the knowledge and skills required for macro-level curriculum-making. This model includes 1) generic design and process expertise such as intra-personal, inter-personal and process-related skills, and 2) specific design expertise such as curriculum design expertise, subject matter knowledge, pedagogical content expertise and curricular consistency expertise. Finnanger (2024) also pointed out that teachers' experiences associated with teaching, classroom practices, micro curriculum-making, and practical routine work are essential to their roles as macro curriculum-makers. Among them, teachers' experiences in school practices, which other actors do not have, are considered extremely valuable:

“Teachers have first-hand experiences of interpreting macro curriculum frameworks, they have vast experiences with students, and they have knowledge of and competence in teaching their subjects. Their experiences also include an understanding of what is possible to do within the practical context of schools and classrooms, which is important to make national curriculum frameworks usable documents for teachers in their everyday lives at school”. (Finnanger, 2024, p. 12)

Furthermore, Stavrou and O'Connell (2022) argued that rather than being a mere deliverer of the curriculum, teachers need to develop their familiarity with the stated curriculum aims, learning outcomes, subject content, teaching and assessment methods, as well as a deeper understanding of curriculum theory. Ahl et al. (2017) argued that with field specific knowledge, curriculum-makers can mediate between their specialist field and their teaching practices through the design of curriculum material as part of the intended curriculum.

Pedagogical factors

Several pedagogical factors were also found to influence curriculum development. These factors involved various elements such as subjects (subject content and organisation), teachers (teachers' networks and identities) and students (students' needs, abilities and interests). As mentioned by Clandinin and Connelly (1992), the strategy of teachers as curriculum designers views teachers as integral parts of the curriculum-making process where teachers, subject matter and students interact in a dynamic manner.

First and foremost, the mastery of subject content and organisation constitutes an important part of the curriculum-making process. For example, de Almeida and Viana (2022) pointed out that the possession of updated subject matter knowledge is essential for teachers when developing the curriculum. Hu et al. (2024) also emphasised the necessity of incorporating core geographical concepts and powerful geographical knowledge into geography curriculum-making process. As “boundary workers”, teachers should apply their pedagogical and disciplinary knowledge to designing curriculum artefacts. Stavrou and O’Connell (2022) further mentioned that for music curriculum-making, subject content, including skills, knowledge, attitudes and behaviours, forms a significant part of the official music curriculum-as-plan.

Moreover, teacher’s networks and identity serve as factors influencing the curriculum-making process. Guzey et al. (2016) pointed out that teachers’ unique experiences and knowledge in different areas will collaboratively contribute to more effective design of curriculum materials. Along with school structure and culture, teacher identity shaped the concrete decision-making during curriculum development (Katz, 2015). This was echoed by Dai et al. (2023) as they found that Computer Science teachers negotiated and interpreted policy to their advantage, thereby shaping the goals and vision of the intended AI curriculum. Grounded in their professional identities, they positioned the AI curriculum within the complex interplay of policy agenda, career challenge and the curriculum context. Wallace and Priestley (2017) added that teachers need to blend their own identities and lived experience into their adoption of new curriculum language to incorporate new curriculum standards into their lesson planning. Teachers also brought their own unique teaching philosophy and style into curriculum-making (You & Craig, 2015).

Furthermore, students’ needs, abilities and interests have an impact on the curriculum-making process. Dai et al. (2023) argued that students could serve as curriculum evaluators as their learning experience and their feelings and thoughts served to maintain accountability of the teacher-initiated AI curriculum. Also, students’ interests and characteristics were prioritised in curriculum development through designing hands-on gamification activities suited to young learners’ everyday AI learning and diverse socioeconomic backgrounds. During the process of curriculum planning, Grundén (2022) and Hu et al. (2024) noted that teachers need to consider students’ experience and needs when designing specific curriculum tasks and artefacts. Teachers’ knowledge of different student groups also serves as an important element during the curriculum-making process (Finnanger, 2024).

