Appendix A: The coding sheet used for annotating and analyzing the MMR studies

|  |  |  |
| --- | --- | --- |
| **Variables** |  | **Values** |
| ID |  |
| Year/issue/No  |  |
| Title  |  |
| Journal |  |
| MMR Purposes | Complementarity [ ]  | Triangulation [ ]  | Development [ ]  | Expansion [ ]  |
| Initiation [ ]  | Not mentioned [ ]   | Other [ ]  |
| **Reflections** |  |
| MMMR Design Transparency | Explicitly mentioned [ ]  | Implicitly identified [ ]  |
| Mixed research designs (based on the Riazi and Candlin’s (2014) classification) | Elective/quasi-MMR [ ]  | Principled elective/MMR [ ]  |
| Innovative MMR [ ]  |
| **Reflections**  |  |
| Mixed methods designBased on Creswell and Plano-Clark’s (2018) typology | Core MMR designs [ ]  | Advanced/scaffolded MMR designs [ ]  |
| If Core MMR designs | Convergent [ ]  | Sequential Explanatory l [ ]  | Sequential Exploratory [ ]  |
| If Advanced MMR designs | MMR Experimental [ ]  | MMR case study [ ]  | MMR participatory [ ]  |
| MMR Evaluation design [ ]  | MMR grounded theory [ ]  | Other [ ]  |
| **Reflections**  |
| MMR Priority | Equal [ ]  | QUAN [ ]  | QUAL [ ]  |
| If sequential | Equal weights [ ]  | QUAL → QUAN [ ] QUAN → QUAL [ ]  |
| Different weights [ ]  | qual → QUAN [ ] QUAL → quan [ ] quan →QUAL [ ] QUAN → qual [ ]  |
| If convergent | Equal weights [ ]  | QUAL + QUAN [ ]  |
|  | Different weights [ ]  | QUAL + quan [ ] QUAN + qual [ ]  |
| MMR Sampling Transparency | Explicitly mentioned [ ]  | Implicitly identified [ ]  |
| MMR Sampling Types | Concurrent samplingIdentical [ ] Parallel [ ] Multilevel [ ] Nested [ ]  | Sequential samplingIdentical [ ] Parallel [ ] Multilevel [ ] Nested [ ]  |
| Quan Sampling Scheme | Type of quan Design | Sample size |
| Qual Sampling scheme | Type of qual Design | Sample size |
| **Reflections** |  |
| Data Source | QUAN data sources |
| QUAL data sources |
| **Reflections** |  |
| Data Analysis | QUAN data analysis |
| QUAL data analysis |
| Inference | Quantitative inference |
| Qualitative inference |
| **Reflections** |  |
| Meta-inference |  |
| **Reflections** |  |
| MMR references  |  |
| **Overall comments** |  |

Appendix B: the lexical dispersion profile



Appendix C: The most frequent words in 304 MMR Abstracts

|  |  |  |
| --- | --- | --- |
| **Word** | **Freq. (R)** | **Bigram/Trigram/Concordancer**  |
| Language | 627 | Foreign language(s), second language, language learning, language learners, English language, heritage language, language education, world language |
| Writing | 299 | Academic writing, writing skills, writing instruction, argumentative writing, writing task, graphic writing, writing proficiency, expository writing, writing prompts, second language writing, academic writing skills, academic writing tasks, IELTS academic writing, argumentative writing skills, academic writing development, academic writing assignment, academic writing courses, authentic academic writing, English academic writing, expository writing skills, argumentative writing instruction, digital graphic writing |
| Online | 110 | Online tools, synchronous online, online second language, online language learning, online English language, online language education |
| Interviews | 107 | Structured interviews, group interviews, individual interviews, stimulated recall interviews, focus group interviews, oral proficiency interviews |
| Qualitative | 105 | Qualitative data, qualitative analysis, qualitative coding, qualitative methods, qualitative findings, qualitative data collection, qualitative data sets, qualitative interview data, qualitative methods |
| Foreign | 104 | Foreign language, foreign language learners, foreign language policy, foreign language anxiety, foreign language enjoyment, foreign language classes, undergraduate foreign language, foreign language programs, foreign language teachers, foreign language university, Chinese foreign language, foreign language stakeholders |
| Feedback | 85 | Corrective feedback, peer feedback, assisted corrective feedback, oral corrective feedback, peer corrective feedback, implicit corrective feedback, & explicit corrective feedback |
