

Theoretical grounds, identification of good practices and recommendations to enhance digital language teaching

Usoa Toledo and Amaia Lersundi Pérez, University of Mondragon, Basque Country







2- **Diagnose** participant schools

3- Provide personalized **recommendations** to participants

3 main objectives





OBJECTIVE 1-ANALYTIC FRAMEWORK

RQ1: What are the pillars of a comprehensive approach to language teaching?

RQ2: Which factors determine successful foreign language teaching?

RQ3: How can digital and virtual tools and the international dimension promote language teaching?





RQ1: What are the pillars of a comprehensive approach to language teaching?

Paradigm Change: from CLIL to PTL





RQ1: What are the pillars of a comprehensive approach to language teaching?

Deeper learning

Learning cannot be separated from language

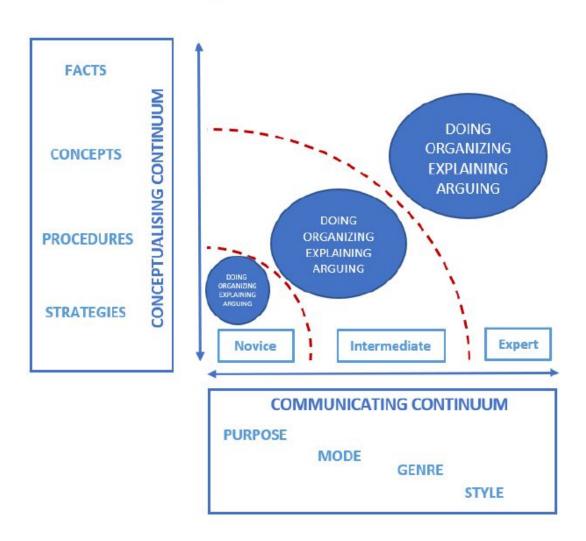
Subject-specific literacies





Pluriliteracies Teaching for Deeper Learning (PTDL) model

RQ1: What are the pillars of a comprehensive approach to language teaching?

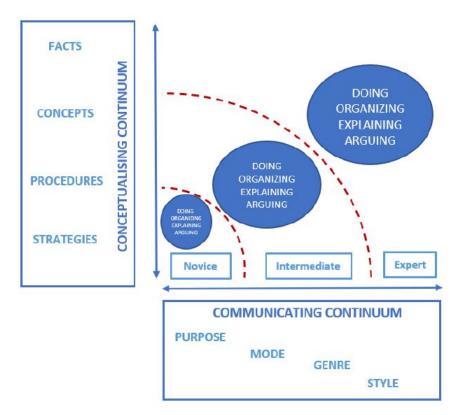






RQ1: What are the pillars of a comprehensive approach to language teaching?

Pluriliteracies Teaching for Deeper Learning (PTDL) model



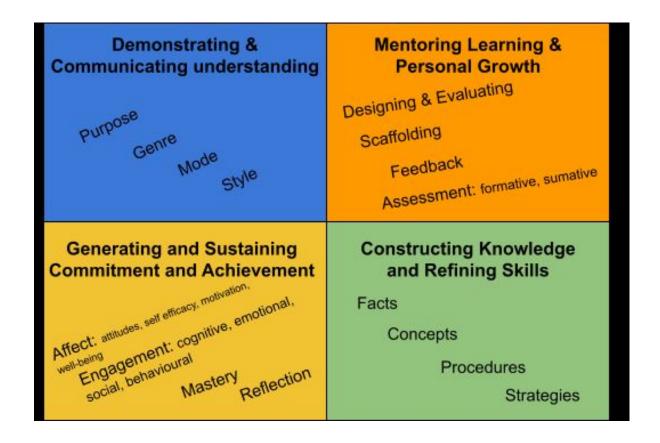
Cognitive Discourse Functions





PTDL: 4 Dimensions

RQ1: What are the pillars of a comprehensive approach to language teaching?







RQ1: What are the pillars of a comprehensive approach to language teaching?

Literature, Literacies and Language Teaching

- Literature as a subject discipline Coyle and Mayer (2021)
- Text in all modalities
- Authentic types of texts in the FL classroom (e.g. advertisements, newspapers reports, magazines, popular song lyrics, blogs, social media and multimodal text from "everyday" to the classical).





RQ1: What are the pillars of a comprehensive approach to language teaching?