Practices in curriculum development (RQ2)

The second research question asks whether curriculum developers use research evidence and learning theories during practical curriculum-making activities. In general, the use of research evidence and theoretical knowledge was much emphasised. However, the use of concrete learning theories was rarely mentioned in practical curriculum-making activities and warrants further investigation.

The use of research evidence and theoretical knowledge

Research evidence and theoretical knowledge were frequently referenced in the curriculum-making process across the coded articles, although in some cases they were only mentioned briefly.

To be specific, in Foster et al.'s (2021) position paper, they outlined a research-informed school mathematics curriculum using Dietiker's conceptual framework of mathematics curriculum as a story to draw out key curriculum design principles. Roberts' (2021) theoretical paper emphasised that it was crucial to apply "powerful knowledge". i.e., key ideas that enable learners to break the limits of their own experiences and access more reliable explanations of the world, to determining the core concepts in a curriculum. In Stavrou and O'Connell's (2022) theoretical paper, they also stressed that curriculum in the form of an official document should be underpinned by curriculum theories and the music education philosophy.

During the design of STEM integration curriculum materials in Guzey et al.'s (2016) article, literature was employed to develop a STEM integration curriculum assessment tool to evaluate the newly-developed curriculum units. When examining how subject-specific competencies were combined with explicit level descriptors in the Swedish history curriculum, Rosenlund (2019) used concepts from both curriculum theories put forward by Basil Bernstein, as well as research on history education such as first- and second-order concepts⁹. Similarly, Haagen-Schützenhöfer and Hopf (2020) employed the design-based research (DBR) approach as a model for systematic curriculum development, which translated theoretical knowledge and research evidence into curriculum design principles. Moreover, it was discovered that curriculum development also referred to research findings on domain-specific effective learning processes and learners' perspectives and conceptions. Huang (2022) mentioned in her article that the development of a glocalised school-based early childhood curriculum draws on several existing well-known curriculum models such as Tyler's principles for curriculum design and the school-based curriculum development models proposed by Furumark and McMullen. The development of national educational curriculum in the local context was also influenced by various international educational philosophies, theories and curricula approaches such as the Montessori Method, the Reggio Emilia Approach, the High Scope Curriculum, the Multiple Intelligences Curriculum and the Early Years Foundation Stage¹⁰. Furthermore, Hu et al. (2024) acknowledged the importance of integrating theoretical insights and practical teaching experiences in designing curriculum artefacts.

⁹ In history education research, first-order concepts refer to the content knowledge of the past, whereas second-order concepts refer to metahistorical concepts or disciplinary ways of interpreting the past.

¹⁰ *The Montessori Method* is an educational approach developed by Maria Montessori that emphasises self-directed learning, hands-on materials, mixed-age classrooms, and the teacher as a guide. *The Reggio Emilia Approach* is a child-centred, project-based approach originating in Reggio Emilia (Italy) which views the environment as a "third teacher" and emphasises collaboration and creativity. *The High Scope Curriculum* is a research-informed curriculum based on active participatory learning. *The Multiple Intelligences Curriculum* is a curriculum model based on Howard Gardner's theory that intelligence is multi-dimensional. *The Early Years Foundation Stage* is the statutory framework for early years in England. It sets standards for learning, development, and care, covering seven areas of learning and the characteristics of effective learning.

The employment of learning theories

Among the coded articles, it was found that the use of learning theories in practical curriculum-making activities was rarely explicitly stated, with only two articles explicitly mentioning and explaining the specific learning theories employed during the curriculum-making process.

First, Haagen-Schützenhöfer and Hopf (2020) used a DBR framework for secondary school optics curriculum development. They pointed out explicitly that the theoretical framework of their curriculum design was based on a moderate constructivist perspective of learning where learning is conceptualised as establishing and adapting cognitive structures during learners' interactions with the environment. This learning could take place in formal or everyday settings both consciously and unconsciously. They also used the model of educational reconstruction adapted from Kattmann and Duit aligning with the constructivist learning theories.

