

ASSESSMENT AND EVALUATION ⁱⁿ CLIL

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www.aeclil.net

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PREFACE

John Clegg

In Europe we are now familiar with Content and Language Integrated Learning, or CLIL. We have been doing it for some 25 years. We do it in most European countries. We differ a lot in the way we interpret and implement it. Some countries and education authorities do it more than others, and are more experienced than others. But governments and the EU seem to approve of it, for a variety of educational reasons. And stakeholders seem to like it: wherever it happens, teachers, learners and parents tend largely to be positive about it.

However, we don't quite agree on what it is. We know that it is a way of combining subject and foreign language (FL) learning, but we still have differing views, for example, as to its purpose: whether it is primarily an exercise in learning subjects, or in becoming more fluent in a language. Some CLIL programmes are taught by subject teachers, some by language teachers and some by both. And crucially the amount of curriculum time which learners devote to it varies radically – from say 3 years plus of a subject taught 100% in a FL to 20 weeks of a subject taught 30% in a FL. The difference between these two programmes is so great as to cast doubt on whether we can call both CLIL. But we do.

The AECLIL project is testimony not only to the wide range of countries and educational contexts in which we do CLIL in Europe, but also to the range of subjects and levels of schooling in which we do it. The project highlights in particular an area of CLIL which we do not know enough about: assessment. Assessing in CLIL is not easy. It throws up critical questions. Let us mention some. Firstly if the programme is supposed to develop learners' knowledge of the FL as well as curricular contents, should both be assessed? Secondly, if the learners are learning a subject through the medium of a language in which they are not fluent – as is often the case – can we ask them to demonstrate subject knowledge in that language, or might that lack of fluency prevent them from showing clearly enough what they know? Thirdly, if we want subject teachers to assess learner performance in a course which they have taught in a FL, do they feel themselves qualified to do that, especially if they are not wholly confident in that language themselves? And fourthly, what assessment tools are the most useful for measuring performance in subjects learned in FL?

One such assessment tool is the bandscale: a set of performance descriptors which allow the teacher to rank a piece of student performance on several sub-skills of a given task, using a pre-constructed scale. This is what the AECLIL project has focussed on. A bandscale allows the teacher to assess together in one assessment tool a range of sub-skills which the learner uses indivisibly when performing a complex learning task. It ranks performance on each of these sub-skills, using a scale which contains several levels (say 5 or 10), but maintains the integrity of the student's performance by combining all the skills together within each level of the scale. Thus one level of the scale will give a measure of the learner's combined performance on all the sub-skills.

This is particularly useful in CLIL, where performance is very obviously the combined result of two key elements, namely FL and subject knowledge, as well as perhaps a combination of several further components of a subject-specific task, such as those which the learner will use in, for example, conducting a scientific experiment (e.g. predicting outcomes, conducting the experiment, reporting results and drawing conclusions). It may also enable the teacher to note the degree to which the learner needs support – especially language support – when performing the task in the FL.

The bandscale thus has several advantages, especially in CLIL. It allows the teachers – if they wish (and of course not all CLIL teachers do) – to give a combined grade for language skill and subject knowledge, as well as allowing them to assess other sub-skills of the task, again if they wish to do so. It may also avoid some of the pitfalls of some conventional assessment tools when used in CLIL. Long-answer questions, for example, may well disadvantage the learner who has good knowledge of the subject but poor productive language skills and cannot therefore easily demonstrate that subject knowledge in inaccurate or inappropriate extended writing in the FL. The bandscale may also reassure the subject teacher – to a degree – that they are able to give a grade without making heavy demands on what they may feel to be their own insecure command of the FL.

However, bandscales have their disadvantages. Firstly they require careful construction. The assessor must first decompose the task to be assessed into its component skills. They must then rank each skill on the scale to be used and devise a descriptor for each rank of each skill, giving a set of sub-scales for that skill. Finally they have to re-combine all sub-scales together, to form a combined descriptive statement for each rank of the overall scale. The resulting draft instrument must then be trialled by several users to see if they feel that it enables them to rank a learner's performance on the relevant combination of skills, on one scale. The instrument is likely to undergo revisions before all the users feel that this is the case. In addition, a bandscale clearly does not absolve the teachers from making an assessment of the learner's performance: they have to observe what the learner does – using the FL – and translate it in their mind onto a rank of the bandscale. This is a fairly intuitive act; there is plenty of room for difference between assessors, and again a group of colleagues will have to apply the scale and discuss the way they have done so together before they can be sure that they are using roughly similar judgements.

Finally the scale will not allow the teacher easily to separate a learner's performance into distinct sub-skills – on the contrary the point of the scale is to combine sub-skills. If a CLIL teacher wants to distinguish between both language and subject performance, the scale may make that difficult: as we know, some learners tend to be good at language and not at subjects and vice versa and the bandscale may make it hard for the teacher to record that. Fortunately, a lot of CLIL programmes do not set out to make these distinctions and simply assess the key subject-related knowledge and skills involved. For these teachers, a scale will be useful.

Institutions involved in the AECLIL project have assessed a range of subjects and a range of subject-related tasks within those subjects, using bandscales. The work of the project should help us to understand more about how, using these specific instruments, subject teachers working in a FL can measure the performance of their learners in the subject as it is demonstrated through that language.

THE AIMS OF THE PROJECT

This publication and the related CD are the result of a three-year AECLIL (Assessment and Evaluation in Content and Language Integrated Learning) project funded by the European Commission (EACEA) with the aim of spreading CLIL methodology by sharing best practices among different European research centers and institutions. AECLIL research focuses on how to assess and evaluate the effectiveness of learning a non-linguistic subject in a foreign language, a methodology which improves the language itself and, at the same time, enhances cross-curricular and thinking skills.

The originality of the project is based on the production of a set of shared teaching tools devised to assess and evaluate both the process and the results of CLIL. The project has been carried out in nine different countries, each of them having different cultural background and school system. Moreover CLIL has been experimented and checked at various levels of education systems, from primary school to university, adult education and teacher training courses, with an additional glimpse to lifelong informal education.

In the *Conclusions of the Council and Representatives of Government of European Member States (May 2009) on enhancing partnership between education and training institutions and social partners, in particular employers, in the context of lifelong learning*, it is stated:

European cooperation in education and training should be implemented in a lifelong learning perspective making effective use of the open method of coordination (OMC) and developing synergies between the different education and training sectors. While fully respecting Member States' responsibility for their educational systems and the voluntary nature of European cooperation in education and training, the OMC should draw on: [...]

- common reference tools and approaches,
- peer learning and the exchange of good practice, including the dissemination of outcomes...¹.

We bore these guidelines in mind while planning and carrying out the project so that the outcomes achieved by the AECLIL partnership can now be easily shared and employed in different teaching and learning environments.

In the following pages you will find both an introduction to the basic principles of the process of evaluation and assessment in CLIL and a presentation of modules planned, administered, tested and assessed according to a common standard with reference to different school levels, plus a wide range of evaluation tools. The CD contains all modules developed by the AECLIL partners.

The consortium has involved a great number of teachers and learners in Bulgaria, France, Germany, Italy, Latvia, Romania, Spain, Sweden and Turkey. It has also allowed the Institutions in charge of processing the data collected to produce a wide set of evaluation grids, rubrics, evaluation and assessment tools, which have been validated and are thus available to all stakeholders also on line at www.aeclil.net.

Lucia Alberti, AECLIL Project coordinator

¹ * Official Journal of the European Union, *Council conclusions of 12 May 2009 on a strategic framework for European cooperation in education and training* ('ET 2020'), 28.5.2009, C 119/4.

GLI SCOPI DEL PROGETTO

Questa pubblicazione e il CD ad essa allegato sono frutto del progetto AECLIL (*Assessment and Evaluation in Content and Language Integrated Learning*) finanziato dalla Commissione Europea (EACEA) allo scopo di diffondere la metodologia CLIL attraverso la condivisione di buone pratiche tra diverse istituzioni ed enti di ricerca europei. Le ricerche svolte si sono concentrate sulle procedure di verifica e valutazione dell'efficacia dell'apprendimento di una disciplina non linguistica attraverso l'uso di una lingua straniera, una metodologia finalizzata al miglioramento della competenza nella lingua straniera che, allo stesso tempo, stimola lo sviluppo di abilità trasversali e capacità cognitive.

L'originalità del progetto sta nella produzione di una batteria di strumenti didattici finalizzati alla verifica e alla valutazione sia del processo che dei risultati ottenuti con l'utilizzo della modalità CLIL. Il progetto è stato sviluppato in nove paesi ciascuno dei quali possiede un differente retroterra culturale e un proprio sistema scolastico. La metodologia CLIL è stata inoltre sperimentata e verificata a vari livelli del percorso educativo, dalle scuole primarie alle Università e nei corsi di formazione per docenti, senza dimenticare i percorsi di educazione permanente non formale per adulti.

Nelle *Conclusioni del Concilio e dei Rappresentanti dei Governi degli stati membri dell'Unione Europea sul potenziamento dei partenariati tra istituzioni preposte all'educazione e alla formazione con le Parti sociali, ed in particolare i datori di lavoro, nel contesto di un'educazione permanente* si afferma:

La cooperazione europea nell'ambito dell'educazione e della formazione dovrebbe essere incrementata nell'arco di tutta la vita attraverso un metodo di coordinamento aperto e lo sviluppo di sinergie tra le diverse agenzie educative e di formazione. Nel pieno rispetto della responsabilità dei singoli stati riguardo al loro proprio sistema educativo e il volontario spirito di cooperazione europea nell'ambito dell'educazione e della formazione, il metodo di coordinamento aperto dovrebbe far riferimento a:

[...]

- strumenti di riferimento e modalità di approccio comuni
- apprendimento tra pari e scambio di buone pratiche, compresa la disseminazione dei risultati...*

E proprio queste linee suggerite dall'Unione europea hanno guidato la progettazione e lo svolgimento della ricerca sicché i prodotti del partenariato AECLIL possono essere ora facilmente condivisi e utilizzati in diversi contesti di insegnamento ed apprendimento.

Nelle pagine seguenti potrete trovare sia una introduzione ai principi fondamentali del processo di verifica e valutazione in CLIL, sia esempi di moduli progettati, svolti, testati e verificati in base a uno standard comune e riferiti a diversi livelli di scuole; è inoltre presente una notevole varietà di strumenti di valutazione. Il CD contiene i moduli prodotti dai partner del progetto AECLIL.

Il consorzio ha coinvolto un grande numero di insegnanti e apprendenti in Bulgaria, Francia, Germania, Italia, Lettonia, Romania, Spagna, Svezia e Turchia. Le istituzioni che avevano il compito di rielaborare i dati hanno poi prodotto un cospicuo numero di

griglie e altri strumenti di valutazione che sono stati convalidati e resi accessibili a tutti anche attraverso il sito www.aeclil.net.

Lucia Alberti, coordinatrice del progetto AECLIL

ЦЕЛИ НА ПРОЕКТА

Това печатно издание и свързаното с него CD са резултат от тригодишна работа по AECLIL проект Оценяването на неезиковите дисциплини, преподавани на чужд език по методологията CLIL/EMILE. Проектът е финансиран от Европейската Комисия с цел разпространяване на CLIL/EMILE методологията чрез споделяне на добрите практики сред различни европейски изследователски центрове и институции.

AECLIL изследването е фокусирано върху това, как да се оценява ефективността при учене на неезиков предмет на чужд език. Това е методология, която подобрява изучаването на самия език и развива едновременно междупредметни връзки и умения за мислене.

Оригиналността на проекта се базира върху създаване на сборник от средства за обучение, изготвени да оценяват както процеса, така и резултатите от CLIL/EMILE. Проектът се изпълнява в 9 страни, всяка с различна културна среда и учебна система. Освен това CLIL/EMILE се експериментира на различни нива на образователни системи – от начално училище до университет и курсове за обучение на учители, с допълнителен поглед към неформалното учене през целия живот.

В *Заключението на Съвета и Представителствата на Правителствата на Европейските държави-членки (май 2009), за подобряване на партньорството между образованието и обучаващите институции и социалните партньори, в частност работодатели, в контекста на Ученето през целия живот*, се казва:

Европейското сътрудничество в образованието и обучението би трябвало да се приложи в перспективата на Ученето през целия живот, създавайки ефективно използване на отворения метод за координация и развиване на взаимодействието между образователните и учебни сектори. Съобразявайки се напълно с отговорността на държавите-членки за техните образователни системи и европейското сътрудничество на доброволни начала в сферата на образованието и обучението, отвореният метод за координация трябва да заложил на :

[...]

- общи средства и методи
- обучение и обмен на добри практики, както и разпространение на резултатите...*

Ние, партньорите, имаме тези насоки предвид, докато планираме и изпълняваме проекта, така че резултатите, постигнати от AECLIL партньорството да могат да бъдат лесно споделени и приложени в различна образователна и учебна среда.

На следващите страници ще намерите както въведение към основните принципи на процеса на оценяването в CLIL/EMILE, така и представяне на планираните модули, които са приложени и оценени според общ стандарт с препратка към различни училищни нива, плюс широк набор от средства за оценяване. CD-то съдържа всички модули, разработени от партньорите в AECIL.

Партньорството включва голям брой учители и ученици от България, Франция, Германия, Италия, Латвия, Румъния, Испания, Швеция и Турция. Това позволява на институциите, които отговарят за обработката на събраните данни, да създадат широк комплект от оценъчни таблици, рубрики, средства за оценяване, които са валидирани и по този начин достъпни до всички партньори и онлайн на www.aecil.net.

Лусия Алберти – координатор на проекта AECIL

DIE ZIELE DES PROJEKTS

Diese Veröffentlichung und die angefügte CD sind das Ergebnis eines dreijährigen AECIL Projekts (*Assessment and Evaluation in Content and Language Integrated Learning*), das von der Europäischen Kommission (EACEA) gefördert wurde mit dem Ziel, CLIL-Didaktik durch den Austausch von *best-practice*-Beispielen zwischen verschiedenen europäischen Forschungszentren und Institutionen zu verbreiten. Die Untersuchung, die von AECIL durchgeführt wurde, zielt darauf ab, Mittel und Verfahren zu finden, mit denen die Effizienz des Lernens eines Sachfaches in einer Fremdsprache geprüft und evaluiert werden kann, und eine Didaktik zu fördern, die die Sprachkompetenzen selbst und gleichzeitig fächerübergreifende sowie kognitive Kompetenzen entwickelt.

Die Besonderheit des Projekts basiert auf der Erstellung einer Reihe von gemeinsamen Lehrwerkzeugen, die es ermöglichen, gleichermaßen den Prozess und die Ergebnisse von CLIL-Modulen zu überprüfen und zu evaluieren. Das Projekt wurde in neun verschiedenen Ländern durchgeführt, wobei jedes Land einen anderen kulturellen Hintergrund sowie ein eigenes Schulsystem hat. Darüber hinaus ist CLIL auf verschiedenen Niveaus des Erziehungssystems, von der Grundschule bis zur Universität und in Lehrerfortbildungskursen ausprobiert und überprüft worden bei gleichzeitiger Berücksichtigung des lebenslangen nicht formellen Lernens.

In den *Conclusions of the Council and Representatives of Government of European Member States (May 2009) über das Fördern von Partnerschaften zwischen Bildungs- und Fortbildungsinstitutionen sowie Sozialpartnern, bes. Arbeitgebern, im Rahmen von lebenslangem Lernen* wird festgestellt:

Europäische Kooperation im Bereich Bildung und Fortbildung sollte in eine lebenslange Perspektive integriert werden, indem man effizient von der offenen Koordinationsmethode Gebrauch macht und Synergieeffekte zwischen den einzelnen Bildungs- und Fortbildungsabteilungen entwickelt. Bei vollständigem Respekt für die Verantwortung eines jeden Mitgliedsstaates für sein Bildungssystem und die Freiwilligkeit europäischer Zusammenarbeit in Bildung und Fortbildung sollte die offene Koordinationsmethode abzielen auf:

[...]

- gemeinsame Referenzwerkzeuge und Herangehensweisen
- Lernpartnerschaften und den Austausch von guten Praxisbeispielen, die Verbreitung der Ergebnisse mit eingeschlossen...*.

Wir beachteten diese Richtlinien bei der Planung und Realisierung des AECLIL-Projekts, so dass die durch die Partnerschaft erzielten Ergebnisse nun problemlos verbreitet und in verschiedenen Lehr- und Lernumgebungen angewendet werden können.

Auf den folgenden Seiten findet man sowohl eine Einführung zu den Grundprinzipien des Evaluationsprozesses und des sogenannten *Assessments* in CLIL als auch eine Vorstellung von Modulen, die geplant, organisiert, getestet und überprüft worden sind entsprechend einem gemeinsamen Standard mit entsprechenden Evaluationsinstrumenten und mit Rücksicht auf die verschiedenen Schulstufen. Die CD enthält alle Module, die von den AECLIL-Partnern entwickelt worden sind.

Das Projektkonsortium hat eine große Anzahl von Lehrkräften und Lernern in Bulgarien, Deutschland, Frankreich, Italien, Lettland, Rumänien, Spanien, Schweden und der Türkei mit eingeschlossen. Dies erlaubte den Institutionen, die den Auftrag hatten, die Daten zu systematisieren, ein breites Spektrum von Evaluationsschemata, Matrices, Evaluations- und Testinstrumenten zu erstellen, die einer Beurteilung unterzogen wurden und allen Anwendern zur Verfügung stehen (dies auch online unter www.aeclil.net).

Lucia Alberti, Koordinatorin des AECLIL-Projekts

LOS OBJETIVOS DEL PROYECTO AECLIL

Tanto esta publicación como el CD adjunto son el resultado de los tres años de trabajo en el Proyecto AECLIL (*Assessment and Evaluation in Content and Language Integrated Learning*), financiado por la Comisión Europea (EACEA) con el objetivo de difundir la metodología CLIL mediante el intercambio de las mejores prácticas entre diferentes centros de investigación e instituciones de Europa. La investigación de AECLIL se centra en los métodos de evaluación de la efectividad del aprendizaje de una asignatura no lingüística en una lengua extranjera, una metodología que mejora la lengua misma y, al mismo tiempo, desarrolla las destrezas intercurriculares y de pensamiento.

La originalidad de este proyecto se basa en la producción de una serie de herramientas didácticas compartidas, diseñadas para evaluar tanto el proceso como los resultados de la metodología CLIL. El proyecto se ha llevado a cabo en nueve países diferentes, cada uno con antecedentes culturales y sistemas educativos distintos. Además, la metodología CLIL ha sido experimentada y comprobada en varios niveles de dichos sistemas educativos, desde la educación primaria a los cursos de formación de profesorado, con un apartado especial para la educación no formal permanente.

En el documento *Conclusiones del Consejo y los Representantes de Gobierno de los Estados miembros europeos (mayo, 2009) sobre la mejora de la colaboración entre las instituciones educativas y de formación y los colaboradores sociales, en particular los empleadores, dentro del contexto del aprendizaje permanente*, se afirma:

La cooperación europea en el ámbito de la educación y la formación, deberá aplicarse con una perspectiva integrada del aprendizaje permanente haciendo uso efectivo del método abierto de coordinación y desarrollando sinergias entre los distintos sectores de la educación y la formación. Con pleno respeto de la responsabilidad de los Estados miembros sobre sus sistemas educativos y del carácter voluntario de la cooperación europea en la educación y la formación, el método abierto de coordinación deberá aprovechar:

[...]

- instrumentos de referencia y planteamientos comunes,
- el aprendizaje entre iguales y el intercambio de buenas prácticas, con inclusión de la difusión de resultados...*.

Tuvimos esas directrices en mente durante la planificación y desarrollo del proyecto para que los resultados alcanzados por los miembros de AECLIL ahora puedan compartirse sin dificultad y sean empleados en diferentes entornos de enseñanza y aprendizaje.

En las páginas siguientes podrá encontrar una introducción a los principios básicos del proceso de evaluación en la metodología CLIL y una presentación de los módulos planificados, administrados, probados y evaluados de acuerdo con un estándar común y referentes a distintos niveles educativos, además de un amplio abanico de herramientas de evaluación. El CD contiene todos los módulos desarrollados por los miembros de AECLIL.

El consorcio ha implicado a un gran número de profesores y estudiantes en Bulgaria, Francia, Alemania, Italia, Letonia, Rumanía, España, Suecia y Turquía. También ha permitido que las instituciones encargadas del proceso de los datos recogidos generen una gran variedad de cuadrículas, rúbricas, y herramientas de evaluación, que han sido validadas y que también están disponibles online para todos los depositarios/interesados en la página www.aeclil.net.

Lucia Alberti, coordinadora del proyecto AECLIL

LES OBJECTIFS DU PROJET

Cette publication et son CD sont le résultat d'un travail de trois ans autour du projet AECLIL/EMILE-Évaluation (*Assessment and Evaluation in Content and Language Integrated Learning*), financé par la Commission Européenne (EACEA) dans le but d'étendre la méthodologie CLIL en partageant les meilleures pratiques au sein de centres de recherche européens et de différentes institutions. L'objectif premier de la recherche du projet AECLIL se concentre sur l'efficacité de l'apprentissage d'une matière en langue étrangère, une méthodologie qui améliore la langue elle-même et, en même temps, améliore les compétences pluridisciplinaires et les fonctions cognitives.

L'originalité du projet est basée sur la production de ressources communes conçues pour évaluer tant processus que les résultats obtenus dans EMILE. Le projet a été entrepris dans neuf pays différents, chacun d'entre eux ayant un environnement culturel et son propre système scolaire. De plus EMILE a été expérimenté et vérifié dans différents systèmes éducatifs, allant de l'école primaire à l'université et pendant l'année

de formation des enseignants ; on peut mentionner qu'il concerne aussi la formation des enseignants tout au long de leur vie.

Dans les *Conclusions du Conseil et des Représentants de Gouvernement d'États membres européens (mai 2009) en instaurant un partenariat entre l'enseignement et la formation d'institutions et des partenaires sociaux, en particulier les employeurs, dans le contexte de formation continuée*, il est dit:

La coopération européenne dans l'enseignement et la formation devrait être mise en œuvre dans une perspective de formation à long terme, en permettant une collaboration et une coordination efficaces entre les différents secteurs. En respectant entièrement la responsabilité des États membres, de leurs systèmes éducatifs et la nature volontaire de la coopération européenne dans l'enseignement et la formation des maîtres, la collaboration devrait s'avancer : [...]

- des outils de référence communs et des approches communes
- un apprentissage entre pairs et des échanges de bonnes pratiques y compris la dissémination de résultats...*

Nous avons eu ces directives à l'esprit dans la planification et l'exécution du projet pour que les résultats réalisés par le partenariat AECLIL puissent être facilement partagés et utilisés dans l'enseignement de différents projets et dans des environnements différents.

Dans les pages suivantes vous trouverez une introduction aux principes de base, le processus d'évaluation dans CLIL et une présentation des modules planifiés, administrés, évalués selon une norme commune en ce qui concerne les différents niveaux, et une vaste gamme d'outils d'évaluation. Dans le CD vous trouverez tous les modules développés par les AECLIL-ASSOCIÉS.

Le consortium a impliqué un grand nombre de professeurs et apprenants en Bulgarie, France, Allemagne, Italie, Lettonie, Roumanie, Espagne, Suède et Turquie. Il a aussi permis aux Institutions responsables du traitement des données rassemblées de produire une grande panoplie de grilles, de rubriques et d'outils d'évaluation, qui ont été validés et qui sont disponibles pour toutes les parties prenantes aussi sur le site du projet www.aeclil.net.

Lucia Alberti, coordinatrice du projet AECLIL

PROJEKTA MĒRĶI

Šī publikācija un materiāls CD formātā ir rezultāts trīs gadus ilgušajam ES Mūžizglītības programmas finansētajam projektam „Sasniegumu vērtēšana satura un valodas integrētā mācīšanās – *Assessment and Evaluation in CLIL*” (AECLIL). Projekta mērķis ir izplatīt satura un valodas integrētas mācīšanas (CLIL) metodiku, daloties un savstarpēji apmainoties pieredzē dažādām Eiropas izglītības un pētniecības institūcijām. Galvenais uzvars projektā AECLIL ir likts uz to, kā novērtēt mācīšanās efektivitāti, mācot ar valodu apguvi nesaistītu priekšmetu svešvalodā, izmantojot metodiku, kas uzlabo valodas apguvi un vienlaicīgi veicina starppriekšmetu saikni un pilnveido domāšanas prasmes.

Projekta inovācija balstās uz projekta partneru kopīgi izveidoto mācību metožu kopumu, kuru izmantojot var novērtēt gan CLIL mācīšanas procesu, gan rezultātu. Projekts vienlaicīgi tika īstenots deviņās Eiropas valstīs ar atšķirīgu kultūru un izglītības sistēmām. Turklāt, CLIL metodika tika izmēģināta un pārbaudīta dažādās izglītības pakāpēs no sākumskolas līdz pat universitātei, ietverot arī pedagogu profesionālo pilnveidi un neformālo izglītību mūžizglītības kontekstā.

Padomes un *Eiropas dalībvalstu valdību pārstāvju secinājumos (2009. gada 12. maijā) par partnerības un sadarbības veicināšanu starp izglītības un apmācības institūcijām un sociālajiem partneriem, īpaši darba devējiem, mūžizglītības sistēmas kontekstā*, tiek uzsvērts, ka:

Eiropas sadarbība izglītībā un apmācībā ir jāīsteno, ņemot vērā mūžizglītības perspektīvu, lietderīgi izmantojot atvērto koordinācijas metodi (OMC) un veidojot sinerģijas starp izglītības un apmācības dažādām nozarēm. Pilnībā ievērojot dalībvalstu atbildību pār savām izglītības sistēmām un to, ka Eiropas sadarbība izglītības un apmācības jomā ir brīvprātīga, OMC ir jāizmanto:

[...]

- kopīgi instrumenti un pieejas,
- savstarpēja mācīšanās un labas prakses apmaiņa, ietverot rezultātu izplatīšanu...*

Šīs vadlīnijas ņēmām vērā, plānojot un īstenojot AECLIL projektu, lai ar sasniegtajiem rezultātiem varētu dalīties un izmantot tos dažādās mācību vidēs un situācijās.

Publikācijā jūs varēsiet iepazīties ar CLIL vērtēšanas procesa pamatprincipiem, ar izstrādāto moduļu izmēģināšanu, administrēšanu un izvērtēšanu, izmantojot vienotu pieeju dažādās izglītības pakāpēs, kā arī plašu vērtēšanas metožu klāstu. Visi AECLIL projekta partneru izstrādātie moduļi ir pieejami elektroniski un CD formātā.

Projekta komanda aktivitātēs iesaistīja lielu skaitu pedagogu un izglītojamo Bulgārijā, Francijā, Vācijā, Itālijā, Latvijā, Rumānijā, Spānijā, Zviedrijā un Turcijā. Tas projekta partneriem deva iespēju apkopot datus un izveidot vērtēšanas tabulas un instrumentus, kuri pēc validēšanas ir pieejami visiem interesentiem projekta interneta vietnē: www.aeclil.net.

Lucia Alberti, projekta AECLIL koordinatore

ASPECTE GENERALE ALE PROIECTULUI

Prezenta publicație și CD-ul aferent sunt rezultate ale proiectului de trei ani AECLIL (*Assessment and Evaluation in Content and Language Integrated Learning*, în limba română *Evaluare în CLIL*), finanțat de Comisia Europeană (EACEA). Proiectul a urmărit promovarea metodologiei CLIL (*Învățarea Integrată a Conținuturilor și Limbii*) prin schimbul de bune practici din domeniu între diferite centre de cercetare, instituții și organizații europene. Cercetarea AECLIL s-a focalizat pe modul de evaluarea a eficienței învățării disciplinelor non-lingvistice într-o limbă străină, metodologie care conduce la îmbunătățirea competențelor lingvistice în paralel cu învățarea transdisciplinară și dezvoltarea abilităților de gândire.

Originalitatea proiectului se bazează pe realizarea unui set de materiale didactice pentru evaluarea atât a proceselor de învățare în CLIL, cât și a produselor învățării CLIL. Proiectul s-a implementat în nouă țări, fiecare caracterizată printr-o dimensiune culturală proprie și un sistem de învățământ diferit. În plus, CLIL a fost experimentat și testat la diferite niveluri ale sistemelor de învățământ, de la învățământul primar la învățământul superior și la sistemul de formare continuă a cadrelor didactice, luând în calcul învățarea informală pe tot parcursul vieții.

În documentul *Concluziile Consiliului și ale Reprezentanților Guvernelor Statelor Membre ale Uniunii Europene (mai 2009) referitoare la îmbunătățirea parteneriatului dintre instituțiile de formare profesională și partenerii sociali, în special angajatorii, în contextul învățării pe tot parcursul vieții*, se afirmă:

Cooperarea europeană în educație și formare trebuie implementată în perspectiva învățării pe tot parcursul vieții utilizând în mod eficient metoda deschisă de coordonare (open method of coordination – OMC) și creând sinergii între diferitele sectoare ale educației și formării. Respectând pe deplin responsabilitatea care revine Statelor Membre față de sistemele proprii de învățământ și natura voluntară a cooperării europene în domeniul educației și formării profesionale, OMC trebuie să se bazeze pe:

[...]

- instrumente de referință și demersuri comune,
- învățarea pe orizontală și schimbul de bune practici, inclusiv diseminarea rezultatelor...*

În timpul conceperii și implementării proiectului am ținut cont de aceste concluzii, astfel că produsele parteneriatului AECLIL pot fi acum împărtășite și aplicate cu ușurință în diferite medii de predare și învățare.

În cele ce urmează, vă oferim o introducere la principiile de bază ale procesului de evaluare în CLIL, urmată de o prezentare a modulelor elaborate, implementate, testate și evaluate conform unor standarde de referință comune la diferite niveluri de învățământ, precum și o gamă de instrumente de evaluare. CD-ul conține toate modulele elaborate de către partenerii AECLIL.

Consortiul a implicat un număr mare de cadre didactice și elevi din Bulgaria, Franța, Germania, Italia, Letonia, România, Spania, Suedia și Turcia, ceea ce a permis instituțiilor responsabile cu procesarea datelor colectate să producă un set bogat de grile de evaluare, descriptori de performanță și alte instrumente de evaluare care au fost validate și sunt puse acum la dispoziția tuturor factorilor interesați și pe pagina web www.aeclil.net.

Lucia Alberti, coordonatoarea proiectului AECLIL

PROJEKTMÄLEN

Denna publikation och den tillhörande CDen är resultatet av ett tre år projekt AECLIL (Bedömning och utvärdering i innehåll och integrerade språkinlärning) som finansieras av den Europeiska kommissionen (EACEA) i syfte att sprida CLIL metoden genom utbyte av bästa praxis bland olika europeiska forskningscentra och institut.

AECLILs forskning är inriktad på att bedöma och utvärdera effektiviteten av att lära ett icke-språkligt ämne på ett främmande språk, en metod som förbättrar själva språket och, samtidigt, förstärker cross-kursplanerna och tänkandets skicklighet.

Originaliteten i projektet är baserat på produktion av delade undervisningsverktyg för att bedöma och utvärdera både processen och resultaten av CLIL. Projektet har genomförts i nio olika länder, var och en av dem med olika kulturell bakgrund och skolsystem. Dessutom har CLIL experimenterats och kontrolleras på olika nivåer av utbildningssystemen, från grundskolan till universitetet och kurser för lärare, med en extra titt på livslångt informellt lärande.

I *Slutsatser av rådet och företrädare för regeringen i Europeiska medlemsstater (maj 2009) om förbättrat partnerskap mellan utbildningsinstitut och arbetsmarknadens parter, särskilt arbetsgivare, inom ramen för livslångt lärande*, konstateras att:

Europeiskt samarbete på utbildningsområdet bör genomföras i ett livslångt lärandeperspektiv för att effektivt använda sig av den öppna samordningsmetoden och utveckla synergier mellan olika utbildningssektorer. Samtidigt som fullt ut respektera medlemsstaternas ansvar för sina utbildningssystem och europeiskt samarbete på utbildningsområdet frivilliga karaktär, den öppna samordningsmetoden bör dra nytta av:

[...]

- gemensamma referensverktyg och metoder,
- ömsesidigt lärande och utbyte av god praxis, inklusive spridning av resultat...*

Vi bar dessa riktlinjer i åtanke medan vi planerar och genomför projektet så att resultaten som uppnås genom AECLIL partnerskap kan nu enkelt delas och användas i olika undervisning och lärande miljöer.

På följande sidor hittar du både en introduktion till de grundläggande principerna för processen för utvärdering och bedömning i CLIL och en presentation av moduler som planeras, administreras, testas och utvärderas enligt en gemensam standard med hänvisning till olika skolnivåer, plus ett stort antal utvärderingsverktyg. Skivan innehåller alla moduler som utvecklats av AECLIL partner.

Konsortiet inneburit ett stort antal lärare och elever i Bulgarien, Frankrike, Tyskland, Italien, Lettland, Rumänien, Spanien, Sverige och Turkiet. Det har också tillåtit institutioner som ansvarar för bearbetning av data att samlas för att utarbeta en bred uppsättning av utvärdering rubrics, utvärdering och bedömningsverktyg, som har validerats och är därmed tillgängliga för alla berörda parter även online på www.aeclil.net.

Lucia Alberti, AECLIL projektkoordinator

PROJENİN AMAÇLARI

Bu yayın (ve ilgili CD), Avrupa'daki farklı enstitü ve araştırma merkezleri arasında, edinilen tecrübeyi paylaşarak CLIL (*Content and Language Integrated Learning – İçerik ve Dilin Birlikte Öğrenimi*) metodolojisi uygulamalarının yaygınlaşması amacını taşıyan ve

Avrupa Komisyonu (EACEA) tarafından desteklenen üç yıllık AECLIL (*Assessment and Evaluation in Content and Language Integrated Learning – İçerik ve Dilin Birlikte Öğreniminin Değerlendirilmesi*) projesinin sonuçlarını içermektedir. AECLIL projesi dil dışındaki bir konunun yabancı dilde öğrenilme verimliliğinin nasıl ölçüleceği ve değerlendirileceği konusuna odaklanan, aynı zamanda öğrenme ve düşünme becerileriyle birlikte doğrudan dilin kendisini de geliştiren bir metodolojidir.

Projenin özgülüğü CLIL' in hem işlemlerini hem de sonuçlarını ölçmek ve değerlendirmek üzere birtakım eğitim yöntemlerinin tasarlanmasını ve paylaşılmasını temel almaktadır. Proje, her biri farklı kültürel altyapı ve öğretim sistemine sahip 9 farklı ülkede gerçekleştirilmiştir. CLIL metodolojisi ayrıca, ilkokuldan üniversiteye kadar çeşitli düzeylerdeki eğitim sisteminde denenmiş, bu arada hayat boyu eğitime ek olarak yer verilmiştir.

Avrupa Konseyi Üye Ülke Devletleri ve Hükümet Temsilcilerinin hayat boyu öğrenim anlayışı çerçevesinde eğitim ve öğretim enstitüleri ve özellikle işverenler olmak üzere sosyal katılımcılar arasında ortaklığı artırmak konulu toplantısında aşağıdaki hususlar beyan edilmiştir:

Eğitim ve öğretim konusunda Avrupa işbirliği, yaşam boyu öğrenme perspektifinde, açık koordinasyon yöntemleri (Open Method of Coordination – OMC)' nin etkin şekilde kullanılması ve farklı eğitim ve öğretim sektörleri arasında sinerji geliştirilmesi ile gerçekleştirilmelidir. Üye ülkelerin kendi eğitim sistemleri konusundaki sorumlulukları ve eğitim ve öğretimde Avrupa işbirliğinin gönüllülük doğasına tam olarak uyulmasının yanı sıra OMC:

[...]

- ortak yaklaşımlar ve referans araçları,
- karşılıklı öğrenme ve sonuçların yayılması dahil, uygulamaların paylaşımı 'ndan yararlanmalıdır...*.

AECLIL projesinin planlanması ve yürütülmesi bu ilkeler göz önünde bulundurularak yapılmış ve elde edilen sonuçlar kolaylıkla paylaşılacak ve farklı öğretim ve öğrenim çevrelerinde uygulanacak hale gelmiştir.