PTDL and Linguistically and Culturally Appropriate Practice

- Multilingualism and multiculturalism (Skinnari & Nikula, 2017, p.233).
- We cannot talk about "language" but we should talk about "languages".
- Intercultural competence (Byram, Gribkova & Starkey, 2002, p.12).







PTDL and Digital Tools

RQ1: What are the pillars of a comprehensive approach to language teaching?

Designing-evaluating and scaffolding learning

Gamification

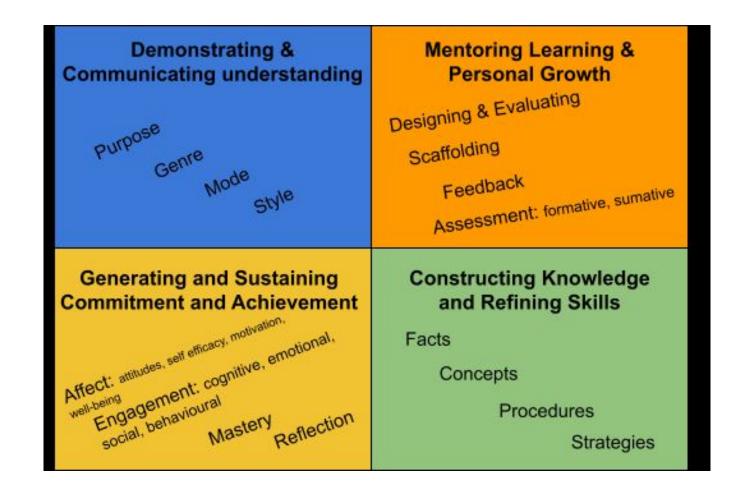
Flipped classroom

Virtual exchange platforms





RQ2: Which factors determine successful foreign language teaching?

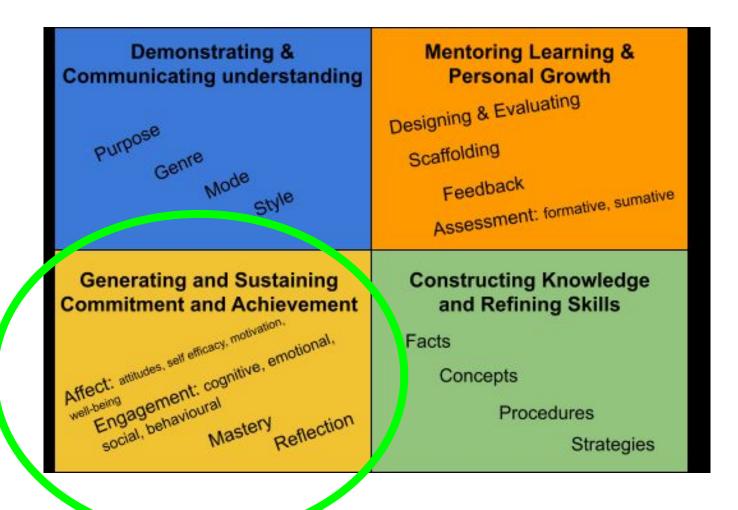






The international dimension

RQ2: Which factors determine successful foreign language teaching?





The international dimension



RQ2: Which factors determine successful foreign language teaching?

(Byram, Gribkova & Starkey,

2002; Chumack 2012; Council of

Europe, 2016; Irvina, 2010; Rader, 2018;)

- Transmission of information
- Help understand
 - Intercultural interactions
 - Social identities
 - Perceptions
- Aim → create conversation





- Must develop IC
- Get to know students & families
- Awareness of third culture kids
- Explore identities
- Acknowledge students' cultures and languages





The international dimension



Design tasks to work on → values, skills, attitudes →develop inclusive citizenship

RQ2: Which factors determine successful foreign language teaching?

