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EDUCACIÓN BILINGÜE PARA TODOS: ¿REALIDAD O QUIMERA?

JORNADAS DE FORMACIÓN DEL PROFESORADO DE ELE EN CONTEXTOS ASIÁTICOS

> Jornadas de formación del profesorado de ELE en contextos asiáticos







DOCUMENTO 1: EL MARCO DIDI





Guest editorial

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ABSTRACT

Guest editorial for the special issue 'CLIL for all? Attention to diversity in bilingual education'.

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Content and Language Integrated Learning (CLIL); diversity; inclusion; Europe

1. Introduction and justification

The European approach to bilingual education – CLIL (Content and Language Integrated Learning) – has been enthusiastically embraced as a potential lever for change and success in language learning. Over the course of the past two decades, it has become a well-established part of education systems across Europe and is now also being increasingly adopted in Latin American and Asian countries as the potential lynchpin to move from monolingual education systems to bilingual ones. It has also been heralded as a way to make bilingual language learning more accessible to all types of learners, as CLIL has been held to afford all students, regardless of social class and economic consideration, the opportunity to learn additional languages in a meaningful way. Many authors thus maintain that CLIL promotes social inclusion and egalitarianism, as the introduction of this approach in mainstream education provides a greater range of students with opportunities for linguistic development which they were previously denied (cf. Marsh 2002; Coyle, Hood, and Marsh 2010; Pérez Cañado 2020).

However, the initial mise-en-scène of CLIL in public schools across Europe points to a very different reality. Indeed, one of the chief concerns which have repeatedly underpinned CLIL discussions affects the lack of egalitarianism, which, according to authors like Bruton (2011a, 2011b, 2013, 2015, 2019) or Paran (2013), is inherent in the application of this approach. In this sense, a notable set of scholars have sounded a note of caution as regards the level of self-selection in CLIL strands, with its corollary inadequacy for attention to diversity (Lorenzo, Casal, and Moore 2009). The thrust of their argument is that CLIL branches normally comprise the more motivated, intelligent, and linguistically proficient students and that these differences are conducive to prejudice and discrimination against non-CLIL learners.

Now that CLIL is steadily embedding itself in mainstream education and the move is increasingly being made from bilingual sections to fully bilingual schools, all learners experience foreign language learning both in language-driven and subject content classes and it consequently becomes incumbent on practitioners to cater to diversity and to ensure CLIL enhances language and content learning in over- and under-achievers alike. This has surfaced as major challenge which could seriously curtail – or even fatally undermine – everything that has been achieved in the previous decades of CLIL implementation. One of the greatest problems plaguing CLIL implementation at present, according to the latest research (cf. Madrid and Pérez Cañado 2018),

is catering to diversity, as there is a lack materials, resources and methodological and evaluative guidelines to step up to it successfully. Thus, prior investigation documents the urgent need for a study on attention to diversity within CLIL in order to shed light on the issue of how (and if) CLIL works across different levels of attainment and what types of curricular and organizational practices can be implemented to cater to it.

The extremely meager amount of research which has thus far been conducted into attention to diversity in CLIL has only focused on the topic superficially and in passing, and not as the chief goal of any investigation (cf. the final article in this special issue for an overview of the main types of studies conducted to date on the topic). Qualitatively, studies have mostly polled stakeholder perspectives of the way in which CLIL programs are playing out and attention to diversity has surfaced as a key challenge (Mehisto and Asser 2007; Pena Díaz and Porto Requejo 2008; Fernández and Halbach 2011; Pérez Cañado 2016a, 2016b). In turn, quantitatively, research has only indirectly explored how CLIL is working in diverse social contexts, socioeconomic levels, and types of schools while examining the effects of CLIL in terms of intervening variables (Alejo and Piguer-Píriz 2016; Anghel, Cabrales, and Carro 2016; Shepherd and Ainsworth 2017; Madrid and Barrios 2018; Pavón Vázquez 2018; Pérez Cañado 2018; Rascón and Bretones 2018; Fernández-Sanjurjo, Fernández-Costales, and Arias Blanco 2019). However, none have examined in a full-blown way the resources, materials, classroom organization, methodologies, or types of evaluation that are being deployed to cater to diversity within CLIL schemes or the main teacher training needs in this area. Furthermore, none have been international comparative studies into this issue, which pool and contrast the knowledge base and experience on this issue of northern, southern, and central European monolingual contexts, where there is an even more conspicuous 'shortage of research in CLIL' (Fernández-Sanjurjo, Fernández-Costales, and Arias Blanco 2019, 2). These are precisely the niches that the present special issue seeks to address.

2. The backdrop: the ADiBE projects

In doing so, it reports on the results of four governmentally funded research projects (at the European, national, and regional levels¹), encompassed with the acronym ADiBE: Attention to Diversity in Bilingual Education. These projects aim to carry out a large-scale comparative study into the effects and functioning of Content and Language Integrated Learning across different levels of attainment in monolingual contexts in six European countries (Spain, Italy, Austria, Germany, Finland, and the UK). They approximate the topic of inclusion in CLIL programs from diverse and complementary perspectives.

Quantitatively, they examine the impact of CLIL programs on the FL, L1, and content achievement of three different levels of learners in terms of verbal intelligence, motivation, English level, and general academic performance to determine whether CLIL truly works with all students and how it is functioning with over-, normal, and under-achievers at the end of both Primary and Compulsory Secondary Education. In turn, qualitatively, they probe teachers', students', and parents' satisfaction with all the curricular and organizational aspects which are being deployed to cater to diversity within CLIL schemes and carry out an analysis of the main teacher training needs in this area. The outcomes obtained within each monolingual context sampled in the study are compared and contrasted in order to determine in which scenarios the measures for attending to diversity are the most successful and, thereby, to learn from the best practices of others.

From a methodological standpoint, original materials have been designed with differentiation triangulation, multi-tiered activities, and interdisciplinary cross-fertilization. They include three levels of activity at phase 1 (following Bloom's cognitive levels), three types of student-centered methodologies at phase 2 (Project-based Learning, Multiple Intelligence Theory, and Cooperative Learning); and three levels of outputs at stage 3 (e.g. infographics, interactive presentations, or videos). They are interdisciplinary in nature, with each project involving L1, L2, and three non-linguistic area subjects and with all these subjects building on and supporting each other. A teacher training course has

also been devised, with a three-pronged structure (theoretical foundations, examples of materials and best practices, and task design) which guides participants from more controlled to freer practice, until they can design their own didactic unit to cater for diversity in CLIL classrooms. Finally, from an *ICT-based perspective*, pedagogical videoguides have been drawn up to provide key tips based on the outcomes of the studies for teachers, students, teacher trainers, parents, and authorities to contribute to making CLIL accessible to all. An app is also being articulated which will allow teachers to take a personalized diagnosis of their main needs to cater for diversity and will redirect them to useful materials designed within the project to step up to this challenge.