İlerleyen sayfalarda hem CLIL' de ölçme ve değerlendirmenin işleyişi hakkında temel prensiplere bir giriş hem de farklı okul düzeylerine referansla genel standartlara göre planlanmış, yönetilmiş, test edilmiş ve değerlendirilmiş modüllere ek olarak geniş kapsamda değerlendirme yöntemlerini bulabilirsiniz. CD ise AECLIL katılımcıları tarafından geliştirilen tüm modülleri içermektedir.

Konsorsiyuma Bulgaristan, Fransa, Almanya, İtalya, Letonya, Romanya, İspanya, İsveç ve Türkiye'den çok sayıda öğretmen ve öğrenci katılmıştır. Projeye katılan kurumlar tarafından toplanan veriler işlenerek birçok değerlendirme tablosu, ölçme ve değerlendirme yöntemi oluşturulmuş ve www.aeclil.net web sayfasında katılımcıların erişimine sunulmuştur.

Lucia Alberti, AECLIL projesi yürütücüsü

HOW THINGS STARTED AND DEVELOPED

Fabrizio Maggi

INTRODUCTION

CLIL can now be considered a real teaching method. Books and publications concerning CLIL practices, processes and achievements are numerous and of excellent quality. Unfortunately we cannot say the same about evaluation in CLIL. In fact papers on this fundamental topic are still rare, and precisely for this reason we have decided to start the AECLIL Project, which involves nine European countries (Italy, Spain, France, Germany, Sweden, Latvia, Romania, Bulgaria and Turkey).

The main tasks of the project are the following:

- stimulate teachers and students towards change;
- help students acquire a good knowledge of the school subjects;
- explore new learning strategies that can be applied in other contexts;
- encourage the integration of learning and new technologies;
- develop cultural competences that could favour a European-wide context;
- contribute to the achievement of the competences stated in the Lisbon guidelines;
- develop tools for assessment referred to different kinds of tasks (analytic and holistic rubrics);
- develop plurilingualism and multilingualism;
- acquire creative and intercultural skills.

These are the steps implemented:

- compare and develop ways of implementing and sharing CLIL projects and experiences in the schools of the participant countries;
- plan CLIL pathways (by using online resources) in some disciplines to be chosen from the field of science and technology and from the arts and humanities, in collaboration with the different partners involved;
- design and implement monitoring and evaluation tools;
- produce learning units through the methods of cooperative learning, using the ICT tools available;
- test the material produced in class, using monitoring devices;
- compare and disseminate the results through the social web;
- provide assessment and evaluation feedback.

The teaching practices and related research conducted so far have been based mainly on four CLIL principles: content, communication, cognition and culture. But these experiences and studies were based on a limited number of experiments (two or three classes, one or maximum two disciplines), and normally occurred in favourable

situations (European projects, European classes, highly-motivated teachers). The results have led to the common belief that CLIL methodology, in its different applications, allows students to acquire:

- real expertise in the chosen discipline and the use of new technologies;
- a better mastery of the mother tongue through contrastive procedures;
- a better mastery of the L2;
- transversal skills (ability to mediate, “mobility” between languages...);
- cultural skills (e.g., how a discipline is taught in different countries).

This project tries to implement a wider search with the European partners, who certainly represent experiences, teaching practices and different methodological choices, albeit only within CLIL methodology. We believe it is important to conduct rigorous research, taking into account a vast number of experiences, from different points of view:

- *cultural*: embedded in different national contexts, within different educational policies;
- *teaching practices*: the methodologies related to disciplines may be different in different situations / implementations; these differences could be ascribed to a “national practice”;
- *the languages in question*: they can be diversified and have a different role / status in different countries.

OBJECTIVES

With this project we intend to verify whether the CLIL methodology can: create the cognitive and cultural assumptions that would lead to a learning approach in the direction of innovation and flexibility;

- encourage teachers and students to be open to change, creativity and problem solving, which are skills favourable to innovation and applicable to a variety of professional and social contexts;
- allow students to master the disciplines and acquire a good general culture;
- develop new learning strategies: mediation skills, “mobility” between one language and another, the relationship between language and subject, contrastive observation between L1 and L2;
- integrate new learning technologies;
- develop cultural competence and openness to Europe;
- contribute to the acquisition of skills defined by the indications from Lisbon²;
- promote communication in the mother tongue: the reinforcement of skills in L1 derived from contrastive observation;
- promote communication in foreign languages, especially as regards mediation and the understanding of other cultures, but also the development of communication skills;
 - promote computer skills: the constant use of ITC in different phases of the work of students and teachers (finding documents, exchanges between partners, databases...);

² European Council, 2000: *Presidency Conclusions*, Lisbon, 23/24th March 2000.

- promote learning to learn, since CLIL methodology promotes reflection on learning and a greater awareness of the procedures of both students and teachers;
- promote social skills and citizenship awareness, enhanced by comparing efficient methods of choice and through the presentation and approach in different contents and contexts; develop assessment and evaluation tools: mainly, checklists, observation grids, analytic and holistic rubrics, evaluation and self-assessment grids.

We should emphasize that the project staff effectively developed the tools listed above. Most of them were actually used and employed by the teachers involved in the project, though some were not. The following chapters will report only on those which were tested. The theme of the project warrants a major impact through the development, testing, monitoring, re-definition and dissemination of modules and materials. The outcomes of the AECLIL Project will give educators of any kind the possibility to count on a wealth of materials ready to use, tested and validated.

METHODOLOGIES

The project employs different methodologies depending on the scope and results that we want to achieve.

Referring to the timeline of the project, the first methodology employed was the implementation of a thorough investigation of the CLIL experiences completed in the nine partner countries. The investigation was extensive and very detailed. The survey results were tabulated and collected in an Excel file and then commented on and published on the official website of the project (www.aeclil.eu). The survey produced a comprehensive and very interesting overview of the different ways in which CLIL is dealt with in the partners' countries. In particular, the following fields have been investigated: subjects, languages used and their level, curricular requirements, motivation and participation of students, parental involvement, teacher training, materials used, the use of ITC, assessment and evaluation.

The importance and relevance of this survey is evident. The detailed analysis of the results allowed us to have a framework and a mapping of CLIL experiences in the different countries, but above all gave us useful information for the creation of the modules that were produced in the second phase of this project.

Each institution produced a number of modules (from primary to secondary and high schools and adult education) which were administered to students and assessed employing the grids provided and developed by the staff. Very often these tools were changed and adapted to local situations. Nonetheless, the results of the assessments are reported in the evaluation chapter.

The tools provided (see the following chapters) have been organized in analytic rubrics and holistic rubrics according to what they were designed to assess. Moreover, relevant remarks have been made about the assessment of language proficiency and content acquisition, self- and peer assessment, and the role of teachers.

EVALUATION STRATEGY

The evaluation strategies are clearly stated. In particular: in order to ensure the necessary high standards of quality of the deliverables, the following three aspects have been observed:

1. *Content*: the content of all deliverables was checked with respect to whether or not they contain what they should contain. In other words, it was checked whether or not each deliverable provided the right content.
2. *Language*: the language of all deliverables was checked in order to ensure readability, intelligibility, clarity, and correct language use. It is important that all messages are clear, not only for the benefit of the Consortium, but also for the benefit of the public at large who will make use of the materials developed within the AECLIL Project.
3. *Format*: the format of all deliverables was checked, in order to ensure that they meet the formal requirements of the EU Commission.

Internal evaluation is intended to focus mainly on processes throughout the project implementation, and for this reason it is continuous during the (whole project) cycle, including all the phases of work. It is fundamentally formative in that it aims to fine-tune and adapt the working context.

The following internal evaluation procedure is incorporated within the project:

- data collection through methods and techniques designed specifically for each step of the project;
- analysis of the data collected;
- a report drawn up for the evaluation of each phase;
- sharing and discussing the report among the AECLIL partners;
- analysis and comment on the data collected through questionnaires administered to students and teachers.

The introduction of an external evaluator reinforced the work of Pavia University and led to express an opinion and evaluation on:

- activities carried out;
- the final products and outcomes;
- the path followed;
- the sustainability of the project.

DISSEMINATION STRATEGY

The Consortium has established a number of strategies for the exploitation and dissemination of the project results. The plan involves the following activities:

- publication of articles concerning the project and its achievements in local newspapers in the different countries;

- participation in national and international conferences (through October 2012 communications about AECLIL project have been presented in: Granada (Spain), Eichstätt (Germany), Milan (Italy), Pavia (Italy), Turku (Finland), Cluj Napoca (Romania), Southampton (UK), Portsmouth (UK), Barcelona (Spain) and Utrecht (Netherlands); in December 2012 a conference has been organized in Pavia to disseminate the various results of the project;
- all the materials produced and the relevant outcomes of the project are inserted in this volume (with a CD) published in English;
- local and national Educational Authorities will be involved in the dissemination policy eventually publishing the volume in their languages;
- on the updated website you can find all the materials produced during the three years of this project: all the rubrics (analytic, holistic, general, etc.), observation grids, self-assessment grids, all the modules and the related results.

The items above will contribute to the valorization not only of the results of the project itself, but most of all of the innovative materials, tools and methodological issues produced during the three years of this pathway.

PROJECT OUTCOMES & RESULTS

The fundamental outcomes and results are of two kinds: concrete deliverables and methodological tools.

As far as concrete deliverables are concerned, these are the outcomes produced up to now:

- guidelines for planning CLIL modules for the teaching of different subjects using a foreign language (see worksheets of the module *CLIL through CLIL* on the CD);
- a thorough investigation of the benefits and disadvantages of the application of CLIL methodology in educational and teaching activities in schools in the European countries involved in the project;
- a survey of the CLIL activities carried out in the partners' specialized fields;
- CLIL modules for teaching contents of different subjects – both scientific and humanistic – in order to find the same or better results of acquisition of specific competences along with the enrichment of the foreign language as well;
- assessment and evaluation tools: tests, papers, checklists, observation grids, evaluation and self-assessment grids, analytic and holistic rubrics. These instruments should allow for the observation, measurement and evaluation of the learning process and of the students' performances during the pathway. These tools are meant to assess the skills and competences achieved by the students.

By “methodological tools” we mean the actual tools employed to help students focus on cognitively-challenging demands, which, combined with higher levels of mental processing, lead to multitasking competences. The term “multitasking”, borrowed from ICT, indicates the ability to handle more than one task, which in our case would also involve specific content, language enhancement and digital competences. The methodological awareness we aimed at is a way to lead students to construct their own

knowledge, not simply by adding information, but also by eliciting and enhancing their learning capacities and problem-solving skills.

PARTNERS

The partnership, formed to implement the AECLIL Project, boasts a wide range of skills and sensibilities that make possible the achievement of truly cross (transversal) targets in the world of education and training.

Here you can find the most relevant information each partner has provided about their own institution:



Rete CLIL della provincia di Pavia (IT) is the applicant organization of the AECLIL Project and it is a network of 31 primary and secondary schools in the Province of Pavia, Northern Italy.

The *Rete CLIL della provincia di Pavia* was founded in 2008 to achieve the following objectives: promote cooperation in research, teacher training, dissemination of materials, methodologies and tools that facilitate the teaching / learning languages taught through the content; develop community awareness of the linguistic diversity that enrich the European Union; enhance the experience of CLIL schools in the province of Pavia; design and implement CLIL courses; provide training on CLIL methodology, organize seminars, educational events on CLIL; access to European projects (especially Comenius and Leonardo) to send content and language teachers abroad to attend workshops for specialization on CLIL; create pathways of action/research, create a database accessible online on educational materials relevant to CLIL.

All these objectives are fulfilled in the AECLIL Project which the Pavia CLIL Network really wanted because little or nothing already exists at the level of assessment and the tools produced in the project will be useful to all the colleagues in the Network who are actually carrying out CLIL experiences in their schools.



Lycée professionnel d'économie G.S. Rakovsky (Yambol, BG). The Vocational High School of Economics G.S. Rakovsky is the only school in the region to provide economic disciplines and to prepare professionals in the field of finance, accounting, banking, management, trade. In 2004 the school was selected for a bilingual project in the specialty "Trade". In recent years the school has a policy dynamics of international relations through European projects within the framework of the Leonardo da Vinci, Comenius and eTwinning. We conducted two three-week courses (2005 and 2008) in banks in Marseille and received the Certificate of Quality. After four projects eTwinning – two of which have obtained the *European Quality Label* – we were invited for two consecutive years to attend the *World Forum* in Lille.

We are taking part in creating assessment grids and tools for evaluating. After working on bilingual project we have some experience in teaching nonlinguistic subjects – banks and business economics – in French and English. So we could enrich and share our knowledge and competences. In this way we relate the theory to the students' future professional realization. We are strongly engaged in the project following the pathways

assigned. The value is that this method motivates and makes students more active and engaged during the lesson.



Gymnasium an der Gartenstraße (Mönchengladbach, D) is a general secondary school that has been active in the field of CLIL for more than ten years. There is a bilingual branch that covers geography and citizenship/economics taught in English. Bilingual classes start in year 7 when students are 12 years old. Teachers working in the bilingual branch have university degrees and teaching qualifications in English and one of the CLIL subjects. Apart from the bilingual branch there is an optional Business English course in years 8 and 9 and 11. For those students we have organized annual meetings in the frame of a regional school network, where they present business plans for start-up companies. Our principal interest is the enlargement of our bilingual courses with the help of CLIL modules in other subjects beside those we teach in our bilingual branch (geography, economics and politics).

The role in the AECLIL Project: *Gymnasium an der Gartenstraße* is involved in the management, dissemination of the project, the development of the pathways and the evaluation of the project results. We tried out one module developed by the *Rete CLIL della Provincia di Pavia (Redox reactions)* and another one in the field of artistic education (*Aboriginal art*). The results of the AECLIL Project offer us a large pool of modules and didactic material we will use in our institution and our classes. In the future we will try out more modules. The evaluation tools will help us to adapt them more precisely to the needs of our staffs and our students.



Universidad Antonio de Nebrija (Madrid, E) is a university with international vocation. Concerned with the importance of plurilingualism and multiculturalism in tertiary education, exchange programs among students and teachers have been a reality for years. CLIL is common practice in the Faculties of Social Sciences, Communication and Languages, since they all offer bilingual degrees. The Department of Applied Languages (DLA) teaches through CLIL and promotes it in the extra-curricular activities (Aula Plurilingüe del Medio Ambiente, EUTIP). Since 2009 the department also contributes to introduce and spread CLIL in the Spanish educational system: it collaborates with Fundación San Patricio in teacher training sessions addressed to teachers of bilingual schools. At the end of the academic year, the department organizes a bilingual forum (Foro Bilingüe Nebrija) created to discuss current issues regarding bilingualism at schools.

In the course 2011/2012 the DLA has introduced a Master's degree in bilingual education for primary and secondary teachers, and in the following year two new bilingual degrees in education for infants and primary students are also offered. The module *Learning CLIL through CLIL* is Nebrija's contribution to the AECLIL module repository. Carried out in English (B1/B2) and divided in three units that provide approximately 10 teaching hours, its tasks have been planned to achieve not only a total understanding of the dynamics of the task-based approach within the classroom, but

also knowledge of specific contents and terminology through practical examples and language recognition activities.

Institut Universitaire de Formation des Maîtres (Montpellier, F). The Teacher Training Institute (IUFM), part of the University of Montpellier 2 “Science and Technology”, is responsible for initial teacher training at primary and secondary level. The IUFM offers training courses in all the subjects taught in the French educational system as well as courses of pedagogy.

Concerning CLIL, the IUFM considers the CLIL approach as a priority. The IUFM organizes initial and in-service teacher training for teachers in CLIL. These teachers will later teach their subject in a foreign language in “European Sections” (sections européennes). The Language Department of the IUFM, the teacher trainers in charge of the CLIL training courses and two secondary schools with “European Sections” are associated with the project.

The IUFM’s contribution to the AECLIL Project consisted in the production of learning units through the methods of collaborative learning in cooperation with the other partners and in the organisation of short teacher training sessions.



lend – Lingua e Nuova Didattica (Roma, IT) is an association of language teachers founded in 1971. It has carried out numerous studies and training activities in the field of language education and, in doing so, has contributed to the development of the Italian education system. Its proactive approach is best illustrated by its journal *lend*, by the *Libri della Collana lend*, through its national conferences and several seminars. *lend* operates throughout Italy by means of a network of local groups, each with its own structure. Lend has also played a part in making accessible important EU documents on school and language policy and has participated in European projects as either partner or coordinator. Lend is one of the founders and an active member of REAL, the *European Network of Language Teachers’ Associations*, and of the OEP, *Observatoire Européen pour le Plurilinguisme*. Lend is strongly involved in language teacher training so it is in a good position to promote the multilingual approach within its audience (teachers, students, trainers).

The participation in the AECLIL Project is rooted in the mission of *lend*. CLIL helps to give greater force to the spread of multilingualism. On the other hand it is a methodology that weaves two disciplines and requires new ways for the assessment and evaluation of learning. Through the AECLIL Project, *lend* aims to support innovative proposals in the field of evaluation.



Centro Linguistico – Università degli Studi di Pavia (IT). The Language Centre at Pavia University promotes the diffusion of foreign language learning and the knowledge of CLIL teaching methodology. In particular, since 2006 it has provided primary school teachers with CLIL training courses in collaboration with the local education department. Moreover, the Centre provides university students with audiovisual materials for self-study and coordinates language courses for all faculties at Pavia University. Finally, drawing on its well-established tradition of L2 testing, the Centre

fosters research in second language acquisition and L2-medium instruction, focussing in particular on the assessment of the outcomes of L2-medium instruction. Therefore, according to our interests of research, the main aim of our involvement in the AECLIL Project was to identify best practices and to analyse the impact that CLIL teaching can have on the learning outcomes of students. The role of Language Centre at Pavia University was to define and to validate the pathways, to carry out reports on the different steps of the project, to monitor and to evaluate the teaching materials and assessing tools produced. The variety of such materials and tools for assessment and evaluation in CLIL teaching, as well as the wide range of teaching contexts involved in the project, provided us with a broad and innovative perspective on CLIL.



Izglītības satura un eksaminācijas centrs (Rīga, LV). The National Centre for Education (VISC) is the Ministry of Education and Science, Republic of Latvia, agency responsible for implementing education policy on the national level. Among VISC key functions there are teacher continuing professional development, curriculum development, assessment and examinations. Implementation of these functions is supported by VISC participation in EU Lifelong Learning Program projects. Currently CLIL is on the agenda not only in projects but also on a national level as it is planned to implement CLIL throughout all levels of general education. A number of schools have been using CLIL in the curricula for several years; however to make CLIL a common practice in schools it is necessary to train more teachers.

Participation in AECLIL Project provides opportunities to revise existing teaching and learning practices, develop and pilot innovative tools focusing on assessment and evaluation and learn from project partners.

During the project implementation VISC in cooperation with Daugavpils State Gymnasium and Aizkraukle Primary School developed and piloted CLIL modules: *Nutrition, Triangles and Teaching CLIL in Primary and Secondary School*.

AECLIL Project products will be valuable resource both for experienced CLIL teachers and teacher trainers as well as for beginners in CLIL. AECLIL Project tools and materials will help teachers to improve the quality of language learning and make the subject teaching more attractive.



Asociația Lectura și Scrierea pentru Dezvoltarea Gândirii Critice România (Cluj Napoca, RO). The Romanian Reading and Writing for Critical Thinking (RWCT) Association, a membership-based professional organization, is committed to promote the development of critical thinking skills through education and professional development mainly for significant stakeholders in education (students, teachers, school

management, teacher educators, parents, educational policy-makers). RWCT Romania develops, delivers, monitors and evaluates teacher training programmes.

Our reason for joining the project was to make CLIL endeavours and their advantages better known in Romania and to help develop specific tools for the quality delivery of CLIL units. It was our understanding that CLIL methodology supports the development of critical thinking.

Our role in the project has been to coordinate Romanian schools that deliver CLIL units and assist them in the implementation of assessment and evaluation instruments for these units, as well as to develop, deliver and evaluate a training course for teachers regarding the CLIL methodology. We have produced teaching/ learning materials for schools that are encouraging CLIL experiences.

Our participation in the project entailed conducting a survey to find out how CLIL is being taught and learning in CLIL assessed. We have developed a 16-hour teacher training programme to prepare teachers and teacher trainers for developing, delivering and assessing learning in CLIL. In addition, we have adjusted the assessment tools for which the template was developed within the project partnership to the specific needs of the CLIL units that we have identified/ developed, and provided feedback to the partnership about the adequacy of these tools. What we value in the results of the project is: firstly, the quality and applicability of the assessment instruments and the underlying philosophy of using assessment for learning; secondly, the quality of the teacher training programme, which has proven successful with an array of teachers and trainers.

Swedish TelePedagogic Knowledge Centre (Nyköping, S) is an internationally recognised knowledge broker organisation having extensive experiences of pedagogic development, unique competences in methodology development and production of practical solutions matching vocational and professional development needs. STPKC is nationally also actively coordinating and contributing to many e-learning services, including those that are extensively worksite, learner-centred, problem-based/focused and virtual community-anchored, and facilitates virtual communities, networks and project collaboration, which gives it unique capabilities to generate impact on both national and European levels, provide overviews trends and experiences from on-going initiatives. STPKC has also extensive experiences from developing and coordinating user-centred online services, collaborative online work, as well as for employment/work-related learning services that both motivates and retains the dignity of the learner.

Hacettepe University (Ankara, TR), Department of Physics Engineering is committed to educate advanced level physics engineers and researchers, to perform research at international level and to publish scientific results.

Hacettepe University AECLIL group consists of Prof. Dr. Fügen Tabak, Assistant Prof. Dr. Özlem Duyar Coşkun, English Lecturer Sündüs Akyıldız and Research Assistant Evrim Umut.

Since at HU in many departments of the Faculty of Engineering the physics courses are in English, we thought that it would be a good opportunity to join the project and

apply CLIL methodology to improve students' skills in content learning in English. HU Department of Physics Engineering takes part in the project as a partner institution. In this respect the AECLIL TR group produced modules in physics at the university level following the CLIL methodology, took part in monitoring, evaluating the process and the end results of the project.

The AECLIL Project was applied to the first year Mechanical Engineering and Industrial Engineering students. This pilot study was not a part of our curricular work but an experiment with volunteers. The content teacher carried out her physics lessons in English taking AECLIL Project in consideration and paying more attention to target language as possible. Then the process was monitored, evaluated and assessed to reach final results of the project. The lessons having been coloured by practical everyday use of the language via the CLIL methodology have been motivating the experimented groups and their level of English. We believe and hope that the Project would lead other Turkish universities, high schools and primary schools to apply CLIL methodology.

TEACHING AND LEARNING WITH CLIL

Franca Quartapelle, Bettina Schameitat

With CLIL – Content and Language Integrated Learning – we name the teaching of any non-language-subject through the medium of a language which is not the mother tongue. The English acronym is used in several countries, such as in Romania, Latvia, Sweden, Turkey, but some countries have their own name and acronym. In France, for example, they call it EMILE – *Enseignement d'une Matière Intégré à une Langue Etrangère*. Bulgaria uses the French acronym. In Spain the official name is AICLE, *Aprendizaje Integrado de Contenidos y Lenguas Extranjeras*, but CLIL is more widely used. In Germany they use the term *Bilingualer Sachfachunterricht*, intended to mean roughly the same as CLIL, which is also in use. But there is a difference, *Bilingualer Sachfachunterricht* includes in the learning process of the subject language also the mother tongue. While CLIL courses tend in general to concentrate on the foreign language and approach immersion courses, the bilingual feature characterizes German courses. *Bilingualer Sachfachunterricht* do not only ensure that learners can understand and manage discourses on the subject also in their mother tongue, but also that they become aware of cultural features and differences.

CLIL – NOT ONLY CONTENT AND LANGUAGE

In a CLIL approach students use a foreign language to learn new content. The focus is on the meaning. CLIL's aim is “to provide learning outcomes in the chosen subject at the same level as the standard mother tongue curriculum; and to provide learning outcomes in the L2 which exceed the standard curriculum” (Masih1999:8).

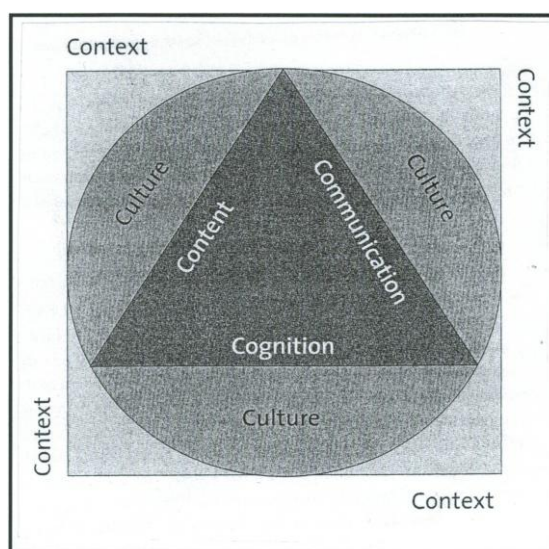
In CLIL lessons both the process of understanding the content and the language acts the learner will perform in managing the content have to be considered. The classroom activities should be geared both towards the acquisition of disciplinary competence and towards the acquisition of communicative competence, in terms of both reception and production. Students do not converse on topics they already know just to acquire a language or to master it better. They have the advantage of addressing concrete issues of the real world in a language that is not their native language. And they do not just listen to the teacher's explanations and study from books, but draw on sources of various kinds, surfing the Internet, interacting with peers. In this manner, they get to know facts often belonging to worlds different from theirs, develop new concepts, identify the relationships between the concepts and, considering data, come to find out the principles that support them.

CLIL classes focus knowledge of an unknown content using thinking skills to understand, analyze, synthesize, evaluate and communicate about. Language enables to construct meaning and to express thinking. We have evidence in the fact that thinking skills are expressed through verbs used also to express language functions (see *Threshold*

level 1975 and *Assessment tools and practices in CLIL* in this book). Successful content learning is dependent on language, and that has to be considered particularly in CLIL where the language is not completely mastered.

CLIL can be described by four factors Coyle, Hood & Marsh (2010) call the “4Cs”: content, cognition, communication and culture. The real context these four elements are embedded in may open windows on cultures the learners don’t belong to.

LANGUAGE AND SUBJECTS



Disciplines can be grouped into three broad areas where they are analyzed according to the characteristics of language (i.e., for the expressive instruments used and the communicative activities recurring) rather than the content covered:

- humanistic and social disciplines;
- scientific and technical disciplines;
- artistic and practical disciplines (Wolff, Quartapelle, 2011).

The so-called humanities, such as philosophy and history, use a language closer to everyday life, relatively polysemic, which makes extensive use of connotation and may produce cultural interferences which have to be considered. For example, when French and Italian people name the coming of Northern peoples (Gothics, Vandals, etc.) to their homeland during the end of the Western Roman empire and the Middle Ages “*invasione dei barbari/invasions des barbares*”, and Germans name the same event “*Völkervwanderung*” (wandering of peoples), this is not only terminology, but different historical understanding. In the humanities the ability to integrate verbal communication with other communication tools is reduced. The content is placed, in the lesson, in an interacting way making little use of visual materials. Even if sometimes the teachings concerning social situations and events are illustrated with pictures and videos, the lesson always relies on verbal exchange.

In scientific subjects, however, the language is highly standardized, many of the terms in use are not very frequent in everyday communication. Their Latin origin stands out clearly in the Germanic languages. The words are polysemous, but have a clear meaning that does not coincide with the area of semantics of everyday language. “Energy”, for example, is a household word. In the language of physics, however, it is not what is believed to have when you feel fit, but assumes a specific measurable dimension expressed in a standardised manner – joule (J) – which is expressed by numerical values. In scientific disciplines, objects, images, symbols, graphs, mathematical code frequently occur. The modules *Kinetic energy and work* and *Nachhaltige Entwicklung und erneuerbare Energien* in this book are an example of how to support the learning of the scientific language.

In disciplines such as music, art, physical education, forms of representation that take the place of language are prevalent, the language use is reduced in the lessons, supplemented by gestures and facial expressions.

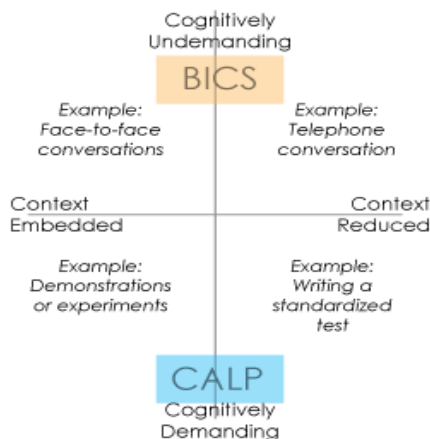
In different subjects the linguistic and communicative activities occur in different degrees. The understanding of what is presented orally in class has an important role for all groups of subjects, but there will be more verbal interactions in lessons related to humanities and social sciences than those found in the lessons of arts and sports, in which students, apart from comparing their thoughts with peers and presenting the findings of research carried out, may have to express themselves through images and gestures, and thus they provide no linguistic performance. For these subjects which are expressed with sounds, pictures, objects or movements it is very likely that reading plays a lesser role than it has in humanities, social sciences and scientific subjects where the uses of texts is essential (Wolff, Quartapelle, 2011).

We can conclude that although in all subjects the linguistic-communicative activities have their importance, it is evident that in each discipline they occur to a different extent.

LANGUAGE AND THINKING SKILLS

The language used to express the subject content is characterized, as we have seen, by the integration with other languages and by communicative activities that occur more or less frequently than others, but also by the cognitive operations used to process the concepts.

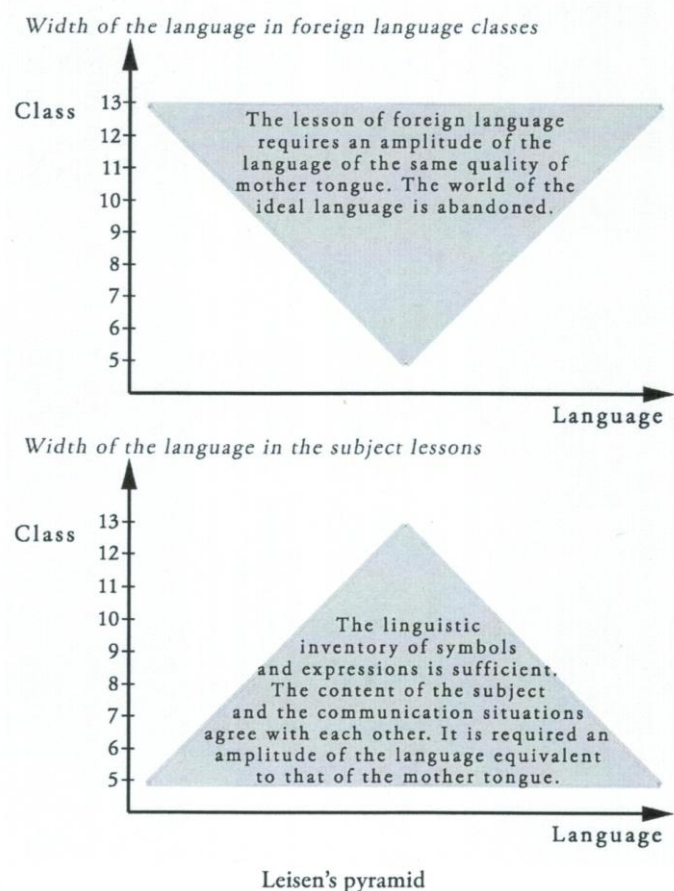
Cummins helps us to describe the relationship between the cognitive dimension and the use of language by defining two different ways of mastering the language. Alongside the basic language skills oriented to the oral communication of daily living (Basic Interpersonal Communication Skills – BICS), Cummins poses the linguistic ability that allows you to verbalize complex cognitive processes (Cognitive Academic Language Proficiency – CALP). The language used in everyday life can rely on verbal media supplied by the context and interaction with other partners which helps accomplish the tasks. Verbalization on specific topics tends to have a minor bond with the context and is more dependent on the knowledge that the individual has of the subject and on the level of abstraction required, while the use of academic language is typically less interactive and less contextualized (Cummins, 2000).



Cummins' BICS/CALP model

In the traditional teaching of foreign language the so-called Basic Interpersonal Communication Skills (BICS) are developed, while CLIL may involve also the so-called Cognitive Academic Language Proficiency (CALP), particularly in the older age groups.

Using a pyramid that can occur up or upside down, Leisen (1992) has shown clearly how different the language you use in CLIL lessons is, if compared to the one seen in traditional foreign language classes.



In foreign language classes, where the language can be practised in a fictional context, students develop language skills like BICS that, over the years, grow closer to the skills of a native speaker. This learning is represented by the inverted pyramid. In CLIL, represented by the pyramid resting on its base, the subject content from the beginning requires a wide linguistic basis, characterized by a certain syntactic complexity and a specific vocabulary. In order to act and interact on specific topics, the student must be sufficiently “equipped” from a linguistic point of view. On the other hand he does not require a fluency in addition to that which refers to the subject itself: the language of the subjects and the symbolic ones are sufficient for the development of subject content. However, it is not only a matter of acquisition of new forms, new vocabulary and new language structures. The specific discourse forms and terminology belonging to the different subjects and to the different aims of the lesson have a relation with language activity and thinking skills. In the module *The Earth, Our House*, for instance, learners are lead to learn and memorize specific vocabulary with the aim to raise awareness and to cooperate with peers. They try out ideas, confront their understanding, negotiate new understandings, explore new ideas, draw conclusion. In the module *Nutrition*, where the topic is studied in form 10, 11 and 12, learners go through three stages, focusing on different aspects and referring to previous knowledge, processing more complex concepts.

What happens in a CLIL lesson can be described as exemplified in the following table adapted from Järvinen (2009). There you can also see that language functions are expressing thinking skills.

TOPIC	Light and dark	← The topic
Activities or components	Looking at objects through coloured cellophane to see if colour changes	← includes these activities
Language: functions	describing comparing...	← which requires these language functions
Language structures	What colour is the basket? It is... What colour does it become? It becomes... I looked at the scissors... I looked through the cellophane... They look green. Next to, on top, through, under...	← which will be modelled using this language.
Vocabulary	cellophane red, blue, green, black, yellow, orange scissors ruler pot paper basket	

WHY CLIL

It is stated in the Action Plan for language learning that the European Commission had launched for the three years 2004-2006: “Content and Language Integrated Learning (CLIL), in which pupils learn a subject through the medium of a foreign language, has a major contribution to make to the Union’s language learning goals. It can provide effective opportunities for pupils to use their new language skills now, rather than learn them now for use later. It opens doors on languages for a broader range of learners, nurturing self-confidence in young learners and those who have not responded well to formal language instruction in general education. It provides exposure to the language without requiring extra time in the curriculum, which can be of particular interest in vocational settings”. (European Commission, 2003).

Also proposing to address practical issues of real life with attention to one or the other subject, CLIL helps to build key competences for lifelong learning, those of which each citizen needs to activate attitudes (interpersonal skills), knowledge (know), skills (the ability to do) that allow to effectively perform an activity or a complex task in response to individual or social needs. These competences emphasize critical thinking, creativity, initiative, problem solving, risk assessment, decision taking, and constructive management of feelings. They provide the basis for taking an active part in society and for learning throughout life (ability to learn) (Recommendation of the European Parliament and of the Council, 2006).

CLIL also allows you to practice the language at school for a greater number of hours than those which may be made available for teaching foreign languages.

CLIL IN THE PARTNERS’ COUNTRIES

Commonly, CLIL teaching occurs when learners, who have the same mother tongue, are taught one or more subjects in a language that is foreign to them. The situation is however changing. In today’s classrooms, there are more and more students who have mother tongues other than that used for their education. The common lessons for these students end up being CLIL lessons, even if not declared as such.

Then there is the situation of multilingual countries, where, with some frequency, CLIL is made in the language of the other language group. This is what happens for Swedish in Finland, the Flemish in French Belgium or for linguistic minority groups, such as Ukrainian, German and Hungarian in Romania and the Russian in Latvia. This does not happen in Italy, in South Tyrol, where Italian and German groups have separate schools that fail to introduce CLIL teaching. Only in secondary schools of Ladin valleys, lessons of different subjects are carried out partly in German and partly in Italian, but only because there are no text books in Ladin.

In some countries they rely on CLIL method to counteract the disappearance of minority languages. So to avoid the extinction of the Sorbian language, spoken by about 60.000 people living between Brandenburg and Saxony, after a preschool marked by immersion, Sorbian is proposed with the CLIL method for teaching some school subjects. Similarly in Switzerland, Romansh, which is spoken by 0,5% of the population, is revitalized with an early CLIL teaching (Le Pape Racine, 2001).

