

# ODL Research Levels, Topics and Gaps in the Humanities: A Systematic Review of Commonwealth Contributions

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## Abstract

In the rapidly evolving landscape of Open and Distance Learning (ODL), the higher education (HE) sector is frequently evaluated based on the dual criteria of research output—both in terms of quality and quantity. As the demand for flexible learning environments grows, the emphasis on producing impactful research publications has become increasingly central to institutional reputation and academic credibility. Monitoring contextual trends and gaps is crucial for understanding the evolving landscape of distance education (DE) and the emergence of dual-mode universities in Commonwealth nations. Evaluation processes provide scholars with valuable insights for implementing ODL strategies across various Commonwealth contexts, aiding the development of policies that incorporate best practices tailored to the specific needs of the ODL domain. This systematic literature review utilised the PRISMA guidelines to identify, empirically evaluate, and analyse the research levels and sub-levels relating to ODL-authored articles published by researchers from Commonwealth countries. The study included a sample of 3129 published articles from the SCOPUS database, concentrating on DE and the humanities, published between 2015 and 2024. Data were analysed through a content analysis of titles, keywords, and abstracts, following Zawacki-Richter's (2009) ODL research levels framework, with small amendments to ensure context specificity. The results indicate that only 4 % of the published articles were attributed to the Macro level of DE systems and theories. The Meso level, comprising management, organisation and technology at the institutional level, accounted for 19%. Finally, the Micro level of teaching and learning in DE revealed the most prominent research level, comprising almost 77% of the articles. These results indicate the relative paucity of DE articles published by Commonwealth authors in the Macro and, to a lesser extent, the meso levels. A further finding is that the original framework, which was developed in 2009, should consider the changing nature of the field of DE and the inclusion of new sublevels in the field.

**Keywords:** Commonwealth Countries; ODL Research; Research gaps; Research levels and topics; Research trends; Humanities

## Introduction

The Commonwealth of Learning (COL) aims to encourage and promote learning across Commonwealth countries by fostering collaboration among member countries. It strives for improved access and quality of education through innovative learning approaches, particularly in open and distance learning. COL aims to empower individuals and communities by providing them with the knowledge and skills necessary for personal and social

development, ultimately contributing to economic growth and stability within member nations. A current project of COL is to investigate DE research in the HE context in Commonwealth Countries to inform their HE initiative in Sub-Saharan Africa and Asia. The study aims to provide insights into the main trends of DE research and institutional dual-mode learning in the Commonwealth and to identify the gaps in this research. In Commonwealth countries, the development and investigation of DE have experienced considerable expansion, fuelled by technological advancements, educational policies, and the demand for accessible learning opportunities. This systematic literature review seeks to examine the progression and research levels of DE research in the HE landscape of Commonwealth nations.

In every academic discipline, research is essential because it stimulates creativity, critical thinking, and knowledge generation. It enables researchers to test theories, investigate open-ended issues, and add to the corpus of knowledge. Students and academics can interact with contemporary topics, hone their analytical abilities, and apply theoretical principles to practical difficulties through research. Research not only reveals new information but also supports preexisting hypotheses, disproves presumptions, and directs future paths. Additionally, research fosters cooperation among academics and raises the legitimacy of academic institutions, advancing various fields (Mahmoudi-Dehaki & Nasr-Esfahani, 2025; Lin & Ahmed, 2023). Research should act as an antecedent for meeting the changing needs in social, cultural, environmental, economic, industrial, technical, and scientific life conditions (Sultana, 2019). Research is thus vital to the integrity, relevance, and evolution of any academic field. It enhances teaching, informs practice, drives innovation, and contributes meaningfully to society. Institutions and scholars must continue to invest in research, not only for the sake of academic prestige but to ensure that knowledge continues to grow and serve the public good (OECD, 2021).

The focus of this study was to provide a Systematic Literature Review of relevant literature published over the last 10 years on DE and dual-mode learning at the HE level in Commonwealth countries. This information will inform the Commonwealth of Learning's HE initiative in Sub-Saharan Africa and Asia.

## **Literature Review**

DE has evolved over centuries, shaped by technological innovation, social needs, and educational reform. From correspondence courses in the 1800s to current digitally mediated learning environments, DE has continuously redefined access, flexibility, and equity in education. The roots of DE can be traced back to Pitman's correspondence courses of the 19th century (Peters, 2001). Commonwealth countries, such as the United Kingdom, South Africa and Canada, were pioneers in establishing DE programs to cater to remote and underserved populations. The advent of radio, television, and the internet further transformed DE, making it more interactive and accessible. The history of DE can be traced through the lens of the five generations of delivery (Moore & Kearsley, 1996), each marked by the dominant technologies and pedagogies of the time.

## **Definitions in Distance Education**

DE as a method of instructional delivery has experienced a profound transformation over the last century. Its conceptualisation has shifted from simple correspondence courses to complex, technology-enhanced, and interactive digital learning environments (Anderson & Dron, 2012). The definitions provided by various scholars over the years highlight the shifting priorities of DE over many years and can be read in conjunction with the

history of DE. Central to understanding DE is examining how it has been defined by scholars, practitioners, and organisations. These definitions reveal the theoretical orientations, technological contexts, and pedagogical strategies that underpin the field.