This special issue reports specifically on the qualitative side of the overarching investigation. It aims to identify the chief difficulties and best practices in catering for diversity in CLIL from a supranational perspective through the use of questionnaires, focus group interviews, and classroom observation conducted with teachers, students, and parents in the afore-mentioned six European countries. It thus attempts to shed light on the issue of how (and if) CLIL works across different levels of attainment, what types of curricular and organizational practices can most effectively be implemented to cater to diversity, and which teacher education issues need to be most urgently addressed. Data, methodological, investigator, and location triangulation are employed in order to paint a comprehensive and empirically valid picture of where fully bilingual schemes stand in monolingual contexts across Europe, drawing a precise description of the way in which CLIL is working with different types of achievers.

3. Clarifying the concept of diversity: The DIDI framework

What exactly does the ADiBE Project understand by diversity or inclusion? Given their increasing growth, the potential of bilingual education programs to serve as an inclusive setting remains high. However, paradoxically, scant research, and practice have touched on the issue of diversity and differentiation, with only perfunctory attention being given to pedagogical considerations which accommodate learner integration in bilingual scenarios. We thus clearly stand in need of articulating a conceptual framework to approach diverse students in an asset-oriented and inclusive manner and of enacting dynamic, effective, and responsive pedagogical strategies to meet bilingual students' needs.

These guidelines are grounded within the framework of *diversity*, *inclusion*, *differentiation*, and *integration* (what we term DIDI) within a bilingual environment (cf. Figure 1). Since these concepts are complex and multi-faceted, let us briefly delineate exactly what is understood by each one in the ADiBE Project in order to fully grasp their manifold dimensions.

Diversity is the initial, overarching umbrella term. It entails providing an adequate education to all students, bearing in mind:

- their personal traits;
- cognitive, cultural, and linguistic needs;
- individual differences in terms of learning styles;
- diversity in experiences, knowledge, and attitudes;
- varying achievement levels, learning paces, and intellectual capacity;
- diverging interests, motivations, and expectations;
- and different socioeconomic and cultural backgrounds (Julius and Madrid 2017; Madrid and Pérez Cañado 2018).

Diversity is, in turn, grounded on the principles of inclusion and differentiation (Julius and Madrid 2017). *Inclusive education*, like diversity, in its broad definition, transcends the notion of disability 'to include learner diversity on the grounds of students' varied ethnic/race, linguistic, biographical and developmental characteristics' (Liasidou 2013, 11). It is regarded as an educational model that aims to respond to the learning needs of all students (Martín-Pastor and Durán-Martínez 2019), especially

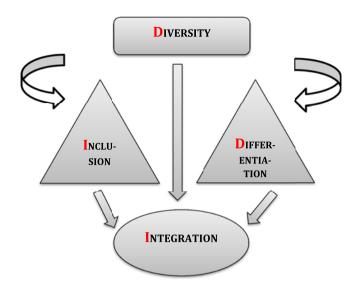


Figure 1. The DIDI framework.

those on the fringes, who are at risk of marginalization and social exclusion (Madrid and Pérez Cañado 2018). It approaches diversity from an asset-based perspective, viewing it as a source of enrichment and as an opportunity to overcome potential barriers in educational development (Cable, Eyres, and Collins 2006; Madrid and Pérez Cañado 2018). It thus provides effective learning opportunities for all students, focuses on achievement, and helps operate a procedural shift in the student from 'outsider to participant' (Cioè-Peña 2017, 906).

Differentiation, in turn, also targets students with diverse abilities and backgrounds. Roiha (2014) considers it a phenomenon within inclusive education and a synthesis of diverse theories, such as Gardner's Multiple Intelligence Theory (MIT) and Vygotsky's Zone of Proximal Development (ZPD). The chief aim of differentiation is to address each pupil's individual abilities and needs, and to tailor teaching to correspond to each ZPD. It thus involves attending to both underachieving and gifted pupils (Roiha 2014).

Finally, a conflation of these three aspects (diversity, inclusion, and differentiation) leads to the integration of students with diverse ability levels (Cioè-Peña 2017). As Madrid and Pérez Cañado (2018, 245) put it, 'Both inclusion and attending to diversity are associated with the phenomenon of integration, which is a consistent response to the diversity of student needs'. The four concepts of our DIDI framework dovetail in order to reshape educational structures and safeguard equitable access to CLIL for all students.

4. Contents of the special issue

Against this research and terminological backdrop, the results of the ADiBE Project by specific country and from a supranational comparative perspective are presented. The volume kicks off with an initial article by María Luisa Pérez Cañado, Diego Rascón Moreno, and Valentina Cueva López which shares the three sets of questionnaires, interviews, and observation protocols that have been originally designed and validated for the project. Their research-based design and double-fold validation process are carefully rendered and the actual instruments are then placed at the service of the broader educational community for further iterations so that replication can ensue in all contexts and personalized diagnoses of teacher needs to cater for diversity can be carried out.

The outcomes by country are then rendered, beginning with the UK. Here, *Do Coyle, Kim Bower, Yvonne Foley*, and *Jonathan Hancock* explore diversity and inclusion in classroom practices in the UK through a case study at secondary education level which conflates two types of bilingual learning: CLIL and EAL (English as an Additional Language). The pluriliteracies lens is applied to identify optimal conditions for teaching and learning in the bilingual education scenario and to enable diverse learners to engage in more significant learning, develop academic literacies, and establish stronger learning partnerships with their teachers.

Silvia Bauer-Marschallinger, Christiane Dalton-Puffer, Helen Heaney, Lena Katzinger, and Ute Smit then delineate CLIL policy and practice in Austria and report on a mixed-methods study with secondary education teachers and students, employing questionnaires and focus group interviews, into self-reported experiences with diversity and the pedagogical practices harnessing it in CLIL classrooms. An interesting tension transpires between the notions of segregation and egalitarianism, and a rift is documented between teacher and learner views on student-centeredness in CLIL lessons and the use of scaffolding, peer support, or the L1 as a fallback strategy. Differences between the two chief contexts in which Austrian CLIL is applied are also ascertained, deriving in a noteworthy set of pedagogical implications for both grassroots practice and teacher development in this context.

Teacher and student outlooks are also explored in Finland by *Tarja Nikula, Kristiina Skinnari*, and *Karita Mård-Miettinen*. As in Austria, the ethos of equality is firmly entrenched in the Finnish educational system, and this ripples out over the concept of differentiation in CLIL contexts. Diversity policies in this country are initially explored and the study is subsequently reported on, in this case, through the use of teacher and student interviews. Unique traits such as the high-achieving nature of CLIL learners and the significance of upward differentiation stand out in the analysis. The lack of topicalization of diversity is also salient in the outcomes, concomitantly with the need to set in place strategies for individualized support, learning paces, and styles.