Nowadays CLIL courses are also foreseen for children of Dutch families living in Germany next to the Dutch border because their parents work in the Netherlands. Such learners' aim (or that of their parents) in a CLIL course is that they can participate in both linguistic and cultural social environments.

DIDACTICS

It is natural to wonder what teaching methodology is more effective for CLIL, whether the one of the foreign language lessons or the one of specific subjects, given that in CLIL we pursue the learning of both content and foreign language.

In CLIL lessons the attention paid to language is undoubtedly greater than it is when the teaching of the subject takes place in the mother tongue, where attention is still required for the acquisition of specific language. You may however consider that in a school with an increasing number of non-native speakers of the language of instruction it becomes increasingly difficult to distinguish between learning in mother tongue and learning a language that is not that of the learner. In these new contexts, as well as the development of disciplinary competence, the classroom activities must be geared to the acquisition of communicative competence, and a communicative competence that will not remain generic, but specific, which induces to use the language and discursive registers characteristic of that particular discipline.

These demands require an integrated approach that cannot be based on methods that use transactional practices in which the student plays a role substantially responsive. Priority should be given to empower to use teaching practices that involve the learner in research and independent study and that, in class, encourage interaction among peers rather than between students and the teacher. Communication is fundamental. When students work in groups, they exchange information, deal with questions and discuss among themselves. They describe, explain, evaluate, argue, draw conclusions, which they then communicate through written or oral reports (Wolff, Quartapelle 2011). Socialized learning strengthens understanding and supports knowledge construction.

A good pedagogical and didactical choice is to tackle real problems with tasks that involve learners in cooperative activities, which lead them to develop content for solutions to be presented to the entire class. These are the features of project-based teaching/learning, a methodology that more than others develops skills, because it involves the use of authentic materials that provide a wide input necessary to focus on a problem. A project does not remain closed within the walls of the classroom, it has strong ties with the outside world, both because the issues that it faces are real, and because the solutions developed may affect the real world, as it is shown in the modules *Le crédit*, where pupils have to create a presentation of the virtual bank, or in *Nachhaltige Entwicklung und erneuerbare Energien*, where the learners simulate a public discussion. The work is developed in authentic classroom interaction and results in an authentic communication outside.

The project work is particularly suitable for CLIL. The modules *Learning CLIL through CLIL* and *CLIL through CLIL* aiming to develop skills for teaching CLIL in teachers and teachers trainers are representative of it.

All the teaching procedures are determined by the subject. Language needs are taken into account secondarily, when one needs to explain the terms or capture the typical structures of the language of the subject.

Even in CLIL a quality teaching activity is the result of the interaction of four parameters considered of equal value: intention, topic, methodology, choice of media. You cannot take decisions on any one of these parameters disregarding its relationship with the other three. The choices of the educational materials, for example, depend on the objectives of learning, but are also determined by both the content you want to share and by the working method. On the other hand, of course, the materials chosen in turn have an impact on the method, content and also on the learning objectives, according to the model developed by the Berlin Pedagogic School (Heimann, Otto & Schulz 1965). This applies to any teaching, to CLIL as well. In the modules developed in the AECLIL Project several types of media are used: texts, videos, ppt, registered lesson, music, graphics, pictures, internet sites, listening documents, job advertisements, as you can see in the module *Redox Reactions* and in the other modules presented in this book and on the CD.

AND WHAT ABOUT ASSESSMENT AND EVALUATION?

The CLIL learner is asked to analyze social, historical, natural phenomena, to carry out tasks, address problems, organize speeches by interacting with others. The communicative activity is not aimed at enhancing itself, but at the understanding and development of concepts and phenomena and the exchange of information. If the content and methodology of the subjects are engaging, they enhance language learning, but also learning of the subject.

We have realized that the students who had benefited from CLIL-style learning managed to master the contents of the discipline better than the students who experienced traditional teaching in their mother tongue. They were able to define more precisely what they had learned and give detailed information (Lamsfuß-Schenk, 2008, Zydatiś, 2007). It seems that this is explained mainly by the fact that learning the content in a foreign language requires greater elaboration activities. In mother tongue students can indeed define a concept or discuss a topic using language loosely. Otherwise if they have a limited command of the foreign language, they are forced to resort to detailed descriptions, perhaps because the concept has not got, in the foreign language, the corresponding words used daily, or perhaps because they understand the complexity of the topic and store the most appropriate specific word. In the native language the student may get away with a superficial reworking of the content, while the teaching in a language that is learnt together with the subject assures him a deeper reworking and consequently a deeper understanding.

These are statements that must be supported by empirical data. We need tools to assess the quality of education and levels of CLIL linguistic and disciplinary competence achieved by students. How are disciplinary competences growing, within the context of emergent language skills? How can we overcome the constraints of communicating on new content with limited language while trying to preserve the complexity of the content? How can we support language learning and acquisition while dealing with complex content? There are many questions raised by the AECLIL Project. CLIL

modules have been developed and tried out in class. Input materials, tasks, assessment criteria and tools have been evaluated. Students' attainment and performances have been assessed; the assessment process has been evaluated. The following chapters, the modules and all evaluation and assessment tools presented in this book and on the CD will give an overview of the work done and how far we went in our evaluation and assessment in CLIL.

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ASSESSMENT TOOLS AND PRACTICES IN CLIL

Teresina Barbero

INTRODUCTION

One of the main objectives of the AECLIL Project certainly is to provide guidelines and tools for CLIL assessment, so far an area where there is incomplete and not systematic documentation. In particular, the existing materials refer primarily to educational situations different from those in which content and language integrated learning generally takes place in Europe.

The realization of this objective could not then disregard a thorough reflection on what we mean by CLIL assessment and its specificity, with respect to the context in which CLIL is practiced.

The cooperation of different countries with diverse backgrounds and experiences have provided an ideal situation for comparison and testing. The procedure followed was as follows:

- a survey on CLIL dissemination and practices in each country; CLIL is known as an “umbrella term” covering different ways of teaching in different situations and also involving different teaching procedures and thus their assessment procedures;
- drafting of thematic modules, based on agreed guidelines, which envisaged the development of didactic pathways of about 20 hours;
- subsequent classification of the activities developed based on a framework of reference;
- proposal of assessment tools, testing by partners, and new proposals.

This chapter will describe precisely the main stages of this process from an assessment perspective, subsequently proposing specific tools which have been developed and tested, highlighting progress but also the aspects to be explored, which may be subject to further studies and analyses.

THE MAIN ISSUES FOR ASSESSMENT IN CLIL

Assessment is not something that comes after instruction, but is an indispensable part of instruction. It is by thinking about assessment that we really start to sharpen up our idea of what CLIL is about and the role of language within it (Llinares et al., 2012: 280).

Assessment is fundamental to the success of CLIL, as it is in any other field in education, since we know that assessment guides learning and students end up focusing on what they are assessed. The assessment in CLIL shares some basic questions with

assessment in general, even if in practice these questions, if related to CLIL, require specific answers: assess “why”, “how”, “what”?

General issues

There are three main concepts associated with assessment (Briggs et al., 2008):

- a) assessment OF learning;
- b) assessment FOR learning;
- c) assessment AS learning.

The *assessment of learning* is a “summative” assessment, largely consisting of tests and exams taken at the end of courses of study in order to check progression through the curriculum. In professional communities, such as business, law and health, content knowledge is assessed for purposes of certification for membership (Llinares et al., 2012). This is the case with the IGCSE (International General Certificate of Secondary Education) tests, which, in education, are for the subject areas (geography, history, sciences) what level tests are for languages. They verify the level of competence achieved by students regardless of the courses of study attended and have different purposes than those of assessing progress at school, although they may also be a reference point for schools. The AECLIL Project has not investigated these types of tests and certifications, nor their possible uses in CLIL classes.

The *assessment for learning* is a “formative” assessment, since it has the aim of informing the planning of future learning and teaching. This involves the teacher and the learner in a continual review of the progress achieved. Formative assessment has three important characteristics: it is *planned*, since teachers collect evidence about the state of learners’ knowledge; it is *reactive*, since teachers adjust their teaching activities in the light of the information they gain; it is *reciprocal*, since both teachers and learners may improve the quality of the studies according to the information they get from formative assessment. These features, while important in all education contexts, have particular implications in CLIL, as they encourage the development of both content and language. Formative assessment seeks to provide feedback to students and teachers through specific assessment tools. Providing feedback is one of the principal purposes of the assessment practice in the AECLIL Project; in this way we can say that it is mainly a formative assessment even if the assessment tools are sometimes used to check a set of competences and knowledge at the end of a didactic path.

The *assessment as learning* increases the awareness about the learning processes. Students and teachers share learning intentions and success criteria and evaluate learning also through alternative forms of assessment, such as self- and peer assessment, and through tools such as portfolios, observation grids and other instruments. We can find this type of assessment in the AECLIL Project, which will be described in more detail in the next chapter.

Moreover, assessment in CLIL, as in all other education fields, must fulfil general quality criteria, two of which are essential: *validity* and *reliability* (Barbero, 2009: 108). Formative assessment must be supported by “valid” assessment tools measuring exactly what these tools intend to assess and being perfectly consistent with the teaching objectives. Assessment must also provide “reliable” feedback for the learner consisting

of criteria, scores and descriptors that may quantify, evaluate and interpret the outcomes. Reliable assessment is accurate, precise and consistent: the same or similar outcome is rated the same (or almost the same) if the assessment is repeated and if different raters judge it independently from one another.

Therefore, assessment is crucial because of its “wash-back” effect on learning; it must cover both content and language and take into consideration all aspects of CLIL communication in their specific context. A positive effect of assessment on CLIL consists in making the learner aware of the wide range of capabilities that can be developed through this approach, instead of focusing on a specific set of data.

Specific questions/issues

A particular issue is relevant and specific to CLIL: “what” to assess? Assess only the content, language and content separately? The answer to this question cannot be separated from a clear vision of what CLIL is and from the needs that are to be satisfied in a specific social and educational context.

CLIL owes a lot (as has been highlighted in the previous chapter) to studies on Canadian and American bilingual teaching both as regards its theoretical foundations and its terminology. For example, the BICS/CALP distinction, expressed by the previously quoted Cummins (2000; see *Teaching and learning with CLIL* in this book), summarizes, in two simple abbreviations, the variety of language uses, highlighting the limits of language learning simply designed to communicate in a context of everyday life (BICS) and, conversely, the need to address, in a specific way, the academic language (CALP) used to learn the subjects:

Simple communication skills may hide a child’s relative inadequacy in the language proficiency necessary to meet the cognitive and academic demands in the classroom. The language used when playing with a ball in the school playground is very different from calculating, using a protractor, the obtuse angle of the parallelogram and then constructing a diagonal line between the two obtuse angles and investigating if this creates congruent triangles (Baker 2001:169).

We must, however, note differences between the American and/or Canadian social context and the European one regarding the situations of language learning. The situation highlighted by Cummins and Baker is essentially the one of English as a language of instruction, together with different languages of immigration used effectively in situations of everyday life; thus, in a school context the lessons are usually taught in English to a linguistically non-homogeneous audience (for which the *vehicular language* can be either the mother or the second tongue) at different levels of competence, where, for second language, we mean the one the student acquires and uses in the immigration country.

This dual-focused learning is thus a possible solution to include students whose mother tongue differs from that in which the lessons are taught in the mainstream curricula:

[...] the integration of language and content objectives in lesson plans has been implemented as one solution to the dilemma on how to teach English to linguistically and culturally diverse students (Short, 1993: 2).

In Europe the situation is different and more varied. The platform for European education of the Council of Europe (2010) highlights the distinct status of languages in the European education system: the language can be studied as a subject, as a foreign or mother tongue or through a subject. CLIL fits into this context and takes the form of a provision in which a subject, or a portion thereof, is taught in a language other than the native language. Learning the language through the subject as a resource for strengthening multilingualism and linguistic stimulus (Commission of the European Communities, 2003) implies, as we know, a reflection on the ways in which meanings are created through language and suggests deep similarities between learning in the mother tongue and in the foreign one.

Despite the variety of ways in which CLIL learning takes place in Europe (Eurydice, 2006), there is an aspect common to almost all countries, which was evident even among the partners in this project: the *vehicular* language (not necessarily English) generally is *foreign* for all students in a class, whatever their language of origin is; CLIL also does not replace the teaching of language as such – the language as a subject – but is realized in parallel to such teaching.

CLIL teaching in Europe – variously represented by the partners of different nationalities in this project – can count, in fact, on a number of common features as regards the objectives and learning conditions. Consequently, evaluation also has specific traits that do not identify exactly with what happens in other educational settings, such as Canada or the United States, where the knowledge of the language of instruction – which may not be the same as the mother tongue – is crucial for success and integration in Society (Llinares et al. 2012) and where a formative assessment necessarily tends to separate language from content:

Teachers may not be sure whether a student is simply unable to demonstrate knowledge because of a language barrier or whether, indeed, the student does not know the content material being assessed. Yet, a distinction needs to be drawn, especially if a student is not succeeding in a course (Short, 1993: 3).

Thus, with respect to the question “what to assess” in CLIL, whether or not to assess the two components together or separately, there are in Europe different positions in this regard, even if a real assessment model has not been proposed so far. So-called “European” CLIL states clearly that the focus should be on content, and the language is intended as instrumental to the latter’s development (Coyle et al. 2010). Not that the problem of language or that of the formal correctness does not exist, but these must be resolved by the CLIL practice itself.

On the one hand, one of the basic principles of CLIL is *comprehensible input*, that is, specific strategies of *scaffolding* must ensure understanding of the message or text; on the other hand, linguistic correctness must be ensured in different ways than those traditionally followed in language courses, such as ensuring spaces are provided for correction, through what Do Coyle defines as a “language clinic”:

It is important to be clear that this [the priority of content in an assessment process] does not mean we should ignore all errors and never assess language, but we can create specific opportunities to do this rather than offer continual corrective feedback which undermines content confidence. The 'language clinic' is a potentially useful version of this practice: from time to time, the teacher gathers language errors which need to be addressed as a class and holds a 'language clinic' in a lesson, explaining to learners that this is a necessary step to support better communication of content (Coyle et al., 2010: 120).

A CONCEPTUAL FRAMEWORK FOR CLIL

In CLIL the primary focus of assessment is on content; this means that assessment in CLIL may have more in common with the ways non-language subjects are assessed than with conventional language tests. Tests generally adopted to assess language proficiency do not meet the needs of CLIL. These tests usually measure, in addition to formal correctness, the communicative competence, which is identified roughly with the language BICS inside the combination BICS/CALP, as referred to above. CLIL language is the academic language (CALP), used for learning the subjects, which uses the structures and vocabulary in a specific, more formal way, which cannot be exactly identified with that of current communication.

In other words, the so-called non-linguistic subjects are expressed and concretized mainly through language. CLIL has precisely this purpose: to highlight integration by enhancing a learning which is dual-focused.

In order to achieve this objective we must have a reference point, a framework that illustrates the ways in which knowledge at different levels of cognitive difficulty integrates and expresses itself through language; in other words, we must represent the way in which the four Cs precisely enunciated by Do Coyle – content, communication (and cultures) and cognition – are integrated in the communication specific to each discipline. For this purpose we propose a framework that integrates content, at different complexity levels, CALP functions and cognitive skills (Barbero, 2012; see table 1). It is based on the knowledge framework by Mohan (1986), a taxonomy where knowledge is considered in its relationships with language at three different levels: *1. classification / concepts*, *2. principles / processes* *3. evaluation / creation* and their language manifestations: *description, sequences, choices*. This framework also involves the cognitive dimension in terms of *lower-order processing*, such as recognizing, identifying, classifying, and *higher-order processing*, such as explaining, applying, or putting together pieces to construct something new and making critical judgments (Anderson and Krathwohl, 2001, mentioned in Coyle et al., 2010).

Table 1. *A conceptual framework for CLIL*

Content	Thinking skills	Language	
<i>Knowledge structure</i>	<i>Lower-order TS</i>	<i>CALP functions</i>	<i>Language structures Vocabulary</i>
Concepts / classification	<ul style="list-style-type: none"> - defining - identifying - classifying - 	description <ul style="list-style-type: none"> - identifying elements in their context - classifying objects & ideas according to their characteristics - identifying & describing information - 	specific vocabulary + grammar
<i>Knowledge structure</i>	<i>Higher-order TS</i>	<i>CALP functions</i>	<i>Language structures Vocabulary</i>
Principles / relationships	<ul style="list-style-type: none"> - explaining - hypothesizing - applying - comparing - solving problems - 	sequences <ul style="list-style-type: none"> - explaining organizing principles & reasoning processes - generating hypothesis on causes & effects - predicting implications, hypothesizing - applying a model - making a timeline, cycle or narrative sequence - describing problem-solving procedures applied to real life problems - 	syntax + textual types
Evaluation / creation	<ul style="list-style-type: none"> - evaluating - expressing opinions - making choices - creating - 	choices <ul style="list-style-type: none"> - summarising information, incorporating new information with prior knowledge - identifying criteria, explaining priorities - indicating reasons for judgments - confirming truth - 	creative use of structures and vocabulary

This framework may be explained in this way:

- The first level is factual: items are identified and classified in their concrete context. This level is or may be linked to concrete experience (Cummins, 2000: 65). From a linguistic point of view it corresponds to the description and organization of information (collecting, for example, knowledge by categories: Who?, What?, Where?, How? When? Which concepts?).
- The second level concerns the *relationship* between concepts (or items). The questions are: What *principles* are there? How are they related to each other? (cause-effect, consequences, methods and techniques, rules...). What happens? What are the *processes, procedures* or routines? The second level is therefore of principles, which are expressed linguistically through sequences: interpreting data and drawing conclusions, formulating and testing hypotheses, identifying causes and effects.
- The third level involves more abstract thinking. The questions are: What are typical reasons for choosing one object or action over another? What are the *choices*, alternatives, decisions? How can information be processed in an original way?

Answering these questions successfully requires the use of *thinking skills* (middle column), both *lower-order* thinking skills and *higher-order* thinking skills. Examples of lower-order thinking skills for content include recalling facts, identifying vocabulary and making definitions. Higher-order thinking skills involve using language to analyze, synthesize, and evaluate. The overlap in terminology used for thinking skills and for language functions (e.g., informing, explaining, analyzing, drawing conclusions, evaluating) suggests a close relationship between language functions and levels of thinking skills. The language functions needed for content activities requiring lower-order thinking skills can usually be expressed with simple grammatical structures. On the other hand, content-activities requiring higher-order thinking skills often involve both more complex language and larger chunks of language (Chamot, O'Malley, 1994).

In table 1 we want to show how the different components are integrated in CLIL and give evidence that the acquisition of language is contextual to the use and development of cognitive skills, as well as to the learning of subject content. Read horizontally, this framework can describe a stage of learning (e.g., the learning of concepts and their classification); however, in the vertical direction it indicates the stages of a process: the identification of facts, their characteristics, their integration in the sequences of a process, up to a higher stage of creativity and critical thinking. From an educational standpoint this schema allows you to:

- determine the level of complexity of content (knowledge structure);
- identify the language resources necessary to express such complexity;
- highlight the cognitive skills that allow the teacher to plan on the basis of this integration;
- provide paths that go from simple to complex;
- prepare support activities (scaffolding);
- identify the most appropriate forms of assessment;

- ensuring consistency between the goals of teaching / learning and that of assessment.

The assessment, especially in terms of formative assessment, will be included within this schema. We have used this framework to analyse and classify the activities in AECLIL and build assessment rubrics.

ACTIVITIES IN CLIL

Activities are the way learning is really fostered, so successful CLIL teaching depends, to a large extent, on how they are chosen and organized.

We can put activities into two large groups: *exercises* and *tasks* (Barbero, 2012). Generally speaking, the former test single elements of knowledge. In language courses they especially focus on formal aspects of the language and are generally structured by the teacher. The latter involve practical use of the knowledge in order to attain a result; as far as language is concerned, they focus on its pragmatic meaning, and more freedom is allowed to learners in choosing their own linguistic structures.

As a matter of fact, many definitions have been given for the word “task” and its concrete application in the teaching and learning process. For example, a task is defined as “a piece of work or an activity which requires learners to arrive at an outcome from given information through some process of thought”, or as “an activity which requires learners to use language, with emphasis on meaning, to attain an objective” (Ellis, 2003: 4). In spite of the variety of the definitions, the features of the task have been clearly described:

- A task is a workplan.
- It involves a primary focus on the meaning: it incorporates some kind of gap, which motivates learners to use language in order to close it.
- It involves real-world processes of language use.
- It engages cognitive processes such as selecting, classifying, ordering and evaluating information in order to carry out the task; these processes influence but do not determine the choice of the language.
- A task has a clearly defined “communicative outcome” (ibid. 9).

Both exercises and tasks may have a place in the classroom, but it is clear that tasks are, generally, the most appropriate for CLIL, as they are the typical activities of the subject, with genres, cultural conventions and specific structures, which require the students’ ability to rework knowledge and skills on their own.

We classified the activities produced in the first administration of the modules of the partners, as seen in the framework proposal (table 2).

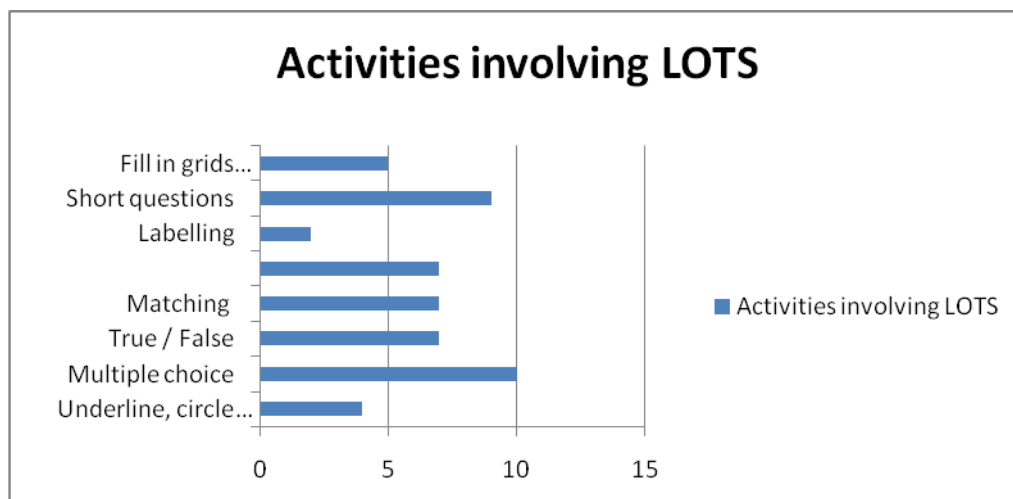
Table 2. *Conceptual Framework for CLIL and activities classification*

Content	Learning Objectives	Strategies
<i>Knowledge structure</i>	Thinking Skills / CALP Language Functions	<i>Activities (exercises & tasks)</i>
Concepts / description	Who? What? Where? <i>Lower-order TS (LOTS)</i> - recognize (words, elements...) - define - identify - classify - describe (objects, elements...) -	- recognize (words, pictures) - underline - circle the odd words out - filling tables / maps / grids - multiple choice - true/false - matching (words, words and definitions, beginnings and endings of sentences) - cloze - completion of sentences - labelling - open questions
Principles / processes / sequences	What relationships between concepts? What principles? What processes / procedures / routines? <i>Higher-order TS (HOTS)</i> - describe processes - solve problems - organize sequences	- explain graphs / maps - complete a flowchart / a diagram - make a map, a flowchart, a graph - solve problems - put sentences in correct order - complete a laboratory report - write a lab report
Creation / evaluation / choices	What are the choices, alternatives, decisions? How can information be elaborated in an original way? <i>Higher-order TS (HOTS)</i> - elaborate information in a personal way - create - evaluate - make choices	- write an essay - write a lab report with personal comments - power point presentation - role play

As you can see, at the first level (concepts / description) we find activities – short questions, labeling activities, cloze, sentence completion, matching, true/false, multiple

choice – usually used in language courses (the extent to which each of these types is present in the modules of the project is shown in table 3).

Table 3. *Activities involving LOTS*



These activities have all the features of an exercise: they provide a single answer, usually *summarized* in a word, a phrase or a simple sentence, or even without words, for example, in matching activities where you simply have to link segments, phrases, words or images; the *creativity* and autonomy of the student are not solicited in any way, but simply his/her knowledge is assessed. It should be noted, however, that in a CLIL context, this is never a purely linguistic knowledge; vocabulary, in particular, is not, or is not only, a linguistic category; rather it indicates content related to a specific subject area, such as concepts or processes in a scientific field:

It can be useful to divide the words of science into various types or categories [...]. There are words – *naming words* – that denote identifiable, observable, real objects or entities, [...] other words – *process words* – may denote processes that happen in science; [...]; the third category, the largest one – *concept words* – denote concepts of various type. [Finally] there are words that have both a scientific and an every day meaning, such as “work, energy, power...” (Wellington, Osborne, 2001: 20).

The study of vocabulary in CLIL is therefore far from superfluous: identifying a term, a definition, thus means somehow recognizing acquiring knowledge in the subjects and distinguishing between the use of everyday vocabulary and of academic language. The study of vocabulary is therefore subject to specific activities. From a cognitive point of view, mostly lower-order thinking skills are recommended, such as recognizing, identifying, finding definitions and classifying. These are still strongly supported activities where scaffolding is provided by the type of exercise.

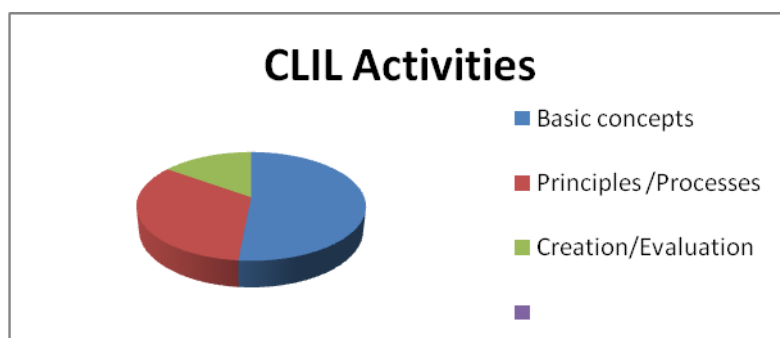
At the second level there are activities such as the completion or explanation of graphs, concept maps, flowcharts, diagrams, the reconstruction of texts (of which the various parts are given in random order), the completion of reports and report writing

following a track-driven solution of problems. These are activities that have, in large part, the characteristics of tasks that require thinking skills typical of subject learning, such as solving problems, establishing relationships, explaining processes, transactions at the highest level, but the creativity and autonomy of the student are limited since these activities are supported by different types of scaffolding: frames, diagrams, maps ...

At the third level there are, in principle, the same activities typical of the subject – reports, laboratory sheets, presentations, simulations, role plays – but the task of organizing knowledge and skills is totally entrusted to the student and his creativity: the student independently chooses the linguistic forms necessary to structure the outcomes. Thus cognitive processes as well as analyzing, explaining, comparing and drawing conclusions are conducted in an autonomous way without the support of scaffolding.

To what extent are the activities of the three levels described in the modules of the project? Table 4 illustrates their distribution.

Table 4. *AECLIL activities*



More than half of the activities (55%) are at the first level and have the acquisition of basic concepts as the objective; they verify individual knowledge, strongly supported by scaffolding, and do not require student creativity. Moreover, in many modules (40%) all activities are included at the first level without progressing to the next level.

To a lesser extent, the second level of the framework has more specific activities for subject learning, such as the identification of principles and relationships and the implementation of processes. But at this level tasks are strongly supported by scaffolding.

Finally, examples of activities set at the third level of the framework are rare, that is to say that there are only a few examples of outcomes requiring specific disciplinary features elaborated autonomously by students.

The reasons for these choices have not been investigated, and these reasons may be numerous: class levels, the experimental nature of CLIL in certain educational settings. Nevertheless, more general causes cannot be excluded, such as the scarcity of detailed studies on genres for the different subjects and, therefore, specific support activities.

The fact is that the real CLIL challenge is to reach high levels in disciplinary competence using a foreign language as a vehicle.

ASSESSMENT TOOLS

A formative assessment not only has to be consistent with the objectives but also provide clear feedback to the students to allow them to unequivocally identify their shortcomings. So the framework described can be used not only for building activities and learning paths to the desired level but also to develop tests for assessing and measuring instruments for the outcomes and to provide relevant feedback (Barbero, Maggi 2012). This framework has been used to develop the *rubrics* in the project modules, as we will illustrate.

As regards measurement there is a substantial difference between the activities that have the characteristics of an *exercise* and those which have the characteristics of a *task*. In the first case, represented by activities such as cloze, matching, multiple choice, or answers to closed questions, the answer generally can be just either right or wrong, while in the second case, where the creativity of the student is involved, his/her ability regarding personal revision, the response is not entirely predictable to a large degree.

While measuring outcomes identified as tasks is a complex operation that requires specific tools (see next section), the measurement of exercises is not so problematic: you only have to calculate the number of correct answers and give them a rating. The numbers in themselves do not provide detailed feedback to students since no description of the outcomes is provided.

Assessment of tasks

Traditional forms of assessment, where the performances are simply measured through a score, are not appropriate for CLIL, where both content and language must be enhanced and the activities to be developed are mostly “real” activities in a specific field.

The assessment of tasks typical to the subject can be linked to what is called authentic assessment.

Authentic assessment occurs when we associate the assessment to types of work that real people do, rather than merely soliciting answers which only require simple, easy to assess responses. Authentic assessment is an appropriate verification of performance because through it we learn if students can intelligently use what they have learned in situations which can be linked to adult experiences, and if they can renew or change new situations (Wiggins, 1998, mentioned in Serragiotto, 2007).

The most appropriate tools to evaluate integrated competences in authentic disciplinary tasks are *rubrics*.

Rubrics

A rubric is an assessment tool in the form of a matrix which is used to assess learners’ performances. It should define what students know and are able to do. It consists of rows listing the features of the performance that will be assessed, and

columns of *descriptors*, indicating the qualities of this performance and the corresponding scores.

There are many advantages in using rubrics to evaluate both students and teachers. Rubrics:

- provide feedback to teachers and students;
- represent a guide for students and teachers, much more explicit than a single numerical score;
- make assessment more objective and consistent;
- reduce the amount of time teachers spend evaluating students' work.

This potential is particularly useful in CLIL, where learning must be supported in its different components and students guided toward awareness of their acquisitions.

There are mainly two types of rubrics: "holistic" and "analytic".

Holistic rubrics

A *holistic rubric* evaluates the product or performance as a whole and describes the activity at different quality levels, each of them corresponding to a score. It is a kind of summative assessment as it requires the teacher to score the overall process or product without judging the component parts separately (Mertler, 2001). The focus of a score in a holistic rubric is on the global quality of a specific content and skills. Advantages in holistic rubrics are quickness in scoring and the provision of an overview of student achievement. A disadvantage is that it provides only a limited feedback (Taggart et al., 1998). In table 5 there is an example of a holistic rubric, which was discussed by partners during the second meeting in Perpignan.

Table 5. *Example of a holistic rubric*

Scores	Descriptors
1 Unsatisfactory	Student shows no knowledge of the subject and specific vocabulary.
2 Almost satisfactory	Student is lacking necessary background knowledge and uses specific vocabulary wrongly.
3 Satisfactory	Student has essential knowledge of the subject. He uses specific vocabulary correctly.
4 Good	Student shows a complete knowledge of the subject. He properly uses specific vocabulary.
5 Excellent	Student shows a complete and thorough knowledge of the subject.

Analytic rubrics

Analytic rubrics are criterion-referenced and assess summative or formative performances along several different dimensions (Taggart et al., 1998). The degree of feedback offered to students is higher than in holistic rubrics. Therefore, the advantages are the provision of a detailed assessment of the tasks and the creation of a profile of specific student strengths and weaknesses (Mertler, 2001). The disadvantages are mostly for the teacher: analytic rubrics are more time-consuming than holistic rubrics as individual work should be examined separately for each of the specific criteria chosen to assess the task.

An analytic rubric necessarily requires these components: an identified behaviour within an *assessment task*; the characteristics of the task that will be assessed (*criteria*), *descriptors* that describe proficiency levels of performance, a rating scale of *scores*, at three or more levels of performance, to be used to rate students' tasks (Taggart et al., 1998).

There must be total consistency among the learning goals, the choice of criteria and the description and evaluation of the outcomes. This is particularly relevant in CLIL since all its components must be involved. The conceptual framework described above may fulfill this aim. This framework has been used to develop an analytic rubric of reference (Barbero, Maggi, 2011), which was presented and discussed by partners in the second meeting in Perpignan (see table 6).

Table 6. *CONTENT - A general rubric*

Score		3	2	1
Topic:	Concepts Classification	Identifies concepts, classifies them and formulates verifiable hypotheses on process / problem solving	Identifies concepts, classifies them and formulates hypotheses on process / problem solving	Identifies concepts, classifies them and formulates hypotheses on incorrect process / problem solving
	Principles Sequences	Performs the procedures, collects and organizes data, makes appropriate conclusions	Performs the procedures, collects and organizes data, makes approximate conclusions	Performs the procedures, collects and organizes data, makes wrong conclusions
	Evaluation Creativity	Evaluates the results obtained, compares them with the hypothesis formulated, and confirms the results	The results coincide only partly with the concepts and assumptions made	The conclusions have no relationship with the concepts and assumptions made

This is obviously a rubric of a general nature which must be adapted to each specific situation. The different levels in knowledge structure – concepts, principles and relationships, evaluation and creativity – referred to a specific content may be adopted as criteria in an analytic rubric.

Rubrics are precisely open lists that must be continually updated and adapted. So one of the partners (Hacettepe University, Ankara, Turkey) proposes a specific rubric for the experiments and laboratory reports, and indicates criteria involving both concepts and processes / relationships as we can see in the specific rubric for the experiments and laboratory reports, which and indicates criteria involving both concepts and processes / relationships (table 7). This kind of rubric integrates language in content and is the vehicle to express content and organize information at different levels of complexity: description / classification, process / relationships, and choices. In other words, it is the CALP functions that are developed.

Table 7. *Assessment rubric for experimental studies*

Assessment criteria	Grades		
	2 – complete	1 – partial	0 – not at all
Defining the research problem and providing hypotheses	Formulates a focused problem and provides reasonable hypotheses.	Formulates a focused problem but does not provide reasonable hypotheses.	Does not formulate a focused problem and does not provide reasonable hypotheses.
Selecting variables and control factors	Identifies the relevant variables and decides which are to be kept constant and which are varied variables.	Identifies only some variables and has difficulties in deciding which are to be kept constant.	Does not identify the variables.
Making observations	Carries out procedures requiring fine manipulative control such as assembling and using a more complex system and reading instruments with complex scales.	Carries out basic laboratory manipulations such as using measuring instruments with unit divisions.	Does not carry out basic laboratory manipulations such as using measuring instruments.
Data collecting and processing	Records appropriate data and processes the quantitative data correctly.	Records appropriate data with mistakes or processes the quantitative data incorrectly.	Does not record any appropriate data or the data is incomprehensible.

Drawing the conclusion	Plots the required graphs, extracts numerical information from graphs.	Plots the required graphs, does not extract numerical information from graphs.	Does not plot the required graphs.
Evaluating the procedure	Performs more complex calculations from data or results which may involve several steps.	Performs valid calculations from data or results.	Does not perform simple calculations from data or results.
Interpretation of the results	Makes correct explanations using an appropriate theoretical model.	Makes valid explanations using a range of familiar science concepts.	Does not make explanations.
Report the experiment	Writes the report in a correct way to interpret experimental results and draw conclusions, independently.	Writes the report in a way which is not in a correct order.	Doesn't write report properly to express his/her results, scientifically.

Nevertheless, the language of communication (BICS) is involved as well in CLIL courses and may be assessed separately if we want to especially focus on communicative skills. Thus, for instance, in an oral presentation language could be assessed in its communicative dimension and the criteria could be: *fluency*, *accuracy* as in the rubric below (table 8), discussed in Perpignan. This could be correlated and combined with the CONTENT rubric (table 6) and give a complete description of students' competences.