The conceptualisation of DE has undergone significant evolution, reflecting changes in technology, pedagogy, and policy priorities. UNESCO (2002) defines DE as an educational process that involves a spatial or temporal separation between teacher and learner, highlighting institutional planning and quality assurance, particularly for international development and equity. Simonson, Smaldino, and Zvacek (2011) emphasise the role of technology, describing DE as institution-based, formal education where learners are separated but connected through interactive telecommunications systems, focusing on instructional design and pedagogical theory. Siemens (2005) introduced connectivism, viewing DE as part of a dynamic network of information and interaction, relevant to MOOCs, social media learning, and lifelong learning, with an emphasis on decentralised and non-linear processes. Zawacki-Richter and Jung (2023) propose the term "Open, Distance and Digital Education" (ODDE), which encompasses diverse methods such as technology-enhanced, blended, and fully online education, aligning education with digital transformation. These definitions collectively illustrate the transition from correspondence courses to adaptive, learner-centric, digitally mediated ecosystems, with ODDE serving as a vital framework for contemporary educational policy, research, and practice. Zawacki-Richter, Cefa, and Bail (2025) note that within the process of digital transformation, the field of distance and online education is in transition, with the traditional boundaries between dedicated distance teaching institutions and conventional residential institutions blurring.

### **Distance Education Research Framework**

The Zawacki-Richter (2009) framework categorises research in DE into three levels:

- The Macro-Level Focuses on system-wide issues like policies, globalisation, accreditation, funding, and trends. It addresses broad economic, social, and cultural forces shaping DE.
- The Meso-Level concentrates on organisational and managerial aspects, such as learner support services, technology infrastructure, quality assurance, and cost analysis and,
- The Micro-Level which examines individual teaching and learning processes, focusing on learner characteristics, instructional methods, interactions, and motivation.

The Zawacki-Richter (2009) framework has long served as a structured foundation for understanding and analysing research in DE. Developed to fill gaps in DE research themes identified through a systematic review spanning 2000–2008, the framework provides integrated strategies across policy, practice, and pedagogy. Over time, researchers have adopted and adapted the framework for specialised purposes, as evidenced by Pulker and Kuklska-Holmes (2021) and Ally and Tsinakos (2014), who utilised it to explore mobile learning. Despite its widespread acceptance, recent years have seen scholars advocating for the expansion of the framework to incorporate emerging trends in ODL.

In this paper, the authors expanded the Zawacki-Richter framework to address significant developments that have reshaped the landscape of DE. These additions include Artificial Intelligence (AI), Open Educational Practices (OEP), Open Educational Resources (OERs), innovative assessment methods, and graduate employability. Each of these enhancements has been strategically placed under the Macro-level or Meso-level of the framework to reflect their institutional and pedagogical relevance.

Open Educational Practices (OEP) have been included under the Macro-level of the framework. According to UNESCO, (date) OEP refers to the use of OERs to enhance the quality of education and promote innovative educational practices. However, OEP transcends the mere use of free resources. As noted by Smyth, Busso and Stagg (2016), OEP encompasses strategies and values that empower learners, foster the co-creation of knowledge, and emphasise shared ownership of education. These practices include open pedagogies and the transparent sharing of teaching methodologies. Recognising its critical role in DE teaching systems and knowledge transfer, the authors deemed OEP an essential addition to the Macro-level.

Separately, OERs were incorporated under the Meso-level of the framework. These resources are widely supported by institutional policies that encourage faculty adoption and provide infrastructure for their usage. Institutions such as the University of British Columbia, the University of Edinburgh, and the University of Cape Town have implemented OER policies to promote equity, access, and professional development. By situating OERs within the Meso-level, the framework acknowledges their role in organisational management and institutional strategies (Jhangiani et al., 2016; Cox & Trotter, 2016).

Innovative assessment methods represent another crucial addition to the Meso-level. The rapid expansion of online education, especially in the wake of the COVID-19 pandemic, has necessitated the evolution of assessment practices. Traditional methods, such as exams and written assignments, are now supplemented or replaced by dynamic, learner-centred strategies. These include authentic assessment, formative assessment with real-time feedback, e-portfolios, peer assessment, gamification, and collaborative discussions. Such methods focus on real-world applications, continuous feedback, and active student engagement, making assessment practices more meaningful and effective (Cahapay, 2020; Moldez et al., 2024).

Graduate employability, a pertinent focus of DE research, has also been integrated into the Meso-level. With the expansion of DE, enhancing employability has become a cornerstone of educational objectives. Graduate employability refers to the skills, understandings, and attributes that make students competitive in the job market (Bezuidenhout et al, 2019). Employers seem to be slowly recognising the value of DE qualifications, despite lingering doubts about their rigour (Adcock, 2023; Lennon, 2021). Including employability as a sublevel acknowledges its institutional importance and its critical role in shaping DE outcomes.

Artificial Intelligence (AI) is another transformative force in DE and has been added to the Meso-level. Over the last decade, AI technologies have revolutionised education by enhancing personalised learning pathways, automating assessments, and providing administrative support. Notable trends in AI research include emotion-aware systems, AI-powered peer feedback tools, and generative AI platforms such as ChatGPT (Prather et al. ,2024). These tools offer innovative solutions for delivering customised and efficient educational experiences. By incorporating AI research into the framework, the author underscores its significance in driving pedagogical and technological advancements.

These additions collectively enhance the Zawacki-Richter (2009) framework to address contemporary priorities in DE. The expanded framework provides a roadmap for future higher education activities at COL, guides systematic reviews, and offers a foundation for peer-reviewed research outputs. By integrating emerging themes such as AI, OEP, OERs, assessment innovations, and graduate employability, the framework aligns itself with technological progress and evolving educational needs. It serves not only as a structured lens for understanding

DE research but also as a dynamic model for addressing the challenges and opportunities of modern digital learning environments. It needs to be emphasised, however, that this amended framework has not been tested or validated, and further research will be required. The framework was modified following the broader COL research project's scope, which required research in additional areas; and it is currently exclusively relevant to this research.