A similar predominance of high-performance learners within an explicit agenda of selectivity can be traditionally found in the German context, which is unpacked in the article by *Philipp Siepmann*, *Dominik Rumlich*, *Frauke Matz*, and *Ricardo Römhildz*. An increasing heterogeneity in the student body is now, however, being ascertained and the study with teachers and students which is rendered here delves deeper, through the use of questionnaires, interviews, and classroom observation, into the methods, materials, classroom arrangements, scaffolding, and assessment techniques which are being set in place to attend to diversity in CLIL streams. Interesting implications ensue, with a special onus on the use of digital media to foster the educational success of linguistically and academically diverse students.

The Italian context contrasts starkly with the previous ones and the article by *Yen-Ling Teresa Ting* offers extremely relevant insights into how diversity is being tackled in a firmly entrenched monolingual area such as the southern Italian one. The focus here is on students and, through surveys and interviews, the study taps into learners' perceptions on methods, materials, groupings, awareness of diversity, teachers' competences, or school-level organization. The most outstanding implications are signposted for the reader, both from a methodologically-oriented perspective and from the teacher education prism.

Also based in southern Europe, the study which *Antonio Vicente Casas Pedrosa* and *Diego Rascón Moreno*'s article chronicles centers specifically on Spain. After framing the investigation against the backdrop of this country's highly inclusive approach to bilingual education, the authors carry out a detailed analysis of teacher and student views on diversity in CLIL programs within five main fields of interest: linguistic aspects, methodology and types of groupings, materials and resources, assessment, and teacher coordination and development. Across-cohort comparisons are also carried out in order to determine whether stakeholder opinions are aligned or divergent. The chief pedagogical implications to continue pushing the CLIL agenda forward in the country are outlined, a particularly pertinent remit as bilingual education is increasingly being mainstreamed in the Spanish context.

If the previous articles drilled down into each specific country involved in the ADiBE project, the final one by *María Luisa Pérez Cañado* looks at the overall results in conflation. It tracks a cohort of

2,562 teachers, students, and parents at 59 sites in the six afore-mentioned European countries. After offering the global results by cohort, it carries out a cross-European comparison of stakeholder perspectives on catering to diversity within CLIL programs. Across- and within-cohort analyses are conducted and valuable lessons are gleaned on the implementation and teacher development actions currently being set in place within bilingual education from a pan-European perspective. The article showcases the main lessons learnt from the diverse contexts, identifies scope for improvement across countries, and establishes the future priorities which an inclusive education reform agenda necessitates in bilingual education scenarios.

Thus, taken jointly, the results presented herein will thereby yield important information on a substantial number of questions which are crucial for the successful development of CLIL programs in fully bilingual schools: Does CLIL have the potential to work with all types of learners? Which are the main difficulties that teachers face in catering to diversity within CLIL programs? What kinds of measures are being set in place to cater to diversity in monolingual contexts? What differences/similarities can be discerned between the measures implemented in northern, central, and southern Europe? Which measures are working better and why? What can we learn from the best practices of others on attention to diversity in CLIL in order to improve our own language learning situation and educational system? None of these questions has been explicitly addressed in prior studies; hence the contribution of this special issue.

Its ultimate aim is to foster the integration of all students, regardless of their socioeconomic status, educational background, or achievement level, and to contribute to making CLIL accessible to all. It will pool the insights of some of the most renowned researchers in the field and foster international dialogue in order to promote a multi-tiered system of support to cater to diversity in CLIL and promote the success of more vulnerable and underserved learners.

Note

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DOCUMENTO 2: LOS CUESTIONARIOS ADIBE

ADiBE Project: Attention to Diversity in Bilingual Education Questionnaire

TEACHERS



1. NAME OF SCHOOL:	9. HOW MUCH OF EACH SUBJECT DO YOU TEACH IN THE FOREIGN LANGUAGE? PLEASE ESTIMATE THE PERCENTAGE:
2. GRADE(S):	50% 60% 70% 80% 90% 100%
3. AGE:	□ 50% □ 60% □ 70% □ 80% □ 100%
4. GENDER: Male Female Other	
5. MOTHER TONGUE:	%06 _□
6. TYPE OF TEACHER: (You may tick more than one) □ Foreign language teacher	10. ARE YOU THE COORDINATOR OF THE BILINGUAL PROGRAM IN YOUR SCHOOL?
□ Content teacher □ Language assistant □ Other:	□ Yes □ No □ Does not apply
7. EMPLOYMENT SITUATION:	11. OVEKALL TEACHING EXPERIENCE:
 □ Civil servant with a permanent post □ Civil servant with a provisional post □ Temporary teacher □ Other: 	 ⊥ Less than 1 year □ 1-10 years □ 21-30 years □ Over 30 years
8. LEVEL IN THE FOREIGN LANGUAGE YOU TEACH:	12. TEACHING EXPERIENCE IN A BILINGUAL PROGRAM:
 □ A1 (Beginner) □ A2 (Elementary) □ B1 (Intermediate) □ B2 (Upper-Intermediate) □ C1 (Advanced) □ C2 (Proficient) 	 □ Less than 1 year □ 1-5 years □ 6-10 years □ 11-15 years □ 16-20 years □ Over 20 years

PLEASE RATE HOW STRONGLY YOU AGREE OR DISAGREE WITH THE FOLLOWING STATEMENTS RELATED TO BILINGUAL TEACHING (1=Strongly disagree; 2=Disagree; 3=Slightly disagree; 4=Slightly agree; 5=Agree; 6=Strongly agree).

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STATEMENTS	STRONGLY DISAGREE	DISAGREE	SLIGHTLY DISAGREE	SLIGHTLY AGREE	AGREE	STRONGLY AGREE
10. I find it easy to design a CLIL lesson that caters for students with different abilities.	1	7	က	4	വ	9
11. I have an adequate repertoire of methods at my disposal to help learners with different abilities in the CLIL classroom	₩	7	က	4	5	9
12. My classroom work is student-centered in order to cater for different abilities in CLIL.	П	7	က	4	വ	9
13. I base classroom work on cooperative learning principles in order to cater for different abilities in CLIL.	П	7	က	4	വ	9
14. I plan for multiple intelligences in my CLIL classroom.	1	7	က	4	വ	9

15. I use task-/project-based classroom work in order to cater for different abilities in CLIL.	₩	01	က	4	гo	9
16. My classroom work is teacher-led in order to cater for different abilities in CLIL.	П	7	က	4	72	9
17. I use mixed-ability groups in my CLIL class.	1	7	က	4	ល	9
18. I provide personalized attention (individual or in smaller groups) in CLIL.	11	7	က	4	Ŋ	9
19. I use peer mentoring and assistance strategies in the CLIL classroom to help different types of learners.	П	7	က	4	ស	9
20. I vary classroom layouts to meet the needs of different types of learners in CLIL.	П	7	က	4	ល	9
21. At my school, we have newcomer classes to support the integration of learners into CLIL.	1	7	က	4	Ŋ	9