| Quantitative | 84 | Quantitative data, quantitative analyses, quantitative phase, quantitative data analysis |
| Perceptions | 83 | Positive perceptions, perceptions towards, positive perception towards, study examined perceptions |
| Motivation | 82 | Motivational profiles, learning motivation, motivational regulation, intrinsic motivation, motivational self, motivational forces, motivational regulation strategies, language learning motivation |
| EFL | 81 | A university EFL context, Yemeni rural high school EFL learners, cohorts of Polish and German EFL student teachers, Danish EFL learners, EFL learning experience |
| Chinese | 78 | Chinese EFL learners, Chinese university students, Chinese language learning |
| Test | 71 | Test scores, test modes, test formats, test taker, entrance test, post production test, literacy test scores |
| Skills | 69 | Writing skills, thinking skills, communication skills, academic writing skills, argumentative writing skills, critical thinking skills, expository writing skills, English language skills, oral communication skills, 21st century skills, oral presentations skills |
| Task | 69 | Task difficulty, videoconference task, task design, task completion |
| Mixed-methods | 68 | A mixed-methods longitudinal study, a mixed-methods approach, utilizing mixed-methods data collection and analysis, mixed-methods observational study, mixed-methods explanatory sequential design, mixed-methods study of Chinese university |
| Mixed | 64 | Mixed research method, mixed methodology, mixed methods, explanatory mixed, sequential mixed, mixed methods triangulation, longitudinal mixed, innovative mixed methods |
| Performance | 63 | Performance assessments, speaking performances, peer feedback performance |
| Assessment | 62 | Assessment literacy, mediated dynamic assessment, assessment literacy required, teacher assessment literacy, proficiency assessments used, online dynamic assessment, writing proficiency assessments |
| Context | 62 | EAP context, academic purposes context, learning context |
| Linguistic | 62 | Linguistic features, linguistic diversity, linguistic resources, linguistic aspects, linguistic complexity |
| Questionnaire | 60 | Questionnaire survey, online questionnaire, a Likert scale questionnaire, a motivational questionnaire |
| Survey | 60 | TPACK-EFL survey, a descriptive survey, survey questionnaires, survey administration |
| Beliefs | 56 | Low self-efficacy beliefs, the beliefs of second language learners, positive beliefs about TBLT principles, conflicting beliefs |
| Positive | 53 | Positive social relationships, positive correlations, positive stance toward, positive attitudes, positive pedagogical perceptions |
| Vocabulary | 52 | Vocabulary learning, specialized vocabulary, vocabulary acquisition, vocabulary knowledge, second language vocabulary, technical legal vocabulary, second language vocabulary, vocabulary learning app, multidimensional vocabulary acquisition |
| Higher | 50 | Higher education, higher mastery goal orientation, higher anxiety and enjoyment in LX classes |
| Fluency | 48 | Fluency measures, temporal fluency, oral fluency, speech fluency, fluency resources, second language fluency, interactional oral fluency |
| Attitudes | 48 | Attitudes towards, positive attitude, attitude towards technology, negative attitude towards, contradictory attitudes towards, learners’ attitudes towards, attitudes towards teachers, attitudes towards plagiarism |
| Cultural | 47 | Intercultural communicative, cross-cultural transitions, intercultural competence, cultural background, cultural dimension, cultural representation, sociocultural theory, intercultural sensitivity, developing intercultural competence, promoting intercultural thinking, intercultural communicative competence |
| International | 47 | International students in ESL advanced writing, International English Language Testing System, English as an international language (EIL) |
| Reading | 41 | Assigned reading, reading comprehension, proofreading revisited, general reading, general reading comprehension, digital social reading, reading comprehension ability |
| Spanish | 41 | Spanish course, K–12 Spanish instructors, Spanish as a second language, Spanish language learners |