(Byram, Gribkova & Starkey,

2002; Chumack 2012; Council of

Europe, 2016; Irvina, 2010; Rader, 2018)



Inclusive classroom where students feel they belong

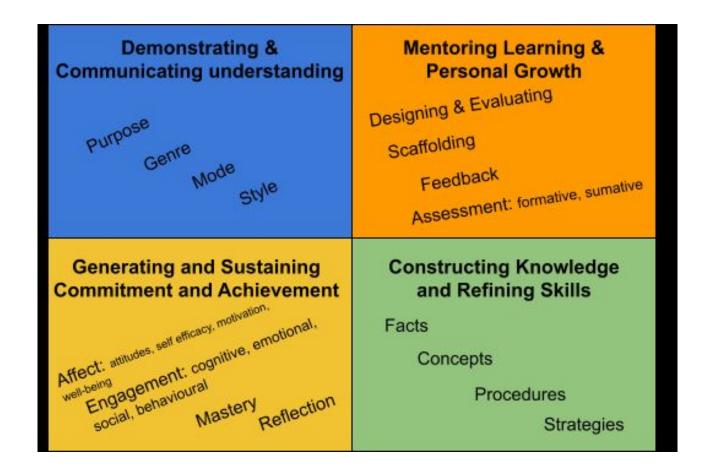
LAP (Chumak, 2012) CRT (Irvina, 2010)







RQ2: Which factors determine successful foreign language teaching?

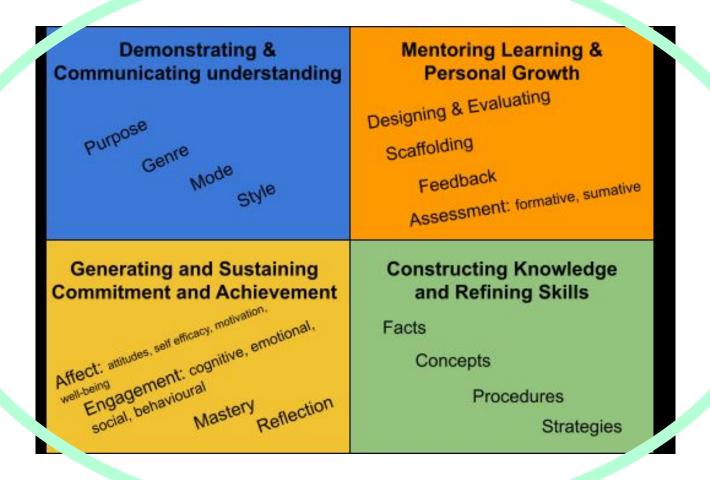




Digital Tools



RQ2: Which factors determine successful foreign language teaching?





Digital Tools



RQ2: Which factors determine successful foreign language teaching?

(Alonso-García et al,

2019, Grous & David, 2013; Prasojo, Mukminin, Habibi, Marzulina, Sirozi

& Harto, 2018; Zhang & Chen, 2022)

- Training → appropriate proficiency
- Beliefs → positive impact
- School → culture and conditions
- Approach → blended, student centered (autonomy, time management and flexibility), collaborative work.
- e-platform → clear and helpful for students
- Face to face → speaking skills, immediate feedback and progress monitoring.









• How do schools implement the pillars that constitute the Pluriliteracy teaching for learning model?

OBJECTIVE 2- Diagnosis

- Are all the factors of those pillars considered within the FL teaching of the school?
- Are the student and teacher perceptions different?





Participants

OBJECTIVE 2- Diagnosis

Country	School	Teachers	Students
Basque Country	4	12	779
Belgium	3	9	321
Denmark	3	12	176
Norway	2	7	99
Total	12	40	1375





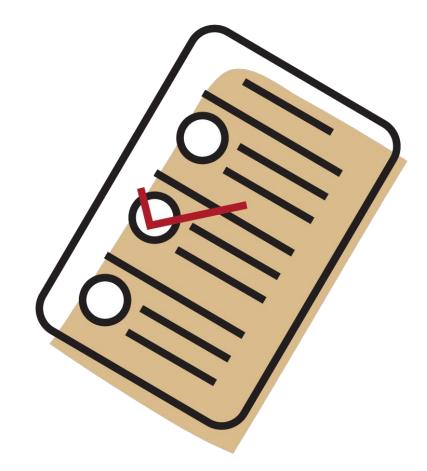


Open questions and Likert-scale questionnaires (3)

1- PTDL → Analytic framework

2- ID/IC → Analytic framework

3- Adaptation SELFIE(European Education Area)











Mixed method: quantitative analysis and qualitative interpretation.

Quantitative analysis:

- Results → percentages, mean and median value
- X2 and T-test → statistically significant differences between teacher and student perceptions.

OBJECTIVE 2 - DIAGNOSIS





OBJECTIVE 3RESULTS AND RECOMMENDATIONS

The results and recommendations of each country - categories

- 1- The four dimensions that form the PTDL model.
- 2- Digital tools in FL teaching and learning.
- 3- Significant differences among teacher and student perspectives in each school.