3. MATERIALS AND RESOURCES	RESOURCE	Ω.				
STATEMENTS	STRONGLY DISAGREE	DISAGREE	SLIGHTLY DISAGREE	SLIGHTLY AGREE	AGREE	STRONGLY AGREE
22 . I have access to materials and resources that already take into account different levels of ability among students.	1	7	က	4	73	9
23. I normally adapt materials to take into account different levels of ability among CLIL students.	П	7	က	4	Ŋ	9
24. I normally create materials to take into account different levels of ability among CLIL students.	П	2	က	4	ro	9
25. I find it easy to adapt materials in CLIL for an academically diverse student group.	П	7	က	4	ល	9
26. I find it easy to create materials in CLIL for an academically diverse student group.	П	7	က	4	ro	9
27 . I find Information and Communication Technology (ICT) useful in order to cater for different abilities in my CLIL classroom.	П	7	က	4	ល	9
If you have responded positively to the previous question, please specify the main technological resources you use:						
28. I use a combination of visual, textual, and/or numeric input to cater for different abilities in my CLIL classroom.	1	04	က	4	ro	9

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STATEMENTS	STRONGLY DISAGREE	DISAGREE	SLIGHTLY DISAGREE	SLIGHTLY AGREE	AGREE	STRONGLY AGREE
29. In my continuous (formative) assessment I attend to different abilities among CLIL students.	1	7	က	4	rV	9
30. In my final (summative) assessment I attend to different abilities among CLIL students.	П	7	က	4	rv	9
31. I vary the grading criteria to cater for different abilities in my CLIL classroom.	1	7	က	4	ro	9
32. In my continuous (formative) assessment I provide detailed guidelines as extra support to cater for different abilities among CLIL students.	П	<i>c</i> 4	က	4	ιO	9
33. In my continuous (formative) assessment I provide personalized and regular feedback in terms of different abilities among CLIL students.	1	7	က	4	ഹ	9
34. I take into account self-assessment in my CLIL classes to cater for different abilities.	П	7	က	4	rv	9
35. In my continuous (formative) assessment I adapt the activities I ask my CLIL students to do in class to their level of ability.	1	7	က	4	ro	9
36. In my continuous (formative) assessment I provide different homework according to individual levels of ability among CLIL students.	П	0	က	4	ιO	9
37. In my final (summative) assessment, I highlight key words in the exam and adapt its vocabulary to cater for different abilities among CLIL students.	1	8	က	4	ro	9
38. In my final (summative) assessment, I provide different versions of the same exam and allow more time to carry it out in order to cater for different abilities among CLIL students.	-	2	က	4	ហ	9

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STATEMENTS	STRONGLY DISAGREE	DISAGREE	SLIGHTLY DISAGREE	SLIGHTLY AGREE	AGREE	STRONGLY AGREE	DOES NOT APPLY
39. I coordinate/collaborate with my language/content/support colleagues in order to cater for different abilities.	1	01	က	4	rv	9	

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education needs support staff, psychologists, social workers) essential to make the CLIL classroom more inclusive in terms of ability.	41. I find the language assistant is sufficiently prepared to cater for different abilities in the CLIL classroom.	42. At my school, we have a guidance counsellor who helps learners with different needs and their families.	43. At my school, we encourage parental support and engagement in order to help him/her with CLIL.	44. I am satisfied with the support system which my school currently has in place to cater for different abilities in CLIL.	45. I need further education in linguistic scaffolding techniques.	46. I need further education in student-centered methodologies which allow me to cater for different abilities in my CLIL classroom.	47. I need further education in using different classroom organizations which allow me to cater for different abilities in my CLIL classroom.	48. I need to have access to more materials which allow me to cater for different abilities in my CLIL classroom.	49. I need further education in how to design and adapt materials which allow me to cater for different abilities in my CLIL classroom.	50. I need further education in how to collaborate/coordinate with my colleagues to cater for different abilities in my CLIL classroom.	51. I need further education in how to engage with parents in order to serve learners of different abilities.	52. I need further education in how to assess my students taking into account different abilities.	53. I need further education in how to critically analyze my own teaching practice.

40. I find the support of multi-professional teams (special

Now, please rank the three most important aspects for you in each section from 1 (most important) to 3:

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- I don't easily have access to materials and resources that already take into account different levels of ability among students. 2. I find it challenging to teach CLIL classes with learners who have different levels of ability.

 3. I don't easily have access to materials and resolutes that already to be into account different.
- I find it difficult to create or adapt materials that take into account different levels of ability among students.
- It is difficult to vary the grading criteria to cater for different abilities in my CLIL classroom. 4. 7.
- I find it difficult to cater for different abilities in my CLIL classroom without the support of multi-professional teams (special education needs support staff, psychologists, social workers).

BEST PRACTICES

- I scaffold language for my CLIL learners as a strategy to support different abilities.
- scaffold the content of my CLIL lessons as a strategy to support different abilities.
 - My classroom work is student-centered in order to cater for different abilities in CLIL.
 - I provide personalized attention (individual or in smaller groups) in CLIL.
- I use a combination of visual, textual, and/or numeric input to cater for different abilities in my CLIL classroom. 4. 72. 0. 7. 8
 - In my continuous (formative) assessment I attend to different abilities among CLIL students.
- In my final (summative) assessment I attend to different abilities among CLIL students.
- I coordinate/collaborate with my language/content/support colleagues in order to cater for different abilities.

TEACHER DEVELOPMENT

- I need further education in linguistic scaffolding techniques.
- I need further education in student-centered methodologies which allow me to cater for different abilities in my CLIL classroom.
- I need further education in using varied classroom layouts which allow me to meet the needs of different types of learners in CLIL. с,
- I need to have access to more materials which allow me to cater for different abilities in my CLIL classroom. 4.
- I need further education in how to design and adapt materials which allow me to cater for different abilities in my CLIL classroom. Ŋ.
- I need further education in how to collaborate/coordinate with my colleagues to cater for different abilities in my CLIL classroom. 9
- I need further education in how to assess my students taking into account different abilities.
 - I need further education in how to critically analyze my own teaching practice.

THANK YOU VERY MUCH FOR YOUR PARTICIPATION.



DOCUMENTO 3: LOS PRINCIPIOS ADIBE



ADiBE Project: Attention to Diversity in Bilingual Education

ADiBE principles for materials & lesson design

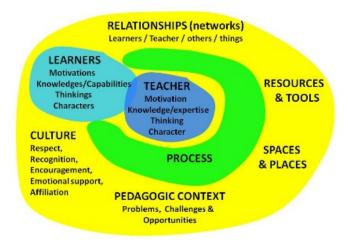
- (1) Teachers as designers
- (2) Dialogic classroom
- (3) Explicitness
- (4) Learner-centeredness
- (5) Multimodality
- (6) Scaffolding

(1) TEACHERS AS DESIGNERS

Inspired by the work of Jackson (2013), Paniagua & Instance (2018), and others, who understand teachers as designers of learning environments, the first ADiBE principle implies that in an inclusive classroom, teachers consider the various needs of their learners, their relationships, the specific context factors, as well as the available materials and resources, to ensure that all learners can achieve the goals of a lesson. Teachers take the role of mentors engaged in the personal growth of the individual learner. From this perspective, the social, physical, and cognitive classroom environment is considered a key factor for learning achievement.