| Activities | 40 | Collaborative activities for learners, course-related activities, oral interaction activities, literacy-focused activities, student-centered activities |
| Engagement | 40 | Research engagement, students' engagement, international engagement orientation, L2 learning engagement |
| Self-efficacy | 38 | Self-efficacy beliefs, task-based self-efficacy for students' motivation, teachers' self-efficacy, the relationship between EPS self-efficacy and EPS performance |
| Motivational | 37 | Learners’ writing-specific motivational profiles, L2 Motivational Self System, writing proficiency levels and motivational regulation strategies |
| Process | 37 | Writers’ internal process factors, language learning process, accent identification process, socialization process, validation process of a self-assessment survey |
| Written | 37 | L2 written performance, oral and written production tasks, a set of written prompts, sole indicator of written fluency |
| Cognitive | 36 | Cognitive strategies, cognitive loads of participants, cognitive linguistic analysis, age-related cognitive limitations, cognitive theory of multimedia learning |
| Communication | 36 | Mediated communication, computer-mediated communication, lingua franca communication |
| Grammar | 36 | Grammar instruction, grammar teaching |
| Listening | 36 | Listening comprehension, listening test, study investigated listening |
| Interaction | 34 | Peer interaction, tele-collaborative interaction, learner-computer interaction, Interaction with native speakers |
| Rater | 34 | Novice rater, rater performance, rater negotiation scheme, writing raters resolve |
| Intercultural | 33 | Intercultural communication, intercultural communicative competence (ICC), intercultural awareness |
| Social | 32 | Social engagement, the smartphone social communication app WeChat, social and psychological factors, social responsibility |
| Challenges | 31 | Great challenges to the validity of assessment, technical challenges, ESP Teachers’ Challenges and Needs Questionnaire (ESP-TCNQ) |
| Communicative | 30 | Communicative competence, communicative ability, communicative teaching, communicative troubles, group communicative task, intercultural communicative competence |
| Critical | 30 | Critical thinking, critical thinking skills, elevate critical thinking, critical thinking abilities, assessing critical thinking |
| Training | 30 | CF training (prompts or recasts), teacher training virtual exchange, teacher training for EMI, EL training program |
| Collaborative | 29 | Collaborative learning, collaborative board game, attitude toward collaborative, collaborative digital graphic |
| Instructional | 29 | Instructional and assessment value of AWE, instructional settings of L2 writing, instructional practices for English language, 10-hour instructional treatment, EIL teachers’ instructional intervention |
| Japanese | 29 | Memorization of Japanese written characters, Japanese people, Japanese L2 learners |
| Literacy | 29 | Lack of assessment literacy, students' emotional literacy (EL), academic literacy, disciplinary literacy practices and genre awareness, deictic critical digital literacy |
| China | 28 | Negative coverage on China in Japan's media, undergraduate level in China, a country like China with a top-heavy bureaucracy |
| Developing | 28 | Developing country, developing communicative skills, developing their linguistic accuracy, developing teachers' English competence |
| Peer | 28 | Peer corrective feedback (CF), peer linguistic resources, peer social network composition, peer critical comments, peer feedback performance |
| Schools | 28 | Greek state primary schools, state-funded schools, Business schools in Asia frequently, K–12 schools |
| Errors | 27 | Word stress errors, word choice errors, pragmatic errors, local lexico-grammatical errors, qualitative analysis of errors |
| Speaking | 27 | Speaking fluency, non-native English speaking students' learning processes, English public speaking (EPS), proficiency in speaking, semi-direct online speaking test |