Table 8. LANGUAGE - A rubric to evaluate communicative language skills

Accuracy	Consistent grammatical control and appropriate use of vocabulary.	Good grammatical control and generally appropriate use of vocabulary.	A few mistakes in grammar and vocabulary use do not lead to misunderstanding.	Systematically makes mistakes in grammar and vocabulary use but the message is generally clear.	The systematic grammar mistakes and the narrow range of vocabulary makes the message meaningless.
Fluency and Interaction	Can express him/herself with a natural flow and interact with ease.	Can express him/herself and interact with a good degree of fluency.	Can express him/herself and interact with a reasonable degree of fluency.	Can manage the discourse and the interaction with effort and must be helped.	The communication is totally dependent on repetition, rephrasing and repair.

It is clear that for language rubrics the scales of the *Common European Framework for Languages* (2001) can be of support in the preparation of descriptors.

Other fields could be investigated and assessed, such as ICT knowledge or cooperative work, in which case specific criteria must be provided. Examples of criteria for “cooperative work” may be found in the rubrics of the AECLIL-modules (*The Earth, Our House, Kinetic Energy and Work; Redox Reactions*).

Steps to follow in a process of authentic assessment

In short, the steps to follow in a process of authentic assessment as well as in the teacher’s assessment questions may be the following (Barbero, Maggi, 2011):

1. Providing authentic tasks: “What tasks are typical of that subject?”
2. Developing a set of standards consistent with the teaching objectives: “What will students be able to do?”
3. Identifying the criteria: “What are the essential elements of the task?”
4. Identifying competence levels for each criterion (generally between two and five) and attributing a score for each level: “What is the level of competence achieved?”
5. Finding competence descriptors for each level and for each criterion. Descriptors may be expressed synthetically (for example: excellent, good, satisfactory, almost satisfactory, unsatisfactory, or: complete, partial, not at all), or analytically: “How can integrated skills be described for each score and in relation to each criterion?”
6. Creating a scored rubric to be drawn upon and adapted to each performance: “What kind of feedback is provided to the learner?”

CONCLUSIONS

Searching for a European CLIL evaluation model, we have come to some basic conclusions. First, the methodological research on CLIL in Europe is unanimous in underlining the *priority* of content, even in a dual-focused teaching / learning context. This leads us to consider that assessment in CLIL should be more like the models offered by the disciplines than those commonly used in language lessons.

As regards in particular the role of language, the point is not to decide whether or not language should be evaluated separately from the content, but to see how it *integrates* with the content. For this purpose we used Mohan’s taxonomy, which proposes a content classification for levels of cognitive difficulty and their corresponding linguistic expression. This taxonomy, used in a previous European project on CLIL, was then further improved with particular reference to the present project to include all CLIL components: content, communication & culture, cognition.

The activities produced in the modules were classified using precisely this framework, and it was observed that most of them are located at the first level: namely, the knowledge of individual elements or concepts, which, from a linguistic point of view, is expressed primarily through lexical elements and simple structures.

The measurement of these activities, which are normally closed questions – cloze, matching, multiple choice, true/false – does not cause particular problems because the scores are awarded based on the number of correct answers. Some teachers, however, in order to make the assessment a true training tool (assessment for learning) provided descriptors for each of the scores, which offer the student a more explicit feedback than simple voting.

More complex is the assessment and evaluation of activities that involve the creativity of the student and where the answer is not, or not entirely, predictable. These are simply the typical activities of the discipline, such as reports of laboratory experiments, role play for management, just to mention some examples from the project. They involve a set of knowledge and skills and the ability to revise and make personal choices.

An evaluation model for CLIL should have the characteristics of authentic assessment and assume its procedures.

In the AECLIL Project we have adopted the framework of the above criteria to identify descriptors within a matrix of reference. This matrix has been variously adapted and integrated by the partners, who have proposed criteria referring both to the content alone, to both the content and language separately, and to the working methods. In this sense the Project is a step forward in the search for a model of assessment in CLIL, although much remains to be done, especially in the search for common criteria and descriptors for the different disciplines.

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EVALUATION IN CLIL

Fabrizio Maggi

TOWARDS AN INTEGRATED EVALUATION

Our project is named AECLIL, “*Assessment and Evaluation in CLIL*”. As explained by Teresina Barbero in the previous chapter, one of the tasks of this project is to provide CLIL evaluating tools and specific information and advice on this fundamental aspect of CLIL teaching and learning.

Evaluation is always a bit difficult and delicate operation that must be addressed in a professional manner by teachers (Serragiotto 2006). You must assess the skills and knowledge acquired by students, but also consider the process, namely how students have achieved certain results. Analyzing the process means gathering information to help teachers to reflect on the proposed route and make the necessary changes in the future to eliminate or at least reduce any distortions detected that hinder learning.

It's only necessary to recall here that evaluation must take into account both the content of the subject and the language used in the CLIL experience. I agree with Serragiotto when he argues that “the weight to be given to the content of the discipline and the language should be determined and shared with students.” In fact, engaging students increases participation and motivation in learning.

The ambivalence of CLIL learning poses two interesting questions about evaluation:

- assess the level of language learning and the one of non-language subject;
- decide whether they are to be evaluated together through each other or separately.

The acronym CLIL shows that it is an “integrated” learning and evaluation cannot and should not be just the sum of what the subject teacher and L2 teacher teach in their individual classes or in co-presence (something quite common in Italian schools), or maybe just by the subject teacher in the case of bilingualism. This is not easy, it requires that the assessment takes into account a few key elements:

- The assessment of language proficiency and content must be performed simultaneously, perhaps in a cross way. All this means providing adequate grids, suitable for testing the L2 and content (see the grids in the annexes).
- The criteria, weights and objectives of the evaluation must be very clear and, if necessary, shared or released to students.
- Self-assessment is a crucial moment. Involving students in assessing their learning progress is highly positive and very engaging for students.
- From this perspective encouraging peer assessment can make students more independent and can give them some tools to monitor their progress.

THE ROLE OF TEACHERS

The field of evaluation for a CLIL activity is complex. As we have seen, each evaluating activity should measure both the achievements of targeted objectives for the content and for the development of language skills. Testing tasks should be set up in such a way that they show what the learner is able to do in the subject through one or more of the five basic communicative skills defined in the *Common European Framework of Reference for Languages* (2001). The assessment and the feedback that learners receive have a double aim: they provide information about two types of performance, they focus on two types of strengths and weaknesses, and they do this in three fields covered by evaluation: the diagnostic area, the formative area and the summative area.

Lots have been written on the last two. I will say something about the diagnostic evaluation. Teachers need to have a fairly precise idea of their students' levels in the five language competences and of their existing knowledge of the subject they are studying before planning their CLIL lessons. This previously acquired knowledge may be defined through questionnaires, tests, students' portfolios and self evaluation grids. By combining these different elements, teachers will be able to decide which language activities are appropriate for specific content while they need to remain aware that these activities should allow the further development of skills in the subject and in the target language. But teachers have to bear in mind that assessment will only be effective if it succeeds in creating a genuine learning community among learners and teachers. This means that a real dialogue between teachers and learners about the process of learning is indispensable. In a CLIL class, evaluation is associated with peer evaluation and with self evaluation and will take the form of a dynamic process that constantly evolves.

Keeping in mind that there is neither one preferred CLIL model or pattern, nor one CLIL methodology, it is essential to recognize that not any kind of teaching or learning "in another language" may be CLIL. Teachers need a common plan: those involved with planning and delivering the CLIL curriculum should have the means to define and support a contextualized interpretation of CLIL, to make explicit the fundamental principles upon which it is based and to put in place rigorous monitoring and evaluation processes (Coyle et al. 2010).

Here are some suggestions about applying assessment and evaluation procedures and tools. According to Bertaux et al. (2009) teachers can:

- a) engage students in an assessment-for-learning culture including:
 - making connections between planned outcomes, learning skills and processes, actual outcomes, and planning for future learning;
 - using self and peer-assessment tools;
 - maintaining a triple focus on language, content and learning skills;
- b) distinguish and navigate CLIL-specific characteristics of assessment and evaluation including:
 - language for various purposes;
 - work with authentic materials;
 - communication with speakers of the CLIL language;
 - ongoing language growth;
 - level of comfort in experimenting with language and content;
 - progress in achieving planned content, language and learning skills goals;
 - developing all language skills;

- distinguishing content and language errors;
 - carrying out assessment in the target language;
- c) prepare students for formal examinations including high-stakes examinations.

CORNERSTONES FOR EVALUATION

Lorenzo et al. (2009) identify four key metaconcerns served as cornerstones for the evaluation process. In their study, the authors consider not only the environment but also the CLIL language policies at European level by opening the way for the formulation of future projects on evaluation. However, the four key issues that they have developed are the following (adapted):

1. *Competence development:*

- a) *linguistic competences* in accordance with the levels of the *Common European Framework of Reference for languages* (2001);
- b) *conceptual competences* relating to the successful integration of content and language;
- c) *procedural competences* as demonstrated by the use of communicative, cognitive and meta-cognitive strategies;
- d) *attitudinal competences* combining both intercultural awareness and motivational factors.

2. *Curricular organization:*

- a) the *model of bilingual education is favoured* – CLIL encompasses a wide range of potential models: single or dual, semi or complete immersion, translanguaging, modular thematic blocks and language showers;
- b) the *characteristics of the bilingual sections* – incorporating the content subjects involved, the L2s and L3s most frequently chosen and the composition of the groups: what proportion of the school body is involved; how the groups are formed and whether they represent any particular social classes;
- c) the *coordination of language and content integration* – both the actors: administrators; language specialists, who may be teachers (L1 as well as L2s and L3s) or native-speaker / expert-user, classroom assistants and content specialists; and the methodologies and materials employed (both for teaching and testing).

3. *Classroom praxis:*

- a) *L2 use* – incorporating both frequency and functions;
- b) *typology of classroom activities* – including considerations relating to the pedagogic approach inherent therein and the classroom interaction patterns implied;
- c) *linguistic range* – academic and sociocultural themes and topics, meta-language;
- d) *skill and competence development* – range, distribution and implementation;
- e) *materials* – the mix of commercial and adapted materials involved, the use of authentic source materials;
- f) *the design of learning units* – aligning conceptual and linguistic factors, thematic relevance, textual considerations, awareness raising, etc.;
- g) *assessment techniques* – the objective/subjective mix, use of portfolios, self and collective evaluation, etc.

4. Levels of satisfaction:

- a) *perceptions* of usefulness and success of diverse aspects of the bilingual programme including the early introduction of an L2 in primary education, the increase in L2 provision via content integrated learning and the scope of the programme from the perspective of numbers involved.

Starting from these ambitious cornerstones we propose the table summarizing the main elements and factors concerning evaluation that a teacher should be familiar with in the following page.

EVALUATION: A Scaffolding Framework for Teachers

KNOWLEDGE: *CLIL teachers should have a good knowledge on:*

- different approaches to evaluation and assessment and their interpretation;
- key concepts in assessment, such as reliability, validity, criteria, goals;
- the relationship between assessment methods, learning styles and teaching styles;
- different stages and purposes of CLIL assessment, diagnostic, formative, summative;
- the implications for CLIL assessment of the links between cognitive operations and academic language skills;
- the relationship between metacognition and CLIL evaluation and assessment practices;
- how the CEFR can be used as an evaluation and assessment tool in CLIL contexts.

QUALITIES: *CLIL teachers need appreciate:*

- the importance of using a variety of assessment techniques in CLIL;
- the importance of validity in assessing content and language;
- the importance of transparency in evaluation criteria for CLIL;
- the need for assessment techniques to take into account multiple intelligences, different learning styles etc.;
- that errors are a natural part of learning;
- the importance of constructive feedback focused on what CLIL learners can do;
- the need to balance assessment of progress in the subject with that of language;
- the interdependence of content, thinking skills and language in learners' production.

SKILLS: *CLIL teachers need to be able to:*

- become familiar with and use a range of assessment methods and tools;
- use appropriate assessment techniques for the different stages in the learning process in CLIL;
- articulate topics and criteria for the assessment of content and the different language skills;
- to share assessment criteria with CLIL learners;
- foster CLIL students' metacognitive awareness by providing appropriate tools for self-assessment;

- to encourage CLIL students to use these tools to frame comments about their own learning process;
- to assess their own language use.

TASKS: *CLIL teachers can develop the Knowledge Quality Skills evaluation by:*

- selecting and designing appropriate assessment methods for specific CLIL courses;
- devising and using observation and evaluation grids;
- reflecting in a structured way on their own assessment practices;
- carrying out observations on assessment practices;
- providing formative feedback on samples of CLIL students' work;
- carrying out error analyses and using these as a learning tool;
- devising and implementing tools to develop metacognitive awareness;
- reflecting on and assessing their own language use.

FINAL PRODUCTS: *CLIL teachers can provide evidence of competence with:*

- reflective reports on their use of different assessment tools in CLIL;
- essays and projects in which they show understanding of key concepts in evaluation and assessment, as applied to CLIL;
- examples of CLIL assessment tools appropriate for different learning styles and intelligences.
- plans and schedules in which appropriate assessment points and methods are identified;
- examples of assessment tools which integrate content, thinking and language (such as rubrics, grids etc.);
- examples of spoken and written formative and summative feedback to CLIL learners;
- examples of applications of the CEFR in specific CLIL situations.

(Adapted from *CLIL across context*, <http://clil.uni.lu>;
<http://www.alte.org/2011/presentations/pdf/sabina-nowak.pdf>)

SELF- AND PEER ASSESSMENT

Using peer and self-assessment helps to make learners more independent, as this gives them tools to monitor their own progress. Peer and self-assessment can help learners to produce the standard of work that is required of them, by making them more aware of the effect of their spoken and written work. By understanding more clearly what is expected of them, they will gradually become more able to critically assess their own work.

In order to confirm the above observations, a questionnaire was distributed to the students of those institutions involved in the first implementation of the CLIL modules. The data comes from a total of 281 students from the Pavia network, Bulgaria, Romania and Germany.

The most relevant aspects that emerge from the present analysis are listed below:

1. Use of the language of learning: the most common and comfortable situations.
2. Strategies of learning: the most useful strategies and tools to accomplish the tasks.
3. What is most important when speaking the second language.
4. The problems encountered during the modules.
5. General considerations about the modules.

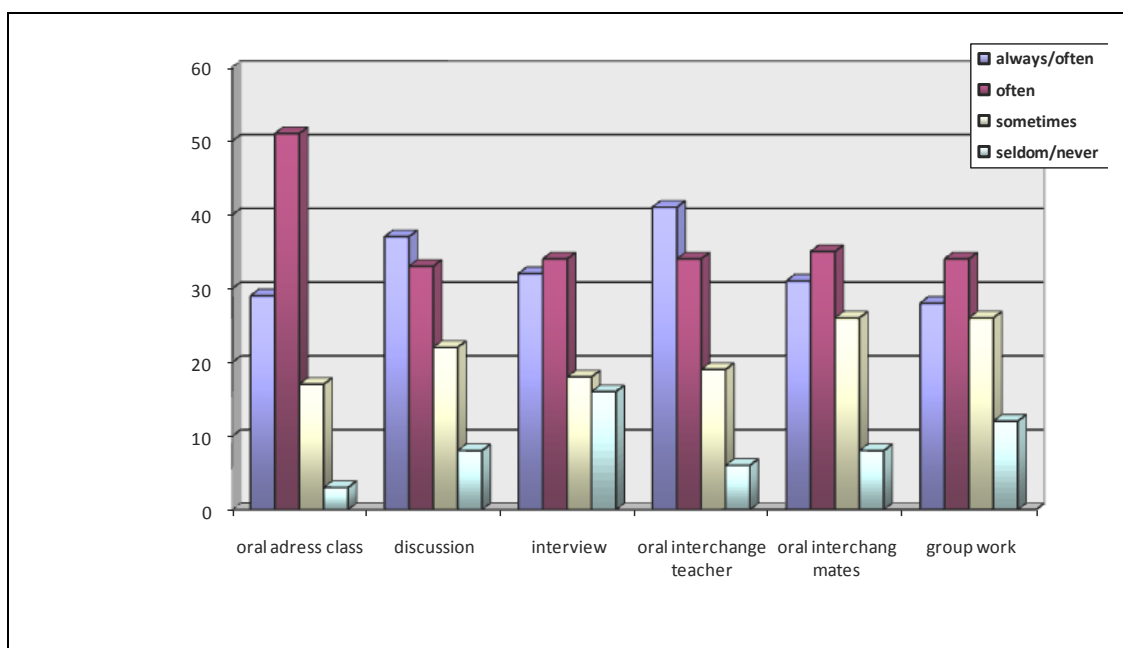
It would be interesting to note, as a starting point, how the students answered the first question in the questionnaire, that is “How do you consider your learning experience in the CLIL module?”.



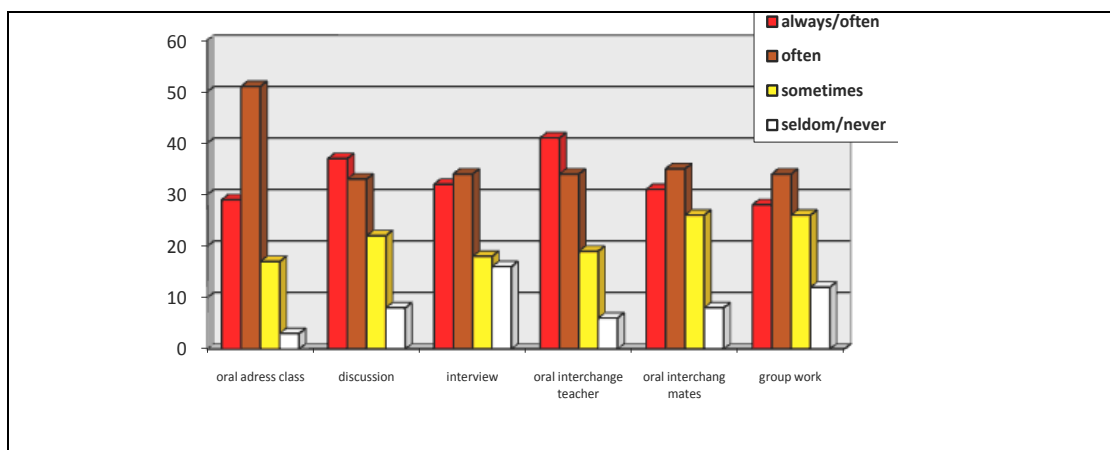
The questionnaires show very positive results, with 41% of “important” and 38% of “very important” answers concerning the evaluation of the whole CLIL learning experience.

1. Use of the language of learning: the most common and comfortable situations.

Questionnaire Answer (QA): In which of these situations have you used the foreign language and how often?



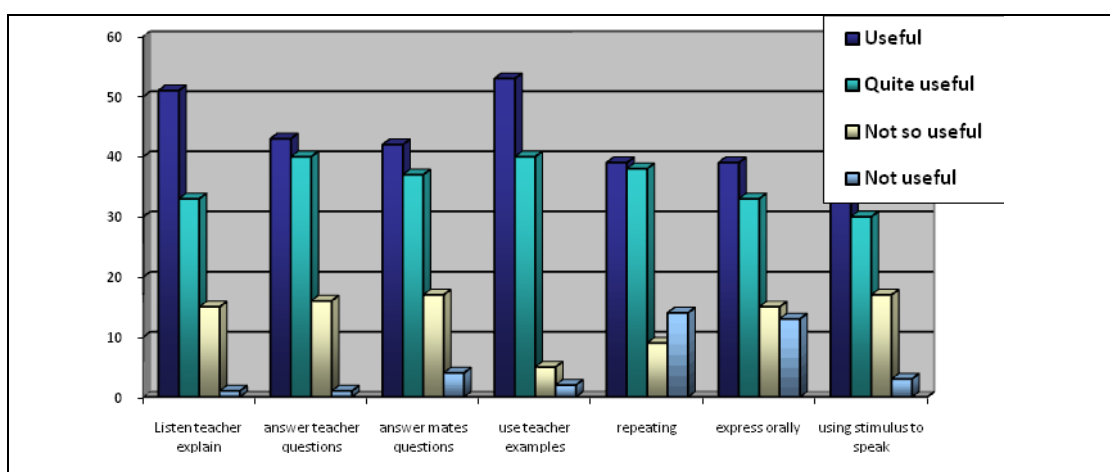
QA: How safe/comfortable did you feel in the following situations?



The most frequent situations in which the language of learning is used are the “interaction with the teacher” (often 41%) and the “interaction with the class” (always 51%), while communication during group work, interviews, discussion and interchange with mates received similar average results. The answers declaring the most “comfortable” situation of use confirm the previous results, showing that “oral addressing to the class” (51%) and “oral interchange with teacher” (41%) are perceived as the most comfortable situations in which to use the second language.

2. Strategies of learning: the most useful strategies and tools to accomplish the tasks

QA: Which strategies did you find more useful to accomplish the tasks?



The students’ answers show that the most useful strategies to accomplish the task are “using the examples presented by the teacher” (very useful 53%, useful 40%) “listening to teacher’s explanations” (51%) and “using images, grids or graphs as a stimulus to

speak” (50%). The strategies considered less useful are “repetition of what was previously heard, read or written” (not useful 14%), followed by “trying to express orally using own words what was previously heard, read or written” (not useful 13%).

QA: Which tools used by teachers have been more helpful?

Audio/Visual aids: 180

Practical examples: 96

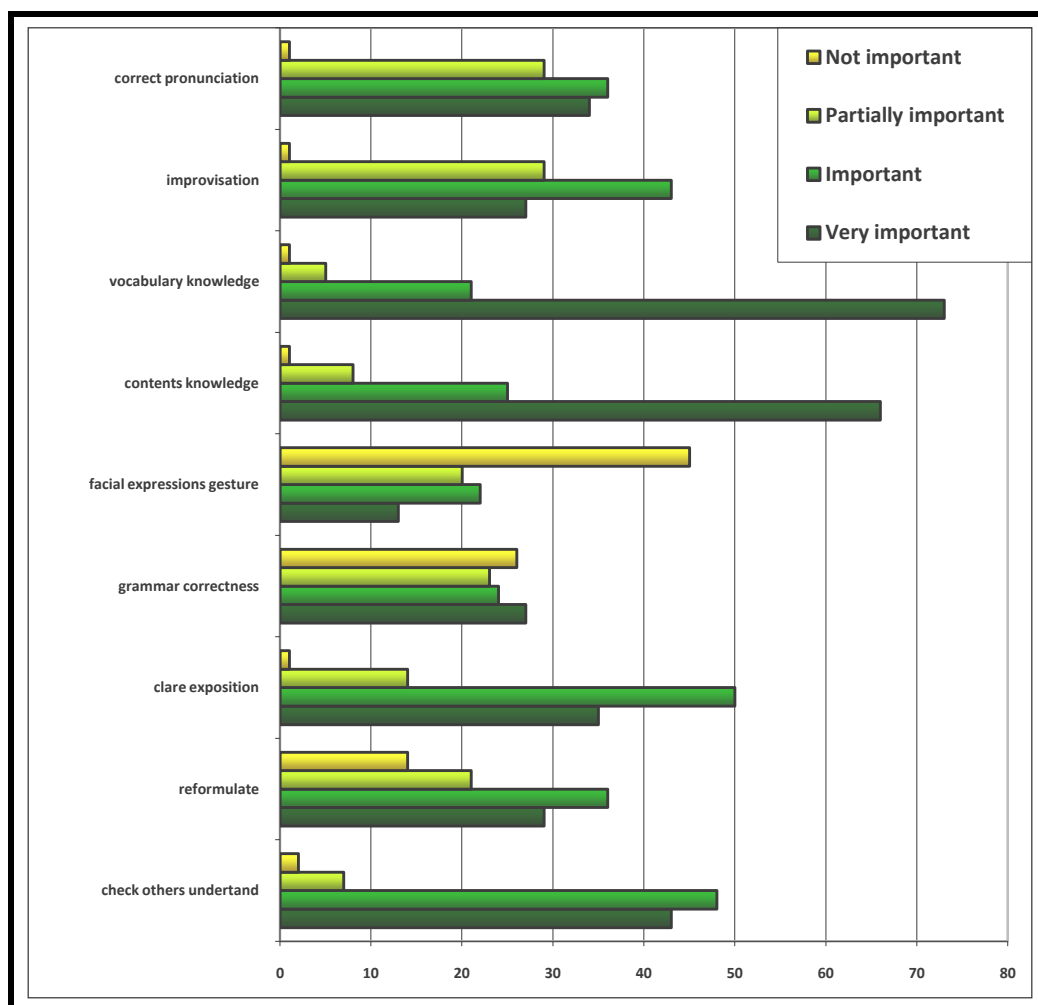
Web links: 123

Realia: 80

With a total of 180 answers out of 281, the use of audio/visual aids as a stimulus to speak was considered the most helpful tool to learn, followed by the use of web links, which was chosen by 123 students (see graphic in *CLIL Modules* in this book).

3. What is most important when speaking the second language

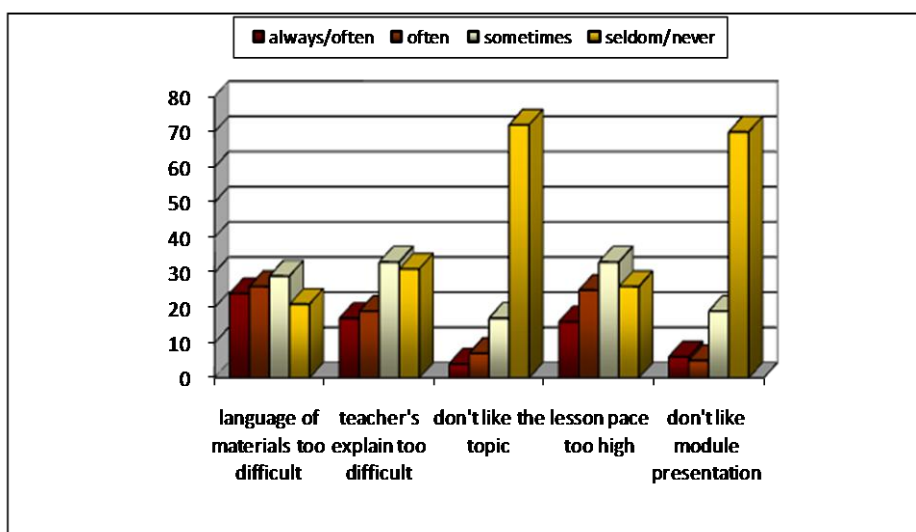
QA: What did you consider important when speaking in a foreign language in this module (in a subject)?



When speaking in the second language the students consider most important the “knowledge of vocabulary” (very important 73%), followed by the “knowledge of contents” (66%). It is interesting to note that “grammar correctness” was not considered a relevant aspect when speaking the language of learning. The least important aspect is the “use of facial expressions, gestures and body movements” (not important 45%).

4. The problems encountered during the modules

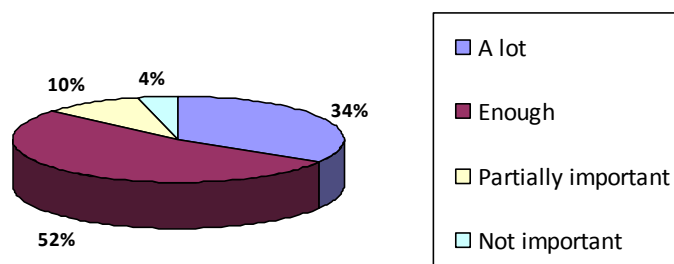
QA: What problems did you have?



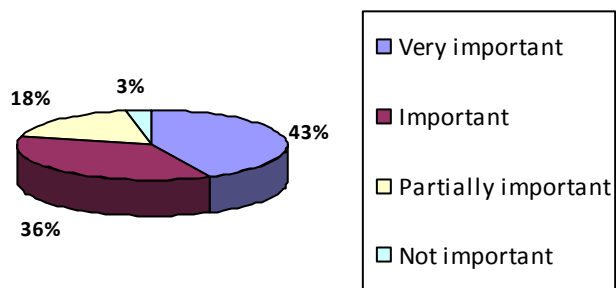
The most common problem for students was the “difficulty of the language of materials” (always 24%, often 26%) and that the “pace of the lesson was too high” (always 16%, often 25%). Another frequent problem was the “difficulty of teacher’s explanations and questions” (always 17%, often 19%). The less frequent problems were that the students “didn’t like the topic of the module” (72%) and “the way the module was presented” (70%).

5. General considerations on the modules.

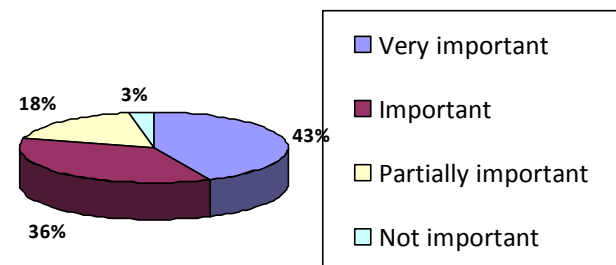
QA: Did this module help you improve your ability to express yourself in the foreign language?



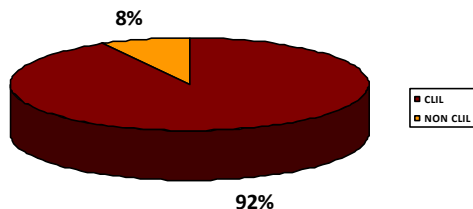
QA: How do you evaluate your learning of the subject studied in the foreign language?



QA: Do you think this CLIL experience will be useful for you?

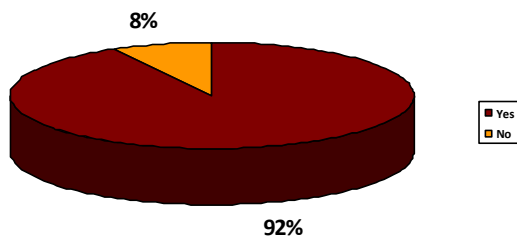


QA: Did you like the experience?



YES : 92%
NO : 8%

QA: If given the choice between CLIL and non CLIL experiences, which would you prefer?



CLIL: 92%
NON CLIL: 8%

Unfortunately we only have one example of peer assessment throughout the project and the data is not enough to provide viable feedback. Peer assessment can help the learners to understand what is expected of them. For example, by reading a fellow learner's lab report in biology and deciding what is good about it and what needs more work, learners develop a clearer idea of what makes a good lab report in terms of both subject and language. This will help them to produce higher quality lab reports in the future. By acting as an audience for a piece of written text, learners start to understand how clearly they need to express their ideas for a third person to understand them. This is particularly important in CLIL, because it can help improve both language skills and subject skills. By experiencing the effect of unclear language, spelling mistakes or confused ideas themselves, learners will be encouraged to use language more carefully to get their ideas across.

There are a number of benefits concerning peer assessment:

- to encourage student autonomy;
- to develop critical judgement by judging the work of others, thereby allowing students to gain insight into their own performance;
- to gain a sense of ownership of the assessment process, thus improving motivation;
- to learn to evaluate their own and their peers achievements "realistically" (lifelong learning);
- to improve key skills development (critical thinking, communication, self-motivation; time management, etc.).

But there are also some problems:

- reluctance of one or more students to participate in process;
- general dislike of assessing/judging friends;
- character conflicts;
- time consuming;
- lack of evaluative/assessment skills;
- lack of accuracy of peer grading.

Clearly, the benefits are more than the drawbacks, because peer assessment:

- provides an insight into individual learning achievements;
- gives information for evaluating the teaching program;
- provides an enriching teaching strategy that engages students in their learning;
- gives further information in order to plan teaching and learning to meet individual student needs;
- enables the targeting of realistic outcomes for students;
- enables students to become aware of their strengths and the areas that need improvement.

Here are some grids we employed in our research:

Self-evaluation student grid

STUDENT'S NAME				
CLASS				
L2:				
SUBJECT				
	General issues			
MY EVALUATION	1 lacking	2 adequate	3 good	4 excellent
a. Evaluation of the lesson as a whole				
b. Content acquisition				
c. Concepts development				
d. Involvement in communication				
e. Use of L2				
f. Problem-solving activities				
g. Individual behaviour				
h. Behaviour in the group				
DIFFICULTIES ENCOUNTERED				
WHAT INTERESTED ME MOST				

Specific issues:

The strategies used and how often:	Always or very often	Often	Sometimes	Seldom/ never
a. I listened to the teacher's explanations.				
b. I answered the teacher's questions.				
c. I answered my mates' questions.				
d. I used the examples presented by the teacher.				
e. I repeated verbally what I had previously heard, read or written.				

f. I tried to express orally, in my own words what I had heard, read or written.				
g. I used images, grids or graphs as a stimulus to speaking.				
h. others:				

When I speak in a foreign language I consider important:	Very important	Important	Partially important	Not important
a. the correct pronunciation of words				
b. the ability to improvise				
c. knowledge of vocabulary				
d. knowledge of the contents				
e. the use of facial expressions, gestures and body movements				
f. grammatical correctness				
g. clarity of exposition				
h. the ability to reformulate				
i. check that the others understand me when I speak				
j. others:				

The problems I had:	Always or very often	Often	Sometimes	Seldom/ never
a. I did not know grammar in the foreign language.				
b. I did not know enough vocabulary in the foreign language.				
c. I did not know the contents of the non-linguistic subject.				

d. I did not understand the teacher's questions.				
e. I was not interested in the non-linguistic subject.				
f. Others:				

Peer assessment grid

	I can do this excellently, quite well, well, poorly.	Peer: You can do this.	Comments
a. Use the information offered by the various media critically			
b. Take down notes/ keywords efficiently so I can use them later on			
c. Do some extensive brainstorming on the various texts and narrow these down to the essential strings in a mind map			
d. Produce a text / an outcome according to the task achievements of the assignment (cohesion, coherence, accuracy, fluency)			
e. Stick to the time schedule			
f. Express orally what I heard, read or wrote			
g. Make use of suggestions and feedback from my study mate			
h. Make use of suggestions and feedback from my teacher			
i. Others:			

TEACHERS' EVALUATION

"How do you evaluate your learning of the subject studied in the foreign language?"

The teachers' questionnaire so far has had 46 replies: 27 from Italy, 10 from Bulgaria, 4 Romania, 3 from Spain, and 1 each from Latvia and Turkey, with an overall female / male ratio of 44:2. Both males were Italian.

Both questionnaires were designed to provide feedback data on the CLIL modules as described in the AECLIL website. As regards the Italian CLIL modules, 15 have so far been produced and applied in 9 schools, so that each school uses an average of 1.7 modules. Each module has different content relating to a different subject. The subjects covered so far include: biology, science, chemistry, history, information technology, maths, physics and geography. The production of the modules was governed by a checklist of available criteria, such as the modules themselves, for inspection on the AECLIL website. It was thus possible to correlate the responses and opinions given in the questionnaire to the basic data, i.e., the modules' content and the principles inspiring them.

All the teachers participated in the project produced project-specific materials. Overall, about 65 teachers participating in the project. As stated earlier, 46 have replied to the questionnaire. 27 (90%) of the total cohort of 30 Italian teachers have thus given their assessment. All the participating schools in Italy are located in Lombardy, specifically in the province of Pavia. All 9 schools are represented in the teachers' evaluation as are all the modules. The same is not true, at least so far, for the students with replies from only 6 schools despite the active participation in the project in other ways.

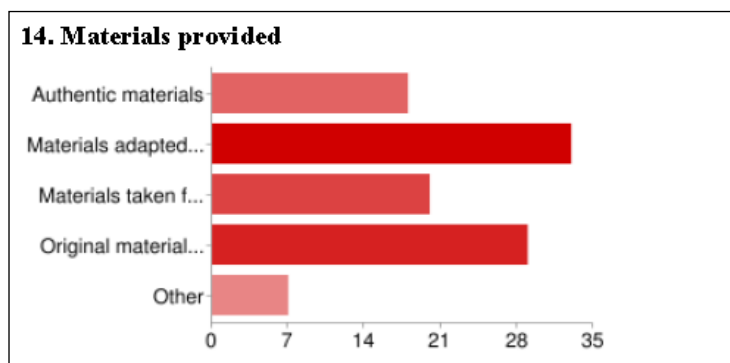
Effectively the teachers are commenting on the success of their own work; in the case of Italy pairs of teachers worked on each module, one a language teacher, one a content teacher. In the case of Bulgaria all 10 teachers have replied to the questionnaire relating to the three modules they produced. In this case, 6 teachers produced the 3 modules in the same way as did the Italian teachers: one content teacher paired with a language teacher. However, in this case 4 additional teachers tested the materials produced by the other 6 colleagues from other schools. In the case of Romania, the 4 teachers tested their own modules.

