

Mapping Global Research on Collaboration and Consultation in Learning Disability Education: A Scopus-Based Bibliometric and Science Mapping Analysis

Rennie Ronil Gumbalai, Leanora Jane Jasmin, Mohamad Ridzuan Bin Awang & Syar Meeze Mohd Rashid

Faculty of Education, The National University of Malaysia
Corresponding Author Email: cikgumeeze@ukm.edu.my

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Abstract

Collaboration and consultation are frequently described as essential features of special and inclusive education, yet their development within learning disability education has not been mapped in a sufficiently focused way. Students with learning disabilities often require coordinated support that cuts across classroom instruction, specialist assessment, family involvement, assistive technology and psychosocial guidance. This study therefore examined the global research landscape of collaboration and consultation in learning disability education through a Scopus-based bibliometric and science mapping analysis. Data was retrieved from Scopus on 9 May 2026 using a search strategy that combined terms for learning disabilities, education, collaboration and consultation. After screening by year, document type, language and subject area, 469 articles and reviews published between 2010 and 2026 were retained. Performance analysis was used to examine publication growth, productive sources, highly cited documents, authors and country contributions, while VOSviewer was used to visualize author density, country collaboration and keyword co-occurrence. The findings show a clear increase in publication activity after 2022, with the United States and United Kingdom functioning as the main knowledge hubs. The keyword structure is organized around learning disabilities, dyslexia, special education, inclusive education, collaboration, co-teaching, professional development, consultation, neurodiversity and technology-supported learning. A notable finding is that collaboration is more visible than consultation, suggesting that consultation remains underdeveloped as a distinct research construct. The study contributes a structured evidence base for future work on multidisciplinary, culturally responsive and outcome-oriented support for learners with learning disabilities.

Keywords: Bibliometric Analysis, Collaboration, Consultation, Learning Disability, Special Education

Introduction

Learning disability education sits at a demanding intersection of diagnosis, pedagogy and inclusion. In everyday school practice, students with learning disabilities may experience difficulties in reading, writing, mathematics, attention, language processing or executive functioning, but these difficulties rarely appear in a neat or isolated form. Grigorenko et al. (2020) emphasize that specific learning disabilities require sustained scientific, educational and support-oriented responses rather than narrow remediation alone. This makes learning disability education a practical concern for inclusive school systems because learners' progress is shaped not only by individual profiles, but also by classroom expectations, teacher expertise, family resources, assessment practices and access to specialist support.

The need to examine this topic is increasingly urgent because inclusive education systems continue to place substantial responsibility on classroom teachers while support capacity remains uneven. OECD (2026) reports from TALIS 2024 that 37% of teachers across participating systems identify modifying lessons for students with special educational needs as a source of stress, while only 45% feel prepared to adapt standardized assessment. These figures suggest that inclusion cannot depend on teacher goodwill alone. It requires structured professional support, shared expertise and coordinated systems through which general educators, special educators, families and allied professionals can plan, implement and evaluate support for learners with learning disabilities. Within this context, collaboration and consultation are particularly important. Collaboration refers to shared professional work, such as co-planning, co-teaching, parent-school partnership, multidisciplinary problem-solving and shared intervention monitoring. Consultation is more specific: it involves the structured exchange of expertise, usually when a specialist, experienced practitioner or professional team supports another person to make better decisions about assessment, instruction, accommodation or intervention. The distinction matters because a school may claim to collaborate while offering very little systematic consultation, and a consultation model may exist on paper without becoming part of teachers' daily practice.

Recent literature strengthens the justification for focusing on collaboration and consultation. Alhossyan (2023) found that collaboration between special and general education teachers is consistently associated with more effective support for students with disabilities, but also identified persistent barriers such as limited time, insufficient professional development, weak administrative support and limited attention to specific disability groups. Similarly, Hallaråker et al. (2025) note that interprofessional collaboration is widely treated as a preferred approach for supporting children with special educational needs, yet the literature remains dominated by health-care contexts and gives comparatively less attention to educational settings. This shows a clear mismatch between what inclusive practice requires and what has been systematically mapped in education-focused research. The knowledge base informing learning disability education has developed through several related traditions, including specific learning disabilities, Universal Design for Learning, literacy intervention, collaborative strategic reading, inclusive pedagogy and evidence-based support (Edyburn, 2010; Grigorenko et al., 2020; Vaughn et al., 2011). However, these traditions are often reviewed separately. Recent science mapping of inclusive education for children with special educational needs shows that the field is multidisciplinary and increasingly linked to education, psychology, rehabilitation, public policy, family studies and professional development, while also calling for stronger cross-national and interdisciplinary

research (Liu & Potmesil, 2025). Therefore, it remains difficult to see how collaboration and consultation are positioned specifically within learning disability education, which countries and journals have shaped the discussion, and which themes are now emerging.