| Technology | 27 | Using technology, educational technology, attitudes towards technology, attitudes towards technology for language learning, games-based technology, information and communication technology (ICT) |
| Digital | 26 | Digital graphic writing, interactive digital textbook, learning with Digital Resources, digital narratives, digital screen capture, digital graphic organizers |
| Writers | 26 | Post-novice undergraduate writers, second language (L2) writers, Japanese L2 writers, future textbook writers |
| Flipped | 24 | Flipped classroom, flipped learning, flipped writing instruction, flipped classroom pedagogical approach |
| Production | 24 | Written production skills, L2 production, oral production, intelligible production, pre/post production tests, significant production gains |
| Undergraduate | 24 | Undergraduate students, undergraduate students’ perceptions, undergraduate biology, undergraduate language learners |
| Corpus | 23 | Corpus of medical lectures, corpus tools, corpus linguistics lens, students’ corpus use, individual corpus queries, corpus of 5910 abstracts |
| Assess | 23 | Assess the participants’ critical thinking, assess the learners’ academic writing skills, to assess the effects of PHONE Words, to assess two dimensions of EIL |
| WTC | 23 | Conceptualizing WTC as a dynamic system, variation in WTC, treatment group's WTC, enhance students’ WTC, advanced learners’ WTC, new understanding of WTC |
| Anxiety | 22 | Anxiety level, foreign language anxiety, less anxiety about using technology, enjoyment and anxiety were positively linked |
| ESP | 22 | ESP settings, ESP courses, ESP Teachers’ Challenges, effective ESP provision, authenticity in ESP assessments |
| Engage | 22 | Engage with language learning, engage in intensive L3 learning, engage in meaningful interaction, engage learners’ interest, engage learners affectively, successfully engage in group conversations with peers |
| Acquisition | 21 | Second language acquisition, vocabulary acquisition and retention, Second Language Acquisition |
| Pragmatic | 21 | Pragmatic needs, pragmatic strategies, pragmatic competence |
| Multilingual | 21 | Multilingual classes, multilingual student population |
| Curriculum | 19 | Curriculum innovation, English curriculum innovation |
| Culture | 19 | Target culture, institutional culture, local culture and ELT materials, the place of culture in teaching English, culture between teachers and students |
| Discourse | 18 | Discourse communities, discourse markers among, university discourse communities |
| Identity | 18 | Writer's identity, identity construction, language identity |
| Comprehensibility | 18 | Different comprehensibility levels, positive comprehensibility ratings, students' comprehensibility |
| ESL | 18 | ESL writing classes, ESL grammar books, ESL writing instructors, Latino ESL students |
| Essays | 18 | Blinded essays, narrative essays, language experience essays, students’ reflection essays |
| Integrated | 18 | Integrated trait, content and language integrated learning (CLIL), independent and integrated tasks, Integrated Performance Assessments (IPAs) |
| Pedagogy | 18 | Writing pedagogy, Language pedagogy in Australia, technology-driven pedagogy and activities, VEC pedagogy |
| Reflection | 18 | Interviews and reflection papers, metacognitive reflection, integrating critical cultural reflection, retroactive reflection |
| Surveys | 18 | Post-treatment surveys, Online surveys, post-course surveys, surveys and class observations, surveys and interviews |
| Argumentative | 17 | Advanced-level argumentative writing skills, argumentative essay, argumentative writing prompts, argumentative behavior of raters |
| EAP | 17 | EAP writing instruction, EAP pragmatic needs, pre-sessional or adjunct EAP courses |
| Improvement | 17 | Significant improvement on the post-test, pronunciation improvement, improvement in listening, improvement on L2 measures, pronunciation improvement |
| Lack | 17 | Lack of theory-driven investigations, lack of collaborative monitoring, lack of access to the L1 community, lack of student awareness |
| Mobile | 17 | Mobile devices, mobile TTS, mobile learning platform, mobile game-based learning (MGBL), mobile English vocabulary learning app, mobile chat scripts |