Currently only 2 teachers, i.e., one class, have implemented the student-as-teacher proposal mentioned in the previous section. The others used a standard CLIL procedure.

I selected only what I thought were the most relevant questions from the teacher questionnaire.

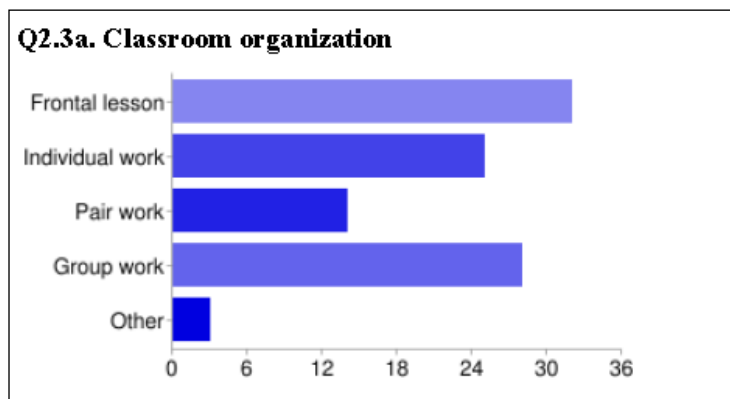
Material provided

This question provides 5 categories for the materials provided in each module. In part this is a critical self-assessment on the part of the participant teachers vis-a-vis the criteria that guided them in the construction of the module content. What is interesting is the rejection of ready-made copied materials, less than 20% suggesting that creativity is a major factor in teacher's motivation to teach and test (Baldry, 2009: 18).



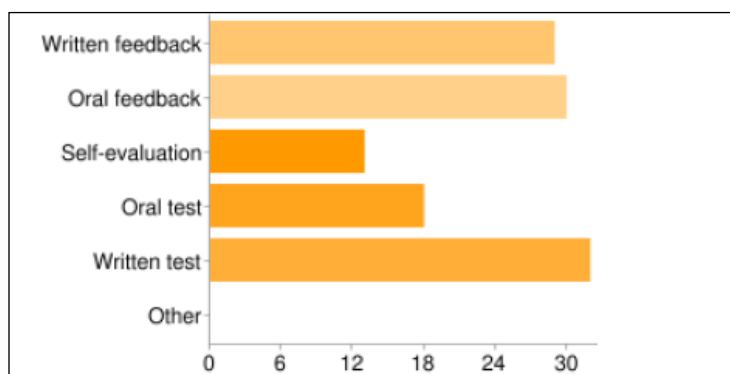
Classroom organization

The data regarding the classroom organization is interesting.



As you can see, frontal lessons are the major teaching technique employed by teachers, but group and pair work are relevant. I think that the effects of the digital age should be such that the reliance on frontal teaching should diminish vis-a-vis other forms of classroom and non-classroom organization since the digital revolution should encourage alternative forms.

Monitoring techniques



Referring to the data on classroom organization, we are not surprised that written tests and feedback are the most popular ways to evaluate student performances and outcomes. Similarly, we can appreciate the fact that self-evaluation does not play a marginal role.

CONCLUSIONS

This chapter has explored the last stages in the AECLIL Project and the map – the pathway if you prefer – it is tracing for CLIL assessment.

Special emphasis has been placed on self-assessment. This kind of assessment encourages students to take ownership of their work through reflection and discussion about the learning process and results. Students are consequently more aware of the learning goals, both with regard to the subject knowledge as well as the language aspects, and are able to integrate this awareness into their own achievements, getting a feeling for progress and personal success. They also enhance their language performance, learn to distinguish between various registers, and become sensitive to subtle lexical and grammatical differences in meaning (Poisel, Feltham, 2009).

Students develop communicative and interpersonal strategies to give helpful qualitative feedback to their peers. Students also acquire intercultural competence through analyzing and reflecting on different conventions and customs, especially in a multicultural classroom, which is an increasingly common occurrence in our classrooms.

A paragraph has also been devoted to understanding what teachers think of this experience, with particular reference to classroom organization and monitoring tools.

Through tables, charts and meaning-compressing diagrams we tried to link this project to the practice theory applied to assessment. We are perfectly aware that a lot has to be explored in the field of assessment and evaluation in CLIL, but our achievements can represent a very good starting point for further analysis and investigation.

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CLIL MODULES

Elena Voltan

THE MODULES IN SCHOOL

The AECLIL Project has involved eleven partners from nine European countries: (see *How Things Started and Developed* in this book). The institutions taking part in the Project are representative of different school levels, from primary schools, secondary schools including lyceums, technical and vocational schools, up to university education, in-service teacher training and informal learning (see *Glossary*)³. In the following pages the main characteristics of all the institutions involved and of all the materials produced are presented through a brief survey.

During the three years of the Project, between 2009 and 2012, the partners have planned, produced and implemented twenty-eight CLIL modules (*) whose main feature is, in fact, their wide variety. Variety from the point of view of the teaching context, the mother tongues, the target languages involved, and the didactic contents, strategies and techniques adopted.

First of all, the variety involves the educational context of each partner, considering the teaching context, i.e., the type of school and the teaching pathways, as well as the language background and policy of each country. Modules from primary schools (1), lower and upper secondary schools (23), university (1) and in-service teacher training (3) have been created (see table 1 for details).

Secondly, the modules show a wide variety from a linguistic point of view, which arises from the high number of languages of the countries involved as well as from the variety of the teaching and target languages in the modules. Consistently with the school context in which the modules were mainly produced, the most represented language is English, which is the target language in 22 modules out of 28, followed by French, the target language in 5 modules, and German, with 1 module.

Another aspect that must be taken into account when analyzing the materials produced, still considering its linguistic features, is the level of proficiency in the teaching languages. With reference to the *Common European Framework of Reference for Languages* (2001), the modules cover a range of levels from A2 to C1, even if most of the modules certify the intermediate levels A2 (7 modules), B1 (12 modules) and A2-B1 (1 module), followed by the higher levels, B1-B2 (6 modules) and B2-C1 (2 modules).

Furthermore, the variety of the educational contexts of the partner institutions led to the realization of modules that range over different subject areas, representing scientific subject matters, such as science and biology (8), chemistry (3), physics (4), mathematics and economics (8), as well as the humanities, such as history (1) and the arts (1).

³ From now on (*).

Table 1. *The modules divided according to the school level*

PARTNER	TITLE OF THE MODULE
<i>Primary School</i>	
Romania – Romanian Reading and Writing for Critical Thinking Association – Cluj Napoca	The Earth, Our House (B1)
<i>Secondary School</i>	
Bulgaria – Lycée professionnel d'économie G.S Rakovsky – Yambol	La monnaie (A2) Le crédit (A2) Economics of Enterprises (B1-B2)
Germany – Gymnasium an der Gartenstraße – Mönchengladbach	Aboriginal Art (A2)
	Young Entrepreneurs. A Business Simulation (B1-B2)
Italy – Rete CLIL della Provincia di Pavia	Redox Reactions: a way to produce energy (A2) A Journey around the Central Nervous System (A2) Equations du premier degré (A2) Intérêt simple (A2) The Magic Triangle: Ohm's Law (A2-B1) Absolutism in England and on the Continent (B1) Database (B1) Plants (B1) Photosynthesis (B1) Periodic Table of Elements (B1) Stars, Life and Chemistry (B1) Forces Applications (B1) Force and Movement (B1) La communication hormonale (B1) Nachhaltige Entwicklung und erneuerbare Energien (B1)
Latvia – Latvian Centre for Curriculum Development and Examination – Riga	Nutrition (B1-B2) Triangles (B1-B2)
Romania – Romanian Reading and Writing for Critical Thinking Association – Cluj Napoca	Unconventional Energy Sources (B1-B2)

<i>University Education</i>	
Turkey – Hacettepe University – Ankara	Kinetic Energy and Work (B1)
<i>In-service Teacher Training</i>	
Latvia – Latvian Centre for Curriculum Development and Examination – Riga	Teaching CLIL in Primary and Secondary School (B2-C1)
Romania – Romanian Reading and Writing for Critical Thinking Association – Cluj Napoca	CLIL through CLIL (B2-C1)
Spain – Universidad Antonio de Nebrija – Madrid	Learning CLIL through CLIL (B1-B2)

Moreover, besides these subjects closely related to the school curriculum, the presence of in-service teacher training contexts has enabled the creation of modules specific to these teaching areas (3 modules).

Some more observations to highlight the relevance of the variety present-ed so far. In fact, a matching among all the variables considered would allow us to make some considerations, at least partially, about the applicability of CLIL modules. It would be possible to compare, each time, modules belonging to the same subject area but with differences in the language level or in student age. See, for example, the modules *Le crédit* and *Young Entrepreneurs. A Business Simulation*, both in the field of economics for secondary students, but the first certifying an A2 level while the second a B1-B2 level, or the case of the physics modules *Kinetic Energy and Work* and *Force and Movement*, which differ only in the students' age, the first being designed for university students and the second for secondary school students. Otherwise, it would be interesting to compare CLIL modules designed for same-age students or with the same language level but belonging to different subject areas; see, for example, modules such as the *Nachhaltige Entwicklung und erneuerbare Energien* in the field of geography and the history module *Absolutism in England and on the Continent*, both designed for secondary school students with a B1 language level, the chemistry module *Periodic table of Elements*, or *Photosynthesis* in the field of biology. Such a comparison among modules would permit us to point out, once the common features have been recognized, the specificities related to each variable, e.g., the subject area or the language level in planning, realizing and implementing a CLIL module.

Moreover, once the variables specific to each module with its peculiar features concerning the planning and the classroom delivery are defined, the proper characteristics of the CLIL teaching approach will come out, such as the interaction activities in the classroom, the prevalence of using the language rather than its explicit knowledge, the use of authentic and differentiated inputs, and the use of a wide range of teaching materials, tools and facilities.

All the modules with their resources can be consulted on the CD. In the following chapters some of the modules delivered will be illustrated, with the aim of representing all the variables previously considered: i.e., the language, the subject areas, the level and the type of the school they are designed for.

For primary school science modules in English, *The Earth, Our House* will be presented. For secondary schools, it will be possible to consult two modules in English in the fields of science, with the module *Nutrition*, and chemistry, with the module *Redox Reactions: a way to produce energy*, as well as a module of economics in French, *Le crédit*, and a geography module in German, *Nachhaltige Entwicklung und erneuerbare Energien*. At the level of university education, a physics module in English will be illustrated, *Kinetic Energy and Work*, and, finally, two modules, *Learning CLIL through CLIL* and *CLIL through CLIL*, will represent the field of the in-service teacher training.

Each module is presented so that it may be possible to notice the characteristics related to its planning as well as those related to its application and classroom delivery. After some general information about the target group, the language, the teaching context and the subject area, the aims of the module are presented, divided into those regarding competence both in the content and in the language aspects and those regarding the acquisition of social work skills. Subsequently the strategies and the activities that are proposed in the module are introduced, as well as the outcomes and expected results and, in the end, the assessment activities and tools and the evaluation criteria.

Some comments are necessary on assessment and evaluation, which is the main outcome of the AECLIL Project. In the presentation of the modules the assessment activities are described and the rubrics and grids (*) used for each module are illustrated.

It is important to note that we are dealing with rubrics and grids that collect a range of criteria and descriptors which are common to all the modules produced in the project and which are expected to be applied as tools for the evaluation process in CLIL modules in general. For an in-depth examination of the process and reflections that led to the creation of these assessment and evaluation tools see *Assessment Tools and Practices in CLIL* and *Evaluation in CLIL* in this book. On the other hand, it seems relevant to the present discussion to underline the high flexibility of these evaluation tools that have been used in the variety of teaching contexts previously presented.

In the presentation of the modules it is also possible to find a detailed description of the classroom activities carried out, each presented through the steps of the students' activities, the tools and resources, and the assessing activities designed for each of them. Finally, space is dedicated to the considerations and comments that the teachers decided to share about their CLIL experience (*) from the perspective of a continuous action-research practice.

THE DEVELOPMENT OF THE MODULES

All the CLIL modules produced inside the AECLIL Project and presented here were initially drafted before November 2010, subsequently undergoing further examinations and revisions that led to their present form. In every revision all different aspects of a CLIL module have been taken into account in an integrated way, considering on the one hand the aspects that specifically concern each module in itself and, on the other, those that are most related to the CLIL approach.

Regarding the first level, the aims of a module, the planning of its classroom delivery, the variety of the materials, and the coherence between its assessment activities and tools and the strategies and tasks carried out have been analysed. According to the CLIL approach, on the other hand, the integration between content and language, the managing of the collaborative space of learning, and the validity of the assessment and evaluation tools are supposed to be the most revealing features.

A FIRST ANALYSIS: MODULE PLANNING AND LESSON DELIVERY

The modules were first analysed by means of a pattern of analysis, the *Checklist* (see *Appendix*), structured in order to point out the different parameters related to the CLIL methodology and the CLIL activators (*). Thus each module has been analyzed from the point of view of both module planning and lesson delivery.

As regards module planning, the aims of the module, the expected outcomes, the “4Cs” of CLIL, that is, content, cognition, communication and culture (*), were considered (Coyle 2007; see also *Teaching and Learning with CLIL* in this book).

Some parameters were introduced in the module planning analysis to evaluate the assessment planning; that is, the presence of formative or summative assessments (Kunnan, 1999) and the definition of criteria and descriptors as tools to enable an integrated evaluation of all CLIL components. This last aspect is, in fact, what has mostly influenced the following steps of the AECLIL Project along with the two implementations carried out, underlining the importance of realizing tools for the evaluation in CLIL.

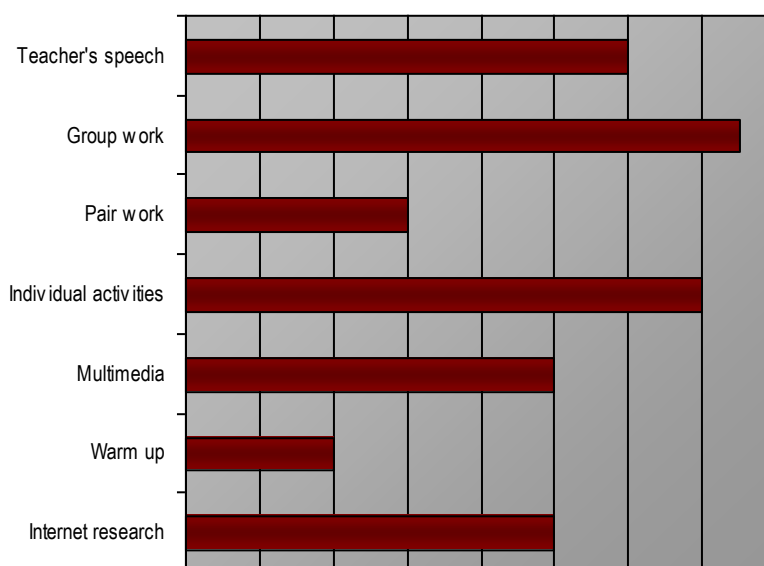
As regards the level of the lesson delivery, this has been examined taking notice of the lesson planning, the choice of the activities, the selection of tools and teaching materials, the identification of the teaching strategies that are most effective in order to link new information with previous knowledge (e.g., KWL strategy, brainstorming, questions, key words), make input comprehensible (e.g. verbal scaffolding, visual aids, key vocabulary emphasizing, speech tuning, graphic organizers), and support learning (e.g. frames, cubing, imitative writing).

Table 2. *A frame to analyze the Lesson Delivery*

CONTENT			CLASSROOM ACTIVITIES
LINK TO PAST LEARNING	MAKING INPUT COMPREHENSIBLE	SUPPORT LEARNING	Teacher’s speech Individual activities
KWL strategy Brainstorming Questions Key-words	Verbal scaffolding Visual aids Key vocabulary emphasizing Speech tuning Graphic organizers	Frames Cubing Imitative writing	Pair work Group work Warm up Multimedia Internet research Laboratory activities Presentations In-class talk

Finally, the classroom management activities were considered (e.g., individual, pair and group work, warm up, teacher’s speech, multimedia support and Internet research), with particular attention to those activities that, according to the CLIL approach, make the learning environment a collaborative space (*) in which a prominent role is played by group work activities (see Table 3) peculiar to the co-operative learning method (Edwards, Mercer, 1987).

Table 3. *Classroom Activities (proportions derived from the data collected from 28 modules).*



All modules were analyzed and commented on in order to carry out both an evaluation and a self-evaluation for the purpose of modifying the modules during the first implementation, which took place between March and June 2011.

After the first implementation

All modules were implemented by the partners who created the modules themselves or, in some cases, by other partners. After the first implementation all modules were analysed and evaluated a second time by the teachers and students who actually tried them out (see *Evaluation in CLIL*).

The *Teacher questionnaire* and the *Student questionnaire* (see *Appendix*) represented the tools to collect the evaluations and the comments about the modules and to highlight their strong and weak points. In fact, the administration of these questionnaires clearly revealed the aspects related to the strategies required to activate the CLIL methodology, dealing in particular with classroom management.

In the *Teacher questionnaire* the teachers involved in the administration of the modules were asked to report the aspects related to the structure of the module they tried out as well as to the classroom management. The questionnaire first took into consideration the aims of each module, evaluating its didactic focus (the integration of content and

language), the activities proposed, whether based on repetitive operations or not, how complex or creative were the operations required and, finally, whether the activities were differentiated or not.

Regarding the classroom management, this was considered from the perspective of the level of interaction in the classroom, taking into account the presence and frequency of interaction among students and between students and teacher, for instance, in individual, pair or group works, as well as with regard to the learning environment.

Furthermore, teachers were provided with a *Teacher self-evaluation questionnaire* (see *Appendix*) in which they were asked to express their impressions and their own considerations about the effectiveness of the strategies, activities and tools they used to accomplish the CLIL methodology. They were also asked to record their opinions on how and how much the CLIL experience (*) influenced their personal teaching experience, as well as to point out the difficulties they might have encountered during the administration.

The students were asked about the same topics through the *Student questionnaire*, where they expressed their comments about the effectiveness and the relevance of the activities they were provided with. In addition, they reported their opinions about the importance and the prevalence of some language abilities over others, as well as about the utility of the materials and the tools used.

On the base of the results gathered from both questionnaires, during the planning of the second implementation it was possible to consider some aspects that emerged as relevant in the CLIL modules and so to carry out some modifications on the first version implemented.

TOWARDS THE SECOND IMPLEMENTATION: MODULE PLANNING, CLASSROOM MANAGEMENT, ASSESSMENT AND EVALUATION

The second implementation took place before February 2012 and the same modules as in the first implementation were tested, revised and modified according to the results and considerations collected, as previously mentioned. What is important to note is the kind of modifications that were carried out and how. Thus, it is possible to say that what was considered while planning and delivering the definitive version of the modules were, on the one hand, the structure and planning of the module itself and, on the other, the specificity of assessment and evaluation in CLIL.

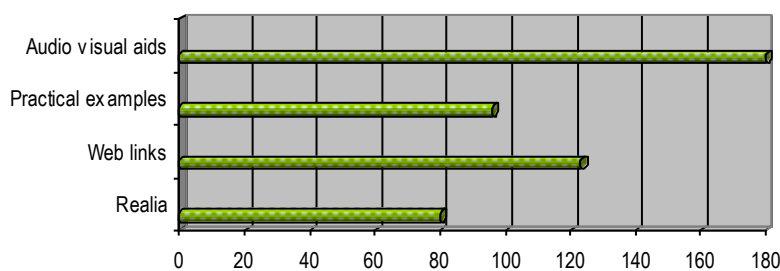
With regard to the first of these two aspects, module planning, the need clearly emerged to satisfy the double-sided aspect of the modules which, on the one hand, show the components of the CLIL approach and, on the other, the specificities that arise from the characteristics of each module itself, according to the teaching context and the aims it is designed for. The same dual needs to be satisfied were managed by analysing the second level of analysis: the assessment and evaluation process. On the one hand, the need for assessment and evaluation tools consistent with the aims and specific aspects of each module and, on the other, the need to create an evaluation tool able to account for the characteristics inherent in CLIL.

An initial analysis at the level of module planning required verifying the adequacy of the tasks according to the language competence of the students. In fact, of basic importance to CLIL is the real integration between the development of the language

competence, that is functions, structures and vocabulary, and the competence in the contents to be learnt. Thus, according to the teaching context, the students' age, educational background and language proficiency, the integration can be achieved by providing the students with a wide range of tasks, materials and inputs by means of which new language and content items are conveyed. The variety of inputs exposes students to a language which is as much as possible authentic as well as helping to develop the main communicative skills, facilitating in this way the learning of content as well. The variety of tasks entails the use of a wide range of tools, strategies and techniques that, in turn, require the activation of many different thinking skills, both lower and higher, by means of an appropriate scaffolding (*).

It would be interesting to note what emerges from the data presented in the following graph, which shows the answers given by a sample of 281 students when asked "Which tools used by teachers have been more helpful?" (see *Student questionnaire in Appendix*). With a total of 180 answers out of 281, the use of audio/visual aids as a stimulus to speaking was considered the most helpful tool to learn, followed by the use of web links, chosen by 123 students.

Table 4. *Teaching tools*



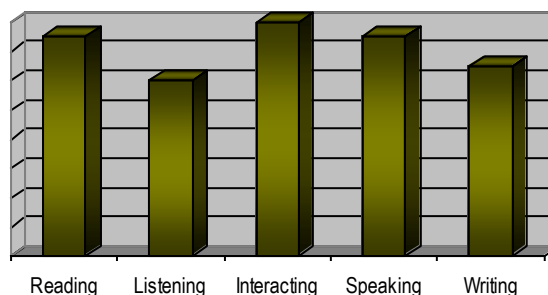
Also clearly emerging in this phase was the need for the thinking skills involved in a module to be consistent with the aims of the module itself and with the assessment activities and the evaluation criteria and descriptors. Therefore, the considerations that led to the second administration concerned first the variety of the didactic techniques mostly used in the modules. The survey on techniques, as well as the perception that students and teachers had about them, was of primary importance both in the module planning phase and during the definition of the classroom management. In this regard, special attention was paid to the prevalence of the development of language use over its explicit knowledge.

From the answers given by students when asked: "In which of these situations have you used the foreign language and how often?" (see *Student questionnaire and Evaluation in CLIL* in this book) what primarily emerged was the prevalence of language use during the interaction between the teacher and the class.

In fact, with regard to this last point, the presence of interaction activities in the classroom was also noted among peers or with the teacher; e.g., with pair, group or in plenum work. The table below shows the proportions for the five communicative skills

involved in the classroom activities that emerged from the first survey and which were then confirmed by the results from the *Teacher* and *Student questionnaires*.

Table 5. *The proportions of the four communicative activities in the modules (data collected from 28 modules).*



It should be recalled that the CLIL learning environment is defined as a collaborative space where the co-operative learning method is fundamental. For instance, the activities in which it is possible to recognize a way of interaction oriented to exploratory talk and critical talk (*) play a leading part. Nevertheless, according to the integration of language use and the managing of language and content, it is also possible to find in the modules activities more oriented to the development of meta-talk and expert talk (*) (Mercer, 1995).

As mentioned above, after the first implementation it was also possible to deal with the aspect of assessment and evaluation in CLIL from a deeper perspective. The first analysis of the modules already accounted for assessment planning from the point of view of the selection of tasks, summative or formative, and of their scope (that is, their capability to cover all the CLIL components in an integrated way), but also of the definition of criteria, descriptors and scores.

The analysis of the assessment process was always carried out considering the consistency between the assessment activities and the requirements that a test should meet: validity, reliability, fairness and wash-back (*) (Bachman, Palmer 1996). The assessment activities provided in the modules were first grouped together on the basis of their cognitive complexity; that is, they were split into low complexity activities (e.g., true/false, matching, cloze) and high complexity activities (e.g., writing, making presentations, manipulation). Subsequently, their consistency with the contents and the tasks presented in the module, as well as with the evaluation criteria was considered (see *Assessment Tools and Practices in CLIL*).

However, what is important to underline in these pages are the considerations that led to the realization of the main results of the analysis and implementation of the modules; in other words, the tools for assessing and evaluating in CLIL. The tools designed are based on the key components of CLIL and therefore are common to all the modules produced in the form of grids and rubrics (*), holistic and analytic.

As previously stated, the need to be satisfied in the elaboration of the grids was the identification of descriptors able to point out the achievement of the specific aims of the module itself as well as the aims related to CLIL. In this sense, even if the wording

in the descriptors might be quite different from one module to another, also from the perspective of their future applications, what is important to highlight is that the descriptors and criteria in each grid are meant to evaluate tasks and content that show the same level of complexity.

One of the rubric created for the project, the *Holistic rubric* (see module *Le credit* and table 5 in *Assessment Tools and Practices in CLIL*) presents descriptors and scores, so it is appropriate to check specific knowledge, such as in activities where only one answer is required, for example, multiple choice or true/false, and where students' creativity is not required.

The same rubric was combined with laboratory performances and also applied to scientific modules, as we can see in table 6, which is part of the chemistry module *Periodic Table of Elements*. The integrations to the *Holistic rubric* are shown in bold.

Table 6. *Assessment rubric for experimental studies*

SCORES	DESCRIPTORS
1 Unsatisfactory	Student demonstrates no knowledge of the subject or of the targeted specific vocabulary. Student isn't able to carry out experimental activities even if guided.
2 Almost satisfactory	Student demonstrates insufficient background knowledge and uses specific vocabulary wrongly. Student isn't able to solve exercises that apply the algorithm taught in the lesson. Only if heavily guided can student carry out experimental activities.
3 Satisfactory	Student demonstrates essential knowledge of the subject. Student uses most of the specific vocabulary correctly. Students solves exercises that apply the algorithm taught in the lesson correctly. If guided, student carries out experimental activities.
4 Good	Student demonstrates complete knowledge of the subject. Student uses specific vocabulary correctly and appropriately. Student solves at least one new type of exercise correctly. Student carries out experimental activities, even if sometimes he needs a little support.
5 Excellent	Student demonstrates complete and thorough knowledge of the subject. Student solves new types of complex exercises correctly. Student carries out experimental activities independently.

The structure of the *Analytic grid* instead can show criteria concerning content, language and, in most cases, co-operative work. This grid is meant to be used in order to

evaluate communicative competences – i.e., reading, writing, listening, speaking and interacting – with a range of criteria covering different levels of complexity (see module *The Earth, Our House*).

This grid has also been applied to assess specific tasks, such as written compositions and oral presentations and it was used as well to assess activities where a process is involved, such as a laboratory report, maths or science tasks, suggesting a completely integrated evaluation of language and content (see *Assessment Tools and Practices in CLIL*).

In the end, according to what has heretofore been stated, the tools elaborated are intended to be flexible enough to apply to a wide variety of teaching contexts and to fulfil the requirements of an integrated evaluation in CLIL.

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CLIL FOR PRIMARY SCHOOL

THE EARTH, OUR HOUSE

Carmen Maria Chişiu

The Earth, Our House is a CLIL module for 9-11-year-olds who learn about environmental issues through reading, discussions, art work and technology-related activities.

The course has been given successfully in at least two schools by two different teachers in Romania.

AECLIL partner	Romanian Reading and Writing for Critical Thinking Association, Cluj Napoca, Romania
Topic	Eco-pirates Recycling
Subject area	Environmental education
Language	English
Language Level	B1 or above
Target group	9-11-year-olds
Time	Adjustable to meet needs; approximately 11 academic hours over the course of a term/semester
Aims	<ul style="list-style-type: none"> - to seek information about recycling - to communicate about recycling using appropriate vocabulary in English - to identify the effects of recycling materials on our environment - to raise awareness of how to protect the environment - to successfully cooperate with peers
Products/outcomes	<ul style="list-style-type: none"> - posters to promote care for the environment - increased awareness of environmental issues - improved English language skills
Classroom activities	The learning activities include balanced use of teacher's presentation, individual, pair and group work, reading, discussions, art work, and internet search

Assessment tools	<ul style="list-style-type: none"> - worksheets - questionnaires - individual scorecards of progress - group portfolios
Assessment criteria Content Language Cooperative work	<ul style="list-style-type: none"> - correct use of recycling-related vocabulary in simple sentences in L2 - identification of relevant information from various sources of information - originality in preparation and execution of visual materials (drawings, symbols, images, photos) - ability to assess own progress - initiation of dialogue in L2 - understanding of oral directions in L2 - reading aloud a familiar text in L2 - ability to cooperate in carrying out group tasks
Resources	<ul style="list-style-type: none"> - questionnaires - images of recyclable items - ppt presentation including eco-pirates map and story - visuals displaying topic-related vocabulary - photos, albums - dictionary - worksheets - maps - cardboard, paper - markers, crayons, watercolours - glue - computer, printer, internet - scissors, yarn, needles - coins, buttons

ACTIVITIES

Lesson 1

Students' work

Preparatory activity: Class divided into groups of four. Teams stay together throughout activities.

Each student is given a questionnaire to collect answers from parents, siblings, grandparents, neighbours, etc. (at least from five people from at least two different families). Students ask the questions in Romanian.

Resources

- worksheet 1: *Initial questionnaire*.

Assessment

- filled-in questionnaire.

Lesson 2

Students' work

Each student uses the filled-in questionnaires, including their own answers. They work in groups to centralise data and draw graphic representation of information collected. Students name objects made of materials that can be recycled.

Resources

- worksheet 1: *Initial questionnaire*;
- sample graphics;
- images of objects made from recyclable materials.

Assessment

- direct observation of group work;
- items included in the portfolio.

Lesson 3

Students' work

Students learn basic words and expressions in a Jigsaw setting (home groups alternate with expert groups).

Each student receives a list of all the words they have learned. Students colour the words learned in the expert group. Experts teach home group members the new words.

Group work: students in groups answer questions written individually on a poster. Posters are displayed on the wall. Groups rotate clockwise and answer question after having read the answers of previous groups. In the end, students discuss and rank all the answers, noting with 1 the most interesting or appropriate response, 2 the next most interesting, and so on.

Resources

- worksheet 2: *Task for expert groups*;
- *Questions* individually written on a poster and pinned to the wall.

Assessment

- direct observation of task performance;
- quality of answers and explanation for ranking answers.

Lesson 4

Students' work

The students fill in the worksheet with names of things that can be recycled in each container. They cut out the images of these things and glue them according to the containers: plastic, cans, glass, textiles, aluminium. They label every image with the name of the item shown. Products are displayed. Groups rotate to look at each product and

analyse the others' work. They add new information to the posters or put a question mark if something is not clear or incorrect. Groups rotate until they get back to their poster. They analyse the additions and the questions, offering their responses to the entire class.

Each student writes down words from Recycle Vocabulary and memorizes them. Then each student corrects and counts the words they have written. Then they fill in the matrix in worksheet 9, Table 1, Line 1.

Resources

- worksheet 3: *Instruction for teachers*;
- images;
- scissors;
- glue, pens/markers;
- worksheet 9: *Self-evaluation*.

Assessment

- direct observation of task performance using the grid;
- self- and peer assessment.

Lesson 5

Students' work

Each student writes in his/her notebook words from the Recycle Vocabulary and memorizes them. They will monitor their progress using worksheet 9.

Each student reads his/her words to his/her desk mate. With the desk mate's help, each student corrects and counts the words they have written. They fill in line 2 in table 1, worksheet 9, and reflect on progress.

Each student makes up at least one sentence in L2 using the words written and/or mentioned by classmates. Group feedback and correction.

Students receive worksheet 4 and stick the correct eco-label above each picture. Then they write suggestions for how to save energy. Each student finds a pair to read to them what they have written.

Resources

- worksheet 9: *Self-evaluation*;
- worksheet 4: *Task and materials*;
- markers.

Assessment

- self- and peer assessment;
- direct observation of task performance and analysis of products using grid.

Lesson 6

Students' work

Students read *The Story of the Eco-Pirates*. Within the groups, students monitor and if necessary correct each other's pronunciation.

Students discuss the story. Taking turns, they ask each other quiz questions.

Students draw on the map the itinerary of the Eco-Pirates' trip and find out where the eco-treasure is buried. Pairs share their work.

Resources

- worksheet 5: *The Story of the Eco-Pirates*;
- worksheet 6: *Map*.

Assessment

- direct observation of task performance using the grid.

Lesson 7

Students' work

Students watch the projection of the Eco-Pirates' story. They receive the written text of the story with some words missing.

They fill in the gaps while watching the presentation. Then they check and share. Students draw their Eco-Paradise, in which they include their favourite sports, their eco-friends, their magic flowers, and their favourite fruit. In groups of four, the students share their work.

Resources

- video presentation;
- worksheet 7: *Fill in the gaps*;
- paper, crayons, water colours, glue, scissors, etc.

Assessment

- direct observation of task performance and analysis of products using grid.

Lesson 8

Students' work

Pair work: each student writes as many words and sentences from the Recycle Vocabulary as he or she can remember. Each student reads what his or her desk-mate has written.

Together they correct and count words and sentences to fill in the tables in worksheet 9.

Students reflect on their progress.

In pairs, students continue the Eco-Pirates story or create a new one in which they use at least 15 words and phrases from the Recycle Vocabulary. They may use dialogue. They highlight in the text specific words related to recycling. Pairs share and classmates give feedback.

Resources

- worksheet 9: *Self-evaluation*;
- computer, internet;
- dictionary;
- albums.

Assessment

- peer and self-assessment;
- direct observation of task performance and product analysis using the grid.

Lesson 9

Students' work

In groups, students make a poster for an environmental campaign. They use information found on best practices of other countries about materials that can be recycled and methods of recycling, where and how energy can be saved, how we contribute to the ecological balance, etc.

Students prepare an exhibition.

At home, students are asked to repeat the survey. Students ask their parents, siblings, grandparents, neighbours, etc.; at least five people from at least two different families.

Resources

- cardboard, paper, markers, glue, crayons, water-colours;
- photos, printer, computer, internet;
- dictionary, albums, scissors, etc.

Assessment

- direct observation of task performance and product analysis using the grid.

Lesson 10

Students' work

Students visit the poster exhibition. Groups analyse the posters. They ask questions and express opinions.

Students fill in the questionnaire by themselves.

They use the questionnaire in English. They centralize the data and prepare the graphic representation. Students assess the progress by comparing the results to those of the initial questionnaire. They discuss findings and express opinions.

Resources

- notepad, sticky notes;
- worksheet 8: *Final questionnaire*.

Assessment

- portfolio, including filled in questionnaires;
- peer evaluation;
- direct observation and product analysis using the grid.

Lesson 11

Students' work

Students make a list of actions that could be achieved in the group they live in (class, family) to help the ecological balance. Students discuss and rank answers.

Students write as many words and sentences from the Recycle Vocabulary as they can remember. Self- and peer correction: each student reads words written by his desk-mate. Then they fill in the tables in worksheet 9 with the number of correct words and sentences. Students analyse and assess progress.

Resources

- flipchart sheets, sticky notes, markers;
- worksheet 10: *Analytic assessment grid for content, language and cooperative work* (see previous pages).

Assessment

- direct observation of task;
- performance;
- portfolio analysis;
- self- and peer assessment.

Analytic assessment grid for content, language and cooperative work

	Criteria	5 excellent	4 good	3 satisfactory	2 almost satisfactory	1 unsatisfactory	Score
CONTENT	Use of words learned about recovery, recycling and reuse in simple sentences	Student uses all new words correctly and appropriately in simple sentences.	Student uses at least 15 new words correctly and appropriately in simple sentences.	Student uses at least 10 new words correctly and appropriately in simple sentences.	Student uses at least 5 new words in simple sentences.	Students uses less than 5 new words in simple sentences.	
	Identification of relevant information from various sources of information	Student identifies relevant information from at least four sources of at least three different types.	Student identifies relevant information from at least three sources of at least two different types.	Student identifies relevant information from at least two sources (possibly of the same type).	Student identifies relevant information from at least one source.	Student does not identify relevant information from any source.	
CREATIVITY	Originality in preparation and execution of visual materials (drawings, symbols, images, photos), to raise awareness of ecological life-view	Student has at least 3 original ideas in designing and preparing visual materials (drawings, symbols, pictures, photos) to raise awareness of recycling.	Student has at least 2 original ideas in designing and preparing visual materials (drawings, symbols, pictures, photos) to raise awareness of recycling.	Student has at least one original idea in designing and preparing visual materials (drawings, symbols, pictures, photos) to raise awareness of recycling.	Student has some contribution to designing and preparing original visual materials (drawings, symbols, pictures, photos) to raise awareness of recycling.	Student has no contribution to designing and preparing original visuals materials (drawings, symbols, pictures, photos) to raise awareness of recycling.	