Figure 1: Amended DE Research levels framework of Zawacki-Richter (2009).

Macro level	<ol style="list-style-type: none"> <li>1. Access, equity and ethics</li> <li>2. Globalisation of education and cross-cultural aspects</li> <li>3. Distance education teaching systems and institutions</li> <li>4. Theories and models</li> <li>5. Research methods in distance education and knowledge transfer</li> <li>16. Open Education Practices<sup>1</sup></li> </ol>
Meso Level	<ol style="list-style-type: none"> <li>6. Management and organisation</li> <li>7. Costs and benefits</li> <li>8. Educational technology</li> <li>9. Innovation and change</li> <li>10. Professional development and faculty support</li> <li>11. Learner support services</li> <li>12. Quality assurance</li> <li>17. Assessment practices<sup>2</sup></li> <li>18. Graduate employability<sup>3</sup></li> <li>19. Open Educational Resources (OERs)<sup>4</sup></li> <li>20. Artificial Intelligence in research<sup>5</sup></li> </ol>
Mico level	<ol style="list-style-type: none"> <li>13. Instructional design</li> <li>14. Interaction and communication in learning communities</li> <li>15. Learner characteristics</li> </ol>

## Research Design and Methodology

The research design for this study is a systematic literature review of all Commonwealth-authored DE articles published between 2015 and 2024. Data was collected in the form of published journal articles from the Scopus database. The data was extrapolated from SCOPUS, filtered and cleaned by 2 researchers. Thereafter, a composite database was created for systematic review and content analysis.

The keywords used for the search were, “open distance learning”, “ODL”, “distance education”, “online learning”, “elearning”, “mobile learning and “dual-mode universities” The inclusion criteria were as follows:

- a) The focus of the study needs to be on DE in HE
- b) Only authors from Commonwealth countries or Commonwealth-associated affiliations were included
- c) The research is published in English and
- d) Only published journal articles were considered for this study

The authors are aware that research from multilingual nations may be overlooked if the search is restricted to published articles written in English, in the SCOPUS database. Furthermore, conference proceedings, book

<sup>1</sup> New code 16. Open Education Practices

<sup>2</sup> New code 17: Assessment practices

<sup>3</sup> New code 18: Graduate employability

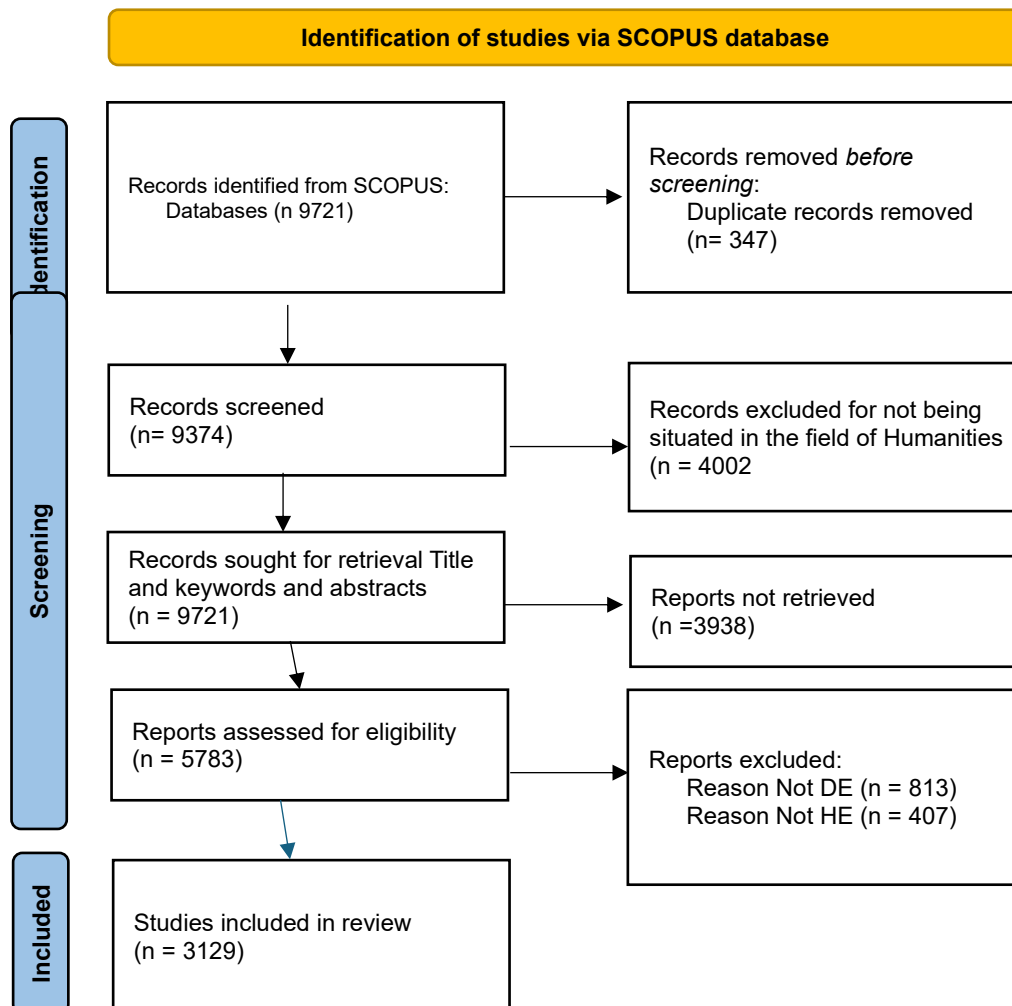
<sup>4</sup> New code 19: Open Educational Resources (OERs)

<sup>5</sup> New code20: Artificial Intelligence (AI) in research

chapters, and other publication vehicles offer valuable publications on DE, which the authors appreciate. However, it would be challenging to examine every possible publication within the time frame and resource allocation allotted for this research project due to the vast number of articles that met the search criteria.