RESULTS

- 59% very limited knowledge of PTDL, CDF, DP.
- ullet Most teachers affirmed that they use authentic text created with pedagogical purpose \to (p=0.043)
- ullet A big percentage of teachers said they involve students in the design of the FL lessons, including the evaluation criteria \to (p=0.016).
- More than half of the teachers claimed that they find out about their pupils' linguistic and cultural backgrounds during their FL lessons \rightarrow (M=3.44/Mdn=3).
- Having a digital strategy at school (M=3.58/Mdn=3.5).
 Involvement (M=3.58/Mdn=3)
- •Teachers slightly agree that they have time for professional development in digital tools and pedagogies (M=3/Mdn=3).
- Differences observed between participants and use of virtual exchange platforms (M=2.22/Mdn=2) and others (M=3.83/Mdn=4).

RECOMMENDATIONS

- •Expand teachers knowledge of the PTDL model, Cognitive Discourse Functions and Deeper Learning.
- Increase the use of authentic text in the FL lessons.
- Involve the students in designing the FL lessons, including the evaluation criteria.
- Introduce more content based on pupils' interests and cultural and linguistic background.



- Work on their digital strategy as a team, involving teachers in designing measures to identify challenges that may arise with blended learning. Developing a plan to deal with the learning and socio-economic needs of the students.
- Look at the opportunities and time offered for Continuous Professional Development in digital tools and pedagogies. Offering more and encouraging participation.
- Reinforce the use of virtual exchange platforms and strategies such as gamification and flipped-classroom to engage students and scaffold students' learning.

- Agirdag, O. (2020). Onderwijs in een gekleurde samenleving. Epo; Berchem.

 Akdemir, A. S. (2017). eTwinning in Language Learning: The Perspectives of Successful Teachers. Journal of Education and Practice, 8(10), 182-190.
 - Al-Harbi, S. S., & Alshumaimeri, Y. A. (2016). The flipped classroom impact in grammar class on EFL saudi secondary school students' performances and attitudes. English Language Teaching, 9(10), 60. https://doi.org/10.5539/elt.v9n10p60 Amiryousefi, M. (2017). The incorporation of flipped learning into conventional classes to enhance EFL learners' L2 speaking, L2 listening, and engagement. Innovation in Language Learning and Teaching, 1–15. https://doi.org/10.1080/17501229.2017.1394307
 - Bachman, L.F., Palmer, A.S. (1996). Language testing in practice: Designing and developing useful language tests. Oxford.
 - Bagarić, V. 2007. Defining Communication Competence. Metodika, 8, 94-103.
 - Belz, J. A. (2003). Linguistic perspectives on the development of intercultural competence in telecollaboration. Language learning & technology, 7(2), 68-117.
 - Blazar, D., & Kraft, M. A. (2017). Teacher and teaching effects on students' attitudes and behaviors. Educational evaluation and policy analysis, 39(1), 146-170.
 - Bovellan, E. (2014). Teachers's beliefs about learning and language as reflected in their views of teaching materials for Content and Language Integrated learning (CLIL) (Doctoral dissertation). Jyväaskylä University.
 - Boekaerts, M. (1999). Self-regulated learning: Where we are today. International journal of educational research, 31(6), 445-457.