A further reason for mapping this field is its practical relevance for education systems where inclusive policy has expanded faster than classroom-level support. In many Asian, multilingual and lower-resource contexts, teachers are expected to support learners with learning disabilities while negotiating limited specialist access, large classes, uneven assessment pathways and varied parental understanding of learning needs. A bibliometric map cannot solve these implementation issues, but it can clarify where the international literature is strong, where it remains silent, and whether existing evidence is sufficiently connected to the realities of school-based support. Despite growing research on learning disabilities, inclusive education, teacher collaboration and professional support, there is still limited bibliometric evidence that specifically maps the intersection of learning disability education, collaboration and consultation. Existing reviews tend to focus either on specific learning disabilities, inclusive education generally, teacher collaboration broadly or intervention approaches such as Universal Design for Learning and collaborative strategic reading. They do not adequately explain whether consultation has developed as a distinct construct, whether collaboration is mainly discussed in relation to classroom teaching or multidisciplinary support, how international networks are structured, and how newer themes such as neurodiversity, technology-supported learning and interprofessional practice are reshaping the field.

A bibliometric approach is well suited to this problem because it provides a way to read the field at scale. Rather than relying only on a narrative selection of studies, bibliometric analysis allows publication patterns, citation influence, country networks and keyword structures to be examined systematically (Donthu et al., 2021). Science mapping adds a visual layer to this process by showing how authors, countries and concepts are connected in literature, particularly through tools such as VOSviewer (van Eck & Waltman, 2010). This study is therefore justified by three considerations: the growing practical demand for coordinated support in learning disability education, the conceptual distinction between collaboration and consultation, and the absence of a focused Scopus-based map showing how this body of research has developed. Accordingly, this study asks five questions: (1) How has publication output on collaboration and consultation in learning disability education changed between 2010 and 2026? (2) Which sources, authors, countries and documents appear most influential in the dataset? (3) How is international collaboration structured? (4) What conceptual themes are visible through keyword co-occurrence? and (5) What future directions can be identified from the emerging themes in the field?

Literature Review

Learning Disability Education in Special and Inclusive Settings

Learning disability education is a central concern in special and inclusive education because it deals with forms of difficulty that are educationally consequential but not always immediately visible. Learners may struggle with decoding, comprehension, written expression, mathematical reasoning, working memory, attention or language-related demands. In school settings, these difficulties require more than general encouragement or broad inclusion policies. They call for precise assessment, evidence-informed instruction,

classroom accommodation, progress monitoring and sustained communication between the adults who support the learner. The highly cited documents in the dataset reflect this layered understanding of need. Grigorenko et al. (2020) offer a broad synthesis of scientific and educational knowledge on specific learning disabilities, while Edyburn (2010) foregrounds Universal Design for Learning to reduce barriers before learners fail. Other influential works on collaborative strategic reading, digital literacy, self-regulated writing and inclusive classroom design show that learning disability education has moved beyond diagnosis alone toward questions of access, participation and instructional design (Altemueller & Lindquist, 2017; Flewitt et al., 2015; Harris & Graham, 2016; Vaughn et al., 2011).

Collaboration and Consultation as Core Practices

Collaboration and consultation are often discussed together, but they do not do identical work. Collaboration describes the shared labour of supporting learners, for example when general and special educators plan together, when families contribute knowledge about the child, or when multidisciplinary teams coordinate intervention. Consultation, by contrast, is the process through which knowledge is transferred, negotiated and applied to a particular problem. In learning disability education, consultation may involve a reading specialist advising on intervention, a psychologist interpreting assessment data, a speech-language therapist guiding language support, or a special educator helping a classroom teacher adapt instruction. This distinction is important for inclusive practice. Co-teaching and collaborative strategic reading show how joint work can be brought directly into classrooms (Vaughn et al., 2011). Digital tools, flipped classrooms and Universal Design for Learning show how instructional environments can be redesigned to widen access (Altemueller & Lindquist, 2017; Edyburn, 2010; Flewitt et al., 2015). However, the quality of these approaches depends on consultation processes that help teachers interpret evidence, choose appropriate adaptations and evaluate whether support is improving learner participation.

Need for Bibliometric Mapping

A focused bibliometric map is needed because the existing literature provides useful but fragmented evidence. Reviews of teacher collaboration show that cooperation between general and special educators supports inclusive practice, yet many studies do not specify disability category, school level or the precise mechanisms through which collaboration affects learner outcomes (Alhossyan, 2023). At the same time, recent work on interprofessional collaboration shows that educational settings remain less developed than health-care contexts, even though schools increasingly depend on coordinated expertise to support learners with special educational needs (Hallaråker et al., 2025). For learning disability education, this means that collaboration may be visible as a broad value while consultation remains underdeveloped as a distinct process of specialist guidance, problem-solving and instructional decision-making. This study addresses that gap by analyzing Scopus-indexed literature through performance analysis and VOSviewer science mapping.

Methodology

Research Design

This study used a bibliometric design supported by science mapping. Bibliometric analysis was appropriate because the aim was not to evaluate one intervention or synthesize a small group of empirical findings, but to examine how a specialized research field has developed over time. The analysis therefore focused on publication growth, source productivity, citation

influence, author contribution, country collaboration and keyword co-occurrence. Science mapping was used to make the intellectual and conceptual relationships in the dataset more visible.

Data Source and Search Strategy

The data were retrieved from the Scopus database on 9 May 2026. Scopus was selected because it provides broad coverage of peer-reviewed literature across education, psychology, social sciences, health professions and related fields. The search strategy combined three conceptual blocks: learning disability terms, education-related terms, and collaboration or consultation terms.