	Criteria	5 excellent	4 good	3 satisfactory	2 almost satisfactory	1 unsatisfactory	Score
EVALUATION	Ability to assess own progress	Student completes in a graph the number of words and phrases learned in four exercises.	Student completes in a graph the number of words and phrases learned in at least three exercises.	Student completes in a graph the number of words and phrases learned at least two exercises.	Student completes in a graph the number of words and phrases learned in at least one exercise.	Student never records the number of words and phrases learned.	
LANGUAGE	Use of language Speaking: To seek dialogue	Student responds very well orally to messages related to recycling.	Student responds well orally to messages related to recycling.	Student responds orally in a satisfactory manner to messages related to recycling.	With the teacher's or peers' help, student responds orally to messages.	Student does not respond to oral messages at all.	
	Use of language Listening: Understanding of oral directions related to the recovery, recycling, reuse	Student responds promptly to all oral directions in L2.	Student responds promptly to most oral directions in L2.	Student responds to most oral directions in L2 after they have been repeated.	Student responds to some oral directions in L2 after they have been repeated.	Student never responds to oral directions in L2.	
	Use of language Reading: Reading aloud a familiar text in L2	Student always reads familiar text in L2 correctly.	Student reads familiar text correctly in L2 most of the time.	Student reads at least three sentences correctly in L2 without help.	Student reads at least three sentences correctly with little help from teacher or peers.	Student reads fewer than three sentences correctly despite significant help from teacher or peers.	
	Use of language Writing	Student writes original sentences correctly and makes minor mistakes when using unfamiliar structures or words.	Student writes original sentences with some minor mistakes, but does not attempt to use unfamiliar structures.	Student writes sentences with mistakes in familiar structures or words, and does not attempt to use unfamiliar structures.	Student writes incomplete or incomprehensible sentences.	Student writes incomplete or incomprehensible words.	

COOPERATIVE WORK	Ability to cooperate in carrying out group tasks	Student performs very well as a group member all the time, demonstrating initiative, organization skills and continuous encouragement of all group members to engage in the activity.	Student performs well as a group member most of the time, demonstrating initiative and support for other members.	Student sometimes performs well as a group member, demonstrating some initiative and support for other members.	At least once, the student has initiative or offers support for other members.	Student does not perform well as a group member at any time.	
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REFLECTION AND COMMENTS

In some of the lessons, there are questions which require a reasoned opinion or argumentation. This has been found to often exceed the capacity of children aged 9-11.

As concerns the assessment grid, the key evaluation criteria used include content (knowledge, creativity, and evaluation), language (understanding, speaking, reading and writing) and teamwork, which help provide a complex image of the students' learning.

The students who completed this module mostly enjoyed the interactive, cooperative learning style of the lessons, the art work they put into the posters, and the fact that they could share their learning from outside the classroom (from family) with peers.

CLIL FOR SECONDARY SCHOOL

LE CREDIT

Mariana Tsonkova

Le module comprend 10 leçons et un test. La durée totale est de 14 heures, 12 heures pour les 10 leçons et 2 heures pour le test d'évaluation. Le thème relève du domaine des banques et vise une étude globale du « crédit » dans tous ses aspects. Les élèves acquièrent des connaissances théoriques sur la matière et apprennent des notions et des définitions. Les compétences et les savoir-faire acquis leur seront nécessaires lors des stages effectués en Bulgarie et en France.

AECLIL partenaire	Lycée professionnel d'économie G.S. Rakovsky, Yambol, Bulgarie
Sujet/thème	Le crédit – types, formes, taux d'intérêt
Domaine	Économie/Banques
Langue	Français
Niveau de langue	A2+
Groupe ciblé	Classe de dixième
Durée	12 heures
Objectifs	<p><i>Contenu :</i></p> <ul style="list-style-type: none"> - décrire le mécanisme général du crédit - expliquer tous les sens du crédit - apprendre l'importance du crédit - connaître les formes du crédit - faire l'analyse du crédit commercial - connaître le mécanisme du TI (taux d'intérêt) - apprendre la formule du TI - comprendre les théories sur le TI - expliquer les TI les plus courants - connaître les facteurs d'influence. <p><i>Langue :</i></p> <ul style="list-style-type: none"> - apprendre des expressions avec le mot « crédit » - apprendre un lexique spécialisé <p><i>Compétences sociales :</i></p> <ul style="list-style-type: none"> - pouvoir communiquer au guichet
Products/outcomes	Dépliants, diaporama, connaissance et utilisation du lexique spécialisé.

Activités en classe	<ul style="list-style-type: none"> - présentation - explication - lecture de documents en ligne et sur papier - formulation de définitions - questionnaire - multimédia - travail en couples et en groupes - recherche de sites internet - rédaction d'un questionnaire et d'une enquête - élaboration d'un diaporama - composition de questions
Moyens d'évaluation	<ul style="list-style-type: none"> - observation directe - test - auto-évaluation - questionnaire.
Critères d'évaluation Contenu Langue Travail en équipe	<ul style="list-style-type: none"> - bien comprendre et expliquer la partie théorique, définitions et explications - utiliser correctement les termes se rapportant au crédit - bien identifier les termes français en les comparant avec les termes bulgares - formuler en groupes des questions sur les différentes leçons
Ressources	<ul style="list-style-type: none"> - <i>Économie générale</i>, Le Bolloch, Le Fiblec - <i>Dictionnaire des affaires</i> - dépliants de publicité en FR/BG - <i>Банково дело</i>, РАДКО РАДКОВ - www.lesclesdelabanque.org. - test

ACTIVITÉS

Activités du professeur avant les cours :

- choix des manuels et des ressources via internet : sites, dictionnaires etc. ;
- recherche et sélection des documents/dépliants de publicité bancaires en français et en bulgare .

Leçon 1 : Les différents sens du crédit

La classe est divisé en quatre groupes. Les élèves cherchent les différents sens du mot « crédit » et analysent les explications pour trouver un sens commun. Chaque groupe choisit un porte-parole/rapporteur qui écrit les significations au tableau.

Leçon 2 : Les types de crédit

Les élèves en groupes font l'étude des ressources pour y trouver les types de crédit en français et les identifier avec les équivalents bulgares. Ils écrivent au tableau et dans les cahiers. Ils jouent le jeu du pendu. Ils rédigent les explications.

Ils formulent des questions sur les types de crédit, par exemple : « Qu'est-ce qu'un crédit croisé ? » ou bien sur quelque terme des définitions : « Que signifie le mot « épargne », « remboursement » etc. ?

Leçon 3 : L'importance et les formes du crédit

Les élèves travaillent en groupes avec le *Dictionnaire des affaires* et le manuel en bulgare pour dénicher les points d'importance du crédit. Ils emploient des formes verbales en s'exerçant après à les transformer en formes nominales : *créer – création, valoriser – valeur, épargner – épargne* etc. Les élèves sortent un à un au tableau pour noter l'information trouvée. On essaie de formuler des explications sur les formes du crédit.

Leçon 4 : Le crédit commercial: avantages et inconvénients

Après avoir trouvé et noté les formes du crédit les élèves réfléchissent en groupes sur les avantages et les inconvénients du crédit commercial. On essaie de transformer les explications en formules synthétisées.

Leçon 5 : Les instruments du crédit

Les élèves étudient les différents instruments proposés par les banques et les autres institutions financières. Ils essaient de formuler des explications.

Leçon 6 : Définition de l'intérêt

Les élèves cherchent une explication du terme « intérêt ». Ils se mettent d'accord sur la plus précise pour en formuler la définition. On fait après un *mindmapping* avec les termes se rapportant à l'intérêt.

Leçon 7 : Formule pour calculer l'intérêt

Les élèves cherchent en groupes préalablement à comprendre la formule pour calculer l'intérêt pendant un cours de maths. Ils comparent les sigles français aux sigles bulgares et essaient de faire de petits calculs et de résoudre des problèmes de maths liés au thème de l'intérêt.

Leçon 8 : Théories sur la nature de l'intérêt

Les élèves lisent les théories (4) sur la nature de l'intérêt en bulgare et en français et essaient d'en donner une explication. Ils notent au tableau et dans les cahiers.

Leçon 9 : Types de taux d'intérêt

Les élèves effectuent une recherche dans le manuel bulgare et dans le *Dictionnaire des affaires* sur les types de taux. Après en avoir trouvé une bonne dizaine ils essaient de formuler des définitions en répondant à des questions du type: « Qu'est-ce qu'un taux directeur ou un taux actuariel ? » Ils notent dans les cahiers et au tableau. Ils jouent au jeu du pendu avec les termes trouvés.

Leçon 10 : Facteurs d'influence sur le taux d'intérêt

Les élèves effectuent une recherche dans le manuel bulgare et dans le *Dictionnaire des affaires* sur les facteurs d'influence sur le taux d'intérêt.

Après en avoir trouvé ils essaient d'expliquer. Ils notent dans les cahiers et sur le tableau les explications formulées. A la fin du cours les élèves élaborent une liste de verbes employés avec le taux d'intérêt.

Les élèves construisent un diaporama sur la base de dépliants de promotion du crédit de consommation et du crédit immobilier dans leur banque virtuelle.

Remarque : Les deux derniers cours sont employés pour le test sur le crédit.

Test

Le test consiste en 9 exercices différents qui ont pour but d'évaluer les connaissances théoriques des élèves sur le crédit – répondre à des questions à choix multiple, trouver le terme à partir d'une définition, compléter les mots manquants, compléter une grille. Chaque exercice comporte des points qui donnent la note totale.

Holistic rubric

Scores	Descriptors	Number of students
1 Unsatisfactory	Student demonstrates no knowledge of the subject or of the targeted specific vocabulary.	
2 Almost satisfactory	Student demonstrates insufficient background knowledge and uses specific vocabulary wrongly. Student isn't able to solve exercises that apply the algorithm taught in the lesson.	
3 Satisfactory	Student demonstrates essential knowledge of the subject. Student uses most of the specific vocabulary correctly. Students solves exercises that apply the algorithm taught in the lesson correctly.	

<p>4 Good</p>	<p>Student demonstrates complete knowledge of the subject. Students uses specific vocabulary correctly and appropriately. Student solves at least one new type of exercises correctly.</p>	
<p>5 Excellent</p>	<p>Student demonstrates complete and thorough knowledge of the subject. Student solves new types of complex exercises correctly.</p>	

RÉFLEXIONS ET COMMENTAIRES

Je voudrais partager mon expérience avec d'autres professeurs pour qu'ils n'hésitent pas à exploiter la méthodologie CLIL/EMILE. Grâce à elle, j'ai pu faire avancer presque tous les élèves. De plus, les connaissances acquises en harmonisant discipline et langue auront un impact positif sur la formation professionnelle des jeunes banquiers dont certains seraient concurrentiels sur le marché européen du travail. Leur participation au travail avec les modules les a motivés à poser candidature pour un stage Léonardo da Vinci dans des banques en France. Deux autres ont été effectués en 2005 et en 2008 dans des banques à Marseille. Un projet Léonardo da Vinci a été déposé au mois de février 2012.

Dans le CD on trouve

- les possibles solutions des travaux faits par les élèves
- le test sur le crédit
- la grille holistique d'évaluation
- un questionnaire pour le diaporama fait par les élèves
- le diaporama fait par les élèves
- le diaporama *Les taux d'intérêt simples et les taux d'intérêt composés* fait pour une leçon de mathématiques.

REDOX REACTIONS: A WAY TO PRODUCE ENERGY

Cristiana Merli and Katia Maculotti

The module covers oxidation-reduction reactions, known as redox. After a first general introduction to the reactions, their use both in daily living and in the laboratory is illustrated, suggesting a simple experiment. Furthermore, the use of redox for the creation of batteries, starting from Volta's, is presented. Exercises help to teach new concepts concerning chemistry and stimulate the use of the English language by introducing new words, improving grammar and favouring oral and written appropriateness in the management of discourse.

AECLIL Partner	Rete CLIL della provincia di Pavia, I.I.S. Faravelli, Stradella, Italy
Topic	Redox reactions
Subject area	Chemistry
Language	English
Language Level	A2 and above
Target group	15/16-year-old students, Computer Studies College
Time	12 hours
Aims	<p><i>Content and social skills:</i></p> <ul style="list-style-type: none"> - ability to distinguish redox reactions from other types of reactions - ability to distinguish one type of redox reaction from other types of redox reactions (e.g. combustion and corrosion are redox reactions but they have different characteristics) - ability to identify oxidant and reduction agents - ability to balance redox reactions - ability to recognize existing relations between chemical reactions and electrical energy - ability to perform basic laboratory activities <p><i>Language skills: development of</i></p> <ul style="list-style-type: none"> - the abilities of listening, reading, writing and speaking - the appropriate scientific vocabulary
Products/outcomes	Written report of the experiment with a final brief oral report in English
Classroom activities	<ul style="list-style-type: none"> - teacher's speech - power point presentation

	<ul style="list-style-type: none"> - group and individual activities (both written and in the laboratory) - audio/video listening
Assessment tools	<ul style="list-style-type: none"> - written report - final written test - laboratory experiment - assessment grid
Assessment criteria Content Language Cooperative work	<ul style="list-style-type: none"> - <i>content and cooperative work</i>: knowledge of given topics, ability to work out concepts and rework formulae, problem solving - <i>language</i>: appropriateness, correctness, richness in vocabulary
Resources	<ul style="list-style-type: none"> - power point file - conceptual map - questionnaires - worksheets - internet - video - text

ACTIVITIES

Lesson 1

Students' work

Students are introduced to the topic thanks to a power point presentation. At first they are given a sheet containing the key words to understand the content, which teachers will explain and make clear. After that they are required to take notes directly from the projected file according to the teachers' further explanations. The file first provides examples of redox phenomena as observed in real-life situations (e.g.: rust, decay, corrosion, combustion, biological processes). These examples are also explained by the help of pictures. There are also play-on-words and pictures to teach the basic concepts. Reduction and oxidation are then explained in a more technical way through formulae. Hints for balancing them are also given.

Students listen to the presentation, take notes and interact with teachers by asking questions when concepts are not clearly understood. Only English will be accepted as the language of interaction, in order to improve and stimulate the use of vocabulary and linguistic fluency on the topic.

In the end, students are given a conceptual map to fill in.

Resources

- worksheet 1: *Redox Key Words*;
- power point file: *Redox Reactions*;
- worksheet 2: *Conceptual Map*.

Assessment

- evaluation of conversational skills through interaction.

Lesson 2

Students' work

After revising the notes taken, students are asked to fill in a questionnaire with open answers on the contents in the power point file. Answers are then discussed in class and further explanation is provided, when required. Interaction with teachers is stimulated by correcting and self-correcting mistakes both about the content and the language used in discussion.

Resources

- students' notes;
- worksheet 3: *Questionnaire*.

Assessment

- filled-in questionnaire;
- direct observation of communicative skills in student-teacher interaction;
- understanding content.

Lesson 3

Students' work

Students are given practical examples of redox balancing, which are first explained by the teacher on the blackboard and with the use of the Periodic Table of Elements. Note-taking activity is once again stimulated and student-teacher interaction promoted. In the end students are given a worksheet to practice balancing through a series of possible reactions to develop by assigning oxidation numbers and balancing reactions.

Resources

- *Periodic Table of Elements*;
- worksheet 4: *Redox Exercises*;
- blackboard.

Lesson 4

Students' work

Students are shown a video of a laboratory experiment dealing with an example of a redox reaction. A glossary of the main tools used in a chemistry laboratory activity is given so as to allow teachers to refer to these tools in English without misunderstanding on the part of students. Pronunciation is pointed out and practiced. Discussion on the images shown is promoted in English only.

Resources

- video: *Redox Demo*;
- worksheet 5: *Lab Tools Glossary*;

Assessment

- direct observation on listening comprehension;
- pronunciation appropriateness;
- communicative skills.

Lesson 5

Students' work

Laboratory reproduction of the experiment previously viewed in the video. Students are divided into groups chosen by the teachers according to their attitude, basic knowledge and technical ability in the lab. The experiment is reproduced under the supervision of the teachers to ensure safe use of materials and the respect of the procedures.

After that students are asked to write a report in English on their experience and to work on a brief oral exposition of laboratory work.

Resources

- Video: *Redox Demo*;
- Chemistry Lab.

Assessment

- direct observation of group work and task performance;
- language skills: speaking, writing.

Lesson 6

Students' work

A text is provided for reading comprehension activities. Students get information on a famous example of the practical exploitation of redox reactions in the creation of a battery. Volta's pile is described and details about its functioning are given. In addition, students are given materials about Volta's life experience and his knowledge of chemical processes. Discussion on the topics provided is once more encouraged after the proposal of a text to evaluate correct comprehension of the materials examined.

Resources

- text: *Volta's Pile*;
- worksheet 6: *Reading Comprehension*.

Assessment

- language skill: reading;
- filled-in questionnaire (ref. worksheet 6).

Lesson 7

Students' work

At this stage students are asked to complete a final test based on knowledge acquired both as far as the contents explained are concerned and their practical ability to deal with chemical reaction balancing.

Resources

- worksheet 7: *Final test*;
- worksheet 8: *Assessment grid* (see below).

Assessment

- evaluation on knowledge acquired and its application to given situations;
- language skills: reading, writing.

Lesson 8

Students' work

Corrected papers are redistributed to students and the most common mistakes underlined and analysed through a checklist on the blackboard. Students are stimulated to ask questions on individual mistakes, when needed. A final discussion about the experience is promoted during which students are asked about their impressions of the whole experience.

Resources

- students' final tests
- blackboard
- worksheet 8: *Analytic assessment grid for content, language and cooperative work* (see below)

Assessment

- evaluation of conversational skills through interaction

Analytic assessment grid for content, language and cooperative work

	Criteria	5 excellent	4 good	3 satisfactory	2 almost satisfactory	1 unsatisfactory	Score
CONTENT	Use of basic subject concepts and knowledge (what)	Has acquired all the basic concepts and principles of the topic. Well structured, correct and comprehensive explanation; excellent personal evaluation	Has acquired most of the basic concepts and principles of the topic. Generally well structured, correct and adequate explanation; good personal evaluation.	Has acquired some basic concepts and principles of the topic. Sufficient explanation, with a limited number of errors; limited personal evaluation.	Has acquired only a few basic concepts and principles of the topic. The explanation shows major deficiencies in terms of logical structuring and formulation.	Hasn't acquired any of the basic concepts and principles of the topic. The explanation is severely deficient in terms of logical structuring and formulation; no personal evaluation.	
	Application of knowledge to new situations (how it relates)	Has used new knowledge with confidence and creativity, applying it in an original way.	Has used new knowledge and applied it correctly in new situations.	Has used new basic concepts and applied them in simple situations.	Has used a few simple concepts and applied them when guided.	Hasn't achieved any knowledge.	
	Creativity / evaluation	Has shown critical thinking, creativity and initiative.	Has shown a good level of creativity and evaluation capability.	Has shown sufficient evaluation capability and sometimes original ideas.	Has not always shown sufficient evaluation ability and has presented poor creativity.	Has shown inability to evaluate and very poor creativity.	

	Criteria	5 excellent	4 good	3 satisfactory	2 almost satisfactory	1 unsatisfactory	Score
LANGUAGE	Use of language: - listening - speaking - reading - writing - interaction	Consistent grammatical control and appropriate use of vocabulary. Can express him/herself with a natural flow and interact with ease.	Good grammatical control and generally appropriate use of vocabulary. Can express him/herself and interact with a good degree of fluency.	A few mistakes in grammar and vocabulary use do not lead to misunderstanding. Can express him/herself and interact with a reasonable degree of fluency.	Systematically makes mistakes in grammar and vocabulary use but the message is generally clear. Can manage the discourse and the interaction with effort and must be helped.	Systematic grammar mistakes and the narrow range of vocabulary makes the message meaningless. Communication is totally dependent on repetition, rephrasing and repair.	
	Cooperative work	Original and creative.	Good level of interaction.	Sufficient degree of interaction.	Partial cooperation.	Unable to work in group.	

REFLECTION AND COMMENTS

The CLIL experience has provided good results concerning both English and chemistry. The topic, the redox, sometimes seems to be difficult for students who find it hard to remember and rework it. The use of English, with the support of multimedia, has made it “more attractive” for students, who have approached it with curiosity and interest. In this sense, the experience in the lab has contributed very much; the students have felt satisfied with what they could understand, and they were able to reproduce the experience given in the video. From the point of view of language, the results have been very satisfactory as well; the students have been able to approach English not only as a foreign language to be learnt but also as a means of communication, trying to improve both their expressive capabilities and grammar appropriateness, as well as to expand their vocabulary.

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NACHHALTIGE ENTWICKLUNG UND ERNEUERBARE ENERGIEN

Caterina Cerutti, Antonella Lovagnini

Das folgende CLIL-Modul ist nach einer Verhandlung mit den Schülern und Schülerinnen und mit der Fachkraft entstanden. Themen und Methodik wurden besprochen und von ihnen akzeptiert. Bei der Modulplanung hat man vor allem die Auswahl der Materialien berücksichtigt: die authentischen multimedialen Materialien haben das Verstehen erleichtert und vor allem die Lernenden motiviert. Meinungsäußerung und -austausch sowie die Entwicklung von strategischen Kompetenzen sind ein Leit-Motiv in jeder Unterrichtsstunde gewesen. Die Lernenden haben selbst das Endprodukt vorgeschlagen. Die Entscheidungen in Bezug auf Inhalt, Struktur und Rollenverteilung wurden von den Lernenden selbst getroffen (lernerzentrierter Unterricht). Der Schwerpunkt des Moduls war schließlich die Evaluation und insbesondere die Förderung der Selbstevaluation, die man durch Klassengespräche, individuelle Gespräche, Fragebögen, Tagebücher und Bewertungsraster durchgeführt hat.

Partner(s)	Rete CLIL della provincia di Pavia, Istituto A. Bordoni, Pavia
Thema	Nachhaltige Entwicklung und erneuerbare Energien
Fach	Wirtschaftsgeographie
Sprache	Deutsch
Sprachniveau	B1 – Die Lernenden können schon mit Wirtschaftstexten umgehen und Grafiken und Tabellen interpretieren.
Zielgruppe	Klasse 13 einer Fachschule (Management, Finanz und Marketing)
Zeit	12 Unterrichtsstunden

Lernziele	<p><i>Sprachkompetenz:</i></p> <ul style="list-style-type: none"> - Fachtermini verstehen und paraphrasieren - Definitionen bearbeiten - mündliche und schriftliche Fachtexte verstehen und erstellen - über Fachinhalte berichten - die eigene Meinung äußern und mit anderen vergleichen <p><i>Fachkompetenz:</i></p> <ul style="list-style-type: none"> - Vor- und Nachteile der erneuerbaren Energien einschätzen - Informationen über deutsche Ökostädte weitergeben - über EU-Richtlinien zu den erneuerbaren Energien informiert sein und informieren <p><i>Persönlichkeitsbezogene Kompetenz:</i></p> <ul style="list-style-type: none"> - eine individuelle Einstellung zum Thema der erneuerbaren Energien entwickeln - die eigenen Fortschritte bewerten (Sprache und Inhalt). <p><i>Lernkompetenz:</i></p> <ul style="list-style-type: none"> - die Lernenden überlegen, wie sie die Arbeit des Diskussionsforums unterstützen können - die Lernenden handeln strategisch und kreativ - die Lernenden benutzen Kompensationsstrategien (Hypothesen aufstellen, sich der Mimik und der Gestik bedienen, umschreiben, auf die Muttersprache zurückgreifen)
Endprodukt	Simulation eines Diskussionsforums über das Thema „Energie der Zukunft: Pro und Contra der erneuerbaren Energien“ (Videoaufnahme)
Unterrichtsmethode	Frontalunterricht Unterrichtsgespräche kooperatives Lernen Einzel-, Paar- und Gruppenarbeit
Evaluation	<p><i>Formative Bewertung durch</i></p> <ul style="list-style-type: none"> - Beobachtung, wie die Lernenden ihr Wissen aufbauen - Beobachtung der Verwendung der Fremdsprache bzw. der Muttersprache - Beobachtung der Selbständigkeit der Lernenden - Feedback-Fragen seitens der Lehrperson und Beobachtung der Qualität der Antworten - Beobachtung der Fähigkeit der einzelnen Lernenden, der

	<p>Gruppenarbeit beizutragen und individuelle Verantwortung zu übernehmen</p> <ul style="list-style-type: none"> - Beobachtung der Fähigkeit der Lernenden, die Arbeit der anderen Gruppe für den Erfolg des Diskussionsforums zu nutzen - Beobachtung der strategischen Kompetenz der Lernenden <p><i>Summative Bewertung im Hinblick auf Sachfach und Fremdsprache durch:</i></p> <ul style="list-style-type: none"> - geschlossene Aufgaben - offene Fragen zum Gelernten - Diskussionsforum - Bewertung des sprachlichen Ausdrucks und der pragmatischen Angemessenheit
<p>Evaluationskriterien Inhalt Sprache Kooperation</p>	<p><i>Sprachgebrauch:</i></p> <ul style="list-style-type: none"> - Verständlichkeit - Kohärenz - Flüssigkeit des Sprechens - kommunikative Angemessenheit - Initiative in der Interaktion - Korrektheit (Aussprache, Wortschatz und Grammatik) - Angemessene Benutzung der Fachtermini <p><i>Fachinhalt:</i></p> <ul style="list-style-type: none"> - Informationen - Prägnanz der angeführten Begründungen - Glaubwürdigkeit der Rolle im Diskussionsforum
<p>Arbeitsmaterialien</p>	<ul style="list-style-type: none"> - Texte und Statistiken - Arbeitsblätter - Videoausschnitte - Fotos - Medien: Computer, Tafel, interaktives Whiteboard

AKTIVITÄTEN

Schritt 1: Aspekte der Nachhaltigkeit

Unterrichtsgestaltung

Die Fachlexik der Arbeitsblätter wird vorentlastet. Die Schüler und Schülerinnen steigen in das Thema ein, indem sie in Partnerarbeit und im nachfolgenden Klassengespräch Aspekte der Nachhaltigkeit mit Hilfe eines Arbeitsblattes untersuchen.

Arbeitsmaterialien

- Arbeitsblatt 1: *Über den Begriff "Nachhaltigkeit"*
- Individuelles Lerntagebuch

Evaluation

- Feedback-Fragen seitens der Lehrkraft – Angemessenheit der Antworten
- Reflexion über den Lernprozess anhand des individuellen Lerntagebuches

Schritt 2: Umwelt und Industrie

Unterrichtsgestaltung

Nach einer kurzen Vorentlastung der Fachlexik schauen sich die Lernenden die Videosequenz *1 Millionen neue Jobs* an, in der die Umweltproblematik mit den Möglichkeiten und Folgen der Industrieproduktion und der Berufsmöglichkeiten in Verbindung gebracht wird. In Einzel- oder Partnerarbeit beantworten sie die Fragen auf dem Arbeitsblatt 2 *Ressourcen*. Im Klassengespräch vergleichen sie dann ihre Lösungen.

Arbeitsmaterialien

- Videosequenz aus 1
www.youtube.com: *1 Million neue Jobs*
- Arbeitsblatt 2: *Ressourcen*

Evaluation

- Vergewisserung des Verstehens des Films durch Feedback-Fragen und Ergänzung des Arbeitsblattes
- Beobachtung der Verwendung der Fremdsprache bzw. der Muttersprache beim Antworten der Leitfragen der Lehrkraft

Schritt 3: Die erneuerbaren Energien

Unterrichtsgestaltung

Nach einer kurzen Vorentlastung der Fachlexik schauen sich die Lernenden die Videosequenz *20% erneuerbare Energien im Jahr 2020* an, in denen Informationen zu den erneuerbaren Energiequellen gegeben werden. In Einzel- oder Partnerarbeit analysieren sie die verschiedenen erneuerbaren Energieformen mit Hilfe des Arbeitsblattes 3 *Erneuerbare Energieformen*. Sie beantworten dann die Fragen auf dem Arbeitsblatt 4 *Energieformen im Vergleich* und vergleichen dann ihre Lösungen im Klassengespräch.

Arbeitsmaterialien

- Videosequenz aus 2
www.youtube.com: *20% erneuerbare Energien im Jahr 2020*
- Arbeitsblatt 3: *Erneuerbare Energieformen*
- Arbeitsblatt 4: *Energieformen im Vergleich*

Evaluation

- Verständlichkeit der Fachbegriffe und Korrektheit der Definitionen (AB 3)
- Vergewisserung des Verstehens des Films durch Feedback-Fragen der Lehrkraft und Ergänzung des Arbeitsblattes
- Kontrolle der Stichworte (AB 4)

Schritt 4: Fotovoltaik und Biogas

Unterrichtsgestaltung

Die Lernenden arbeiten in Partnerarbeiten an Fachtexten aus Wikipedia (Arbeitsblatt 5), um die Eigenschaften der verschiedenen erneuerbaren Energieformen (Biogas, Fotovoltaik, usw.) zu unterscheiden und zu definieren. Das Thema wird mit dem interaktiven Whiteboard visualisiert (siehe Arbeitsblatt 6).

Arbeitsmaterialien

- Arbeitsblatt 5: *Erneuerbare Energieformen*
- Arbeitsblatt 6: *Fotovoltaik und Solarthermie*
- Fotos und Schemata von Energieerzeugungsanlagen
- Zeichnungen, die das Verfahren der Energieerzeugung darstellen
- Individuelles Lerntagebuch

Evaluation

- Kontrolle, ob sowohl die Definitionen als auch die Schemata und Zeichnungen verstanden worden sind (AB 5-6)
- Beobachtung der Fähigkeit der Lernenden, den Inhalt zu reproduzieren und den anderen ihr Wissen mitzuteilen
- Kontrolle der Stichwörter (AB 5)
- Reflexion über den Lernprozess anhand des individuellen Lerntagebuches

Schritt 5: Virtueller Besuch einer Windmühle

Unterrichtsgestaltung

Die Lernenden schauen sich die Videosequenz *Windenergie – Neue Riesen für Windpark* an. In Partnerarbeit beantworten sie die Fragen auf Arbeitsblatt 7. Sie vergleichen dann ihre Antworten im Klassengespräch.

Arbeitsmaterialien

- Videosequenz aus www.youtube.com: *Windenergie – Neue Riesen für Windpark*
- Arbeitsblatt 7: *Windenergie*

Evaluation

- Feedback-Fragen und Ergänzung des Arbeitsblattes zur Vergewisserung, dass der Film verstanden worden ist
- Beobachtung, wie die Fremdsprache bzw. die Muttersprache beim Antworten der Leitfragen der Lehrkraft verwendet wird

Schritt 6: Die Energiekosten

Unterrichtsgestaltung

Die Arbeit an einer Tabelle erlaubt, Daten über die Energiekosten miteinander zu vergleichen und zu interpretieren. Die Arbeit wird in Partnerarbeit anhand des Arbeitsblattes 8 durchgeführt. Danach werden die Ergebnisse im Plenum besprochen.

Arbeitsmaterialien

- Arbeitsblatt 8: *Die Energiekosten*

Evaluation

- Kontrolle, ob die in der Tabelle (AB 8) enthaltenen Daten über die einzelnen Energieformen (AB 5-6) verstanden worden sind
- Beobachtung der Fähigkeit der Lernenden, die Statistik zu interpretieren und anderen Informationen mitzuteilen

Schritt 7: Klassenarbeit

Unterrichtsgestaltung

Diese Unterrichtsstunde wird der Kontrolle des Gelernten gewidmet. Mit geschlossenen Aufgaben (Multiple Choice-Aufgabe, Lückentext) wird kontrolliert, wie sich die Lernenden den Inhalt eingepägt haben. Zwei offene Fragen erlauben, auch die Schreibkompetenz zu bewerten.

Arbeitsmaterialien

- *Test* (Geschlossene Aufgaben und offene Fragen)

Evaluation

- Summative Leistungsbewertung und Lernzielkontrolle

Schritt 8: Besprechung der Schülerleistungen

Unterrichtsgestaltung

Die Ergebnisse der Klassenarbeiten der vorangehenden Stunde, die die Lehrkraft korrigiert in die Klasse bringt, werden im Plenum besprochen. Die Lernenden werden sich ihrer Schwächen und Stärken bewusst. Auf fachliche Unklarheiten wird eingegangen.

Arbeitsmaterialien

- Korrigierte Klassenarbeiten der Lernenden

Evaluation

- Selbstevaluation und Reflexion über das integrierte Bewertungsverfahren

Schritt 9: Vorbereitung des Diskussionsforums

Unterrichtsgestaltung

Dieser Schritt, der insgesamt drei Unterrichtsstunden in Anspruch nehmen wird, hat als Ziel, ein Diskussionsforum zu organisieren. Die einzelnen Rolle (z.B. ein Parteimitglied der Grünen, ein Befürworter der EU Richtlinien, der Geschäftsführer des Bundesverbandes Solarwirtschaft, ein Mitglied der Stadtverwaltung Freiburg (ökologische Stadt), ein Atomkraftwerksbetreiber, Publikum, ein Moderator...) müssen entwickelt werden. Dafür wird eine Gruppenarbeit organisiert, wonach Gruppen pro und Gruppen contra die regenerativen Energien die jeweiligen Argumente zusammenstellen und aufschreiben.

Arbeitsmaterialien

- *Individuelle Lerntagebücher*
- *Lerntagebücher der Gruppen;*
- *Bogen zur Beobachtung der Arbeitsgruppe*

Evaluation

- Durch eine realitätsnahe Aufgabe beobachtet die Lehrperson, wie die Lernenden das inhaltliche und fremdsprachliche Können integrieren und aufbauen
- Durch Tagebücher und Beobachtungsbögen werden sich die Lernenden ihres Lernprozesses und der erworbenen Sozialkompetenzen bewusst

Schritt 10: Diskussionsforum *Energie der Zukunft*

Unterrichtsgestaltung

Das geplante und vorbereitete Diskussionsforum wird simuliert und Video aufgenommen. Die Schüler und Schülerinnen, die keine bestimmte Rolle haben, sitzen als Publikum vor dem Diskussionspodium, können Fragen stellen und zu den Aussagen der Diskussionsmitglieder Stellung nehmen.

Arbeitsmaterialien

- Von den Schülern und Schülerinnen entwickelte Darstellung der Struktur der Debatte

Evaluation

- Beobachtung, ob die unterschiedlichen Gesichtspunkte im Diskussionsforum sich logisch gegenüber stellen
- Beobachtung des sprachlichen Ausdrucks und der pragmatischen Angemessenheit

Schritt 11: Abschließende Evaluation

Unterrichtsgestaltung

In der letzten Stunde schauen sich die Schüler und Schülerinnen gemeinsam das Video an, das sie aufgenommen haben. Sie machen sich in einem dazu vorgesehenen Beobachtungsbogen Notizen, die sie benutzen, um hinterher ihre Leistungen kritisch zu bewerten.

Arbeitsmaterialien

- Das Video der Schüler und Schülerinnen
- *Selbstbeobachtungsbogen Video*
- *Beobachtungsbogen Diskussionsforum* (siehe unten)

Evaluation

- Kritische Analyse des Produktes anhand der Beobachtungsbögen *Diskussionsforum*
- Gesamte Reflexion über die Schülerleistungen und über die Stärken und Schwächen des Projektes

Beobachtungsbogen Diskussionsforum

Bewertung der Teilnahme der einzelnen Schüler am Diskussionsforum

Sprachgebrauch

- Verständlichkeit
- Interaktion
- Initiative
- Flüssigkeit des Sprechens
- Lexik
- Ausdrucksweise
- Korrektheit der Sprache

Inhalt

- Sinnhaftigkeit
- Glaubwürdigkeit der Rolle
- Informationen

ÜBERLEGUNGEN UND KOMMENTARE

Die Stärke dieses Moduls besteht darin, dass die Schüler und Schülerinnen ihre Motivation am Deutsch- wie auch am Geographielernen gestärkt haben. Das konnte die Lehrperson nicht nur bei der Vorbereitung und Durchführung der Debatte, sondern auch in nachfolgenden Unterrichtsstunden feststellen. Was die Bewertung betrifft, wurde nicht nur die Schülerleistung kontrolliert, sondern auch der Lernprozess anhand von Frage- und Beobachtungsbögen, Checklisten, Reflexion und Rückmeldungen. Dadurch konnte die Selbstbewertung der Lernenden entwickelt werden. Es waren authentische Aufgaben formuliert worden, die im Einklang mit den Lernzielen standen. Daher sollte auch die Evaluation so authentisch wie möglich vor sich gehen und die Beurteilung von echten Kompetenzen ermöglichen. Dem CLIL-Ansatz entsprechend hat es sich nämlich um eine doppelt fokussierte Bewertung gehandelt: Inhalt und Sprache sind integriert (siehe z.B. das Diskussionsforum) als auch getrennt (siehe z.B. den Wortschatztest) bewertet worden. Die erworbenen sprachlichen Fertigkeiten sind folglich auch noch im Deutschunterricht geübt und gestärkt worden.