- Boyraz, S., & Ocak, G. (2017). Implementation of flipped education into Turkish EF teaching context. Journal of Language and Linguistics Studies, 13(2), 426–439.
- Brown, H. D. (2000). Principles of language learning and teaching (Vol. 4). New York: longman.
- Brown, N. & Wilson, M. (2011). A Model of Cognition: The Missing Cornerstone of Assessment. Educational Psychology Review 23(2).221-234.
- Bruner, J., & Sherwoord, V. (1976). Peekaboo and the learning of rule structures. In J. Bruner, A. Jolly, & K. Sylva (Eds.), Play: Its role in development and evolution (pp.277–87). Harmondsworth, England: Penguin Books
- Camacho, A., & Iruskieta, M. (2021). Euskararen i(ra)kaskuntza-prozesuak: hezkuntza eta hizkuntza teknologiak. Tantak, 32(2), 9–31. https://doi.org/10.1387/tantak.21654
- Canale, M. & Swain, M. (1980). Theoretical bases of communicative approaches to second language teaching and testing. Applied Linguistics, 1, 1-47.
- Celce-Murcia, M., Dörnyei, Z. & Thurrell, S. (1995). Communicative Competence: A Pedagogically Motivated model with content specifications.
 Applied Linguistics, 6, 5-35.
- Chen Hsieh, J. S., Wu, W. C. V., & Marek, M. W. (2017). Using the flipped classroom to enhance EFL learning. Computer Assisted Language Learning, 30(1–2), 1–21. https://doi.org/10.1080/09588221.2015.1111910
- Claxton, G., Chambers, M., Powell, G., & Lucas, B. (2011). The learning powered school. Pioneering 21st Century Education.
- Chumak-Horbatsch, R. (2012). Linguistically Appropriate Practice. A guide for working with Young Immigrant Children. Ontario: University Of Toronto Press.
- Common European Framework of Reference for Languages (CEFR) (2001). Learning, Teaching and Assessment. Strasbourg. Retrieved from
- https://www.coe.int/t/dg4/linguistic/Source/Framework EN.pdf.
- Corsitto, C., & Ugalde, I. (2001). Zenbait sekretu hizkuntzen irakaskuntza arrakastatsurako. Ale honetan, 48, 26-33.
- Council of Europe (2016). Competence for democratic culture: living together as equals in culturally diverse democratic societies. Retrieved from: https://rm.coe.int/CoERMPublicCommonSearchServices/DisplayDCTMContent?documentId=09000016806ccc07





- Da Silva, M. D. P. C. (2011). The "Sign up and Connect" eTwinning project: an intercultural approach to teaching English as a foreign Language. In International Conference the Future of Education. Florence, Italy.
- Dalton-Puffer, C.(2007) Discourse in language integrated learning (CLIL) classrooms. Amsterdam, the Netherlands: John Benjamins
- Dalton-Puffer, c. (2015) Cognitive Discourse Functions: combining content and language perspectives for CLIL teacher development.
 Conference Presentation. CLIL Colloquium: Integrating Content and language for teacher development in bilingual/multilingual setting: From research to practice. Madrid: 10.06.2015
- Davis, W., & Davis, H. A. (2006). teacher self-efficacy and its influence on the achievement of adolescents. self-efficacy beliefs of adolescents, 117.
- Deci, E. L., & Ryan, R. M. (2000). The" what" and" why" of goal pursuits: Human needs and the self-determination of behavior. Psychological inquiry, 11(4), 227-268.
- De Coole, D., Valk, A. (2015). Actief met taal: Didactische werkvormen voor het. Coutinho.
- Delarue, S. (2017). De taalles gaat digitaal. Recensie van Mesie, Masja, Guus Perry & Patricia Rose, Digitaal. Werkvormen voor het talenonderwijs. Bussum, Coutinho, 2017. OVER TAAL, 56(3).
- Do Coyle & Meyer, O. (2021). Beyond CLIL. Cambridge University Press.
- Do Coyle, Marsh, D., & Hood, P. (2010). C.L.I.L. Content and Language Integrated Learning (1st ed.). Cambridge University Press.
- Do Coyle, Ana Halbach, Oliver Meyer & Kevin Schuck (2017): Knowledge ecology for conceptual growth: teachers as active agents in developing a pluriliteracies approach to teaching for learning (PTL), International Journal of Bilingual
 Education and Bilingualism, DOI: 10.1080/13670050.2017.1387516. To link to this article: http://dx.doi.org/10.1080/13670050.2017.1387516
- Do Coyle (2015). Strengthening integrated learning: Towards a new era for pluriliteracies and intercultural learning. Latin American Journal of Content and Language Integrated Learning, 8(2), 84-103, doi:10.5294/laclil.2015.8.2.2
- Do Coyle (2018) The Place of CLIL in (Bilingual) Education, Theory Into Practice, 57:3, 166-176, DOI: 10.1080/00405841.2018.1459096. To link to this article: https://doi.org/10.1080/00405841.2018.1459096