TITLE-ABS-KEY (("learning disabilit*" OR "specific learning disabilit*" OR dyslexia OR dyscalculia OR dysgraphia OR "learning difficult*") AND (education OR school OR classroom OR teacher OR teachers OR student OR students OR "special education" OR "inclusive education") AND (collaboration OR collaborative OR consultation OR consultative OR partnership OR teamwork OR "co-teaching" OR "teacher collaboration" OR "parent-teacher collaboration" OR "multidisciplinary team" OR interprofessional OR interdisciplinary))

The initial Scopus search produced 1,470 documents. After applying the inclusion filters, the final dataset consisted of 469 documents. The inclusion criteria were publication years from 2010 to 2026, document types limited to Article and Review, English-language publications, and subject areas related to Social Sciences, Psychology, Arts and Humanities, and Health Professions.

Screening and Analysis Procedure

Screening was carried out in a transparent sequence. The initial Scopus results were refined by year range, document type, language and subject area. Only articles and reviews were retained because these document types are more likely to represent peer-reviewed scholarly contributions. The analysis then proceeded in two stages. First, performance analysis was used to describe the structure of the dataset. Second, VOSviewer was used to generate author density, country collaboration and keyword co-occurrence maps. The interpretation of the maps was based on the size of nodes, link strength, clustering and the thematic proximity of terms.

Table 1

Data screening and inclusion profile

Screening criterion	Decision
Database	Scopus
Search date	9 May 2026
Initial records	1,470 documents
Final dataset	469 documents
Year range	2010-2026
Document types	Article and Review
Language	English
Subject areas	Social Sciences, Psychology, Arts and Humanities, Health Professions

Results and Discussion

Publication growth and annual research trends

The final dataset consisted of 469 Scopus-indexed documents published from 2010 to 2026. Publication activity was relatively steady during the first decade of the period, but the pattern changed noticeably after 2022. Output increased from 32 documents in 2022 to 36 in 2023 and then rose sharply to 59 documents in both 2024 and 2025. The 2026 figure should be read cautiously because the search was conducted in May, before the publication year was complete.

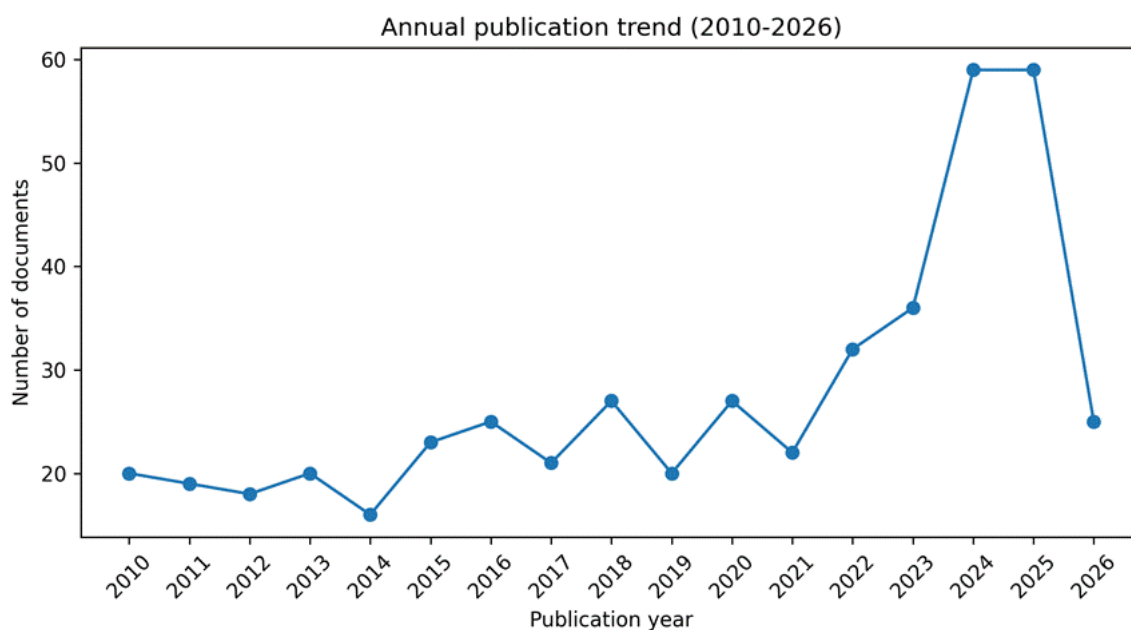


Figure 1. Annual publication trend on collaboration and consultation in learning disability education, 2010-2026.

Table 2

Annual distribution of Scopus-indexed documents.

Year	Documents
2010	20
2011	19
2012	18
2013	20
2014	16
2015	23
2016	25
2017	21
2018	27

2019	20
2020	27
2021	22
2022	32
2023	36
2024	59
2025	59
2026	25

This growth pattern suggests that the topic has moved from a modest but persistent research area into a more visible scholarly conversation. The increase after 2022 is plausibly connected to several overlapping developments: renewed attention to inclusive education after pandemic-related learning disruption, stronger interest in digital and hybrid learning environments, and growing concern about multidisciplinary support for learners whose needs cross academic, developmental and psychosocial domains. The trend strengthens the rationale for a bibliometric review because the field now has enough density to reveal meaningful patterns rather than isolated publications.