Teachers as *designers* of learning' is a holistic approach to the creative and inclusive planning, organisation and evaluation of teaching and learning in classrooms. It suggests that the goal of 'learning events' (the processes leading to the end point of a topic or theme in terms of what we want our different learners to have learned and experienced over a specific period of time) is in fact the starting point. Teachers as *designers*', therefore, systematically plan for how this end goal will be achieved for all learners in different ways. It is about much more than task design and sequencing in individual lessons. And, in bilingual classrooms, it is about much more than focussing on language tasks and the learning of 'content'.

Such a holistic approach can be referred to as an ecological approach to teaching for deeper learning which is dynamic and co-created by the learners and teachers in specific classrooms. Such purposefulness requires careful transparency between teachers and between teachers and their learners for this to be truly ecological. The diagram below provides a useful visual overview.



http://www.normanjackson.co.uk/derby.html

EXAMPLE (An Expedition to the Amazon Rainforest)1

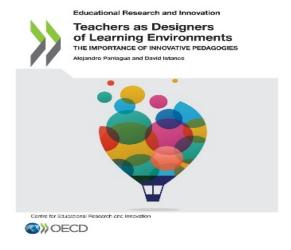
The materials serve the first ADiBE principle by offering considerable flexibility in planning individual learning processes. For all tasks, there are up to three levels of difficulty. The various levels differ in the relationship between cognitive and linguistic task demand and support, i.e., tasks at the 'easy' level will provide ample input, process, and output scaffolding. This is to ensure that all students, regardless of their choice of task level, will be able to participate in cooperative follow-up activities and will be able to make a valuable contribution to classroom discussions. Another characteristic of the materials is that they do not only cater to different levels of ability, but also offer differentiated learning paths and suggest various ways to present the learner products.

The opportunities of digital learning greatly support the principle of teachers as designers. Regarding differentiated instruction, the most salient feature of the materials is their flexibility: Students can make independent decisions on the amount of support of language- and content-related learning while being able to participate in whole-class activities or group work. Unlike most digital textbooks, they contain interactive elements and links, which allow them to quickly navigate between content pages, skills files, and glossary and thereby to work independently with the materials. Students can thus work at their own pace, which frees up time for the teacher to provide individual support. While the teacher's manual suggests a rather traditional, linear lesson structure, the materials can just as well be used more flexibly in an autonomous learning environment or for self-study. Moreover, they allow for different levels of cooperation, from individual work to cooperative pair or group work. Thus, teachers can tailor the activities to the current learning needs of their students.

CHECKLIST

- ✓ Design principles cater for diversity by creating ways of enabling all learners to engage in conceptualizing (knowledge and skills) and communicating what they have learned.
- ✓ Design principles involve planning ways in which teachers explicitly mentor learning and develop personal growth (mindsets of learners) in individual learners throughout the learning event.
- ✓ Design principles are embedded in a pluriliteracies approach to teaching and learning.
- ✓ Design principles pay attention to the classroom environment (physical, social and cognitive) as a key factor in the quality of learning for all learners at whatever stage they are.
- ✓ Teachers as designers of learning can be seen as an ecological and inclusive approach to classroom learning.

¹ Taken from Siepmann & Pérez Cañado (in press for 2021). Catering to Diversity in CLIL: Designing Inclusive Learning Spaces with the ADiBE Digital Materials. *Anglistik. International Journal of English Studies*.



Pedagogy is at the heart of teaching and learning. Preparing young people to become lifelong learners with a deep knowledge of subject matter and a broad set of social skills requires understanding how pedagogy influences learning. Doing so shifts the perception of teachers from technicians who strive to attain the education goals set by the curriculum to experts in the art and science of teaching. Seen through this lens, innovation in teaching becomes a problem-solving process rooted in teachers' professionalism, a normal response to addressing the daily challenge of constantly changing classrooms.

(OECD Report, 2019: 1)

BACKGROUND READING ON TEACHERS AS DESIGNERS

Design principles in bilingual education are embedded in the Pluriliteracies approach to Teaching for Deeper Learning (PTDL) (2019): https://www.youtube.com/watch?v=ogxvMpDjtEU

Jackson, N. J. (2013). The concept of learning ecologies. In N. Jackson, & G.B. Cooper (Eds.) *Lifewide Learning, Education and Personal Development*. Retrieved from http://www.lifewideebook.co.uk/conceptual.html.

Meyer, O., Imhof, M., Coyle, D., & Banerjee, M. (2018). Learnscaping: Creating next-gen learning environments for pluriliteracies growth. *CALL in multilingual contexts*, 18–40.

Paniagua, A., & Istance, D. (2018). Teachers as designers of learning environments: The importance of innovative pedagogies, educational research and innovation. Paris: OECD Publishing. Retrieved from https://read.oecd-ilibrary.org/education/teachers-as-designers-of-learning-environments/foreword_9789264085374-1-en#page1

(2) DIALOGIC CLASSROOM

Since CLIL students are learning complex concepts through a foreign language, CLIL classrooms must be sure to provide safe spaces in which all voices can be heard, regardless of each student's level of foreign language competence. CLIL classrooms must encourage dialogue, interaction, and collaborative learning, giving all learners an opportunity to share their own thoughts and perceptions on all topics. Dialogic classrooms call for mutual respect, with teachers adapting their instructional activities so that all learners are supported, thereby enhancing each student's individual capacity. Teachers can make a significant contribution to providing a safe space in the classroom by raising awareness of respectful communication and interaction. Since students in CLIL communicate in a foreign language, this implies providing appropriate language cues that lower the threshold to engage in classroom discourse.

The key here is *languaging*, i.e., where individual learners are given many opportunities to articulate or to language their learning to peers and to teachers. It enables teachers to begin to see where learners may understand the concepts but do not have the language to express that understanding (e.g., if they have been using visual support or scaffolded learning) or whether an individual has not understood the concept. It also enables teachers to adapt their planning and teaching and to differentiate to meet individual learner needs.

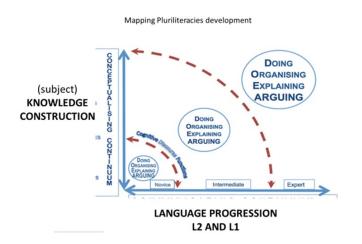
Functional language

Dialogic-rich classrooms are fundamental and require careful design of tasks which follow learning stages as set out below. Each of the four stages of learning requires different kinds of functional language (e.g. the language of Science, the language of Geography) and literacies which need to be made transparent for learners with appropriate practice opportunities provided:

DOEA

- **D**oing/ enabling the subject (History, Science)
- Organising and documenting it (creating graphs, diagrams, classifications)
- Explaining understanding to others (learners need the language of explaining),
- Arguing, critiquing, discussing, justifying (from particular perspectives).