Page et al (2021, 1) state that the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) were “developed to facilitate transparent and complete reporting of Systematic reviews” They include a checklist of 27 items to guide the researchers when undertaking a systematic literature review, and that this update will enhance evidence-based scientific research. By following these 27 items, researchers should be able to replicate studies. These guidelines are an update on the previously published PRISMA guidelines put forward by Moher, Liberati, Tetslaff and Altman (2009). Figure 2 presents the PRISMA 2020 flow diagram for the systematic literature review of published DE articles in the SCOPUS database written by authors from Commonwealth Countries.

**Figure 2 PRISMA 2020 flow diagram**



In the initial search of the SCOPUS database, 9721 articles met the requested search criteria. These articles were downloaded into an Excel spreadsheet, and numerous manual data sorts were carried out to seek any duplications. Data was sorted according to title, authors and journal of publication to detect duplications, which were then

removed from the dataset. Because of the high number of articles downloaded, the authors decided to restrict the dataset for analysis to only those articles that fell under the field of Humanities; This reduced the dataset to a more manageable number of 5783 articles.

Two coders further cleansed the data by reviewing all the titles, keywords, and abstracts to ensure firstly that the article was related to DE and, secondly, that it was located in the HE sector. The two coders met regularly to discuss their exclusions and reached a consensus on the final dataset to be used for the analysis. Both coders have extensive experience in DE teaching, research and article writing, and have carried out similar research previously. The data was coded according to the amended Zawacki-Richter (2009) framework (see Figure 1) using a priori coding. The researchers applied Cohen's kappa to assess the inter-rater reliability of the two coders for the coding of the a priori codes. The Kappa coefficient statistic for the Primary level (Macro, Meso or Micro level) reveals a 0.84 score, and for the sub-levels, it was 0,86, which indicates a high level of agreement between the two coders. This suggests that both coders share a high level of consistency and agreement, indicating that the coding process is consistent and reliable.

Content analysis is a research tool used to determine the presence of certain words, themes, or concepts situated within some form of qualitative data, usually texts. By using content analysis, researchers can analyse themes, relationships and meaning to the texts under investigation. Riffe, Lacy, Fico and Watson (2023) argue that "Only this information-gathering technique [content analysis] enables us to illuminate patterns in large sets of communication content with reliability and validity". The data was analysed through a descriptive content analysis using bar charts. The analysis includes the Commonwealth country of affiliation as well as research levels and sub-levels. The results were compared to similar studies on research levels and trends that have been carried out by Zawacki-Richter et. al. (2009), Zawacki-Richter and Naidu (2016), Bozkurt and Zawacki-Richter (2021) and Roberts (2016) and Roberts and van der Walt (2022). This was done to assess the gaps in ODL research from Commonwealth countries.

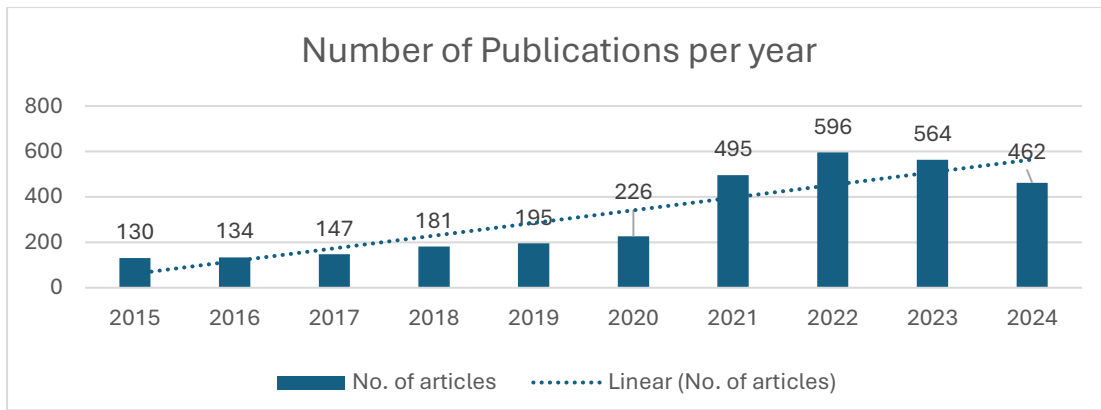
## **Results:**

The following results from the analysis of the dataset are presented and discussed:

- Total number of publications for each year from 2014 to 2025
- Country-specific publications

Results based on the research levels from the amended Zawacki-Richter (2009) framework

### **Figure 3 Number of publications by Commonwealth authors from 2015 to 2024**



From Figure 3 it can be shown that since 2021, there has been a marked increase in DE research, driven in part by the global shift to online learning during the COVID-19 pandemic and the subsequent integration of digital technologies into educational systems. This surge is evident across various disciplines and regions, reflecting a heightened interest in exploring and DE teaching and learning (Andriyan, Puspitasari, Chanrawati & Ramadhan, 2023). Publications peaked in 2022 (n=596 publications) with a slight decrease in 2023 (n=564). The total publications for 2024 (n=462) depict only those published in SCOPUS until October 2024, and this means there will be an increase in this number when the final articles for 2024 are available on the SCOPUS database.