NUTRITION

Inese Barkovska

The module gives a sample of the learning of the topic “Nutrition” in three stages. The theme is studied in forms 10, 11 and 12. To give a better idea how it works we present the parts of the teacher’s individual program. As the subject “Science in English” is an integral part of the secondary syllabus for the students (Daugavpils State gymnasia) who study mathematics, science and technical programs – it is compulsory in their timetable – it was necessary to work out a program. This means that there are 35 lessons allotted for the subject per academic year.

The teacher’s individual program is based on the Latvia National syllabus for the integrated subject “science” (in their native tongue) and the standard of acquiring the English language. The relevant topics (“Nutrition”, ”Digestive system”, ”Health”) are studied in the relevant subjects over a three-year period.

CONTENT: PROGRAM

The topic “Nutrition” is studied through the program, each time focusing on different aspects and referring to previous knowledge. To understand how it works we have provided extracts of the teacher’s program. The topic under discussion is given in italics.

FORM 10 (2nd semester)

Learning component	Compulsory content	Topics	Number of lessons
The diversity and unity of the world	Life processes in organisms	Cells – Types of cells	2
		<i>Nutrition</i>	2
		<i>Nutrients</i>	2
		Reproduction	2

FORM 11 (2nd semester)

Learning component	Compulsory content	Topics	Number of lessons
The construction of the world and the human body	Systems, their operation and interaction	Human organ systems	2
		Blood circulation	2
		<i>Digestive system</i>	2
		(etc.)	

FORM 12 (2nd semester)

Learning component	Compulsory content	Topics	Number of lessons
		Human ecology	1
		<i>Health – Healthy lifestyle</i>	4
		Problems with health	2

AECLIL Partner	Daugavpils State gymnasium, Riga, Latvia
Topic	Nutrition
Subject area	Science
Language	English
Language Level	B1-B2 (intermediate-upper intermediate)
Target group	Students aged 15-19
Time	8 classroom periods per three years
Aims	Competences in content, language and social skills
Products/outcomes	Presentations, essays
Classroom activities	In-class talk, pair work, group work, scaffolding, Internet research, graphic organisation, language exercises
Assessment tools	Self-assessment, group assessment, summary assessment (test)
Assessment criteria Content Language Cooperative work	Assessment for oral performance (presentation skills) and written performance, taking into account content and language
Resources	Written texts, charts, videos

FORM 10

- Topic:** *Nutrition. Plant and human nutrition*
- Time:** 2 lessons of 40 minutes each.
- Aims:**
- to gain systematic knowledge of what a plant or human has to consume;
 - to be able to compare the consumption in plants and humans;
 - to understand the importance of the right consumption.

ACTIVITIES

Lesson 1

Students' work

Group work: What do plants/humans need to stay alive?

- Students are divided into 2 big groups ("plant" and "human" ones) and a few small ones.
- Talk: discussion. Students take their own notes, edit their group work.
- Reading in pairs. Find out the missing words (A teacher removes 5-6 words from the text *Human as Organisms – Nutrition*, for example: "cereals", "growth", "store", "keep", "minerals", "fit", "reactions", etc.).
- Discussion: The differences and similarities in plant and human nutrition. Problem question: Find similarities and differences in plant and human nutrition!
- Creative task (individually): "Describe your breakfast from the point of view of nutrients."
- Home assignment: Be ready to speak about "What makes a good breakfast/lunch/dinner/supper? Why do we need to have breakfast?"

Resources and materials

- paper
- *Humans as Organisms* and *Green Plants as Organisms*, taken from *Key Stage three science*, p. 8 and 21 (step 3 and 4). The material can be used as a hand-out, as a language task (to insert words which had been previously removed from the text), etc.
- Internet resources: www.britishcouncil.org/science-cubed (step 6).

Students' work

- Presentation prepared by students.
- Presenters' questions to the audience about their presentation (feedback).
- Students' questions to the presenters.
- Expansion/home assignment: "Regional diets. Food consumed in different regions of the world".

Assessment

- peer evaluation: discussing positive aspects and shortcomings.
- assessment of oral performance (presentation).

Resources and materials

- *Assessment grid for oral presentation* (example, see below).

FORM 11

Topic: *Digestive system*

Time: 2 lessons of 40 minutes each.

- Aims:**
- to revise the previous knowledge about human organs;
 - introduce English terms and be able to describe the processes;

- be aware of the importance of care to be taken regarding the health of digestive organs.

ACTIVITIES

Students' work

1. Warm-up, pair work:
 - What is digestion? Try to define the term.
 - What other words can we form from the stem “digest”?
 - What are the two ways of breaking down food?
2. In-class discussion. Revision: What nutrients we need.
3. “Brainstorm”: Organs that take part in digestion. To fill in the diagram *Digestion in Humans – Working with words* with the words (terms and dictionaries are provided).
4. Creative task (individually): Students are asked to write three True/False statements based on the text. The rest of the students have to respond to statements.
5. Discussion: What is the role of each organ?
6. Vocabulary revision. Lexical exercises.

Resources and materials

- paper
- *Digestion*, taken from *Key Stage Three Science*, p. 9 (step 5). The material can be used as a handout, can be shown on the screen, a teacher can remove the words from this text to be filled in by students.
- *Digestion in humans*, taken from K. Kelly, *Science*, p. 83 (step 6)

Lesson 2

Students' work

7. Presentation prepared by students: “Digestive system”.
Presenters' questions to the audience about their presentation (feedback).
Students' questions to the presenters.
8. Expansion/home assignment: Regional diets. Food consumed in different regions of the world.

Assessment

- peer evaluation: discussing positive aspects and shortcomings.
- assessment of oral performance.

Resources and materials

- Internet resources: www.britishcouncil.org/science-cubed (step 8).
- *Assessment grid of oral performance* (see below).

FORM 12

Topic: *Health. Healthy lifestyle. Healthy foods. Diets.*

Time: 2 lessons of 40 minutes each.

- Aims:**
- strengthen and organize all the knowledge gained about nutrition;
 - be able to give a short talk on healthy lifestyle;
 - be aware of the importance of caring about health since adolescence.

Lesson 1

Students' work

1. Pair work: Organize graphically your ideas about healthy lifestyle and be ready to present them to your peers.
2. Evaluation and discussion of the ideas presented.
3. Presentation (The procedure similar to that in forms 10-11, lesson 2).
4. Revision about nutrition and digestion.
5. Discussion: Diets and dieting – pros and cons.
Students first work in groups and then present their arguments.
6. Factors which affect human health. "Brainstorming" by the whole class; teacher monitors and writes down the ideas.

Assessment

- peer evaluation: discussing positive aspects and shortcomings.
- assessment of oral performance (presentation).

Resources and materials

- paper;
- hand-out: *Language Tasks* (information gap-filling, matching words and definitions, matching parts of sentences);
- *Key Stage Science*, p. 18 (step 6);
- *Assessment grid for oral presentation* (see below).

Lesson 2

Students' work

7. Argumentative essay writing. Pre-writing activities (Brainstorming ideas, planning, organizing ideas, etc.).
8. Tasks on revising vocabulary.

Lesson 3

Students' work

9. Test on the topic Healthy lifestyle, diets.

Assessment

- Assessment for written essay.

Resources and materials

- *Assessment grid for essays* (see below);
- test on health (two variants).

ASSESSMENT GRIDS

Assessment grid for oral presentation (example)

Scores	Content and presentation Descriptors	Accuracy Descriptors
1 unsatisfactory	The presented texts chosen are not relevant to the topic, there are texts which show no sign of thoughtful choice, covering the whole slide copied from the Internet. Student just reads the text, is unable to answer audience's questions about the theme.	Student's performance is just reading the text with pronunciation mistakes which disturb understanding of the presentation.
2 satisfactory	The material chosen and created is not logically ordered, the main points may be left out. Though the presentation gives some relevant information about the topic. The student mostly reads the text from the screen but is able to answer the audience's questions.	Student has mistakes in pronunciation; the text on the screen contains spelling mistakes. The structure of sentences may be wrong. The student does not understand some of audience's questions.
3 good	The material chosen for the presentation is relevant to the topic, is logically organized, the main points and glossary pointed out. The student has a rather good command of the material, is able to answer the audience's questions, though at least some questions may cause a problem.	There occur some pronunciation mistakes (1-3) in new notions. The text on the screen contains no mistakes, except for the glossary in which some words are given in the plural or past forms. The student understands the questions and is able to answer them mostly grammatically correctly.
4 excellent	Student has used several sources for his presentation. The material is logically sequenced, the main points are highlighted. The glossary is chosen relevant to the topic. The design and visuals in slides are thoughtfully chosen. The student shows a complete and thorough knowledge of the theme, is able to answer audience's and teacher's questions, has prepared tasks for peers.	Student has a good command of pronunciation. The text of the presentation does not contain any faults. The glossary and questions provided for audience do not contain mistakes. The student understands questions and gives expanded answers to them showing a good command of lexical repertoire relevant to the topic.

Assessment grid of oral performance

Criteria	Content	Language	Points
excellent	Student shows a complete and thorough knowledge of the subject. Explanations are well structured. Examples are provided. Able to answer teacher's/examiner's questions.	Uses appropriate vocabulary. Grammar structures are correct or mostly correct (1-2 inaccuracies). Answers to questions relevant to the subject and are expanded. Fluent speech.	13-15
good	Most information and facts are correct. Some facts may be omitted. Basic concepts used appropriately. Explanations are logically sequenced. Unable to answer 1-2 questions.	Basic topical vocabulary is used. Good grammar command in terms of structure although some inaccuracies may be present (3-5). Speech mostly fluent, may pause to look for answer or vocabulary item.	10-12
satisfactory	Some information and facts are given. Knows the main concepts. The speech lacks logical structure. Partly unable to give answers.	Some basic vocabulary is used. Inaccuracies in grammar (6-9). Lacks fluency, speech is stumbling. Does not understand some questions.	5-9
unsatisfactory	Cannot provide relevant information. Unable to answer questions. Or: not enough to evaluate.	Inappropriate use of basic topical vocabulary or lack of it. Many mistakes (10 and more). Serious problems in interaction.	0-4

Assessment grid for essays (200-250 words)

	Criteria	5 excellent	4 good	2-3 satisfactory	1 unsatisfactory
CONTENT	Use of basic subject concepts and knowledge	Content completely relevant to the topic. Arguments supplied with examples. Facts justified with appropriate examples. Appropriately used all/main basic concepts. Evidence of understanding principles of the topic.	Topic discussed successfully. One argument can lack support.	An attempt to discuss the topic has been made. Does not give enough arguments or aspects of the problem.	The topic is not revealed or is misunderstood.

	Criteria	5 excellent	4 good	2-3 satisfactory	1 unsatisfactory
	Organisation	Clearly and logically arranged. Linkers are varied and used successfully. Proportions observed.	Clear layout. Link words used, though some may be repeated.	It is possible to follow the ideas. Paragraphing may be wrong or absent. Proportions are not observed. Too long or short. (The normal number of words +/- 10%.)	Organisation is hard to follow or trace. Too short.
LANGUAGE	Vocabulary and spelling	Vocabulary is relevant to the topic. A wide repertoire of vocabulary and terms. No spelling mistakes.	Appropriate use of topic vocabulary. Inappropriate use of synonyms may occur. A few spelling mistakes (1-3).	Basic vocabulary is used. Vocabulary repertoire is limited. There are mistakes in using synonyms.	Inappropriate use of basic vocabulary. Sometimes (3 or more cases) spelling inhibits understanding.
	Grammar	No grammar mistakes, except for some (1-2) in articles.	Good grammar. Some mistakes (1-3) may be present.	There are mistakes (5 -10) in structures, prepositions and verb forms. Some mistakes (1-2) are disturbing.	Mistakes prevent understanding of content.

REFLECTION AND COMMENTS

1. Module has been tried out in class of 27 students, aged 18-19.
2. Assessment tasks are: oral presentation on the given topic and a discursive essay on the topic given (“Diets and starvation”).
3. During the work it was decided to add a reading task on obesity problems and a presentation on starvation and famine problems in the world.
4. As the two main types of students’ performance to be evaluated are speaking and writing skills, we chose the Assessment grid for oral presentation. The improvement was added to the language performance task. It relies on pronunciation as this aspect may cause misunderstanding.

Results of the test:

	10 – 2 students
Test was written by 22 students from form 12 a.	9 – 3 students
	8 – 7 students
The scores are: 1-the lowest, 4-passing, satisfactory level, 10-the highest.	7 – 2 students
	6 – 4 students
	5 – 3 students
	4 – 1 students

The results show that the test functions well in discriminating among students. They coincide with students' performance in other subjects and show rather high levels of acquiring the material revised and learned, which proves that the module works well.

Problems

1. While working on the method of testing it was difficult to choose the most appropriate. So we came to the variant of a complex work which includes both test-type and a substantial piece of written work. That is why we used two assessment grids as models, the *Assessment grid for oral presentation* and the *Evaluation grid for essays* created by the teacher herself.
2. In fact, regarding the assessment, almost each written piece requires the creation of a grid for assessment, which depends on aim and length. And, in our opinion, accuracy does not have to play the main role.
3. Students could consider things which are to be evaluated in CLIL and discuss together with a teacher whether or not a certain grid suits them if we want to implement a student-centered module.

WHAT STUDENTS WROTE

Written essay "On diets and dieting".

(the worst and the best. They are printed, as the written work could not be qualitatively scanned. Mistakes, if any, are not corrected.)

My opinion on diets and dieting.

In my opinion diets is the way to can't become obesity and to become organisms fukcionet to right way. Big part of people have problems with obesity, but they don't think about this, they continue eat more faste food and they can't use of energy in activities. But some people are starvation. They always are hungry, but they not eat, because they think that they are obesity or fat. They always vomiting, what they eat and think that this is good. They have problems with health, they can't have inaf vitamins and minerals, they have problems with sport, because they can't have energy. I think people need have diets, but

(Work is not finished). The given work got 4 points.

On diets and dieting

Nowadays many people decide to go on diets in order to lose weight, have a nicer look or to keep up with fashion changes. Sometimes this decision can be really helpful, even necessary, but it can also lead to some unpleasant consequences and health problems.

One of the things we definitely need to mention is that people, who obey diets, tend to remove several products for their nutrition. As they think that it is the best solution to lose weight much faster. However, we should not forget that our digestive system is able to function properly only if we consume all necessary nutrients such as: carbohydrates, fats, fibers, proteins, minerals and, of course, water. Without a proper amount of water (about 2 litres) our organism can survive only 2-3 days. Obsession with diets can result in vitamin deficiency, anorexia, bulimia etc.

On the other hand, diets can have some advantages, because they train your willpower. What is more, sometimes people have no other choice but to obey a diet if they are allergic to some products or their metabolism is too slow to digest all eaten products and not gain too much excess weight. In this case it is advisable to eat more fibres, vegetables and fruit and diminish the amount of sweets, cakes and other fatty and sugary food. One more reason for going on diets are special religious views. For instance, buddhists refuse to eat meat and other animal products as they consider this non-esthetic, even wrong way of living. Unfortunately these people forget that our organism needs meat, eggs and fish because these products contain proteins which are necessary to build new cells.

In conclusion I would like to say that diets have become more commercial than health matters, people tend to make business using words: "healthy", "beautiful", "model" as a cover for their greedy intentions. But, of course, people themselves should decide what to do and what not to do.

The given work got 20 points in spite of some inaccuracies.

CLIL FOR THE UNIVERSITY EDUCATION

KINETIC ENERGY AND WORK

Fügen Tabak, Özlem Duyar Coşkun, Sündüs Akçıldız

The module is prepared with the aim of facilitating the learning of concepts about kinetic energy and using English through activities focused on concepts by using CLIL methods. It contains assessment criteria grids for language, content and cooperative work, activity description grids, preparatory and warm-up activities and exercises.

AECLIL partner	Hacettepe University, Ankara, Turkey
Topic	Kinetic Energy and Work – Definitions and Applications
Subject area	Physics
Language	English
Language Level	B1
Target group	HU Faculty of Engineering, Mechanical and Industrial Engineering, 1 st -year students
Time	Five hours
Aims	<ul style="list-style-type: none"> - to learn the concepts of energy; definition of work, work and kinetic energy, work done by a gravitational force, work done by a spring force, work done by a variable force; definition of power - to familiarize students with the basic concepts and vocabulary related to kinetic energy and work - to familiarize students with word-guessing strategies - to improve reading skills - to improve listening skills by note-taking during the lessons - to develop speaking abilities by encouraging the students to participate - to improve interaction between the teacher and the students as well as among students themselves by encouraging them to use everyday English - to enable the students to talk about the subject using the given activities - to practice thinking in English rather than thinking in the mother language while students express themselves
Outcomes	<ul style="list-style-type: none"> - written classwork - activities and strategies

Classroom activities	<ul style="list-style-type: none"> - lecturer's talk - group work
Assessment tools	<ul style="list-style-type: none"> - exam - direct observation
Assessment criteria Content Language Cooperative work	<ul style="list-style-type: none"> - knowledge of the subject - ability to solve exercise - use of BICS - use of CALP - participation in the classroom activities
Resources	<ul style="list-style-type: none"> - course textbook: - <i>Fundamentals of Physics</i>, by Halliday, Resnick, Walker, - 8th (extended) edition, ISBN 978-0-471-75801-3. - blackboard - transparencies, overhead projector - reading passage related to work, energy and power (taken from <i>How Things Work, The Physics of Everyday Life</i>, by Louis A. Bloomfield, 2nd edition, The University of Virginia) - the video of the lecture entitled <i>Work, Energy, and Universal Gravitation</i> and its transcript – Walter Lewin, <i>8.01 Physics I: Classical Mechanics, Fall 1999</i>, Massachusetts Institute of Technology: MIT OpenCourseWare, http://ocw.mit.edu (accessed 03.09.2012) - worksheets - scratch paper

ACTIVITIES

Step 1

Students' work

Warm-up (paper airplane): The students are given some scratch paper to make an airplane and are asked to throw it as far as possible. They are then asked to answer the question: "Who has spent the maximum energy and how do you know that?".

Resources

- scratch paper.

Assessment

The expected answer to the question is: "Whichever plane is thrown the farthest requires the hardest work; thus, whoever has thrown it the farthest has worked the hardest". This is the result of the work and kinetic energy theorem.

Step 2

Students' work

In worksheet 1 (*Work, energy and power*) a reading passage related to work, energy and power is distributed to the students. In worksheet 2 (*Language Strategies*) the instructor pre-teaches some common strategies for guessing the meaning of words in context. While reading the text the students are asked to underline the given contextual clues and to guess the meanings of the words by using them. To check their understanding they are asked some follow up questions like: "How many names can you list for disordered energy?"

Resources

- worksheet 1: Work, energy and power (taken from Louis A. Bloomfield, How Things Work, The Physics of Everyday Life);
- worksheet 2: Language Strategies.

Alteration: This could be done orally by eliciting the word-guessing strategies from the students. After that, the teacher goes through the word-guessing strategies and writes them on the board. The students are then given the text to work on the definitions of words and the contextual clues and to do the exercises.

Follow-up: The students are given another text to study the contextual clues as homework.

Assessment

Whoever finds the contextual clues could answer the questions correctly.

Step 3

Students' work

The task is to watch a video (worksheet 3).

Pre-listening: The teacher draws attention to the topic by asking a volunteer to stand up and stand still for a while. The teacher then asks the student and the whole class whether or not s/he would feel tired if s/he kept the same position for a long time; the answer is yes. Eventually, the teacher asks if there is any difference between tiredness and work and what the definition in physics is of work; the answer is: "In physics you can get tired without having done any work."

While listening: The students are asked to watch the video extract taken from a lecture on work and energy by paying special attention to certain terms in physics and their definitions and taking notes.

When the students finish listening they are asked some questions on the purpose of the activity, why they have listened to a video extract instead of merely listening to an audio cassette, and the problems they faced while doing the listening in L2, etc.

Post-listening: After the students listen, they are given worksheet 4 to do the exercise.

Resources

- overhead display;
- the video of the lecture entitled Work and Energy and its transcript – Walter Lewin, 8.01 Physics I: Classical Mechanics, Fall 1999, <http://ocw.mit.edu>
<http://www.youtube.com/watch?v=PmJV8CHIqFc&list=PLF688ECB2FF119649>
- worksheet 3: Keywords and their Turkish equivalents;
- worksheet 4: Listening and note-taking;
- worksheet 5: Assessment grids (see below).

Assessment

Those who supply the correct answers are the ones who have taken notes properly.

ASSESSMENT GRIDS

Assessment grid for content

Scores	Descriptors
1 Unsatisfactory	Student shows no knowledge of the subject.
2 Almost satisfactory	Student is lacking necessary background knowledge. S/he isn't able to solve simple exercises.
3 Satisfactory	Student has essential knowledge of the subject. S/he solves simple exercises similar to the ones done during lessons.
4 Good	Student shows a complete knowledge of the subject. S/he solves new exercises correctly.
5 Excellent	Student shows a complete and thorough knowledge of the subject. S/he solves most difficult exercises easily.

Assessment grid for language

Scores	Descriptors
1 Unsatisfactory	Student doesn't use the everyday English and the specific vocabulary on the subject matter at all.
2 Almost satisfactory	Student is able to use the everyday English and the specific vocabulary on the subject matter improperly.
3 Satisfactory	Student is almost able to use the everyday English and the specific vocabulary on the subject matter.
4 Good	Student is able to use the everyday English and the specific vocabulary on the subject matter properly.
5 Excellent	Student is able to use the everyday English and the specific vocabulary on the subject matter perfectly.

Assessment grid for cooperative work

Scores	Descriptors
1 Unsatisfactory	Student is unwilling to participate in the activities either feeling shy or uncomfortable about using the language.
2 Almost satisfactory	Student is willing to participate in some of the activities which require simple structures and vocabulary in English.
3 Satisfactory	Student is almost able to participate in many of the activities which require some complex structures and specific vocabulary in English.
4 Good	Student is able to participate in the activities which require good level of English.
5 Excellent	Student is able to participate in the activities which require perfect level of English.

REFLECTIONS AND COMMENTS

We believe that teaching courses in English for non-native speakers of English is very important. At Hacettepe University, the medium of instruction is 100% English in many of the departments and 30% in some. The freshmen at the departments of Mechanical/Automotive and Industrial Engineering have been chosen as the pilot group. The lessons entail the practical use of the language via the AECLIL methodology and computer-based instruction; this approach is motivating for the chosen groups' learning and has improved their level of English.

Doing the lesson directly in English without any reference to their mother tongue is ineffective, as they sometimes need help to hear the words in Turkish to check their understanding. Especially when a new concept in physics is introduced, it is necessary to understand what the concept is and to learn the new vocabulary efficiently, in part through direct translation.

Warm-up activities are especially effective in encouraging the students to participate in the lesson. Generally most students are willing to participate by speaking, i.e., by asking questions or by making comments, as long as they are given a task. However, some students reject learning because they feel frustrated and confused even if they do the task properly, and they keep complaining about the difficulties of learning the subject via another language.

One drawback is that this project is not part of our curricula, while for some partners there are even schools for implementing this. For the AECLILTR group, experimenting with CLIL methodology was a voluntary and experimental activity.

CLIL FOR IN-SERVICE TEACHER TRAINING

LEARNING CLIL THROUGH CLIL

Elena Orduna, María Ortiz and Marta Genis

Learning CLIL through CLIL is a CLIL module for teachers and teacher trainers, i.e., higher education. The module thus follows an appropriate structure for the students it is aimed at. The course has been delivered successfully in five different institutions (Teacher Training courses organized by schools, Teacher Training courses organized by Teachers' Associations, Courses organized at University) by three different teachers in Spain.

AECLIL partner	Universidad Antonio de Nebrija, Madrid, Spain
Topic	CLIL, CLIL methodology
Subject area	Methodology teaching
Language	English
Language Level	B2 or above
Target group	Teachers and teacher trainers
Time	Adjustable to meet needs; approx. 10 academic hours
Aims	<ul style="list-style-type: none"> - introduce teachers and teacher trainers to CLIL - reflect on the benefits of CLIL methodology - become familiar with CLIL principles and implications - understand and know how to apply CLIL methodology - learn vocabulary, strategies and techniques for a bilingual class - know how to assess own and others' performance
Products/outcomes	<ul style="list-style-type: none"> - improved English language skills - increased awareness of CLIL methodology - students' poster - students' Decalog for CLIL collaborative space - completion of Teacher Competence Questionnaire
Classroom activities	The learning activities include teacher's presentation, individual, pair and group work, reading, reflection and debate, finding information, creating a poster, answering worksheets.

Assessment tools	<ul style="list-style-type: none"> - observation sheets - self & peer assessment sheets - task production - rubrics
Assessment criteria: Content Language Cooperative work	<ul style="list-style-type: none"> - correct use of classroom vocabulary in L2 - ability to reflect on own teaching practice - ability to look for and find information on the Internet - creativity in preparation and execution of poster - ability to assess own progress - ability to cooperate in carrying out group tasks
Resources	<ul style="list-style-type: none"> - PPT presentations - videoclips Content & Language integrated learning. From CLIL methods for language learning http://www.youtube.com/watch?v=4YoCQYJezNA&feature=mfu_in_order&playnext=1&videos=hn4zF7x3fyc - Cooperative learning (video) http://www.youtube.com/watch?v=HEh8Z0sbiRE - article: Moate J., 2010: "The integrated nature of CLIL: A Sociocultural Perspective", in International CLIL Research Journal, vol. 1 (3) / 2010 - worksheets - assessment rubrics - computer - Internet

ACTIVITIES

Lesson 1 Activity 1

Students' work

Warm-up activity: watching first segment of video (whole group). Discussion and reflection on:

- how they learn languages;
- different methods used;
- effectiveness of methods used;
- difference between learning by construction and learning by instruction.

Resources

- PPT Unit 1: *Learning CLIL through CLIL*;
- video 1: *Content & Language integrated learning. From CLIL methods for language learning* (First segment 0:00-1:34).

Assessment

- observation of group discussion;
- understand difference between learning by construction and learning by instruction.

Lesson 1 Activity 2

Students' work

Follow-up activity: second segment of video. Discussion and reflection on:

- new information society;
- need to rethink how we teach and what we teach;
- CLIL definition.

Resources

- PPT Unit 1;
- video 1: *Content & Language integrated learning. From CLIL methods for language learning* (Second segment 1:34-2:39).

Assessment

- observation of group discussion;
- CLIL definition.

Lesson 1 Activity 3

Students' work

Identification and organisation of knowledge:

- methods;
- advantages & disadvantages;
- effectiveness;
- conclusions.

Resources

- PPT Unit 1.

Assessment

- observation of group discussion;
- advantages, disadvantages & - - conclusion.

Lesson 1 Activity 4

Students' work

Language identification:

- learning vs. teaching;
- communicative vs. grammatical competence;
- approach vs. method;
- competence building;
- knowledge development;
- thinking & re-thinking.

Resources

- PPT Unit 1.

Assessment

- self and peer assessment.

Lesson 1 Activity 5

Students' work

Task for students:

After having watched the videos and the PowerPoint presentation on CLIL methods for language learning, the students do the following in groups:

- a. Write a list of the most important concepts learned so far;
- b. Classify and distribute those concepts/areas of knowledge among the group members;
- c. Find out information on the Internet about those concepts and anything new related to them. Make a summary of their most important notions;
- d. Organize the new contents and display them graphically in a one-slide PowerPoint presentation taking into consideration fixed guidelines (see worksheet 1);
- e. Produce a feedback survey about your poster for classmates to fill in during presentation with following sections:
 - poster structure, organization of materials, accuracy of final concept goals
 - language accuracy
 - presentation structure and oral delivery.

Resources

- worksheet 1: *Creating and presenting a poster*;
- Internet;
- computer & PPT software.

Assessment

- self- and peer assessment
- direct observation of task; performance and analysis of products using rubric.

Lesson 2 Activity 1

Students' work

Warm-up: Comments on posters presented and free discussion about CLIL basics.

Resources

- students' posters on CLIL.

Assessment

- peer and self-assessment comments on rubrics results.

Lesson 2 Activity 2

Students' work

Follow-up:

- Read the article 'The integrated nature of CLIL by Moate;
- Answer the questions given on worksheet 2;
- Discussion on issues.

Resources

PPT Unit 2

- Moate J., *The integrated nature of CLIL: A Sociocultural Perspective*;
- worksheet 2: *Question Sheet on Moate's Article*.

Assessment

- self- and peer assessment direct observation of task performance and analysis of products using rubric.

Lesson 2 Activity 3

Students' work

Identification and organisation of knowledge:

- collaborative space;
- teacher's role;
- exploratory talk principles;
- IDRF;
- reflection on these issues.

Resources

- PPT Unit 2;
- video: *Cooperative learning*.

Assessment

- direct observation of group discussion.

Lesson 2 Activity 4

Students' work

Language identification:

- content & language integrated learning;
- transmission & transaction;
- genre;
- social, meta-, critical, expert, exploratory talk;
- collaborative space;
- dialogic class;
- commitment, transparency, consideration, joint ownership;
- answer definition sheet (see appendix 3).

Resources

- PPT Unit 2;
- worksheet 3: *Definitions*.

Assessment

- direct observation of group discussion;
- feedback on definition sheet.

Lesson 2 Activity 5

Students' work

Task for students: Once the students have read the article *The Integrated Nature of CLIL: A Sociocultural Perspective* and answered the question sheet, they re-read the fragment *Fundamental integration – language in learning* and think about TEN basic principles which are adequate for the CLIL collaborative space.

They write those ten principles under the heading *The Decalog for my CLIL Collaborative Space* in a one-slide PowerPoint presentation. Once finished, they give decalog to a classmate to correct (in return, they will also correct mate's work). When they get decalog back, they correct mistakes and include comments if appropriate.

Resources

- PPT Unit 2;
- Moate J., *The integrated nature of CLIL: A Sociocultural Perspective*;
- worksheet 4: *The Decalog for my CLIL Collaborative Space*;
- computer and PPT software.

Assessment

- self-assessment.

Lesson 3 Activity 1

Students' work

Warm up: Discussion and reflection on:

- principles of CLIL;
- components of a CLIL lesson.

Resources

- PPT Unit 3.

Assessment

- direct observation of discussion self- and peer assessment.

Lesson 3 Activity 2

Students' work

Follow-up: Discussion and reflection on key elements in CLIL.

Resources

- PPT Unit 3.

Lesson 3 Activity 3

Students' work

Identification and organisation of knowledge:

- exercise on Core CLIL Activators (see worksheet 5);
- discussion and reflection on Core CLIL Activators.

Resources

- PPT Unit 3;
- worksheet 5 (parts a and b): “*Core CLIL Activators*” + *Exercise*.

Assessment

- direct observation of discussion;
- self- and peer assessment.

Lesson 3 Activity 4

Students' work

Language identification:

- cognition;
- confident learner;
- creativity;
- intercultural understanding;
- cross-curricular collaboration.

Resources

- PPT Unit 3;
- worksheet 6: *CLIL Glossary*.

Assessment

- direct observation of discussion
- self- and peer assessment.

Lesson 3 Activity 5

Students' work

Task for students:

Students answer the questionnaire on *Teacher Competences* according to their personal achievements in CLIL methodology seen in these three units. Once the questionnaire is completed, they share results with a classmate and discuss those results they have in common, those that diverge, and why this is so.

Finally, they compare the conclusions to their past experience as students and make a list of the most important differences.

Resources

- PPT Unit 3;
- worksheet 7: *Teacher Competences Questionnaire* (see below).

Assessment

- direct observation of discussion;
- self- and peer assessment

TEACHER COMPETENCES QUESTIONNAIRE

CLASSROOM MANAGEMENT	
Can use target language in:	
• management	
• time management	
• classroom noise management	
• giving instructions	
• managing interaction	
• managing co-operative work	
• enhancing communication	
INTERPERSONAL COMMUNICATION SKILLS	
Can communicate using contemporary social registers.	
Can adjust social and academic registers of communication according to the demands of a given context.	
ACADEMIC LANGUAGE SKILLS	
Can read subject material and theoretical texts.	
Can use appropriate subject-specific terminology and syntactic structures.	
Can read subject material and theoretical texts.	
TEACHING LANGUAGE SKILLS	
Can use own oral language production as a tool for teaching by varying:	
• registers of speech	
• cadence	
• tone and volume	
LEARNING ACTIVITIES TEACHING SKILLS	
Can use the target language to:	
• explain	
• present information	
• give instructions	
• clarify and check understanding	
• check level of perception of difficulty	

<ul style="list-style-type: none"> • Can use the following forms of speech: 	
<ul style="list-style-type: none"> • exploratory 	
<ul style="list-style-type: none"> • cumulative 	
<ul style="list-style-type: none"> • disputational 	
<ul style="list-style-type: none"> • critical 	
<ul style="list-style-type: none"> • meta 	
<ul style="list-style-type: none"> • presentational 	
COURSE DESIGN SKILLS	
Can adapt course syllabus so that it includes language, content and learning skills outcomes.	
Can integrate the language and subject curricula so that subject curricula support language learning and vice-versa.	
Can plan for the incorporation of other CLIL core features and driving principles into course outlines and lesson planning, including:	
<ul style="list-style-type: none"> • scaffolding language, content and learning skills development 	
<ul style="list-style-type: none"> • continuous growth in language, content and learning skills development 	
<ul style="list-style-type: none"> • learner autonomy 	
<ul style="list-style-type: none"> • fostering critical and creative thinking 	
<ul style="list-style-type: none"> • helping students to link learning from various subjects in the curriculum 	
<ul style="list-style-type: none"> • using assessment to improve student learning (learning skills, content and language, as well as cognitive development) 	
Can select learning materials, structuring them or otherwise adapting them as needed.	
Can identify and make use of learning environments in addition to the classroom (e.g., discussion forums, study groups, school grounds, a community centre, the neighbourhood).	
Can select the language needed to ensure:	
<ul style="list-style-type: none"> • student comprehension 	
<ul style="list-style-type: none"> • rich language and content input 	
<ul style="list-style-type: none"> • rich student language and content output 	
<ul style="list-style-type: none"> • efficient classroom management 	
PARTNERSHIP SKILLS	
Can cooperate with parents to support student learning by:	
<ul style="list-style-type: none"> • guiding parents in understanding and using the terminology and concepts of education, so they can better support their child's learning 	

<ul style="list-style-type: none"> raising awareness about productive and counterproductive strategies used by parents 	
<ul style="list-style-type: none"> learning more about the student 	
Can cooperate with school managers, educational authorities, and other decision makers.	
Can agree on common teacher training goals with fellow teachers.	
Can analyse learner's needs with fellow teachers.	
In the case of team- and co-teaching, can develop efficient task-sharing.	
RELATIONSHIP BUILDING SKILLS	
Can connect with each student personally.	
Can foster belief in each student's capacity to learn.	
Respect diversity.	
Can create a reassuring and enriching learning environment.	
Can support individual and differentiated learning.	
Can adapt materials and strategies to students' needs.	
Can engage SEN students (students with special educational needs).	

(Adapted from P. Bertaux, C.M. Coonan, M.J. Frigols-Martín, P. Mehisto (2010), *The CLIL Teacher's Competences Grid*)

REFLECTION AND COMMENTS

In most of the lessons, there are topics which require discussion, personal opinion and reflection for debate. Some of the students were not used to this kind of active approach to learning and were reluctant to participate in the debate. However, the students enjoyed the interactive, cooperative learning style of the module, and the fact they could share their opinions with peers and find very creative ideas for their bilingual classes. They also improved their oral skills, particularly the fluency they need for classroom communication.

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CLIL THROUGH CLIL

Maria Kovacs

CLIL through CLIL is an in-service training course for teachers who wish to learn about CLIL and engage their students in such learning by developing and delivering CLIL modules in their schools. The course provides first-hand experience of CLIL by being taught partly in a foreign language.