Also, Dai et al.'s study (2023) explicitly stated that their collaborative construction of primary school curriculum on artificial intelligence was guided by an integrated theoretical framework of social constructionism which believes that social realities and human actions/ideas are mutually shaped. Specifically, their curriculum development was guided by a series of social constructionist theories about curricula, stakeholders, and teacher agency. They emphasised the situated and relational construction of curriculum practices among participants, aiming to find out how teachers, serving as curriculum-makers, navigated the complex environment of external influences and local systems.

Discussion and Conclusion

With regard to the factors influencing intended curriculum development and how research evidence and learning theories are used during the practical curriculum-making activities, the current review identified the key developers and actors/stakeholders involved in the curriculum development process, the good principles of and barriers to curriculum development, as well as the multi-faceted influences on curriculum development. Among these findings, several notable points are worthy of further discussion in relation to the relevant literature in the field.

Characteristics of curriculum development

Among all the coded articles, it was found that some characteristics were evenly distributed (e.g., subjects, educational phase, curriculum type) while some were not comprehensively covered (e.g., country of focus, methodology). Specifically, in terms of the country of focus, most of the publicly available studies were set in the European, North American and Asian contexts, with no relevant articles identified that illustrate the curriculum-making process in countries in Latin America, Africa or Oceania. This calls for more future research on curriculum-making practices in less represented contexts or jurisdictions, especially for jurisdictions like Canada (e.g., Ontario) and New Zealand where additional scope for indigenous rights may be provided in the curricula. Regarding the methodology employed in the coded articles (except three theoretical papers), most studies employed a qualitative-oriented methodology while none of the studies used quantitative methodology alone to examine the process of the curriculum-making. This somewhat indicates that exploring the

nuanced process of curriculum development necessitates a thorough understanding of the perspectives of multiple stakeholders, which can be best achieved through qualitative methods such as focus groups or semi-structured interviews. While quantitative methods are effective in identifying causal relationships, it remains necessary to combine them with qualitative approaches to fully capture the landscape of practical curriculum-making processes, as evidenced by several coded articles that employed mixed-methods designs to examine curriculum development.

Factors influencing curriculum development

Regarding the sites of activity of curriculum-making, this review discovered that empirical evidence about the supra level of curriculum-making was somewhat limited, and information regarding the meso level of curriculum-making was severely lacking. This finding echoes Priestley et al. (2025) who suggest that the supra- and meso-level of curriculum-making were not easily accessible in the public domain in English. Under this circumstance, more research needs to be conducted or translated into the English language concerning these two sites of activity for a more holistic and dynamic conceptualisation of curriculum. Also, it is necessary to clarify, through robust research evidence, how different levels or sites of activity are interconnected during the curriculum-making process, as the interests of various parties may conflict, be negotiated and become conflated across the supra, macro, meso and micro levels in the development of the intended curriculum. As Bouw et al. (2021) suggested, design considerations at one level may have implications for design decisions at other levels. Thus, alignment within and across the various design levels (e.g., macro, meso and micro levels) is needed to maximise learning.

Speaking of the curriculum-makers, it is interesting to note that school teachers constituted the main curriculum-developers in the coded articles, although a range of other actors or stakeholders (e.g., university academics, curriculum specialists, government agencies, textbook developers, etc.) were also involved in the curriculum development processes. However, it was noted that in some cases, although teachers served as the curriculum-makers, they were excluded from the final decision-making and their participation as curriculum makers did not lead to the desired curriculum-making outcome. Moreover, some teachers had confusions about different sites of activity for curriculum-making, embraced false assumptions about the relationship between various actors/stakeholder, and felt less confident in their skills and expertise in curriculum-making compared with other specialists. Overall, teachers' exclusion, confusion and lack of necessary expertise for curriculum-making, as reported in many studies, highlight the need for more systematic and professional training to better prepare teachers, both mentally and practically, to take on the role of curriculum-makers. At the same time, rather than acting as consultants or helpers, other actors/stakeholders also need to be actively involved as curriculum-makers during the curriculum-making process. Viennet and Pont (2017) identified that lack of stakeholder involvement was one of the key reasons behind ineffective curriculum development. Insights from different stakeholders may bring and contribute diverse expertise and valuable professional and contextual knowledge for curriculum design. Also, as mentioned by Vreuls et al. (2025), it is important to consider which stakeholders to involve, when to involve them, and the establishment of sustainable relations throughout the entire curriculum development

process. In addition, Bouw et al. (2021) emphasised that the establishment of partnerships between different stakeholders is essential at the macro level of curriculum-making.