**Figure 4 Country-Specific Publications**

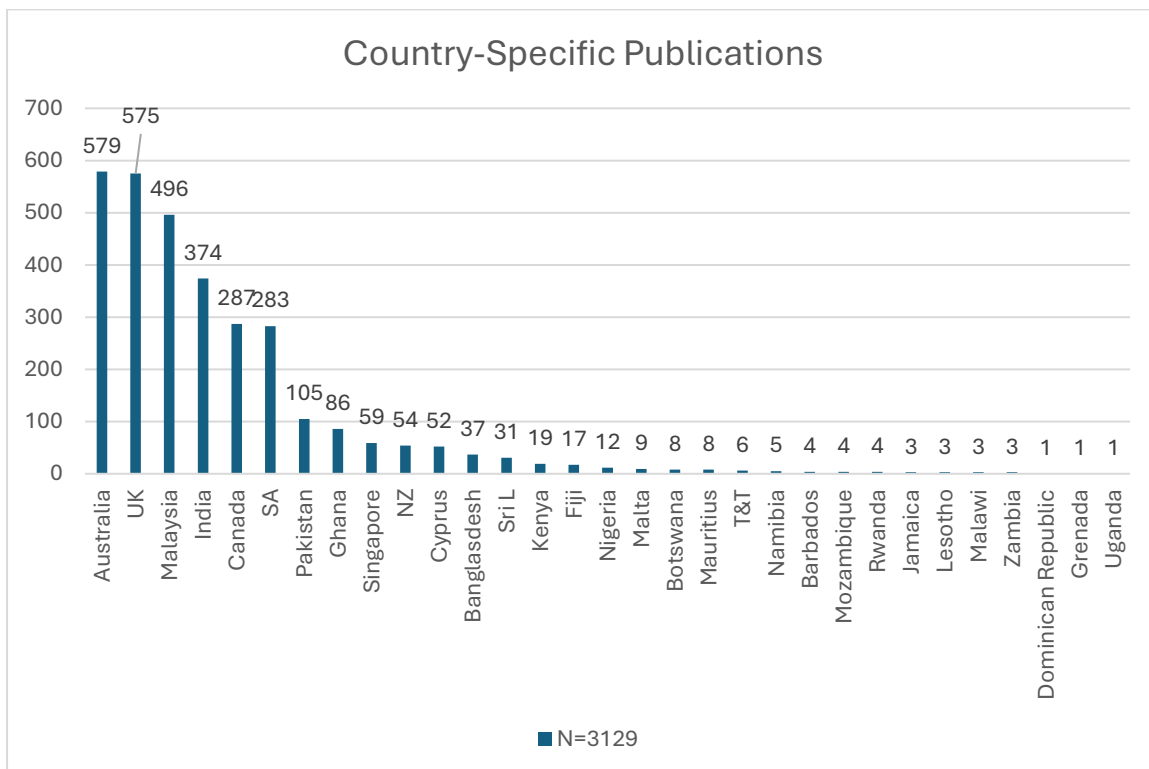


Figure 4 indicates that the total number of articles published in the SCOPUS database from 2015 to 2024 authored by researchers from Commonwealth Countries, is 3129. Australia has the largest number of publications (n=579) and is followed closely by the UK with 575 articles. Other countries that published substantially include Malaysia (n=496), India (n=374), Canada (n=287) and South Africa (n=283). In all, 31 of the 56 Commonwealth nations

are depicted in this graph. There were no articles published from other Commonwealth nations within this review. Together, the top six nations produced more than 80% of all Commonwealth publications.

The Commonwealth is divided into various regions that include Asia, Europe, the Pacific Islands, Africa the Caribbean and the Americas. The Asian region produced the most publications (n=1102), with publications from each country in that region. Malaysia led the way, followed by India, Pakistan, Singapore, Bangladesh and Sri Lanka. There are only three Commonwealth countries in Europe, being the UK, Cyprus and Malta. All three countries contributed to the research on DE, the majority of which were UK-authored, followed by Cyprus and then Malta.

Australia, New Zealand, and Fiji are the Commonwealth's principal Pacific Island nations that contribute to DE research. Together, these three nations produced 650 articles, which is a little under 20% of all the papers published by Commonwealth nations. Although there are 13 Commonwealth countries in this region, these are the only three Pacific Island nations to publish publications on DE in the SCOPUS database. A total of 579 articles were authored by Australian researchers, 54 articles by authors from New Zealand, and Fiji's contributions consisted of 17 publications.