Most Productive Sources

The source analysis shows that publications were distributed across journals related to special education, inclusive education, learning disabilities, educational psychology, nursing education and educational technology. The most productive source was *Intervention in School and Clinic*, with 16 documents, followed by *European Journal of Special Needs Education* with 13 documents and *Learning Disability Quarterly* with 11 documents.

Table 3

Most productive sources in the final Scopus dataset.

Rank	Source title	Documents	Citations
1	Intervention in School and Clinic	16	139
2	European Journal of Special Needs Education	13	209
3	Learning Disability Quarterly	11	390
4	British Journal of Special Education	10	135
5	International Journal of Inclusive Education	9	181
6	Learning Disabilities Research and Practice	8	196

7	Education and Information Technologies	8	99
8	Support for Learning	7	37
9	Journal of Learning Disabilities	6	124
10	Nurse Education Today	6	55

The source distribution confirms that the topic is not housed in one narrow journal community. Core special education and learning disability journals are prominent, including *Intervention in School and Clinic*, *Learning Disability Quarterly*, *British Journal of Special Education* and *Journal of Learning Disabilities*. At the same time, *Education and Information Technologies* and *Nurse Education Today* show that the topic also travels into educational technology and interprofessional professional preparation. This spread is meaningful because collaboration and consultation are not only classroom strategies; they are also organizational and professional practices.

Most Highly Cited Documents

The citation analysis identifies the most influential documents in the dataset. The most cited publication was by Grigorenko et al. (2020), followed by Edyburn (2010), Flewitt et al. (2015), Mullins and Preyde (2013), and Vaughn et al. (2011). These documents indicate that the intellectual base of the field is connected to specific learning disabilities, Universal Design for Learning, digital literacy, invisible disability experiences and collaborative strategic reading. Citation counts were not interpreted as a direct measure of methodological quality. Rather, they were treated as indicators of scholarly visibility within the retrieved Scopus corpus. This distinction is important because some highly cited publications are broad conceptual or methodological contributions, while others are closely aligned with classroom intervention or inclusive practice.

The ranking also shows that collaboration and consultation are linked to several adjacent conversations. The most visible documents do not all use consultation as their central construct, but they address the conditions that make consultation necessary: evidence-based intervention, accessible instructional design, digital participation, reading support, learner identity and professional coordination. For this reason, the citation results were interpreted alongside the keyword and country networks rather than as a stand-alone hierarchy. A highly cited article may shape the field indirectly by providing a framework, vocabulary or intervention model that later studies adapt. In this dataset, the influential documents show that collaboration and consultation are tied to the practical problem of how schools convert specialist knowledge into usable classroom support.

The pattern also suggests that future research should be more precise about the level at which collaboration occurs. Some studies emphasize classroom-level collaboration, such as co-teaching or collaborative reading intervention. Others point toward organizational collaboration, including referral systems, multidisciplinary teams and professional development. Consultation can bridge these levels because it links specialist knowledge with teacher decision-making, but this bridge is still not sufficiently visible in the highest-level bibliometric indicators.

Table 4

Most highly cited documents in the dataset.

Rank	Lead author/year	Title	Source	Citations
1	Grigorenko E.L. (2020)	Understanding, Educating, and Supporting Children With Specific Learning Disabilities: 50 Years of Science and Practice	American Psychologist	283
2	Edyburn D.L. (2010)	Would you recognize universal design for learning if you saw it? Ten propositions for new directions for the second decade of UDL	Learning Disability Quarterly	278
3	Flewitt R. (2015)	New directions for early literacy in a digital age: The iPad	Journal of Early Childhood Literacy	265
4	Mullins L. (2013)	The lived experience of students with an invisible disability at a Canadian university	Disability and Society	178
5	Vaughn S. (2011)	Efficacy of collaborative strategic reading with middle school students	American Educational Research Journal	152
6	Su F. (2010)	Evaluating the use of a wiki for collaborative learning	Innovations in Education and Teaching International	122
7	Mutohari F. (2021)	Difficulties in implementing 21st century skills competence in vocational education learning	International Journal of Evaluation and Research in Education	100
8	Harris K.R. (2016)	Self-Regulated Strategy Development in Writing: Policy Implications of an Evidence-Based Practice	Policy Insights from the Behavioral and Brain Sciences	92
9	Altemueller L. (2017)	Flipped classroom instruction for inclusive learning	British Journal of Special Education	88
10	Meyer E.J. (2016)	Transgender and gender-creative students in PK-12 schools: What we can learn from their teachers	Teachers College Record	75

The highly cited documents point to the intellectual anchors of the dataset. Grigorenko et al. (2020) represents the scientific and educational foundation of specific learning disabilities. Edyburn (2010) reflects the continuing influence of Universal Design for Learning in conversations about access and barrier reduction. Other highly cited works on digital literacy, collaborative strategic reading, writing intervention and inclusive learning suggest that the field is shaped by a practical concern: how to convert knowledge about learning differences into instructional environments that learners can use.