Planning needs to take account of these major pupil activity domains along the knowledge continuum, all of which have different literacy demands.



Cognitive Discourse Functions

In line with the foregoing, CDFs (Cognitive Discourse Functions) are language functions that are used to illustrate what is happening when learners are 'thinking'. CDFs are divided into seven independent functions: Classify, Define, Describe, Evaluate, Explain, Explore and **Report**. Each CDF requires different kinds of functional language. These also need to be taken into account when planning and teaching.

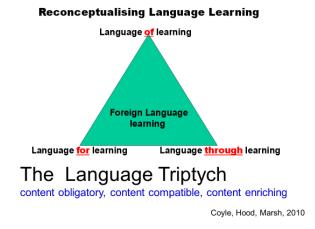
The Language Triptych

The Tripytch (language of, for and through learning) provides a useful tool for teachers to monitor the type of language which is being learned to ensure that both the form of CLIL language (as in grammar and syntax) and the discourse functions of language needed to support deeper learning and concepts are transparently learned and simply acquired over time.

Language of learning is all the key terminology, phrases and meaning words that are associated with any topic and include core vocabulary, phrases, and verbs (in appropriate tenses).

Language for learning is all the language that learners will need to carry out tasks (e.g., if they are explaining (as in DOEA), they will need the language of explaining).

Language through learning is all the language they will need to take what they are learning to a deeper level and here they will definitely need language functions (CDFs) to achieve this.



EXAMPLE (An Expedition to the Amazon Rainforest)²

The classroom activities suggested in the materials follow the principle of dialogic classroom by lowering the threshold for learner participation. They anticipate students' previous knowledge as well as the questions they might to bring to the classroom. For instance, to raise awareness of the connection between meat production and deforestation and to underline the relevance of the topic of the tropical rainforest to the students' everyday lives, a campaign advertisement by the Union of Concerned Scientists (2014) is presented to the learners. While it can be expected that all students will be able to make

² Taken from Siepmann & Pérez Cañado (in press for 2021). Catering to Diversity in CLIL: Designing Inclusive Learning Spaces with the ADiBE Digital Materials. Anglistik. International Journal of English Studies.

hypotheses about the aim of the campaign and the underlying issue of deforestation, many students may be unable to express their ideas in the foreign language. Therefore, there are various degrees of scaffolding available in the three levels of difficulty, which the learners can access by clicking on the links. The digital materials thus allow students to flexibly adapt the learning materials according to the amount of support they need to take part in this whole-class activity. The full potential of this feature is unfolded if students are equipped with individual digital devices such as tablet computers. It is up to them to decide on the amount of scaffolding that is displayed. Since other students will not be able to see which level they have chosen, a safe space is created for the students to learn at their current level.

CHECKLIST

- ✓ Does the project include tasks that prompt collaborative learning and knowledge coconstruction through dialogue? Are all students given a chance to voice their thoughts on all topics?
- ✓ Are tasks and activities designed to support and encourage student participation? Is there language support? Is it clear to students which thinking skills are expected of them?
- ✓ Do activities provide space for learners' voices and establish an atmosphere where everybody's (the peers and the teachers alike) views are respected? Do you provide cues and language for "agreement/disagreement", "negotiation", etc.?

BACKGROUND READING ON THE DIALOGIC CLASSROOM

- Alexander, R. J. (2008). *Towards dialogic teaching: Rethinking classroom talk* (4th ed.). York: Dialogos.
- Haneda, M., & Wells, G. (2008). Learning an additional language through dialogic inquiry. *Language and Education*, 22(2), 114–136.
- Scott, P. H., Mortimer, E. F., & Aguiar, O.C. (2006). The tension between authoritative and dialogic discourse: A fundamental characteristic of meaning making interactions in high school science lessons. *Science Education*, 90(4), 605–631.
- Skidmore, D. (2019). Dialogism and education. In N. Mercer, R. Wegerif, & L. Major (Eds.), *The Routledge international handbook of research on dialogic education* (pp. 27–37). London: Routledge.

(3) EXPLICITNESS

The idea that it is important to make specialist or 'vertical' knowledge accessible in the classroom is closely linked to Basil Bernstein's work on the sociology of education and pedagogic discourse. Basil Bernstein (1999) distinguishes two types of discourses in education: a horizontal one, which is common to everyday life, informal and usually connected to concrete experience, and a vertical discourse of school knowledge, which is more formal and abstract. In fact, teachers frequently break down abstract 'vertical' concepts by means of 'horizontal' talk, i.e. translating them into everyday language to make them more familiar and relevant to pupils' lived experience. However, they rarely do the opposite. That is to say, teachers rarely teach pupils how to actively navigate the formal discourse of vertical school knowledge. This disadvantages learners who are less good at picking up tacit rules by observation and/or who are learning in a second language. Visible pedagogy is necessary to create a more level playing-field for all types of learners and it entails that students become aware of the (tacit) rules of vertical discourse. Visible pedagogy makes cognitive steps explicit and models the formal language that is expected in examinations. To support students in navigating vertical discourses, learning should be made explicit, for instance, by modelling cognitive processes and outcomes (e.g., through think-alouds) and building a repertoire of formal language.

EXAMPLE (An Expedition to the Amazon Rainforest)³

The materials employ a multitude of strategies to make learning visible. Vertical knowledge is made accessible to students through advance organizers, cognitive discourse functions, reflection on learning, and model texts. Advance organizers are employed to raise students' awareness of the purpose of a unit in the context of the whole classroom sequence as well as its learning objectives. They come in form of short lead-in texts to each unit and can be used to involve students in planning their learning process. Reflective activities at the end of each unit (such as 3-2-1 RIQ, New Learning Online 2021) encourage students to reflect on their learning process and to thus gain a deeper understanding how a particular unit fits into the bigger picture. While the differentiated activities map different roads to the same goal, the introductory and reflective phases that frame each unit ensure that all learners have reached this goal. They also help the teacher diagnose which students need additional support.

CHECKLIST

✓ Have you explained to students how this lesson builds on concepts and skills they have already learned? Have you told them what the purpose of the learning activity is?

✓ Do you use 'think alouds', or do you verbalize thinking processes when demonstrating a task?

³ Taken from Siepmann & Pérez Cañado (in press for 2021). Catering to Diversity in CLIL: Designing Inclusive Learning Spaces with the ADiBE Digital Materials. *Anglistik. International Journal of English Studies*.

- ✓ Do you tell students what you are doing while you are modelling the language they need? Do you ask students to verbalize why they are solving a problem the way they do (making thinking explicit)?
- ✓ Do you give students an exemplar or model of an assignment they will be asked to complete? Do you describe the exemplar assignment's features and why the specific elements represent high-quality work?
- ✓ Do you make learning strategies explicit?