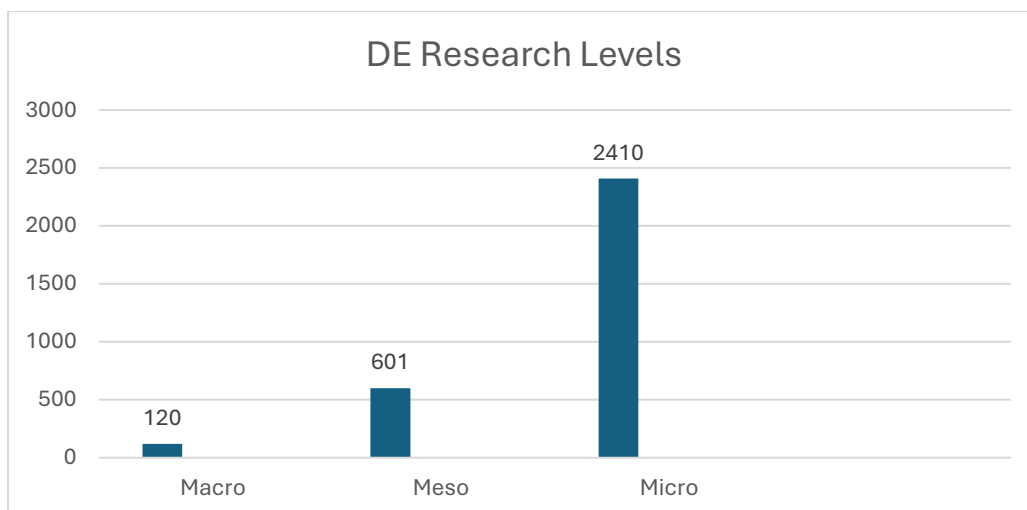
Between 2015 and 2025, 439 publications with African authors were published in the SCOPUS database, accounting for 14% of all published articles in this dataset. Thirteen of the 19 African Commonwealth nations have publications in the SCOPUS database, as shown in Figure 4. After South Africa (n=283), Ghana (n=86) and Kenya(n=29) are ranked second and third, respectively. It is logical to infer that the University of South Africa (Unisa) is the largest producer of DE research on the African continent, given that it was founded in 1948 and is the oldest DE institute in the world devoted exclusively to DE.

Canada and 12 other Caribbean nations form the 13 Commonwealth countries that make up the region of the Caribbean and the Americas. Most DE research is written by authors from Canada (n=287), and there are relatively few articles from Trinidad and Tobago, Barbados, Jamaica, the Dominican Republic and Grenada. Only six out of the 13 countries in this region are actively publishing DE research.

### **Research Level and sublevels**

Figure 5 presents the findings for each of the three research levels (Macro, Meso, and Micro). Slightly less than 4% of all publications (n=120) were placed at the Macro-level of study, whilst only 19% of articles pertained to the Meso-level (n=601), and 77% of publications were aimed at the Micro-level of research.

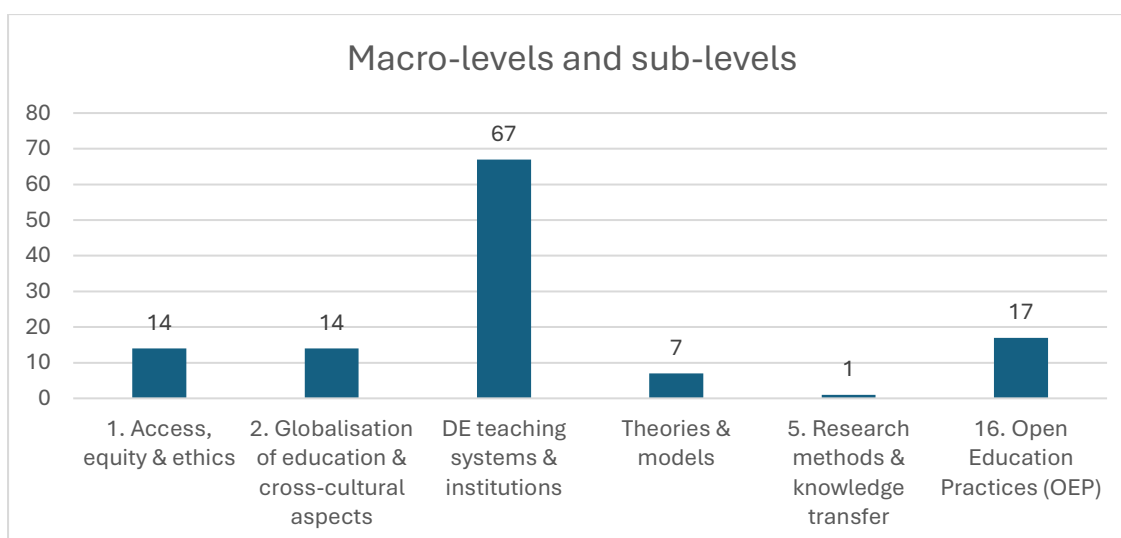
### **Figure 5 DE Research Levels**



Previous DE research analyses of publications from various countries also indicate the proliferation of micro-level research, but not nearly as prominently as the results indicated in Figure 5. Zawacki-Richter et al (2009) researched DE articles published in five of the most prominent journals: Open Learning (OL), Distance Education (DE), American Journal of Distance Education (AJDE), Journal of Distance Education (JDE), International Review of Research in Open and Distance Learning (IRRODL).<sup>6</sup> According to them, more than half of the articles were at the micro level, and they considered this to be "highly over-represented." In a survey of DE articles written by South Africans between 2015 and 2019, Roberts and van der Walt (2022) discovered that over 66% of the articles focused on the micro level. According to earlier research conducted between 2010 and 2014, 65% of DE publications were concerned with the micro level of DE research (Roberts, 2016).

The breakdown of each level into its constituent sublevels is shown in Figure 7.