Productive Authors and Author Density

The author's analysis indicates that several scholars have made repeated contributions to the field. Boardman A. G. was the most productive author, with five documents and 237 citations. Shaw S. C. K. and Norwich B. followed with four documents each. The author pattern shows that the field is not dominated by a single author group but is distributed across

scholars working in special education, reading intervention, inclusive practice, educational psychology and professional support.

Table 5

Most productive authors in the dataset.

Rank	Author	Documents	Citations
1	Boardman A.G.	5	237
2	Shaw S.C.K.	4	96
3	Norwich B.	4	58
4	Vaughn S.	3	215
5	Roberts G.	3	215
6	Anderson J.L.	3	90
7	Lemons C.J.	3	21
8	Klingner J.K.	2	177
9	Scott A.	2	79
10	Orosco M.J.	2	73

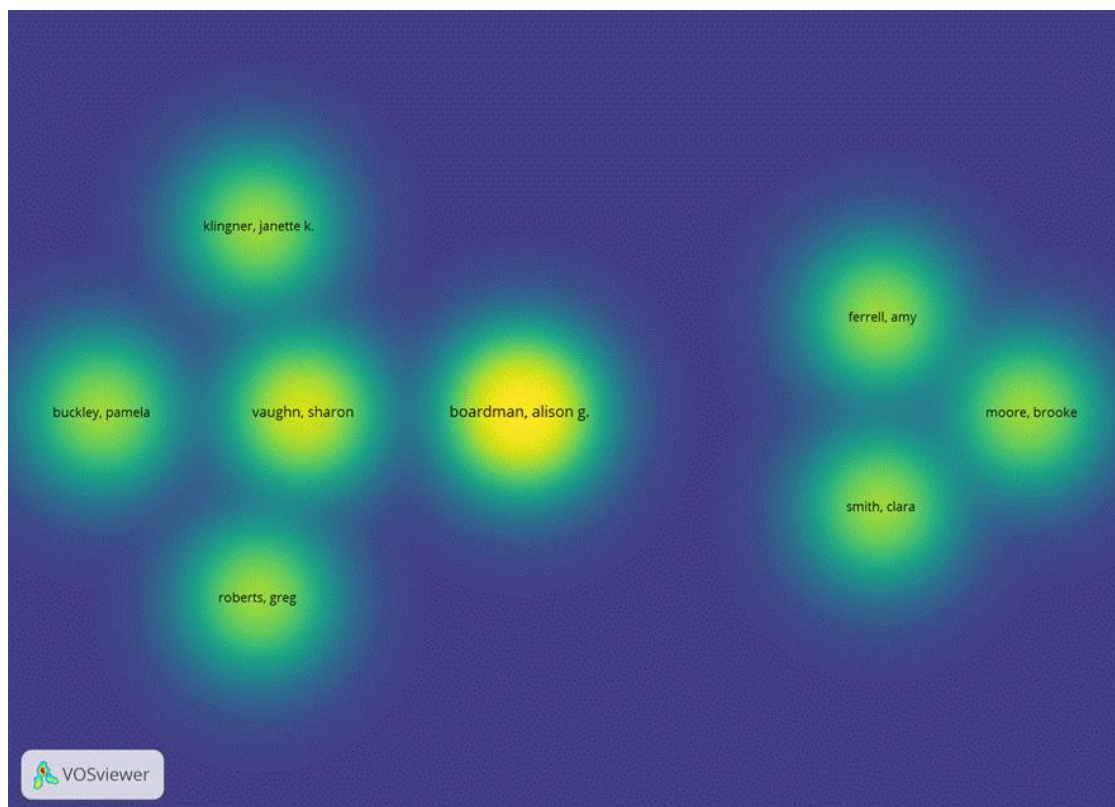


Figure 2. Author density visualisation generated using VOSviewer.

The author density map offers a more cautious picture than the productivity table alone. Boardman, Alison G. appears as the most visible density point, and authors such as Vaughn, Klingner and Roberts are linked to reading intervention and collaborative instructional research. However, the map also shows that the author landscape is not fully integrated. The visible areas appear more like several specialized pockets than one cohesive international network. This indicates that the field has recognized contributors, but still needs stronger cross-group collaboration, especially between school-based special education researchers and scholars working on consultation, health-related support or technology.

Country Contributions and International Collaboration

The country analysis shows that the United States was the leading contributor, with 153 documents, followed by the United Kingdom with 82 documents. Spain, Australia and Canada also appeared among the top five contributing countries. The dominance of the United States and the United Kingdom suggests that research on collaboration and consultation in learning disability education has been strongly shaped by Anglophone education systems.