BACKGROUND READING on EXPLICITNESS

- Bernstein, B. (1996). *Pedagogy, symbolic control and identity: Theory, research, critique.*London: Taylor & Francis.
- Bernstein, B. (1999). Vertical and horizontal discourse: An essay. *British Journal of Sociology of Education*, 20(2), 157–173.
- Martin, J. R. (2006). Metadiscourse: Designing interaction in genre-based literacy programs. In R. Whittaker, M. O'Donnell, & A. McCabe (Eds.), *Language and literacy: Functional approaches* (pp. 95–122). London: Continuum.

(4) LEARNER-CENTEREDNESS

Student-centered, active, hands-on learning should be favored in CLIL programs, where learners take center stage and become the protagonists of the teaching-learning process. Learner-centered methods/approaches such as cooperative learning, task-based language teaching, project-oriented work, or curricular integration should be part and parcel of CLIL scenarios in order to cater for diverse learners and promote inclusion. Putting students at the center of the teaching-learning process requires that teachers promote autonomy, participation, and interaction in the classroom, which goes hand in hand with a self-reflexive shift of their own role from educator to facilitator. The students' construction rather than the teacher's transmission of knowledge is at the core of student-centered methodologies such as cooperative, task- or project-based learning.

A good read for inspiration is Fullan & Langworthy's *A Rich Seam*⁴, where teacher-learner partnerships are at the core of deeper learning. Critical here is that we develop the skill of mentoring *learning* rather than the learner (this involves different more affective elements of learning). Mentoring learning is about enabling all learners to engage in learning conversations, to talk more effectively about their own learning, and to begin to realize how they can take greater ownership of that learning (learner voice and self-agency).

EXAMPLE (An Expedition to the Amazon Rainforest)⁵

The screenshot on the left-hand side in Fig. 3 shows a complex competence task (Hallet, 2013) which provides a twofold choice for students to personalize their learning process according to their abilities and preferences. The learners' choice for the geographer's or the biologist's path entails different perspectives on, and approaches to, the ecosystem of the Amazon rainforest. There are up to three levels of cognitive and linguistic difficulty available for all paths. Whichever path they follow, all students can make a valuable contribution to the cooperative follow-up activity (Siepmann, forthcoming: 49):

Form mixed groups of experts on climate, vegetation, wildlife and soil/nutrient cycle of the tropical rainforest. Exchange about your findings from your work in expert groups and sum up what you have learnt about your topic. Then, discuss how these factors are connected:

- How does the climate affect the vegetation and the soils of the tropical rainforest?
- How does the vegetation affect the soils and the climate?, etc.

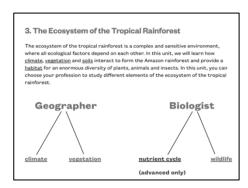
Only through cooperation and communication will the group be able to complete the schematic representation of the ecosystem of the tropical rainforest (cf. screenshot on the right-hand side in Fig. 1).

This task demonstrates the advantages of digital media over textbooks or other traditional lassroom media in providing rich input materials. The number of differentiated materials, and hence of copies that teachers would have to make, would render it next to impossible to put such a task sequence into practice. Given that the materials comprise twenty pages

⁵ Taken from Siepmann & Pérez Cañado (in press for 2021). Catering to Diversity in CLIL: Designing Inclusive Learning Spaces with the ADiBE Digital Materials. *Anglistik. International Journal of English Studies*.

⁴ https://www.michaelfullan.ca/wp-content/uploads/2014/01/3897.Rich_Seam_web.pdf

and that all materials would have to be made available to all students, this would amount to several hundred copies.



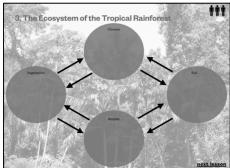


Figure 1: Learners follow their own learning paths and contribute to a complex cooperative task

CHECKLIST

- ✓ Do my activities help make the transition from mere transmission of information to the understanding and assimilation of contents based on learning by doing and discovery?
- ✓ Are the students truly the protagonists of the learning process via a more autonomous, participative, and interactive type of learning?
- ✓ Am I as a teacher pulling back from being a donor of knowledge to become a facilitator and mediator of learning, thereby transitioning from a teacher-driven to a student-led classroom?
- ✓ Is cooperative learning being used to build on and complement each student's strengths and to empower all types of learners?

BACKGROUND READING ON LEARNER-CENTEREDNESS

Ball, P., Kelly, K., & Clegg, J. (2016). *Putting CLIL into practice*. Oxford: Oxford University Press.

Coyle, D., Hood, P., & Marsh, D. (2010). *CLIL: Content and language integrated learning*. Cambridge: Cambridge University Press.

Dalton-Puffer, C. (2011). Content-and-language integrated learning: From practice to principles? *Annual Review of Applied Linguistics*, 31, 182–204.

Pavón Vázquez, V., & Rubio, F. (2010). Teachers' concerns and uncertainties about the introduction of CLIL programmes. *Porta Linguarum*, 14(1), 45–58.

Pérez Cañado, M. L. (2018). CLIL and pedagogical innovation: Fact or fiction? *International Journal of Applied Linguistics*, 28, 369–390.

(5) MULTIMODALITY & MULTILITERACY

Texts in a wide sense – including films, hypertexts, graphs, maps, etc. – usually combine different modes of meaning-making. Making use of multimodality can support learning in heterogeneous CLIL classrooms, as multimodal instruction facilitates understanding and speaks to different abilities of learners. In addition, promoting competences in understanding how to extract information from multimodal texts or even in producing such texts to develop multiliteracies is an important task in 21st-century education (Kalantzis & Cope 2016). In classroom practice, this means that rich, multimodal input is offered to compensate for individual weaknesses and to cater to students' strengths, and students are given ample opportunities to create their own multimodal texts or shift between different modes of presentation (e.g., by verbalizing a graph).

By designing instruction that utilizes a variety of tasks deployed through a variety of modalities, we quite naturally cater to diversity, since multimodal instruction not only accommodates individual weaknesses but also engages and potentiates individual abilities, competences, and strengths. A multimodal learning progression which uses an array of task types deploying different modalities (texts, tables, images, graphs, etc.) and which call for a variety of interactions (individual, pair work, etc.) for different purposes (negotiate meaning, email your friend, etc.) cultivates not only multiple literacies, but also builds academic competence and develops "soft skills" (see Figure 2).