- Dönszelmann, S., van Beuningen, C., Kaal, A., Rick de Graaff (2020) Handboek vreemdetalen didactiek.
- Ellis, R. (2003). Task-based Language Learning and Teaching. Oxford.
- Ellis, R. (2009). Task-based language teaching: sorting out the misunderstandings. International Journal of Applied Linguistics, (3), 221-246
- Ellis, R. (2017). Position paper: Moving task-based language teaching forward. Language Teaching, 50, 507 526.
- Egbert, J., Herman, D., & Lee, H. (2015). Flipped instruction in English language teacher education: A design-based study in a complex, open-ended learning environment. Tesl-Ej, 19(2), 1–23.
- European Comission (2018). Proposal for a Council Recomendation on a comprehensive approach to the teaching and learning of languages. Retrieved from: https://eur-lex.europa.eu/resource.html?uri=cellar:36ae2f05-5dc7-11e8-ab9c -01aa75ed71a1.0001.02/DOC_1&format=PDF
- Garcia, O. (2009). Bilingual education in the 21st century. A global perspective. Malden, MA: Wiley-Blackwell.
- Gasmi, A. A. (2017). An exploratory study of students' lived experiences in a blended- flipped writing class. SSRN Electronic Journal, 3, 210–226. https://doi.org/10.2139/ssrn.2822993
- Ghufron, M. & Nurdianingsih, F. (2021). Flipped classroom method with computer assisted language learning (CALL) in EFL writing class. International Journal of Learning, Teaching Educational Research, 20(1), 120-141.
- Gonulal, T., & Loewen, S. (2018). Scaffolding technique. The TESOL encyclopedia of English language teaching, 1-5.
- Graz Group (2015). The Graz Group Model: Mapping Pluriliteracies Development. A Pluriliteracies Approach to Teaching for Learning. European Centre for Modern Languages. https://pluriliteracies.ecml.at/
- Grosu, , L., David, I. (2013). E-learning in foreign language teaching: what is gained and what is lost (benefits and drawbacks of e-learning.
 JADLET Journal of Advanced Distributed Learning Technology, 1(2), 44-51
- Hardan, A. A. (2013). Language learning strategies: A general overview. Procedia-Social and Behavioral Sciences, 106, 1712-1726.
- Hattie, J. (2012). Visible learning for teachers: Maximizing impact on learning. Routledge.
- Hattie, J., & Timperley, H. (2007). The power of feedback. Review of educational research, 77(1), 81-112.





- Heemsoth, T., & Heinze, A. (2016). Secondary school students learning from reflections on the rationale behind self-made errors: A field experiment. The Journal of Experimental Education, 84(1), 98-118.
- Hymes, D.H: (1972). On Communicative Competence in Pride, J.B. & Holmes, J. (1986). Sociolinguistitics. Selected readings (269-293)
- Holmes, B. (2013). School Teachers' Continuous Professional Development in an Online Learning Community: lessons from a case study of an e T winning Learning Event. European Journal of Education, 48(1), 97-112.
- Huang, Y. N., & Hong, Z. R. (2016). The effects of a flipped English classroom intervention on students' information and communication technology and English reading comprehension. Educational Technology Research and Development, 64(2), 175–193. https://doi.org/10.1007/s11423-015-9412-7
- Idsoe, E. M. C. (2016). The importance of social learning environment factors for affective well-being among students. Emotional and Behavioural Difficulties, 21(2), 155-166.
- Keijzer, J., Verheggen, K., & Gils, V. D. (2016). Differentiëren in het talenonderwijs: kleine ngrepen, grote effecten (01 ed.). Coutinho.
- Konu, A. I., & Lintonen, T. P. (2006). School well-being in Grades 4–12. Health education research, 21(5), 633-642.
- Kwakernaak, E. (2015). Didactiek van het vreemdetalenonderwijs. Uitgeverij Coutinho.
- Lambert, W.E. (1975). Culture and language as factors in learning and education. In A.Wolfgang (Ed.), Education of immigrant students (pp.55-83). Toronto: Ontario Institute for Studies in Education.
- Lantolf, J., Poehner, M. (2014) Sociocultural Theory and Pedagogical Imperative in L2 Education: Vygotskian Praxis and the Research/Practice Divide. New York: Routledge
- Lee, C. K. (2010). An overview of language learning strategies. Annual Review of Education, Communication & Language Sciences, 7.
- Long, M. H. (2005). Methodological issues in learner needs analysis. Second language needs analysis, 76, 99.
- Lüftenegger, M., Schober, B., Van de Schoot, R., Wagner, P., Finsterwald, M., & Spiel, C. (2012). Lifelong learning as a goal—Do autonomy and self-regulation in school result in well prepared pupils?. Learning and Instruction, 22(1), 27-36.