Table 6

Top contributing countries and territories

Rank	Country / Territory	Documents
1	United States	153
2	United Kingdom	82
3	Spain	25
4	Australia	22
5	Canada	19
6	Undefined	13
7	China	12
8	South Africa	11
9	Turkey	11
10	Brazil	9

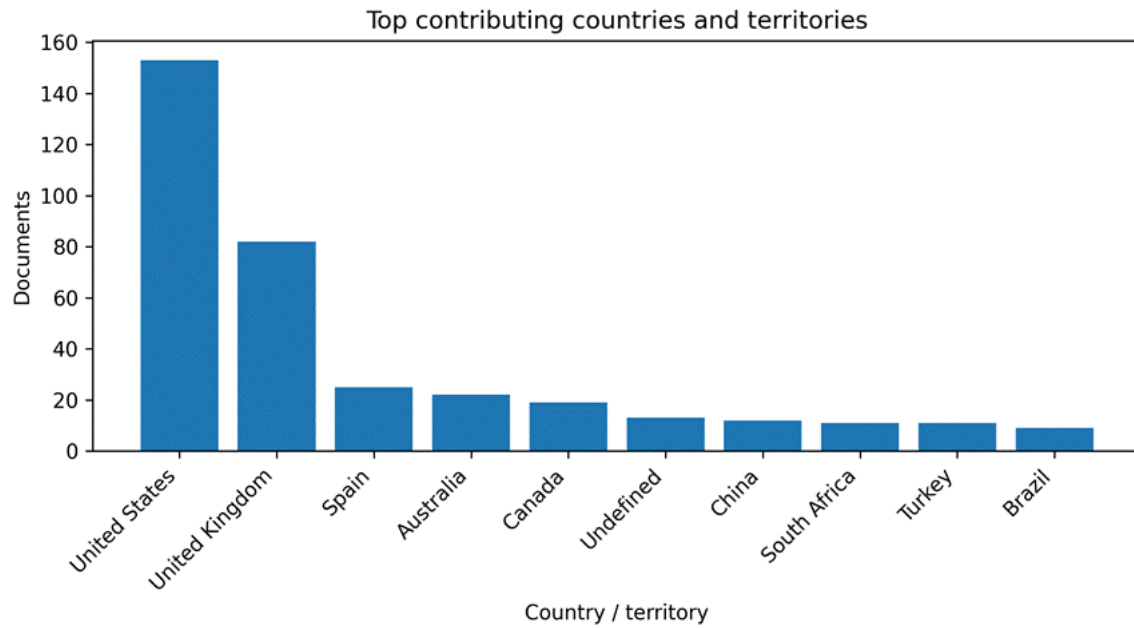


Figure 3. Top country and territory contributions based on Scopus analysis.

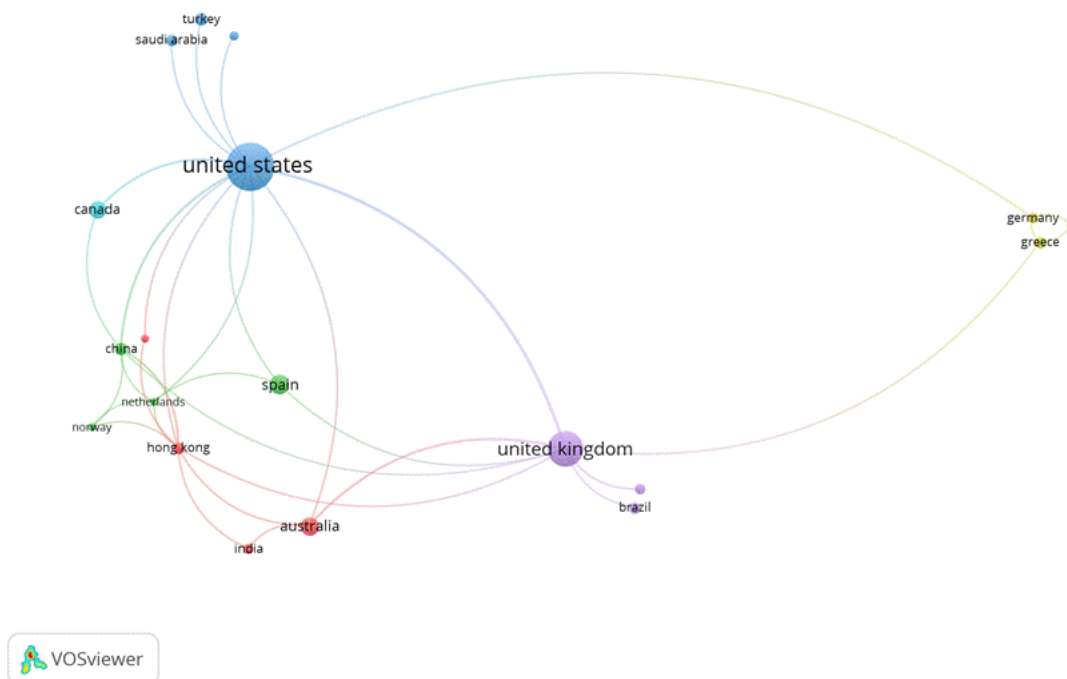


Figure 4. Country collaboration network generated using VOSviewer.

The country collaboration network shows a field with clear centers of gravity. The United States is the largest hub and is connected to several countries, including Canada, China, Hong Kong, the Netherlands, Norway, Saudi Arabia and Turkey. The United Kingdom is also a major node, with visible connections to Australia, Brazil, Germany and Greece. These links indicate that the field is international, but the structure is still uneven. Knowledge of production

remains concentrated in a small number of Anglophone contexts, while many multilingual and lower-resource systems appear less visible in the network.