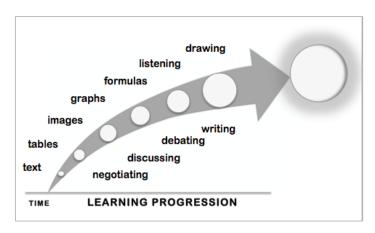


Figure 2: Multimodal learning progression

EXAMPLE (An Expedition to the Amazon Rainforest)6

Another benefit of digital media is that they can process all sorts of input materials – be they texts, hypertexts (with links), images, videos, or sounds. This is paramount to the fifth ADiBE principle of multimodality and multiliteracies. The materials include so-called CLIL skills pages that provide step-by-step instructions on how to work with different sources for information – from images to Google Earth satellite images to climate graphs. Each of these different texts create meaning through a different combination of modalities at varying levels of abstraction. For instance, a satellite image obtained from Google Earth

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⁶ Taken from Siepmann & Pérez Cañado (in press for 2021). Catering to Diversity in CLIL: Designing Inclusive Learning Spaces with the ADiBE Digital Materials. *Anglistik. International Journal of English Studies*.

includes various layers of information and combines the satellite image with texts, gridlines, and other geodata. Understanding how these modes work together to convey meaning is an important prerequisite for developing subject literacy in geography.

Multiliteracies pedagogy is not limited to understanding different modes of communication and their combination, but also implies the production of multimodal texts, as well as the ability to shift between modes of meaning-making. This enables students to process information in greater depth, as such activities initiate complex cognitive and communicative processes, which Meyer et al. (2015) refer to as deeper learning. Therefore, most of the tasks entail a shift in the modes of representation, such as a verbalization of a diagram illustrating the principles of agroforestry or using the information from a schematic representation of the layers of the rainforest to prepare an audio guide for a canopy walking tour.

CHECKLIST

- ✓ Does your *learning progression* offer instruction through a variety of *receptive* and *productive* instructional task types and modalities so as to cater to individual weaknesses as well as abilities, competences, and strengths?
- ✓ Has each task-type/modality been optimized for *literacy development* as well as *competence* and *skill-building*?
- ✓ Have you made sure that receptive learning modalities are completed through *productive* learning tasks so that *hands-on learning* concludes with *minds-on learning*?

BACKGROUND READING on MULTIMODALITY & MULTILITERACY

Multimodality:

https://www.cjv.muni.cz/cs/wp-content/uploads/sites/2/2016/02/cr-11516-marchetti.pdf

Soft skills:

Heckman, J. J., & Kautz, T. (2012). Hard evidence on soft skills. *Labour Economics*, 19(4), 451–464.

OECD: https://www.oecd.org/education/ceri/Fostering-and-Measuring-Skills-Improving-Cognitive-and-Non-Cognitive-Skills-to-Promote-Lifetime-Success.pdf

Soft Skills: https://www.childtrends.org/wp-content/uploads/2015/06/2015-24WFCSoftSkills1.pdf

(6) SCAFFOLDING

Drawing on Vygotsky's (1978) concept of the Zone of Proximal Development (ZPD), the principle of scaffolding implies that temporary support is offered according to the students' current needs. Scaffolding refers to instructional techniques used to move students progressively toward stronger understanding and greater learning independence. Teachers provide successive levels of temporary support that help students reach higher levels of comprehension and skill acquisition that they would not be able to achieve without assistance. As students' learning proceeds, these measures are gradually reduced and more responsibility is handed over to the students. Like physical scaffolding, the supportive strategies are incrementally removed when they are no longer needed, and the teacher gradually shifts more responsibility over the learning process to the student.

Scaffolding can take various forms. Hammond and Gibbons (2005) distinguish between macro (or designed-in) and micro (or interactional) scaffolding. The former refers to preplanned scaffolding measures that are usually included in the learning materials and task instructions, whereas the latter encompasses all kinds of (communicative) support teachers offer in the classroom. Hallet (2011) divides scaffolding into input, process and output scaffolds, indicating that, at different stages in the learning process, students need different kinds of support.

EXAMPLE (An Expedition to the Amazon Rainforest)7

While some forms of scaffolding provided in the materials have already been introduced in the previous sections, this heading will provide a more detailed account of the various types and layers of scaffolding found in the exemplary material, which can be broadly structured by referring to Hallet's (2011) distinction between input, process, and output scaffolding. On the input level, the material, for example, provides language support in form of a glossary of technical terms, images that support understanding of verbal information, or guiding questions that draw attention to relevant information in videos. On the process level, step-by-step instructions are given to structure the learning process. The skills pages contain detailed walkthroughs to help students master some key methods of the CLIL geography (and biology) classroom, such as:

- using *Google Earth* to locate a place,
- interpreting a climate graph, or
- creating a flow chart (cf. Fig. 3)

⁷ Taken from Siepmann & Pérez Cañado (in press for 2021). Catering to Diversity in CLIL: Designing Inclusive Learning Spaces with the ADiBE Digital Materials. *Anglistik. International Journal of English Studies*.

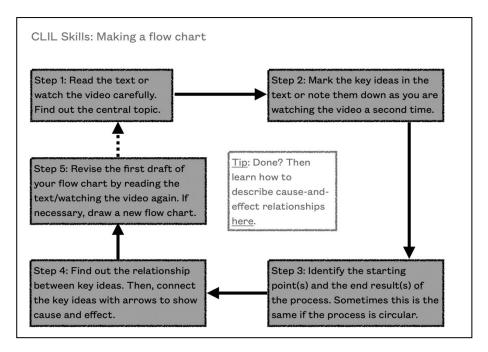


Figure 3: Skills page - Making a flow chart

On the output level, language cues are provided to lower the threshold for learners to participate in classroom discussions (e.g., describing cause-and-effect relationships). There are also scaffolds that help students understand generic features of a target text by drawing attention to their typical structure; for instance, model texts at the 'advanced' level or gap-filling activities at the 'easy' level. The advantage of the digital materials is that learning support can be conveniently accessed via links and that students can adapt the amount of scaffolding that is displayed to their current needs.

CHECKLIST

- ✓ Have you described or illustrated a concept, problem, or process in multiple ways to ensure understanding? Have you varied scaffolding approaches to cater for different learning styles?
- ✓ Have you used the learners' L1 for scaffolding?
- ✓ Have you used multi-level activities to challenge faster learners and support weaker students? Have you broken down an activity into smaller steps?
- ✓ Have you used cooperative learning to promote teamwork and dialogue among peers?

BACKGROUND READING on SCAFFOLDING

Basics:

https://www.edglossary.org/scaffolding/

More:

- https://www.opencolleges.edu.au/informed/teacher-resources/scaffolding-in-education-a-definitive-guide/ (a great overview)
- https://study.com/academy/lesson/scaffolding-in-education-definition-theoryexamples.html (animated video)
- Hogan, K., & Pressley, M. (Eds.). (1997). Scaffolding student learning: Instructional approaches and issues. Cambridge, MA: Brookline Books.
- The IRIS Center. (2005). *Providing instructional supports: Facilitating mastery of new skills*. Retrieved from https://iris.peabody.vanderbilt.edu/module/sca/ (online mini-course)
- Vygotsky, L. S. (1978). *Mind in society: Development of higher psychological processes* (14th ed.). Cambridge, MA: Harvard University Press.
- Wood, D. J., Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem solving. Journal of Child Psychiatry and Psychology, 17(2), 89–100.