| Participation | 17 | Participation among participants, encouraging active participation, classroom participation |
| Plagiarism | 17 | Plagiarism in Anglo-American academia, subtle plagiarism, misunderstandings about plagiarism, Anglo-American notion of plagiarism |
| Pronunciation | 17 | Find pronunciation a difficult skill to teach, promoting pronunciation improvement, native pronunciation of the teacher, weekly pronunciation tasks, Received Pronunciation (RP), Developing intelligible pronunciation |
| Sociocultural | 17 | Vygotsky's sociocultural theory, sociocultural aspects, sociocultural perspective, sociocultural theories of writing |
| Accuracy | 16 | Writing accuracy, grammatical accuracy, linguistic accuracy and fluency, reading accuracy and fluency |
| Age | 16 | Age influences CFL teachers’ confidence, gender and/or age in the attitudes towards |
| Bilingual | 16 | Bilingual peers who collaborated, preschool bilingual education, bilingual high-stakes, bilingual competences |
| French | 16 | French learners, French liaison, French college students, French grammar, French course |
| German | 16 | German degree courses, German EFL student teachers, German as a foreign language |
| Lexical | 16 | Lexical retrieval difficulty, Lexical richness, lexical knowledge and range, lexical diversity, lexical and grammatical errors |
| Lower | 16 | Lower textual units, lower proficiency beginners, lower levels of L1 and LX anxiety, lower CEFR levels, lower attention spans |
| Negative | 16 | Negative impact, negative emotions, negative coverage, negative emotions, negative feedback |
| Nonnative | 16 | Native or nonnative speakers of English, training nonnative students, nonnative speakers (NNSs) |
| Scoring | 16 | Scoring and qualitative feedback, scoring criteria, scoring validity, raters’ scoring interpretations |
| Textbooks | 16 | ELT textbooks, digital textbooks, block-formatted textbooks, Japanese textbooks |
| Authentic | 15 | Authentic language data (i.e., corpora), authentic academic writing assignment, authentic materials in second language |
| Evaluation | 15 | Automated writing evaluation (AWE), evaluation and monitoring strategies, evaluation criteria used in academia |
| Faculty | 15 | Faculty and domestic students, faculty development practices, faculty development |
| Kanji | 15 | Kanji learning, kanji and kanji components, learners' kanji knowledge, kanji in Japanese |
| Longitudinal | 15 | Longitudinal study, a longitudinal mixed-methods design, longitudinal in-depth interviews |
| Korean | 14 | South Korean college students, Korean English-major, Korean speakers |
| Synchronous | 14 | Synchronous text chats, synchronous voice-based computer-mediated, synchronous DA sessions, synchronous transcendence (TR) sessions, synchronous online environments |
| Thinking | 14 | Critical and analytical thinking skills, critical thinking activities |
| Dynamic | 13 | Dynamic interplay, complex dynamic systems theory (CDST), dynamic assessment (DA) |
| Follow-up | 13 | A follow-up qualitative study, follow-up Skype interviews, follow-up focus group |
| Genre | 13 | Pedagogical genre of the laboratory report, genre acquisition, novice teachers' genre awareness and critical literacies |
| Self-regulation | 13 | Writing self-regulation, self-regulation and self-efficacy, self-regulation in language learning |
| Syntactic | 13 | Syntactic structures, syntactic complexity, syntactic diversity, syntactic parsing and semantic-proposition |
| AWE/automated writing evaluation | 12 | Assessment value of AWE in writing classrooms, reliability of AWE corrective feedback, AWE programs |
| Exploratory | 12 | Exploratory factor analysis (EFA), sequential exploratory mixed-methods approach |
| Heritage | 12 | Autochthonouss heritage language (AHL), heritage language and literacy, heritage language speakers |
| Narratives | 12 | Video-based oral narratives, autobiographical narratives, grammatical features of the narratives |
| Autonomy | 10 | Learner-autonomy model, autonomy amongst students |
| Efficacy | 10 | Self-regulatory efficacy and apprehension, efficacy in a foreign language learning, program efficacy |