Good practice underpinning curriculum development

On the one hand, several effective curriculum design principles were identified through empirical evidence, while a number of barriers were also noted that may inform future good practice. In general, curriculum coherence at both internal and external levels, attention to student needs and learning contexts, teachers' design expertise as well as the transparency and clarity throughout the overall process were specifically emphasised. Moreover, the current review found that sustaining good practice in curriculum-making requires consideration of additional influencing factors. These include contextual factors (e.g., social, economic, political and cultural elements), institutional capacity (e.g., developers' competence, available funding) and pedagogical factors (e.g., interactions among subjects, teachers and students).

On the other hand, findings of the current review reveal that although research evidence and theoretical knowledge were adequately referenced in the coded articles, learning theories were rarely addressed during the curriculum-making process, with only two studies clearly identifying the use of constructivist and social constructionist learning theories. This echoes previous research conducted by Ireland and Majewska (2024). It also supports results from Morrish et al.'s (2025) research on international comparison of curriculum policy, which explored learning theories as part of one of its research questions and found that references to learning theories appeared in the curriculum documents of only 2 of the 14 jurisdictions examined. A key recommendation arising from the current finding is to equip prospective curriculum-makers with the appropriate knowledge of learning theories, as well as the competence and skills to apply relevant learning theories in the curriculum development with sound justification. Last but not least, as suggested by Oates (2018), the development of evidence-based resources that link learning theories with teaching practices is also necessary to support future curriculum developers (including teachers, academics and specialists, etc.) in confidently grounding and describing learning theories in their curriculum-making activities, which warrants further exploration (see Majewska et al., 2026)

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Appendix A: Final coding categories

Code System

Who are curriculum developers
Curriculum design principles
Barriers on curriculum development (what not to do)
Actors/Stakeholders
Industry/Subject/Curriculum specialists
Academic institutions
Government
Education resources/publishers
Headteachers
Teachers/ school staff
Students
Influences on curriculum development
Supra level
SUPRA-Policy borrowing and lending
SUPRA-Economic development goals
SUPRA-Inter-state guidance and policy (e.g., OECD)
Macro level
MACRO-National tests/exams
MACRO-National development programme
MACRO-National educational goals
Meso level
MESO-Educational materials and products influencing curriculum development

Pedagogical factors
Pedagogical-Subject content (academic and vocational)
Pedagogical-Subject organisation (subject-based vs. integrated curriculum)
Pedagogical-Teachers' networks
Pedagogical-Teacher identity (teachers' perceptions of their roles)
Pedagogical-Student needs and abilities
Pedagogical-Students' interests
Institutional factors
Institutional-Competence/skills of curriculum developers
Institutional-Available funding
Contextual factors
Contextual-Socio-economic factors
Contextual-Personal or nationwide/socio-cultural/political views and agendas
Contextual-Power (e.g., social, political)
Contextual-Location of learning (including its culture)
Practices in curriculum development (research evidence and theoretical knowledge)
Practices in curriculum development (learning theories)
Method
Theoretical
Mixed methods
Quantitative methods
Qualitative methods
Study focus
Subject specific/agnostic

Physical education

Vocational subjects

STEM (Science, Technology, Engineering, Maths)

Arts, humanities and social sciences

Subject agnostic

Educational phase

Educational phase mentioned

Educational phase not mentioned

Country of focus

Country

Country agnostic

Curriculum type

Classroom

School

National

Appendix B: Detailed characteristics of coded articles (in chronological order)