AECLIL Partner	Romanian Reading and Writing for Critical Thinking Association, Cluj Napoca, Romania
Topic	<ul style="list-style-type: none"> - CLIL - CLIL methodology - CLIL module
Subject area	Teaching methodology
Language	English
Language Level	B2 or above
Target group	<ul style="list-style-type: none"> - teachers - teacher trainers
Time	16 hours (2-3 days)
Aims	<ul style="list-style-type: none"> - argue cogently for adopting CLIL - cooperate with peers to draft CLIL learning units / modules - use English in communication about CLIL
Products/outcomes	<ul style="list-style-type: none"> - CLIL concept maps - draft CLIL modules
Classroom activities	The overall approach is based on the KWL strategy (Ogle 1986). It is built on an assessment-driven approach, whereby the learners' initial level of performance is established through small and whole group discussions and analysis of the CLIL assessment grid. The content is then shared and new skills built through a variety of reading, writing and discussion activities carried out individually, in small groups, and/or with the whole class. Finally, the assessment grid is revised for a progress check and consolidation of what has been learnt.

Assessment tools	<ul style="list-style-type: none"> - CLIL assessment grid - checklist for cooperative learning skills - jigsaw reading - exit cards for learner feedback and self-assessment
Assessment criteria Content Language Cooperative work	<ul style="list-style-type: none"> - CLIL concept mastery - quality of CLIL unit design - use of English in oral communication - reading comprehension in English - cooperation with peers in group work
Resources	<ul style="list-style-type: none"> - written instructions for tasks - readings (article, jigsaw reading) - templates for CLIL unit design assessment tools

Step 1

Students' work

Icebreaker for getting to know each other and for discussing expectations and concerns about the course.

Resources

- worksheet: written instructions for *Mix – Freeze – Pair*.

Assessment

- direct observation of task performance.

Step 2

Students' work

Clarify understanding of objectives of the workshop and of CLIL assessment.

Resources

- handout: *KWL-chart* (with strategy description).

Assessment

- direct observation of learners;
- participation in discussion.

Step 3

Students' work

Clarify the concept of CLIL.

Use the *KWL-chart* for individual and group work.

Answer the question “What do I know or think I know about CLIL?” Speculate on what CLIL means. Fill in the **K** column.

Answer the question “What do I want to know about CLIL?” Think and write questions in the **W** column.

Resources

- handout: *KWL-chart* (with strategy description);
- KWL-grid on board.

Assessment

- monitoring how *K* & *W* columns are filled in: number of entries, not quality, as this is preparation for the new learning.

Step 4

Students' work

Become familiar with *INSERT* strategy for self-monitoring understanding of text.

Resources

- handout: *INSERT* (symbols and meaning written on board).

Assessment

- checking understanding of meaning / use of symbols.

Step 5

Students' work

Read using *INSERT*, looking for answers to the questions in *W* column of the *KWL-chart*; those who finish reading early fill in *INSERT* chart.

Resources

- handout: *Content and Language Integrated Learning*.

Assessment

- monitoring of *INSERT* use while reading.

Step 6

Students' work

Discussion to clarify answers to questions in *W* column of the *KWL-chart*.

Resources

- *KWL-chart*;
- handout: *Content and Language Integrated Learning*.

Assessment

- participation in discussions.

Step 7

Students' work

Fill in the *L* column of the *KWL-chart*.

Resources

- *KWL-chart*.

Assessment

- quality of entries in *L* column.

Step 8

Students' work

- Prepare CLIL concept map in groups of 3-4.
- Share concept maps with whole group.

Resources

- flipchart paper, markers.

Assessment

- quality (clarity, logic) of concept map.

Step 9

Students' work

In groups of 3 or 4 the participants are given a set of 12 questions and 12 answers. They divide them among themselves, without knowing at this stage which answer matches which question. The group members take turns reading aloud their questions (one at a time) and then all together try to identify the appropriate answer from the stack of answers they have. The person who finds the answer first will:

- read it aloud
- argue why they think this is the appropriate answer (using language cues).

Extension if time allows: the groups choose one question that they find very important and *write their own answer* to the parents.

Resources

- worksheet: *Parents ask – experts answer* (questions and answers cut up and mixed).

Assessment

- correct matching of answers to the questions;
- for the extension activity: quality of answers provided to selected question.

Step 10

Students' work

In groups of 3-4 students answer the questions “How may I introduce CLIL in my teaching? Who would I have to collaborate with and how?”

Acknowledge form for assessment of group processes and use it as a self-assessment tool during group work from here on.

Resources

- handout : *Group Self-Assessment for Discussions*;
- *Trainer's Checklist of Group Work*.

Assessment

- monitoring group processes;
- quality of answers.

Step 11

Students' work

Plan a CLIL unit in small groups set up based on age group of students involved or subject matter taught.

Resources

- handout: *Planning a CLIL Unit (Unit plan; planning matrix; guiding questions).*

Assessment

- assessment is done by looking at the grid for unit planning.

Step 12

Students' work

Present unit plan; provide and receive feedback (from peers and trainer).

Resources

- *Analytic assessment grid for content, language and cooperative work* (see below);
- *Participants' self-evaluation grid.*

Assessment

- (self-)assessment of participants in the *CLIL through CLIL* training Programme.

ANALYTIC ASSESSMENT GRID FOR CONTENT, LANGUAGE AND COOPERATIVE WORK

	Criteria	5 excellent	4 good	3 satisfactory	2 almost satisfactory	1 unsatisfactory	Score
CONTENT	Use of basic subject concepts and knowledge	Provides a complex, original definition of CLIL in ca 200 words, which identifies at least four essential features of CLIL.	Provides a correct definition of CLIL using some of the wording from the reading materials and some original elements.	Identifies one complete definition of CLIL in the reading materials provided during the training.	Identifies one element of a definition of CLIL provided in the reading materials made available during the training.	Does not identify any element of a definition of CLIL.	
	Application of knowledge to new situations	Designs and is completely prepared to deliver one at least 15-hour CLIL module in his/her school.	Correctly and completely adjusts the CLIL module/unit designed in a group during training to his/her students' learning needs and is be ready to start delivering it.	Adds at least three new and relevant elements (adjusted to his/her students' needs) to the draft design of the CLIL unit produced in a group during training.	Adds at least one relevant new element to the draft design of the CLIL unit produced in a group during training.	Does not add any relevant new element to the draft design of the CLIL unit produced in a group during training.	
	Creativity	Lists four valid and highly convincing arguments for adopting CLIL in his/her school.	Lists three valid and convincing arguments for adopting CLIL in his/her school.	Lists two valid arguments for adopting CLIL in his/her school.	Lists one argument for adopting CLIL in his/her school.	Does not list any argument for adopting CLIL in his/her school.	

	Criteria	5 excellent	4 good	3 satisfactory	2 almost satisfactory	1 unsatisfactory	Score
LANGUAGE	Use of language (L2=EN) listening reading	Understands all essential communication (oral and written) related to CLIL in L2.	Understands most essential communication (oral and written) related to CLIL in L2.	Understands some essential communication (oral and written) related to CLIL in L2.	Understands some communication (oral and written) related to CLIL in L2.	Does not recognize in written or spoken language any CLIL related vocabulary in L2	
	Use of language (L2=EN) speaking writing	Argues clearly orally and in writing for adoption of CLIL in his/her school in L2.	Produces at least two arguments (orally and in writing) for adoption of CLIL in his/her school in L2.	Produces at least one argument (orally or in writing) for adoption of CLIL in his/her school in L2.	Produces at least part of an argument (orally or in writing) for adoption of CLIL in his/her school in L2.	Does not use in spoken or written language any CLIL related vocabulary in L2	
	Use of language (L2=EN) writing	Produces a draft design of a CLIL module in L2.	Produces most of a draft design of a CLIL module in L2 or all with support from trainer / other participants.	Contributes at least one correct and relevant element to the draft design of a CLIL module in L2.	Contributes at least one element to the draft design of a CLIL module in L2.	Does not produce any written CLIL related vocabulary in L2	
	Use of language (L2=EN) interaction	Interacts with group members very effectively in L2.	Interacts with group members adequately and relevantly in L2.	Interacts with group members in CLIL related communication in L2 at least twice.	Interacts with group members in L2 at least twice.	Does not interact at all with group members in L2	
COOPERATION	Securing shared understanding	Always makes sure that group members have shared and correct understanding of the task before proceeding to do it.	Most times, makes sure that group members have shared and correct understanding of the task before proceeding to do it.	Sometimes remembers to check that group members have shared and correct understanding of the task before proceeding to do it.	At least once, remembers to check that group members have shared and correct understanding of the task before proceeding to do it.	Never checks that group members have shared and correct understanding of the task before proceeding to do it.	
	Staying on task	Always focuses on task.	Focuses on task most of the time.	Sometimes focuses on task.	Focuses at least on one task.	Never focuses on any group task.	
	Active listening	Always listens actively to relevant communication in group.	Listens actively to relevant communication in group most of the time.	Listens actively to relevant communication in group some of the time.	Listens to relevant communication in group some of the time.	Never listens to communication in group.	

Participants' self-evaluation grid (10)

Participant's name	
L2:	
Topic delivered	

In the space on the right, please, write the number that best reflects your self-assessment as a learner, and comment on why you have chosen that number.

MY EVALUATION	1 lacking	2 adequate	3 good	4 Excellent
Evaluation of training as a whole				
Content acquisition				
Development of concepts				
Involvement in communication				
Use of L2				
Attitude				

Please, respond in the space provided on the right.

Difficulties encountered	
What interested me most	

REFLECTION AND COMMENTS

The *CLIL through CLIL* training programme was delivered to two groups of teachers. The second group received the revised programme, in which the major change was the introduction of the self-assessment grid at the beginning of the learning process for better oriented learning.

Discussions – which had been planned to take place in L2 – were predominantly conducted in L1 due to the language skills of the majority of participants. However, L2 was used in all reading materials, by the trainer in giving instructions, and by about 25% of participants in most discussions. However, in clarifying tasks the trainer had to use L1. All participants used L2 in the *Getting to know each other* and the other energizing activities, as well as in the *read-alouds*. In writing (note-taking, concept map, CLIL unit planning) the participants used a mixture of L1 and L2. Most of the final presentations were delivered in L2 by group members whose English language skills were stronger, with completions and peer feedback in Romanian.

As for the difficulties encountered, the participants pointed out language-related difficulties and some difficulties in planning a CLIL unit. The aspect that interested the participants most was the CLIL methodology. What some participants valued highly in the course was the opportunity to improve their English language skills

GLOSSARY

María Ortiz, Beatriz López

4Cs of CLIL methodology [BG: 4 C на CLIL методологията: съдържание, общуване, познание и култура; DE: die vier Cs der CLIL-Didaktik: Inhalt, Kommunikation, Denken und Kultur; ES: las 4 Cs de la metodología AICLE: contenido, comunicación, cognición y cultura; FR: les 4 C de la méthodologie EMILE: contenu, communication, cognition et culture; IT: le 4 C della metodologia CLIL: contenuto, comunicazione, capacità cognitive e cultura; LV: četri CLIL elementi; RO: cei 4 C ai metodologiei CLIL: conținut, comunicare, cunoaștere și cultură; SV: de fyra C-er för CLIL metodiken: innehåll, kommunikation, kognition och kultur; TR: CLIL'in 4 C' si: Content - İçerik, Cognition - Kavrama, Communication - İletişim, Culture - Kültür]: *content, communication, cognition and culture.* (D. Coyle, 1999). *These are interrelated components of CLIL. Culture is also linked to citizenship and community.*

Affective side of learning [BG: афективната страна на обучението; DE: Affektive Seite des Lernens; ES: aspecto afectivo de la enseñanza; FR: dimension affective de l'apprentissage; IT: dimensione affettiva dell'apprendimento; LV: mācīšanās affektīvie aspekti; RO: dimensiunea afectivă a învățării; SV: den affektiva sidan av lärande; TR: öğrenmenin duygusal tarafı]: *aspects of learning influenced by the learners' emotions and feelings.*

CLIL [BG: CLIL; DE: bilingualer Unterricht; ES: AICLE, Aprendizaje Integrado de Contenidos y Lenguas Extranjeras; FR: EMILE, Enseignement de Matière par l'Intégration d'une Langue Étrangère; IT: apprendimento integrato di lingua e contenuto; LV: CLIL, Saturā un valodas integrēta mācīšanās; RO: CLIL, Învățarea integrată a conținuturilor și limbii; SV: CLIL, Innehåll- och språksintegrerad inlärning; TR: CLIL, içerik ve dilin birlikte öğrenimi]: *educational approach in which a foreign / second language is used as a vehicle for learning a curricular subject while learning the foreign / second language at the same time.*

CLIL activators [BG: основни CLIL активатори; DE: wichtigste fördernde Elemente für bilingualen Unterricht; ES: activadores esenciales de AICLE; FR: facteurs qui facilitent l'EMILE; IT: elementi che contribuiscono alla realizzazione del CLIL; LV: CLIL veicinošie elementi; RO: activatoare esențiale în CLIL; SV: CLIL aktivatorer; TR: CLIL ana etkinleştiricileri]: *elements of good pedagogy and CLIL practice, representing some of the ways in which CLIL participants work together to build both learning communities and learning environments for students. Examples: engaging students, reflecting on practice, managing language or systematizing integration.*

CLIL experience [BG: CLIL опит; DE: Erfahrung mit bilinguaem Unterricht; ES: experiencia de AICLE; FR: expérience d'EMILE; IT: esperienza CLIL; LV: CLIL pieredze; RO: experiență CLIL; SV: CLIL erfarenhet; TR: CLIL deneyimi]: *observation or participation of CLIL approach.*

CLIL module [BG: CLIL модул; DE: bilinguale Unterrichtseinheit; ES: módulo AICLE; FR: module EMILE; IT: modulo CLIL; LV: CLIL modulis; RO: modul CLIL; SV: CLIL modul; TR: CLIL ünitesi]: *unit or component of CLIL. An independent teaching/ learning unit which is complete in itself. It is designed to teach topics of a specific subject. Modules fit into a flexible learner oriented methodology.*

CLIL strategy (BG: CLIL стратегия; DE: methodische Strategien im bilinguaem Unterricht; ES: estrategia de AICLE; FR: stratégie EMILE; IT: strategia CLIL; LV: CLIL stratēģija; RO: strategie CLIL; SV: CLIL strategi; TR: CLIL stratejisi]: *strategies used in CLIL methodology, for example: introduce rich input, scaffolding learning, promote interaction or add intercultural dimension to the teaching when possible.*

CLIL teachers' reflective practice [BG: рефлексивна CLIL практика; DE: Reflexion des bilinguaem Unterrichts; ES: práctica reflexiva; FR: pratique réflexive sur l'expérience EMILE; IT: riflessione sull'esperienza CLIL; LV: CLIL pedagoga darbības pašanalīze; RO: practica reflexivă a profesorilor CLIL; SV: CLIL lärarnas reflekterande praktik; TR: öğrenimde yansıtıcı pratik]: *teachers analyse and reflect on their own practice in CLIL with the purpose of improving it.*

Code switching [BG: Превключващ код; DE: Hin- und Herschalten zwischen Mutter- und Zielsprache; ES: cambio de código; FR: changement de code; IT: commutazione di codice, alternanza linguistica; LV: koda maiņa; RO: schimbarea codului; SV: kodväxling; TR: kod değişimi]: *practice of moving between two languages or dialects in different contexts.*

Cognition [BG: Познание; DE: Denken; ES: cognición; FR: cognition; IT: dimensione cognitiva; LV: izziņa; RO: cogniție; SV: kognition; TR: kavrama]: *one of the 4Cs of CLIL methodology. It indicates process or result: in addition to thinking, remembering, identifying and defining, reasoning, creative thinking and evaluating are also needed for academic study.*

Collaborative space [BG: Пространство за сътрудничество; DE: geschützter Raum für Lernende; ES: espacio colaborativo; FR: espace collaboratif; IT: spazio collaborativo; LV: sadarbības vide; RO: spațiu de colaborare; SV: samarbetsplatsen; TR: işbirliği ortamı]: *a place where learners can try out ideas, confront former understandings and negotiate together new meanings.*

Creativity [BG: Креативност; DE: Kreativität; ES: creatividad; FR: créativité; IT: creatività; LV: radošums; RO: creativitate; SV: kreativitet; TR: yaratıcılık]: *ability to produce something new, or to solve problems through imagination.*

Critical talk in CLIL [BG: Критика на приложението на CLIL; DE: bilinguale Diskussion; ES: conversación crítica; FR: utilisation de la langue pour une discussion critique; IT: uso della lingua per una discussione critica; LV: kritiskās diskusijas metode; RO: discurs critic în CLIL; SV: kritisk samtal i CLIL; TR: eleştirel tartışma]: *the act of critically approaching a topic in discussion with the purpose of questioning, inventorying and weighing multiple perspectives and making well-informed, justified decisions or judgments.*

Expert talk [BG: Експертна беседа; DE: Expertensprache; ES: conversación experta; FR: conversation experte; IT: uso settoriale della lingua; LV: eksperta diskusijas metode; RO: discurs de expert; SV: expert-samtal; TR: teknik tartışma]: *subject-specific discourse using terminology with particular conceptual connotations.*

Exploratory talk in CLIL [BG: Проучвателни разговори за прилагане на CLIL; DE: exploratives Gespräch im bilingualen Unterricht; ES: conversación exploratoria; FR: utilisation de la langue à des fins heuristiques; IT: uso euristico della lingua; LV: izpētes diskusijas metode; RO: discurs explorator în CLIL; SV: förberedande samtal i CLIL; TR: kapsamlı tartışma]: *discussion relying on use of L1 and L2 aiming to explore a concept or topic, to look at its various dimensions and implications with the purpose of enhancing knowledge of it.*

Fairness [BG: Точност; DE: Fairness; ES: equidad; FR: acceptabilité; IT: accettabilità; LV: objektivitāte; RO: corectitudine; SV: rättvisa; TR: doğruluk]: *absence of bias; the quality of treating sb. or sth. equally or in a way that is right or reasonable.*

Formal learning [BG: официално обучение; DE: institutionalisiertes Lernen; ES: educación formal o reglada; FR: apprentissage formel; IT: apprendimento formale; LV: formālā izglītība; RO: învățare formală; SV: formellt lärande; TR: resmi öğrenim]: *structured and regulated educational system provided, supported and operated by the state according to an official curriculum. It includes pre-primary, primary, secondary and university education and it is applied in a specific timetable/schedule.*

Genre [BG: Жанр; DE: Gattung; ES: género; FR: genre; IT: genere o forma testuale; LV: žanrs; RO: gen; SV: genre; TR: tarz]: *a category of text composition in communication, marked by a distinctive style, form, or content.*

Informal learning [BG: Неформалното обучение; DE: nicht institutionalisiertes, informelles Lernen; ES: educación informal; FR: apprentissage informel; IT: apprendimento informale; LV: ikdienējā mācīšanās; RO: învățare informală; SV: informellt lärande; TR: gayriresmi öğrenim]: *it allows acquiring and accumulating both knowledge and skills via daily experiences (work, leisure) and the relationship with the environment. It normally occurs outside the classroom. It is not intentional and not structured regarding learning aims, learning time and learning support, and normally no certification is involved.*

In-service training [BG: обучение в преподаване; DE: Lehrerfortbildung; ES: formación en el servicio o formación continua; FR: formation continue des enseignants; IT: formazione in servizio dei docenti; LV: pedagogu tālākizglītība; RO:

formare continuă a cadrelor didactice; **SV**: i-tjänst lärarfortbildning; **TR**: hizmet içi eğitim]; *professional training while on the job, different from “pre-service training”, done before any professional activity.*

Learning outcomes [**BG**: Резултатите от обучението CLIL; **DE**: Lernertrag im bilingualen Unterricht; **ES**: resultados del aprendizaje; **FR**: résultats de l'apprentissage; **IT**: risultati dell'apprendimento; **LV**: mācību sasniegumi; **RO**: rezultatele învățării; **SV**: lärandemål; **TR**: öğrenim çıktıları]; *the results or products of learning content and language through spoken, written, practical or creative work.*

Meta-talk [**BG**: Мета-беседа; **DE**: Metakommunikation; **ES**: meta-conversación; **FR**: metacommunication; **IT**: uso della lingua a scopi metacognitivi; **LV**: metakomunikācija; **RO**: metadiscurs; **SV**: meta-diskussion; **TR**: konuşma ötesi]; *awareness of the act of talking, its functions and dimensions for a variety of communicative purposes.*

Non formal learning [**BG**: Неформалното учене; **DE**: informelles Lernen; **ES**: educación no formal o no reglada; **FR**: apprentissage non formel; **IT**: apprendimento non formale; **LV**: neformālā mācīšanās; **RO**: învățare non-formală; **SV**: icke-formellt lärande; **TR**: okul dışı öğrenim]; *it normally occurs outside of traditional educational institutions and its certifications or qualifications (if any) do not have official recognition. It refers to educative institutions, areas and activities that have been created to satisfy specific objectives and, therefore, it is intentional from the learner's point of view.*

Primary school/education [**BG**: Начално образование; **DE**: Grundschulbildung (in den meisten Ländern Europas von 6-12); **ES**: enseñanza o educación primaria (entre 5 y 12 años); **FR**: enseignement primaire; **IT**: scuola primaria (5 anni, a partire da 6 anni di età); **LV**: pamatskola (skolēni vecumā no 7-15 gadiem); **RO**: învățământ primar; **SV**: grundskola/utbildning; **TR**: ilköğretim]; *first stage of compulsory formal education for children between 5 and 12 years old (depending on the country).*

Reliability [**BG**: Надеждност; **DE**: Reliabilität; **ES**: fiabilidad; **FR**: fiabilité; **IT**: affidabilità, attendibilità; **LV**: ticamība; **RO**: încredere; **SV**: tillförlitlighet; **TR**: güvenilirlik]; *that can be trusted because it works in the way it is expected.*

Rubric [**BG**: рубрика; **DE**: Kriterienkatalog, Bewertungsraster; **ES**: rúbrica; **FR**: répertoire; **IT**: rubrica (valutativa); **LV**: vērtēšanas kritēriju kopums, rubrika; **RO**: set de descriptori de performanță; **SV**: rubriken; **TR**: değerlendirme çizelgesi]; *a scoring tool usually in the form of a matrix used to assess learner outcomes (products, performances). A rubric includes a set of criteria, standards and levels of performance. Rubrics can be holistic – where the teacher scores the product as a whole –, analytic – where the teacher scores part of a product –, general or specific.*

Scaffolding [**BG**: Скеле; **DE**: Hilfen zum Verständnis im Fremdsprachenunterricht; **ES**: andamiaje / planificación de apoyo; **FR**: support à l'apprentissage; **IT**: sostegno dato per l'apprendimento; **LV**: mācību atbalsts; **RO**: eșafodaj; **SV**: byggställning; **TR**:

pekiştiriciteknikler]: *technique used to help learners move forward in their learning and understanding.*

Secondary school/education [BG: средно образование; DE: Sekundarschule – in den meisten Bundesländern noch einmal in Sekundarstufe I und II eingeteilt, 12-16, 16-18 Jahre; ES: enseñanza o educación secundaria – entre 12 y 16 años; FR: enseignement secondaire – collège, 11-15 ans; lycée, 16-18 ans; IT: scuola secondaria – dal sesto al tredicesimo anno di scuola; LV: vidusskola – skolēni vecumā no 16/19 gadiem; RO: învățământ secundar – 10/11-15/16, 16/17-18/19 an; SV: gymnasieutbildning – mellan 16 och 20 år gammal; TR: ortaöğretim – 17-19 yılın]; *second stage of compulsory formal education for children between 12 and 18 years old approx. (students' ages vary depending on each country's educational system), more based on subject teaching.*

Social talk [BG: Социална беседа; DE: Alltagsgespräch; ES: conversación social; FR: langue pour la communication quotidienne; IT: lingua per la comunicazione quotidiana; LV: ikdienas runas metode; RO: discurs social; SV: social-diskussion; TR: sosyal konuşma]; *communication among individuals in a social context, such as when students practice use of a foreign language in everyday discussions rather than for academic purposes.*

Systematising integration of CLIL [BG: Систематизираща интеграция на CLIL; DE: systematische Integration von bilingualem Unterricht; ES: sistematización de la integración; FR: systématisation de l'intégration d'EMILE; IT: integrazione del CLIL nel sistema di istruzione; LV: CLIL integrēšanas sistematizācija; RO: sistematizarea integrării CLIL; SV: systematisera integration av CLIL; TR: CLIL integrasyonunun sistemleştirilmesi]; *the act of making CLIL an integral part of the education system.*

Transaction [BG: Транзакция; DE: Transaktion; ES: transacción; FR: transaction; IT: transazione; LV: transakcija; RO: tranzacți; SV: transaktion; TR: iletişim]; *a communicative action or activity involving two or more parties that reciprocally affect or influence each other.*

Transmission [BG: Трансмисия; DE: Übertragung von Informationen; ES: transmisión; FR: transmission; IT: trasmissione; LV: pārsūtīšana; RO: transmite; SV: transmission; TR: iletim]; *the act of sending a message, a picture, or other kind of information.*

University education [BG: Висше образование; DE: Universitätsausbildung; ES: educación universitaria; FR: enseignement supérieur; IT: istruzione universitaria; LV: augstākā izglītība; RO: învățământ superior; SV: universitetsutbildning; TR: üniversite eğitimi]; *part of higher, post-secondary, tertiary education; educational level following secondary school dealing with undergraduate and postgraduate education, provided by colleges, universities and institutes of technology, which includes teaching, research and applied work.*

Validity [BG: Валидност; DE: Validität; ES: validez; FR: pertinence; IT: validità, pertinenza; LV: validitāte; RO: valabilitate; SV: validitet; TR: geçerlik]; *that can be trusted because it assesses what should be assessed. See washback effect.*

Washback effect [**BG**: Обратна връзка; **DE**: Synergieeffekt; **ES**: efecto colateral; **FR**: impact; **IT**: impatto, ricaduta; **LV**: atgriezeniskais efekts; **RO**: efectul testării asupra predării; **SV**: washback effekt; **TR**: washback etkisi]: *the way tests and assessment tools are perceived to influence classroom practices and syllabus/curriculum planning. Closely related to “consequential validity”, both terms are considered as synonyms.*

APPENDIX

Evaluation criteria for CLIL-Modules

CLIL-module

I - MODULE PLANNING

Global aims/goals

- Are the teaching aims clear?
- Are the learning outcomes defined?

Content

- Is the module content linked to past learning?
- Is the presentation of new content clear?
- Is the content accessible?
- With reference to the conceptual framework where can topics be introduced?
 - classification / experience
 - principles / processes
 - evaluation / creation
- Is content distributed in different, progressive *steps*?
- Is a progression from simpler to more complex provided?

Cognition (thinking skills)

- Which thinking skills are involved in the steps of the different modules:
 - Lower-order thinking skills*: defining, identifying, classifying.....?
 - Higher-order thinking skills*: explaining, applying, comparing, hypothesizing...?
- Are appropriate *strategies* provided to develop thinking skills? Which ones?

Communication (language)

- Which CALP functions are involved? (CALP: Cognitive Academic Language Proficiency)
 -
- Which socio-communicative functions (BICS: Basic Interpersonal Communicative Skills) are developed as well? At which language level of CEFR do they correspond?
 - A2
 - B1
 - B2
 - C1
- Are language functions declined in structures and vocabulary?

- Which language activities are involved?
 - listening
 - reading
 - speaking
 - interacting
 - writing
- Are the students involved in *using the* language?
- Are the students involved in *learning the* language?

Culture

- Does the content theme offer opportunities to develop pluricultural perspectives?
- Which curriculum links can the content theme encourage?

Assessment planning

- Which summative and formative tasks are provided?
- Are *criteria* established?
- Do the assessment criteria cover all the CLIL components in an integrated way?
- Are competence *descriptors* provided? Are they coherent with the module aims?
- Are *scores* provided?
- How are the scores formulated?
 - description of the performance
 - by just one word
- Are alternative assessment forms (peer assessment, self-assessment, portfolio....) been considered?

II - LESSON DELIVERY

Lesson planning

- Does each step provide a balanced quantity of materials and tasks?
- Is each lesson planned in detail (time, materials, activities....)?

Teaching strategies

- Which *strategies* are used to link new information *to previous learning*?
 - KWL strategy
 - brainstorming
 - questions
 - key words
 -
- Which *strategies* are used in order to *make input comprehensible*?

- oral scaffolding - questioning, paraphrasing, thinking aloud
- visual aids
- key vocabulary emphasizing
- speech appropriate for students' proficiency level
- graphic organizers

- Which *thinking strategies* are used to *support learning* (comprehension & production)
 - oral scaffolding – questioning
 - frames
 - cubing
 - imitative writing
 -

- Which classroom management activities are planned?
 - teacher's speech
 - group work
 - pairwork
 - individual activities
 - internet research
 - warm up
 - multimedia
 - exercises manipulating form
 - exercises or tasks integrating language improvement and content learning
 - tasks focusing content and real world connections
 -

Teaching resources

- Which are the teaching materials provided?
- Are the materials authentic or adapted?
- Is the use of the internet or IT suggested?

Assessment practice

- What is the feedback provided? How are the results communicated?
- Has a positive wash-back been produced?

STUDENT QUESTIONNAIRE

You are asked to fill this questionnaire so that we can know your opinion on the CLIL experience carried out this year. Indicate your responses with a "√". Thank you for your cooperation.

1. How do you consider your experience of learning in the CLIL module?

Very important Important Partially important Not important

2. In which of these situations have you used the foreign language and how often?

	Always or very often	Often	Sometimes	Seldom / never
a. oral addressing to the class				
b. discussion				
c. interview				
d. oral interchange with teachers				
e. oral interchange with mates				
f. group work				
g. others:				

2.1 How safe/comfortable did you feel in the following situations:

	Very comfortable	Comfortable	Partially comfortable	Not comfortable
a. oral addressing to the class				
b. discussion				
c. interview				
d. oral interchange with teachers				
e. oral interchange with mates				
f. group work				
g. others:				

3. Which strategies did you find more useful to accomplish the tasks?

	Useful	Quite useful	Not so useful	Not useful
a. listening to the teacher's explanations				
b. answering the teacher's questions				
c. answering my mates' questions				
d. using the examples presented by the teacher				
e. repeating verbally what I had previously heard, read or written				
f. trying to express orally, in my own words, what I had heard, read or written				
g. using images, grids or graphs as stimulus to speak				
h. others:				
i. others:				
j. others:				

4. When you spoke in a foreign language in this module (in a subject) you consider important...

	Very important	Important	Partially important	Not important	Promoted in the module
a. the correct pronunciation of words					
b. the ability to improvise					
c. knowledge of vocabulary					
d. knowledge of the contents					
e. the use of facial expressions, gestures and body movements					
f. grammatical correctness					
g. clarity of exposition					
h. the ability to reformulate					
i. check that the others understand me when I speak					
j. others:					

5. Did this module help you improve your ability to express yourself in the foreign language?

- A lot Enough A little None

6. How do you evaluate your learning of the subject studied in the foreign language?

- Very positive Positive Partially positive Negative

7. What problems did you have?

	Always or very often	Often	Sometimes	Seldom / never
a. The language of the materials is too difficult.				
b. The teacher's questions and explanations were too difficult.				
c. I don't like the topic of the module.				
d. The pace of the lesson was too high.				
e. I don't like how the module was presented.				
f. Others:				

8. Which tools used by teachers have been more helpful?

- audio/visual aids (films, graphs, images...)
- practical examples
- web links
- realia

9. Do you think this CLIL experience will be useful for you?

- Very useful Useful Partially useful Not useful

10. Why?

11. Did you like the experience?

- Yes
- No

Why?

12. If given the choice between CLIL and non CLIL experiences, which would you prefer?

Why?

TEACHER QUESTIONNAIRE

L2	<i>Subject</i>

<i>Name of the school</i>	
<i>Place</i>	<i>Country</i>
<i>Class</i>	<i>Nr. Students</i>

<i>Dates</i>	<i>Nr. hours</i>
<i>Title of the module</i>	
<i>Objectives</i>	
<i>Topics</i>	
MATERIALS PROVIDED	
<input type="checkbox"/> Authentic materials	
<input type="checkbox"/> Materials adapted from the Internet	
<input type="checkbox"/> Material taken from foreign language books	
<input type="checkbox"/> Original materials prepared by teachers	
<input type="checkbox"/> Other	

		DESCRIPTION			
1	<input type="checkbox"/> Focus on L2				
	<input type="checkbox"/> Focus on content				
	<i>Kind of activities required</i>				
	<input type="checkbox"/> Requires mechanical operation				
	<input type="checkbox"/> Requires a complex operation				
	<input type="checkbox"/> Requires creativity				
2	<i>Classroom organization</i>				
	<input type="checkbox"/> Frontal lesson				
	<input type="checkbox"/> Interactive lesson				
	<input type="checkbox"/> Individual work				
	<input type="checkbox"/> Pair work				
	<input type="checkbox"/> Group work				
3	<i>How often do teachers use them?</i>	<i>Always</i>	<i>Often</i>	<i>Sometimes</i>	<i>Seldom / never</i>
	<input type="checkbox"/> Frontal lesson				
	<input type="checkbox"/> Interactive lesson				
	<input type="checkbox"/> Individual work				
	<input type="checkbox"/> Pair work				
	<input type="checkbox"/> Group work				
4	<i>Control of learning</i>				
	<input type="checkbox"/> Written feedback				
	<input type="checkbox"/> Oral feedback				
	<input type="checkbox"/> Self-evaluation				
	<input type="checkbox"/> Oral test				
	<input type="checkbox"/> Written test				
	<input type="checkbox"/> Other				

5	Teacher's own difficulties (methodology, language, content) Causes:
6	Students' difficulties (language and content) Causes:
7	Strategies / activities particularly effective Reasons:
8	Strategies / activities particularly ineffective Reasons:
9	Level of appropriateness of the evaluation criteria and assessment tools employed
10	General opinion on the experience
11	Other

TEACHER SELF-EVALUATION QUESTIONNAIRE

You are asked to fill in this questionnaire so that we can know your opinion on the CLIL experience carried out this year. Indicate your responses with a "√". Thank you for your cooperation.

1. Which are your previous experiences in CLIL teaching?

- None
- A few
- Some
- Many

2. How do you consider your experience of teaching in the CLIL module?

- Very effective Effective Partially effective Ineffective

3. In which of these situations would you allow code switching?

	Always or very often	Often	Sometimes	Seldom / never
a. oral addressing to the class				
b. discussion				
c. interview				
d. oral interchange with teachers				
e. oral interchange with mates				
f. others:				

4. Which strategies suggested in the module did you employ to facilitate learning?

	Useful	Quite useful	Not so useful	Not useful
a. listening to the teacher's explanations				
b. answering the teacher's questions				
c. answering the participants' questions				
d. using the examples presented by the teacher				
e. repeating verbally what s/he had previously heard, read or written				
f. trying to express orally, in her/his own words what s/he had heard, read or written				
g. using images, grids or graphs a stimulus to speak				
h. others:				
i. others:				
j. others:				

5. When you teach/evaluate language you consider important...

	Very important	Important	Partially important	Not important	Promoted in the module
a. the correct pronunciation					
b. the ability to improvise					
c. knowledge of vocabulary					
d. the use of non-verbal language					

e. grammatical correctness					
f. fluency					
g. the ability to reformulate					
h. the ability to understand and to be understood					
i. others:					

6. Do you think you have made progress in applying this methodology in your teaching in the foreign language?

- A lot Enough A little None

7. How do you evaluate your teaching of the subject in the foreign language?

- Very positive Positive Partially positive Negative

8. What problems did you have?

	Always or very often	Often	Sometimes	Seldom / never
a. The language selected was too difficult for the students' level.				
b. It was difficult to combine content and language.				
c. The pace of the lesson was too high for the students.				
d. I did not have enough knowledge of the content.				
e. Others:				

9. Which of the tools used have been more helpful to deliver your lessons?

- audio/visual aids (films, graphs, images...)
- practical examples
- web links
- realia

10. Do you think this CLIL experience will be useful for your professional future?

- Very useful Useful Partially useful Not useful

Why?

11. Did you like this teaching experience?

- Yes
- NO

Why?

12. If given the choice, would you like to have another CLIL experience?

Why?

%%%%%%%%%

Title of CLIL experience

Class level

Date

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