| EPS | 10 | EPS performance, relationship between EPS self-efficacy and EPS performance, EPS instructional practices |
| OPI | 10 | OPI and OPIc within a 2-week period, Spanish OPI and OPIc |
| Virtual | 10 | Virtual exchange project phases, virtual environments, virtual classroom, virtual world |
| Voice | 10 | Gave a voice to TAs, voice strength in second language (L2), authorial voice in written discourse |

Appendix D: The multidisciplinary MMR references used in AL studies\*\*

|  |  |  |  |
| --- | --- | --- | --- |
| Document | Mode of publication | No. of times cited  | Google scholar citations |
| ***Creswell and/or his collaborators*** |
| Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research*.  | Book | 41 | 49093 |
| Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approach.* | Book | 25 | 189802 |
| Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research.* | Book | 7 | 63989 |
| Creswell, J. W. (2015). *A concise introduction to mixed methods research*.  | Book | 5 | 5917 |
| Creswell, J. W., Plano Clark, V. L., Gutmann, M., & Hanson, W. (2003). Advanced mixed methods research designs.  | Book chapter | 5 | 7813 |
| Ivankova, N., Creswell, J., & Stick, S. (2006). Using mixed-methods sequential explanatory design: From theory to practice.  | Article | 3 | 3535 |
| Creswell, J. W. (2013). Qualitative inquiry and research design: Choosing among five approaches.  | Book | 2 | 153032 |
| Fetters, M. D., Curry, L. A., & Creswell, J. W. (2013). Achieving integration in mixed methods designs-principles and practices.  | Article | 1 | 2688 |
| Hanson, W., Creswell J., Plano Clark, V., Petska, K., & Creswell, J. (2005). Mixed-methods research designs in counseling psychology.  | Article | 1 | 2454 |
| Creswell, J., Plano Klassen, A., Clark, V., Smith, K. (2011). *Best practice for mixed methods research in the health sciences*.  | Article | 1 | 2136 |
| Ivankova, N. V., & Creswell, J. W. (2009). Mixed Methods.  | Book chapter | 1 | 197 |
| ***Teddlie and her collaborators*** |  |  |  |
| Teddlie, C., & Tashakkori, A. (2009). *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences*.  | Book | 11 | 9730 |
| Tashakkori, A., & Teddlie, C. (2010). *SAGE handbook of mixed methods in social and behavioral research*.  | Book | 7 | 13959 |
| Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches.*  | Book | 4 | 12728 |
| Teddlie, C., & Tashakkori, A. (2006). A general typology of research designs featuring mixed methods.  | Article | 2 | 1184 |
| Teddlie, C., & Yu, F. (2007). Mixed methods sampling: A typology with examples.  | Article | 1 | 5982 |
| Onwuegbuzie, A. J., & Teddlie, C. (2003). A Framework for analyzing data in mixed methods research. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioral research* (Pp. 351-383).  | Book chapter | 1 | 1957 |
| ***Burk Johnson and his collaborators*** |  |  |  |
| Johnson, R.B., Onwuegbuzie, A., & Turner, L. (2007). Toward a definition of mixed methods research.  | Article | 7 | 11478 |
| Johnson, R.B., Onwuegbuzie, A.J. (2004). Mixed methods research: a research paradigm whose time has come.  | Article | 4 | 20947 |
| Onwuegbuzie, A. J., & Johnson, R. B. (2006). The validity issue in mixed research. *Research in the Schools,* 13(1), 48-63. | Article | 2 | 2074 |
| ***Greene and her collaborators*** |  |  |  |
| Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixed-method evaluation designs.  | Article | 5 | 10093 |
| Caracelli, V. J., and J. C. Greene. (1993). Data analysis strategies for mixed methods evaluation designs.  | Article | 3 | 1248 |
| Greene, J. C., & McClintock, C. (1985). Triangulation in evaluation: Design and analysis issues. *Evaluation Review*, 9, 523-545. (n=365) | Article | 2 | 365 |
| Greene, J. C., & Caracelli, V. J. (1997). Defining and describing the paradigm issue in mixed‐method evaluation.  | Article | 1 | 1109 |
| Caracelli, V., & Greene, J. (1997). Crafting mixed-method evaluation designs. *New Direction for Evaluation*. 74, 19–32. (n=729) | Article | 1 | 729 |

\*\*27 studies did not fit the following categories and each was referred to once. This list is also available.