**Figure 7: Macro-levels and sub-levels**

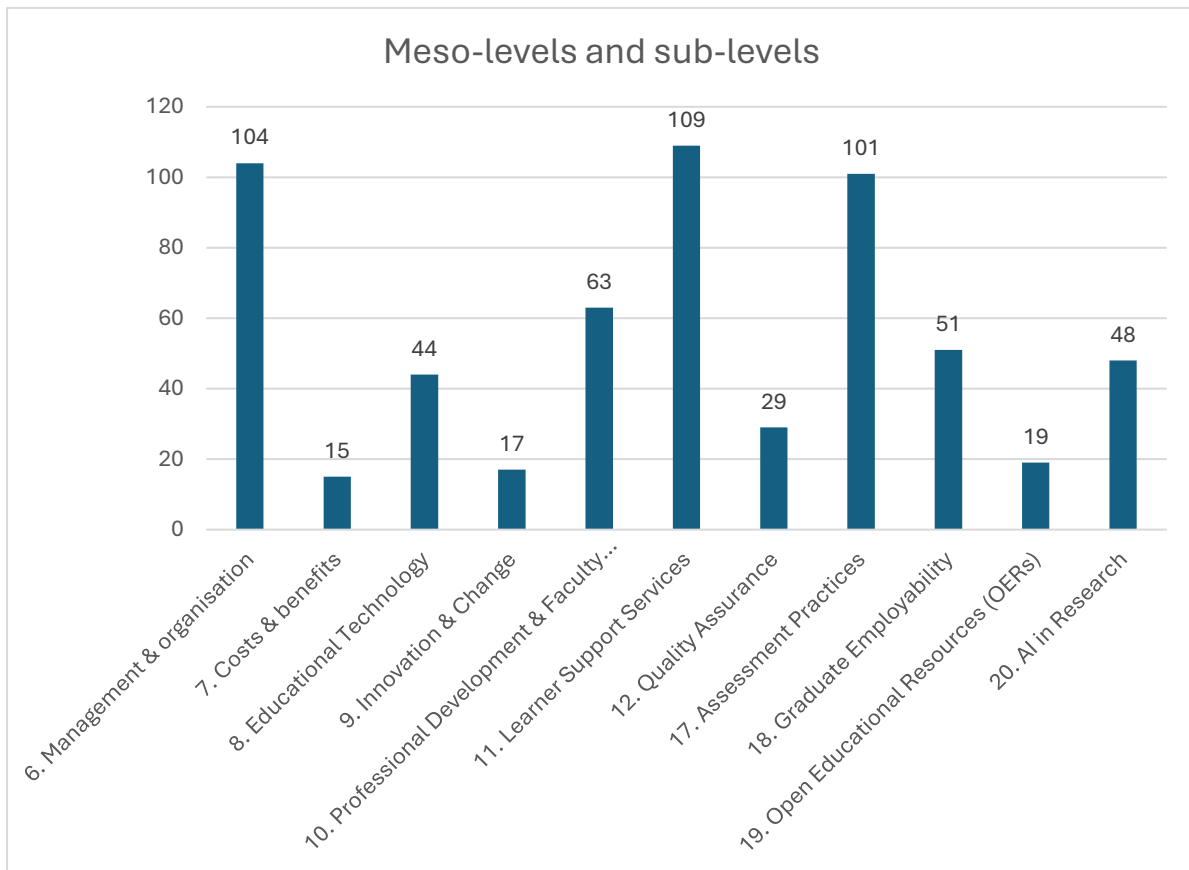


At the macro level of DE research, most of the research is directed towards sublevel 3 – DE teaching, systems and institutions. The newly added sublevel of OEP attracted 16 publications, and a small number of articles were

<sup>6</sup> This journal is now called the International Review of Research in Open and Distributed Learning

published concerning access, equity and ethics (sublevel 1) and globalisation of education and cross-cultural aspects (sublevel 2). It is concerning to observe the limited focus on macro-level research within the field of DE from Commonwealth countries, as Macro-level research is essential for informing policies and strategies that address infrastructural disparities, regulatory frameworks, and the scalability of distance learning initiatives. Without such insights, efforts to expand and improve DE may fail to address the root causes of inequity and inefficiency within the system.

**Figure 8: Meso-levels and sub-levels**

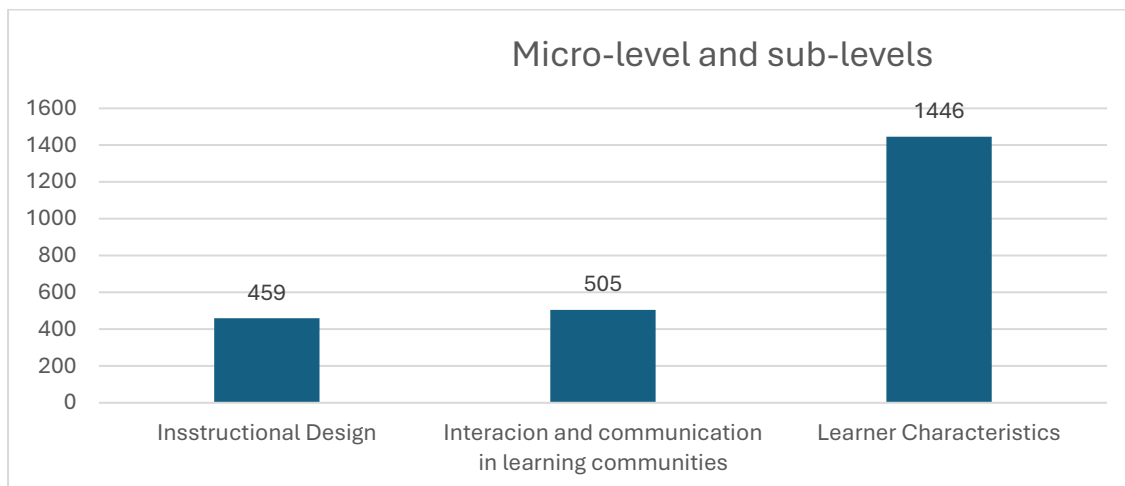


Despite the increasing volume of DE research in the Commonwealth countries, it is concerning to note that only 19% of publications between 2015 and 2024 addressed Meso-level topics. Learner support services (sub-level 11), Management and Organisation (sub-level 6) and the new sub-level 17 (Assessment Practices) provided the largest share of the research.