Keyword co-Occurrence and Conceptual Structure

Keyword co-occurrence analysis was used to identify the conceptual structure of research on collaboration and consultation in learning disability education. The VOSviewer keyword file shows that the most prominent terms included human, learning disabilities, dyslexia, learning disorder, education, special education, learning difficulties, collaboration, inclusive education, students, reading and teaching. These keywords indicate that the field is simultaneously anchored in learner characteristics, academic intervention, inclusive practice and professional collaboration.

Table 7

Top keywords by occurrence in the VOSviewer co-occurrence analysis

Keyword	Occurrences	Total link strength	Average publication year
human	113	1775	2019.42
humans	84	1356	2019.58
learning disabilities	83	427	2020.40
dyslexia	69	740	2019.12
child	63	1051	2019.40
female	58	1038	2019.29
male	57	1031	2018.74
learning disorder	53	842	2018.94
article	52	908	2017.92
special education	48	342	2019.56
education	46	589	2018.02
learning difficulties	34	88	2020.24
adult	32	590	2019.47
psychology	32	581	2020.56
students	28	291	2020.61

Table 8

Keyword clusters and thematic interpretation.

Cluster	Thematic label	Items	Occurrences	Total link strength	Representative terms
1	Dyslexia, literacy and psychosocial learning needs	53	408	6146	dyslexia, learning disorder, adult, literacy, young adult, mental health
2	Clinical, developmental and neuropsychological evidence	48	306	5036	article, adolescent, controlled study, clinical article, school child, neuropsychology
3	Special education, collaboration and instructional practice	46	477	3638	learning disabilities, special education, collaboration, students, reading, student
4	Inclusive education, teacher learning and broader disability discourse	41	303	2555	learning difficulties, inclusive education, learning, inclusion, autism, writing
5	Education, curriculum and interprofessional learning	40	368	6085	humans, education, learning disorders, procedures, curriculum, nursing education
6	Child-centred psychological and diagnostic support	28	437	7329	human, child, female, male, psychology, diagnosis
7	School systems, assessment and specific learning disabilities	19	130	1974	school, schools, questionnaire, education, special, specific learning disability, surveys and questionnaires
8	Qualitative, social and participation-oriented research	18	82	1195	qualitative research, comprehension, interpersonal communication, spain, emotion, medical students
9	Preschool communication and methodological reproducibility	7	40	796	preschool child, child, preschool, communication, pilot projects, pilot study, reproducibility of results

Discussion

Intellectual structure of the field

The findings indicate that research on collaboration and consultation in learning disability education has a genuinely multidisciplinary structure. It draws from special education,

inclusive education, educational psychology, health professions, nursing education, speech-language pathology, rehabilitation, technology and professional learning. This is not accidental. Learning disabilities often requires decisions about assessment, instruction, accommodation, family engagement and psychosocial support. These decisions rarely sit within the expertise of one teacher or one profession alone. The keyword structure can be read as having two broad intellectual foundations. The first is learner-centered and includes terms such as learning disabilities, dyslexia, reading, academic achievement, literacy, learning disorder and specific learning disability. The second is practice-centered and includes special education, inclusive education, collaboration, co-teaching, teacher training, professional development and consultation. The connection between these foundations is the central issue for the field: how knowledge about learner needs is translated into coordinated educational action.

Collaboration as a more visible theme than consultation

A particularly important finding is the uneven visibility of collaboration and consultation. Collaboration recorded 28 occurrences and a total link strength of 147, while consultation recorded six occurrences and a total link strength of 101. Co-teaching and professional development also appeared as notable practice-oriented terms. This suggests that the literature is more comfortable discussing shared work in broad terms than treating consultation as a specific professional process with its own models, procedures and outcomes. This matters because collaboration and consultation are not interchangeable. Collaboration emphasizes shared responsibility and joint work; consultation emphasizes structured guidance, specialist input and problem-focused decision-making. In practice, both are needed. A classroom teacher may collaborate with a special educator but still need consultation on how to interpret assessment data, adapt reading instruction or monitor intervention response. Future research should therefore make consultation more explicit rather than allowing it to disappear under the broader label of collaboration.

Dominance of the United States and United Kingdom

The dominance of the United States and United Kingdom is a major feature of the dataset. Their prominence reflects established research traditions in specific learning disabilities, response to intervention, inclusive education, special educational needs, co-teaching and professional collaboration. These contexts have also produced influential policy and practice frameworks that shape how learning disability support is discussed internationally. At the same time, this dominance creates a limitation for the field. Models of collaboration and consultation are not culturally neutral. They depend on teacher preparation systems, class size, access to specialists, language policy, diagnostic procedures, parental expectations and funding structures. Future studies should therefore examine how collaborative and consultative support is enacted in Asian, African, Latin American, Indigenous, multilingual and lower-resource contexts, where the organization of special education support may differ substantially from dominant Western models.