- Macaro, E., Handley, Z. and Walter, C.(n.d). A systematic review of technology in English as a second language: Focus on primary and secondary education. University of Oxford
- Martin, F., & Bolliger, D. U. (2018). Engagement matters: Student perceptions on the importance of engagement strategies in the online learning environment. Online Learning, 22(1), 205-222.
- Mesie, M., Perry, G., & Rose, P. (2017). DigiTaal: werkvormen voor het talenonderwijs (Dutch Edition) (01 ed.). Coutinho.
- Mesie, M., & Kammenga, A. (2020). Unmute: Activerende Didactiek voor De Online taalles. Uitgeverij Coutinho.
- Meyer, Oliver and Coyle, Do (2017). "Pluriliteracies Teaching for Learning: conceptualising progression for deeper learning in literacies development" European Journal of Applied Linguistics, vol. 5, no. 2, 2017, pp. 199-222. https://doi.org/10.1515/eujal-2017-0006
- Mohan, B., Constant, L., & Tammy S., (2010). Assessing Language and Content: A functional Perspective. In Amos Paran & Lies Sercu (eds.).
 Testing the untestable in Language Education, 217-240. Clevedon: Multilingual Matters.
- Morton,T. (2012). Teachers' knowledge about language and classroom interaction in content and language integrated learning (Doctoral dissertation). Universidad Autónoma de Madrid.
- Ning, H. K., & Downing, K. (2010). The reciprocal relationship between motivation and self-regulation: A longitudinal study on academic performance. Learning and Individual Differences, 20(6), 682-686.
- Novak, J. (2002). Meaningful Learning: The Essential Factor for Conceptual Change in Limited or Inappropriate Propositional Hierarchies Leading to empowerment of Learners. Science Education 86. 548-571.
- Nunan, D. (1989). Designing tasks for the communicative classroom. Cambridge university press. Nurieva, G. (2020). Peculiarities of gamification in foreign language teaching in the context of digitalization of education. VI International Forum on Teacher Education. IFTE-2020, 1849-1860. doi:10.3897/ap.2.e1849
- OECD (2017). PISA 2015 Results (Volume III): Students' well-being. Paris: OECD Publishing.





- O'Dowd, R., & O'Rourke, B. (2019). New developments in virtual exchange for foreign language education. Language Learning & Technology, 23(3), 1–7. http://hdl.handle.net/10125/44690
- O'Dowd, R., & Lewis, T. (Eds.). (2016). Online intercultural exchange: Policy, pedagogy, practice. Routledge.
- O'Malley, J. M., Chamot, A. U., Stewner-Manzanares, G., Kupper, L., & Russo, R. P. (1985). Learning strategies used by beginning and intermediate ESL students. Language learning, 35(1), 21-46.
- O'Malley, J. M. & Chamot, A. U. (1990). Learning strategies in second language acquisition. Cambridge university press.
- Onderwijsraad, V. (2020). Zonder wrijving geen glans: identiteit en waarden op school : met praktijkwijzer voor leraren. Holand: Lanoo Campus
- Ormaetxea Urreta, A. (2021). Atzerriko hizkuntzaren irakaskuntzako metodologia eta estrategia berriak.
- Oxford, R. (1990). Language learning strategies What every teacher should know. Heinle & heinle Publishers.
- Pietarinen, J., Soini, T., & Pyhältö, K. (2014). Students' emotional and cognitive engagement as the determinants of well-being and achievement in school. International Journal of Educational Research, 67, 40-51.
- Pintrich, P. R., & Zusho, A. (2002). The development of academic self-regulation: The role of cognitive and motivational factors. In Development of achievement motivation (pp. 249-284). Academic Press.
- Polias, J. (2016). Apprenticing Students into Science: Doing, Talking, and Writing Scientifically. Melbourne: Lexis Education.
- Prasojo, L., Mukminin, A., Habibi, A., Marzulina, L., Sirozi, M., & Harto, K. (2018). Learning to teach in a digital age: ICT integration and EFL student teachers' teaching practice. Teaching English with Technology, 18(3), 18-32
- Prensky, M. (2010). Digital Natives, Digital Immigrants. On the Horizon, 9(5), 1–6.
- Rader, D. (2018). Teaching and Learning for Intercultural Understanding. Engaging Young Hearts and Minds. New York: Routledge.
- Rajaram, K. (2019). Flipped classrooms: Providing a scaffolding support system with real-time learning interventions. Asian Journal of the Scholarship of Teaching and Learning, 9(1), 30-58.
- Richards, J.C, Rodgers, T.S, (2014). Approaches and methods in language teaching. Cambridge University. United Kingdom