Discipline-specific MMR sources

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Rank | Document | Orientation | Mode of publication | N | Google scholar citations |
| 1 | Dörnyei, Z. (2007). *Research methods in applied linguistics.*  | General | Book | 13 | 10474 |
| 2 | Riazi, A. M., & Candlin, C. N. (2014). Mixed-methods research in language teaching and learning: Opportunities, issues and challenges.  | MMR | Article | 5 | 299 |
| 3 | Hashemi, M. R., & Babaii, E. (2013). Mixed methods research: Toward new research designs in applied linguistics.  | MMR | Article | 2 | 166 |
| 4 | Riazi, A. M. (2016). Innovative Mixed-methods Research (IMMR): Moving beyond design technicalities to epistemological and methodological realizations.  | MMR | Article | 1 | 78 |
| 5 | Jang, E. E., Wagner, M., & Park, G. (2014). Mixed methods research in language testing and assessment.  | MMR-Language testing and assessment | Article | 1 | 56 |
| 6 | Brown, J. (2014). *Mixed-methods research for TESOL*. Edinburgh: Edinburgh University Press.  | MMR | Book | 1 | 205 |
| 8 | Cerezo, L. (2016). Type and amount of input-based practice in CALI: The revelations of a triangulated research design.  | MMR-CALL | Article | 1 | 10 |
| 9 | Singleton D & Pfenninger SE (2015). Insights from a mixed methods approach with respect to age and long-term instructed language learning.  | MMR-SLA | Book chapter | 1 | 12 |
| 10 | Long, M. H. (2005). A rationale for needs analysis and needs analysis research.  | MMR-ESP | Book chapter | 1 | 160 |
| 11 | Irie, K. (2014). Q Methodology for post-social-turn research in SLA.  | MMR-Q methodology | Articles | 1 | 24 |
| 12 | Chapelle, C. (2012). *Using mixed-methods research in technology-based innovation for language learning*. Paper presented at the Innovative Practices in Computer Assisted Language Learning Conference, University of Ottawa, Ontario.  | MMR-CALL | Conference presentation | 1 | 3 |
| 13 | Gilmore, A. (2015). Language learning in context: Complex dynamic systems and the role of mixed methods research. In J. King (Ed.), *The dynamic interplay between context and the language learner* (pp. 194–224).  | MMR-Complex dynamic systems | Book chapter | 1 | 8 |
| 14 | Ushioda, E. (2014). Motivation perspectives on the self in SLA: a developmental perspective. In S. Mercer, & M. Williams (Eds.), Multiple perspectives on the self in second language acquisition (pp. 140-154).  | MMR-Motivation | Book chapter | 1 | 2 |
| 15 | Elsner, D., & Viebrock, B. (eds.) (2014). *Triangulation in der Fremdsprachenforschung*.[Triangulation in Foreign Language Research].  | MMR-EFL | Book | 1 | 6 |
| 16 | Hatch, E., & Lazaraton, A. (1991). *The research manual: Design and statistics for applied linguistics*.  | General | Book | 1 | 1801 |
| 17 | Lazaraton, A. (2000). Current trends in research methodology and statistics in applied linguistics.   | General | Article | 1 | 188 |
| 18 | Stickler, U., & Hampel, R. (2015). Qualitative research in CALL.  | General | Article | 1 | 39 |
| 19 | Long, M. H. (2011). Methodological principles for language teaching.  | General |  Book chapter | 1 | 200 |
| 20 | Polio, C., & Friedman, D. (2017). *Understanding, evaluating, and conducting second language writing research*.  | General | Book | 1 | 111 |
| 21 | De Costa, P. I., Valmori, L. & Choi, I. (2017). Qualitative research methods. In Loewen, S. & Sato, M. (eds.), *The Routledge handbook of instructed second language acquisition*.  | General | Book chapter | 1 | -- |
| 22 | Brown, J. D. (2001). *Using surveys in language programs*. | General | Book | 1 | 1885 |
| 23 | McNamara, C. (1999). General guidelines for conducting interviews. <http://managementhelp.org/businessresearch/> interviews.htm.  | General  | Website | 1 | 1370 |

Appendix E: Documenting general sources

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Rank | Document | Mode of publication | N | Google scholar citations |
| 1 | Cohen, L., & Manion, L.& Morrison, K. (2002). *Research methods in education*.  | Book | 5 | 70528 |
| 2 | Bryman, A. (2008). *Social research methods.*  | Book | 2 | 66201 |
| 3 | Denzin, N.K. (1978). *Sociological methods: A sourcebook.*  | Book | 1 | 5907 |
| 4 | Flick, U. (2004). *Triangulation in qualitative research.*  | Book chapter | 1 | 1256 |
| 5 | Friedman, D. A. (2012). *How to collect and analyze qualitative data.*  | Book chapter | 1 | 257 |
| 6 | Lincoln, Y., & Guba, E. (1985). *Naturalistic inquiry.*  | Book | 1 | 3363 |
| 7 | Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation.* | Book | 1 | 46999 |
| 8 | Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook.* | Book | 1 | 136356 |
| 9 | Robson, C. (2002) *Real world research: A resource for social scientists and practitioner-researchers.*  | Book | 1 | 33245 |
| 10 | Mills, G. (2018). *Action research: A guide for the teacher researcher.*  | Book | 1 | 5328 |