Emerging Themes: Technology, Neurodiversity and Interprofessional Practice

The overlay map indicates that the field is beginning to shift toward newer themes such as artificial intelligence, student engagement, neurodiversity, school teachers, primary education, clinical competence and interprofessional practice. These terms should be interpreted carefully because some are still emerging rather than fully established. Even so,

they show that collaboration and consultation in learning disability education are being pulled into contemporary debates about digital learning, professional competence and more inclusive understandings of cognitive difference. Three directions are especially noteworthy. First, artificial intelligence and educational technology raise questions about how teachers and specialists might use digital tools for assessment, intervention planning and learner engagement without reducing support to automated decision-making. Second, neurodiversity invites the field to move beyond deficit language and consider learner identity, agency and environmental fit. Third, interprofessional practice reminds researchers that many learners require coordinated support across education, psychology, therapy, health and family systems.

Theoretical, Methodological and Practical Implications

Theoretically, the findings support an ecological understanding of learning disability education. Students are supported within nested systems that include classroom instruction, school leadership, family participation, professional services and policy expectations. Collaboration and consultation are the mechanisms that connect these systems. The findings also align with inclusive and social models of disability because the keyword structure includes participation, access, Universal Design for Learning, assistive technology, inclusive education and learning support.

Methodologically, this study shows the value of combining Scopus data with VOSviewer mapping, but it also shows the importance of careful terminology management. The dataset includes overlapping terms such as learning disabilities, learning disability, learning disorder, learning disorders, learning difficulties, specific learning disability and specific learning disabilities. Future bibliometric work should use a carefully prepared thesaurus to merge conceptually similar terms where appropriate and to avoid overstating artificial distinctions between keywords.

For practice and policy, the findings point to a clear message: collaboration must be designed, not merely expected. Schools need protected planning time, shared documentation, structured consultation meetings, clear referral pathways and leadership support. Teacher education programmes should also prepare teachers to communicate with specialists, interpret evidence, use assistive technology, engage families and make ethically sound decisions for learners with learning disabilities. This is especially relevant in education systems where inclusive policy has advanced faster than school-level support structures.

Limitations and Future Directions

Limitations

Several limitations should be acknowledged. First, the study used Scopus only. Although Scopus offers strong multidisciplinary coverage, it does not index every relevant publication in special education, educational psychology, health professions or school consultation. Relevant studies from Web of Science, ERIC, PubMed, PsycINFO and regional databases may therefore be absent from the dataset.

Second, the search strategy shaped the results. The string was intentionally designed to capture learning disability, education, collaboration and consultation, but related studies may use alternative terms such as learning needs, academic difficulties, support services,

collaborative consultation, instructional coaching, school-based support or multidisciplinary service delivery. These studies may not have been retrieved if they did not use the selected terms in titles, abstracts or keywords.

Third, the review included only English-language articles and reviews from 2010 to 2026. This improved consistency but may have reduced representation from non-English and multilingual contexts. Finally, bibliometric indicators such as publication counts, citation counts and total link strength reveal influence and structure, but they do not directly measure classroom quality, policy impact or learner outcomes.

Future Directions

Future bibliometric studies could combine Scopus with Web of Science, ERIC, PsycINFO, PubMed and regional databases to provide a broader view of the field. Future conceptual and empirical studies should also examine consultation more directly, including school-based consultation, collaborative consultation, instructional coaching, specialist-teacher consultation and family-professional consultation.

There is also a need for stronger evidence from Global South, Asian, African, Latin American, Indigenous and multilingual contexts. Such work would help determine whether dominant models of collaboration and consultation travel well across different policy systems, or whether they need to be redesigned for local realities such as limited specialist access, large classes, multilingual classrooms and uneven diagnostic services.

Finally, future studies should connect collaboration and consultation with learner outcomes and lived educational experiences. Important outcomes include reading development, writing performance, mathematics learning, school engagement, self-efficacy, social participation and learner voice. Technology-supported collaboration and neurodiversity-informed consultation are particularly promising directions, but both require careful empirical testing rather than optimistic assumptions.

Conclusion

This study mapped global research on collaboration and consultation in learning disability education using Scopus-based bibliometric analysis and VOSviewer science mapping. The analysis drew on 469 articles and reviews published between 2010 and 2026, retrieved from Scopus on 9 May 2026 after screening by document type, language, year range and subject area. The findings show that the field has grown steadily and has expanded sharply in recent years, especially from 2022 onward. The literature is anchored in special education, inclusive education, learning disability research, educational psychology, professional development and intervention-oriented practice. Highly cited documents show the influence of specific learning disability research, Universal Design for Learning, literacy intervention, digital literacy, collaborative strategic reading and inclusive pedagogy.

The country network shows a strong concentration of research in the United States and United Kingdom, with additional contributions from Spain, Australia, Canada, China, South Africa, Turkey and Brazil. The keyword structure reveals several connected themes: learning disabilities and dyslexia, special and inclusive education, collaboration and co-teaching, consultation and interprofessional practice, teacher development, technology-supported

learning and psychosocial support. The main contribution of this study is the identification of a conceptual imbalance in the field. Collaboration is highly visible, while consultation remains less clearly developed as a distinct research construct. This imbalance matters because students with learning disabilities often require both shared professional responsibility and structured expert guidance. Future scholarship should therefore strengthen consultation theory, expand cross-cultural evidence, examine learner outcomes and develop practical models that help teachers, specialists, families and learners work together in more coherent and equitable support systems.

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