- Rigney, J. W. (1978). Learning strategies: A theoretical perspective. Learning strategies, 165-205.
- Romli, N. H., Abd Aziz, M. S., & Krish, P. K. N. (2021). L1 as a Scaffolding Tool in Teaching of English as L2: A Study in the Malay Context.
- Rubin, J. (1975). What the good language learner can teach us. TESOL quarterly, 41-51.
- Rubin, J. (1987). Theoretical assumptions, research history and typology. IN: A. WENDEN & J. RUBIN Learner strategies in language learning.
- Sharing Perspectives. (2019). About. Retrieved March 21, 2022 from https://sharingperspectivesfoundation.com/about/
- Skinnari, K., & Nikula, T. (2017). Teachers' perceptions on the changing role of language in the curriculum. European Journal of Applied Linguistics, 5 (2), 223-244. doi:10.1515/eujal-2017-0005
- Soliya. (2019). About us. Retrieved March 21, 2022 from https://www.soliya.net/about/about-us
- Suhrcke, M., & de Paz Nieves, C. (2011). The impact of health and health behaviours on educational outcomes in high-income countries: a review of the evidence. World Health Organization. Regional Office for Europe.
- Surma, T., Vanhoyweghen, K., Sluijsmans, D., Camp, G., Muijs, D., & Kirschner, P. A. (2019). Wijze lessen: twaalf bouwstenen voor effectieve didactiek (01 ed.). Ten Brink Uitgevers.
- Stoll, L., & Louis, K. S. (2007). Professional learning communities. McGraw-Hill Education (UK).
- Swain, M. (2006). Languaging, Agency and collaboration in Advanced Language Proficiency. In Heidi Byrnes (ed.), Advanced Language Learning: The contribution of Halliday and Vygotsky, 95-108. London: Continuum.
- Tardieu, C., & Dolitsky, M. (2012). Integrating the task-based approach to CLIL teaching.
- Van den Branden, K. Task-Based Language Education in Burns, A., Richards, J.C. (). The Cambridge Guide to Pedagogy and Practice in Second Language Teaching Cambridge.
- Vanhoof, S., & Speltincx, G. (2022). Feedback in de klas: verborgen leerkansen. Lannoo Meulenhoff-Belgium.
- Van de Craen, P. (2017) Klaar voor CLIL. Acco Uitgeverij.
- Vandevelde, M. (2019). Feedback geven aan leerlingen op school. Politeia.





- Vollmer, H.J.(2008). Constructing tasks for content and language integrated learning and assessment. In J.Eckerth & S.Siekmann(Eds), Task-based language learning and teaching: Theoretical, methodological and pedagogical perspectives (pp.227-290). Frankfurt-am-Main, Germany: Peter Lang
- Vygotsky, L. S., & Cole, M. (1978). Mind in society: Development of higher psychological processes. Harvard university press.
- Wenden, A. (1987). Conceptual background and utility. Learner strategies in language learning, 5, 3-13.
- Wood, D., Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem solving. Child Psychology & Psychiatry & Allied Disciplines.
- Zhang, M. & Chen, S. | (2022) Modeling dichotomous technology use among university EFL teachers in China: The roles of TPACK, affective and evaluative attitudes towards technology, Cogent Education, 9:1, 2013396, DOI: 10.1080/2331186X.2021.2013396 To link to this article: https://doi.org/10.1080/2331186X.2021.2013396
- Zhang, F. (2017). Quality-improving strategies of college English teaching based on microlesson and flipped classroom. English Language Teaching, 10(5), 243. https://doi.org/10.5539/elt.v10n5p243
- Zimmerman, B. J. (2000). Attaining self-regulation: A social cognitive perspective. In Handbook of self-regulation (pp. 13-39). Academic press.
- Zumbrunn, S., Tadlock, J., & Roberts, E. D. (2011). Encourage self regulated learning in the classroom.

















Thank you!



www.digi-lingo.eu