Author(s)	Title	Methodology	Subject	Education phase	Country/ Jurisdiction of focus	Curriculum type
Huizinga et al. (2014)	Teacher involvement in curriculum design: Need for support to enhance teachers' design expertise	Qualitative (interviews with teachers and facilitators)	Subject-agnostic	Lower secondary education	the Netherlands	Classroom
Katz (2015)	Harnessing teacher potential as Israel education curriculum developers	Qualitative (IEC documents, interviews, observations, artefacts)	Arts, Humanities and Social Sciences (Jewish education)	Secondary education	Israel	School
You & Craig (2015)	Narrative accounts of US teachers' collaborative curriculum making in a physical education department	Qualitative (narrative inquiry)	Physical education	Secondary education	United States	School
Guzey et al. (2016)	Building up STEM: An analysis of teacher-developed engineering design-based STEM integration curricular materials	Mixed-methods	STEM (integrated)	K-12 (Kindergarten to secondary education)	United States	Classroom
Ahl et al. (2017)	The voice of curriculum developers in teacher guides	Qualitative (text analysis)	STEM (mathematics)	Lower secondary schools	Sweden	Not mentioned
Wallace & Priestley (2017)	Secondary science teachers as curriculum makers: Mapping and designing Scotland's new curriculum for excellence	Qualitative (empirical phenomenology)	STEM (science)	Secondary education	Scotland	National
Rosenlund (2019)	Internal consistency in a Swedish history curriculum: A study of vertical knowledge discourses in aims, content and level descriptors	Qualitative (document content analysis)	Arts, Humanities and Social Sciences (history)	Upper secondary school	Sweden	National

Author(s)	Title	Methodology	Subject	Education phase	Country/Jurisdiction of focus	Curriculum type
Haagen-Schützenhöfer & Hopf (2020)	Design-based research as a model for systematic curriculum development: The example of a curriculum for introductory optics	Mixed methods (DBR)	STEM (optics)	Secondary education	Country-agnostic	School
Foster et al. (2021)	Principles for the design of a fully-resourced, coherent, research-informed school mathematics curriculum	Theoretical (position paper)	STEM (mathematics)	Secondary education	England	School
Roberts (2021)	How might Covid-19 affect the biology curricula of the future? Two principles for curriculum developers to consider	Theoretical	STEM (biology)	Not mentioned	Country-agnostic	National
Dai et al. (2022)	Collaborative construction of artificial intelligence curriculum in primary schools	Qualitative (ethnographic observation, teacher interviews, artifacts)	STEM (computer science)	Primary education	China	Classroom
de Almeida & Viana (2022)	Teachers as curriculum designers: What knowledge is needed?	Qualitative (focus group interviews)	Subject-agnostic	Primary and secondary education	Portugal	National
Grundén (2022)	The planned curriculum-Not just a matter of teachers	Qualitative (focus group discussions)	STEM (mathematics)	Primary education	Sweden	School
Huang et al. (2022)	A conceptual framework for developing a glocalized school-based curriculum	Qualitative (synthesising curriculum models)	Subject-agnostic	K-12 (particularly early childhood education)	China	School
Stravrou & O'Connell (2022)	Music teachers at the crossroads: navigating the curriculum as plan and lived	Theoretical	Arts, Humanities and Social Sciences (Music)	Secondary education	Country-agnostic	National (first half of the article)
Finnanger (2024)	Teachers as macro curriculum makers: Mandate and influence in the Norwegian LK20	Qualitative (document analysis, interviews with teachers and subject supervisor)	Arts, Humanities and Social Sciences (English as a Foreign Language)	LK20-Primary and secondary education	Norway	National

Author(s)	Title	Methodology	Subject	Education phase	Country/ Jurisdiction of focus	Curriculum type
Hu et al. (2024)	Evolving into curriculum makers: the pivotal role of geography teachers as “boundary teachers”	Mixed-methods (within a collaborative action research framework)	Arts, Humanities and Social Sciences (Geography)	Upper secondary school	China	National