With just 15 articles (slightly more than 1%), Costs & Benefits (Sublevel 7) is the most under-represented sublevel in the Meso-level. This is consistent with studies by Roberts and van der Walt (2022), who discovered that only 2% of South African Meso-level publications are concerned with Costs and Benefits. Similar findings were made by Zawacki-Richter et al. (2016), who determined that this topic was the focus of little over 1% of Meso-level articles.

The three new sub-levels that were added to the framework justify their inclusion. Sublevel 18 (Graduate Employability) contributed 51 articles, sublevel 19 (OERs) 19 articles, and 48 articles referred to AI in their research (sublevel 20).

**Figure 9 Micro-level and sub-levels**



Micro-level research is overrepresented, with 77% of all DE research aimed at this level. Sublevel 15 (Learner Characteristics) is the most used and contributes over 46% of all research and 60% of the micro-level research. Findings by other researchers investigating research levels found that 50% of articles were directed at the micro level (Zawacki-Richter et al. 2009 ) and 66% for South African authors (Roberts& van der Walt, 2022). Zawacki-Richter et al (2009) felt that the figure of 50% for micro-level articles was “Highly Represented”.

The authors discussed the coding levels at length and agreed that sublevel 13 (Instructional Design) would cover all articles relating to online pedagogy, blended/hybrid learning and MOOCs, as they related to teaching and learning. The use of social media, collaborative groups, peer-assisted learning and mobile learning was assigned to sublevel 14 (Interaction and communication in learning communities), and learner characteristics (sublevel 15) encompassed student perceptions, engagement, and motivation.

#### **Discussion and further research:**

The authors retrieved all articles written by Commonwealth authors, fulfilled the inclusion and exclusion criteria, and were published in the SCOPUS database. A total of 3129 articles remained after duplicates were removed, as well as articles, where the focus was not DE or the context, was not HE.

Since 2021, there has been a marked increase in DE research, driven by the global shift to online learning during the COVID-19 pandemic and the subsequent integration of digital technologies into educational systems. This surge is evident across various disciplines and regions, reflecting a heightened interest in exploring DE teaching and learning (Andriyan, Puspitasari, Chanrawati & Ramadhan, 2023). The sudden shift to remote learning necessitated rapid adaptation, prompting researchers to explore various facets of DE, including digital infrastructure, pedagogical strategies, and policy implications.

There has been a linear increase in DE publications over the 10-year period. Publications peaked in 2022 (n=596 publications) with a slight decrease in 2023 (n=564). The total publications for 2024 (n=462) depict only those published in SCOPUS until October 2024, and this means there will be an increase in this number. The growing number of publications, particularly in the post-COVID-19 period, is to be welcomed. However, the Global North still dominates this research space, with over 46% of all publications being authored by scholars from Australia,

the UK and Canada. Malaysia, India and South Africa have contributed 37% of the published articles, and smaller countries are starting to show signs of moving into this area of research.

The research articles that were assigned to the Macro-level within the amended Zawacki-Richter (2009) research levels framework indicate that only 4% of research falls under this level. However, 58% of these articles are authored by scholars in the UK, Australia and Canada. Many publications under the Macro-level were published by South African, Malaysian, and Indian authors, demonstrating that developing nations are starting to take charge of their destiny and tackling the wide economic, social, and cultural factors influencing DE in their respective contexts. Kenya, Ghana and Cyprus have begun working in this space, and they are encouraged to move ahead and forge a research pathway embracing the Macro-level areas of research. It is also important to note that a Malaysian scholar authored the most frequently cited macro-level article. However, it will be crucial for scholars to pay attention to the dearth of Macro-level studies and fill this obvious research and publication gap concerning system-wide topics, including funding, accreditation, globalisation, policies, and trends.

Research falling under the Meso-level, which concentrates on organisational and managerial aspects of institutions, such as learner support services, technology infrastructure, quality assurance, and cost analysis, accounted for 19% of all publications. Zawacki-Richter and Bozkurt (2021) found that in 2013, 43% of DE publications pertained to the meso-level, while Roberts and van der Walt (2022) ascribed 31% of the publications from 2015 to 2019 of South African-authored DE articles to the meso-level. This suggests that meso-level research has been relatively underrepresented among Commonwealth authors and that institutional dynamics and organisational frameworks in DE have yet to be fully explored. While Meso-level research in DE within the Commonwealth has been limited, there is a growing awareness of its significance. Strengthening this area of research is essential for addressing institutional challenges and enhancing the delivery of DE across diverse contexts.

It is important to value the significance of micro-level research in informing and enhancing the quality of teaching and learning. By concentrating on learner experiences, new methods of interaction and instructional design strategies, valuable insights can be obtained that lead to improved learning experiences. The most highly cited article overall research levels was, however, a Micro-level article authored by collaborative researchers from India in which they explored the perceptions and preferences for online education in India during the COVID-19 pandemic (Muthuprasad, Aiswarya, Aditya and Jha, 2021)

Due in part to the acceleration of online teaching and learning since 2020, there was, however, an abundance of similar types of research carried out, albeit in different contexts. Most of these publications investigate how Faculty and students perceived the shift to online learning, and data saturation has been achieved. While Micro-level research is essential for improving learning experiences, there is a need to strengthen Macro and Meso-level research to address institutional and systemic challenges. Commonwealth Countries are encouraged to expand their focus on both Macro and Meso-level topics to fill existing gaps and contribute to the evolution of DE research globally.

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