Open Educational Resources for Language Teachers: a goal-oriented approach

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Caveat:

This paper has been written before March 3rd 2012 and is only intended as a modest but sincere contribution to the discussion at the EuroCall CMC and Teacher Education SIGs workshop in Bologna on 29-30 March 2012.

The Open phenomenon

'Open' is a fairly recent concept that covers many loads. Open Source, term coined in 1998, is perhaps best known by language teachers, but there is still some confusion with concepts like Freeware or Shareware. The basic idea behind Open Source is that work that is useful for the author may also be useful for others. If the author gets feedback, (s)he can increase the quality of his/her programming. Later, an economical explanation was given: as long as I share my changes, the total quality of the product will increase, thus the quality of the product I use for my clientele will increase.

The concept was later applied to other fields, like Open Content (Wikipedia), free culture (freely usable samples for DJs), open government data (data.gov), open street map for mapping, food and even … content. The Open Knowledge Foundation, founded in 2004 and now with chapters in several countries including Belgium (http://be.okfn.org), states that "Open knowledge is content that people are free to use, re-use and distribute without legal, technological or social restrictions." The Foundation advocates a middle course between piracy and strict copyright enforcement.

Next to initiatives for Open Government (http://data.gov.be/) , Open Justice, Open Access, Open Research, Open Science, we are more and more talking about Open-Source Learning and Open Educational Resources (OER). Question is: will language teachers fall for the Open approach? What have we learned from the past?

Rationale

Any issue regarding content for language learning and teaching should be discussed from three different angles of attack: the teacher's, the author's and the researcher's point of view.

The language teacher

From 1980 to 1986, I have been a language teacher (French and Spanish) in secondary and higher education, and since 1986 involved in the teacher training programme of the University of Antwerp (Institute for Education and Information Sciences). My experience is that it remains very difficult to explain to the general public that teachers have a heavy workload, and language teachers perhaps the heaviest. This workload can easily be explained by a number of reasons: the fact that they are required to mark a lot of exercises, tasks, papers and assignments, they have to constantly adapt their lessons to current themes and topics (through the use of radio, tv and newspaper content), they have to focus on the four skills to be evaluated, they have to focus on social and intercultural competence, they have to respect the prescribed targeted levels (like CEFR), they should include cross-curricular objectives, organize school trips, adapt their content to specific groups (possibly with special needs), integrate the target culture (Landeskunde), look for partners in tandem projects, implement technology, follow new pedagogical trends, organize meetings with colleagues, reflect, differentiate, talk with parents, conduct Action Research…

As far as content is concerned, language teachers can rely on several resources. Commercially available textbooks and materials generally speaking offer reasonable quality and in many cases follow recent pedagogical insights and trends, but they do not afford fast adaptation to specific situations and needs. They are certainly very useful for beginners, but for advanced learners teachers rather rely on freely available authentic documents on the Web. These documents have not been written for didactic purposes, they may be too difficult, contain many errors or present less appropriate materials. This is why sites like www.internetactuel.be offer adapted materials (e.g. graded readers) which offer authenticity without the disadvantages of non-adapted authentic materials. On repositories like www.klascement.be in Flanders, teachers can exchange interactive exercises, learning objects and documents. Also copyrighted materials like songs and movies can be used in education under the 'fair use' regulation. Last but not least, there is the content language teachers develop themselves.

Finding, adapting and writing content for language teaching is an arduous job. Now, sharing, adapting and reusing content should not only considerably reduce the time teachers have to spend on content, it would also increase the didactic quality of the content and increase their self-efficacy (which induces a positive snowball effect). I have always been puzzled by my impression or perception that language teachers share so little content, nor reuse content shared by others. Which we tried to measure more accurately with the survey described below.

Now the 'Open' philosophy is not only about downloading, adapting and using, it is also about sharing again: a peer-to-peer collaborative informal network, based on the idea that the extent to which people contribute will be proportional to what they have received before. Not the other way around. We will have to analyze to what extent this might be a crucial factor in the teacher's mind.

I started my CALL career at the University of Antwerp in 1986, after having used mainframes and punch cards for my master's thesis, and after having tried the first micro-computers (and the first video-cameras) as a language teacher in secondary education. Looking back on 26 amazing and fascinating years of development and research, I am convinced I have been a privileged witness of the emergence of color screens, hard disks, networks, CD-ROMS, visual interfaces, multimedia, the Internet, intelligent tutoring, adaptive intelligence and mobile devices. While CMC tools have already proven great value for language learning and teaching in general, the added value of language courseware (tutors) is hampered by two major obstacles: the cost of software development and the cost of content development (Colpaert 2004).

The cost of software development can be reduced by applying three principles: systematic and methodological design, a generic architecture for distributed applications in terms of object models, and through Open Source. Educational software development in general has seen the emergence of Open Source systems such as Moodle, Big Blue Button, OpenSis and ExeLearning, which have gained momentum but have not completely broken through yet.

The cost of content development for language learning and teaching in general, and for textbooks and technology-embedded content (e.g. language courseware) in particular, can be called *excessive*, mainly due to the labour-intensiveness of content authoring, the lack of transferability to other media and products, and the fact that content gets lost at every change (learning programmes, technology …) due to its dedicated structuring.

Most language learners, teachers, CALL practitioners and researchers will easily agree that content for language learning and teaching should be more generic, reusable, authorable, exchangeable, portable, sustainable and … open. But it is far more difficult to explain the necessity of a technological infrastructure, tools and an ergonomic interface, based on a generic content structure. In Flanders, publishers are still not aware of the fact that this approach could save them millions in the production process. The department of Education is too focused on stimulating hyperactive amateurs on the one hand, and on pampering hype-driven newbie scholars on the other. All this while other bodies are willing to throw money at anything that has 'Open' in its name, like Fred Riley mentioned in a discussion mentioned below.

The researcher

My third angle of attack is my recent focus on the empirical and theoretical validation of the following working hypotheses:

- It is more efficient (and meaningful) to focus on the learning effect produced by the entire learning environment as an *ecology*, than to try to measure any significant difference produced by the introduction of a single technology (ecological paradigm shift).

- The design of this learning environment should be geared towards realizing the learners' (and teachers') personal goals first, before (and as a better way

of) focusing on the realization of pedagogical goals (Colpaert 2010). Psychology should be more important in CALL design.

The main problem is that both learners and teachers know so little about themselves, about the subconscious factors that hinder or stimulate them, and that it is so difficult to elicit personal goals. What they say to be true on conscious level can play in the opposite direction on subconscious level. For instance, South-American students who learn English will easily say that their identity (meaning a feeling of inferiority regarding the English-speaking world, the dominant role of the U.S. in particular) doesn't hinder them, while in many focus groups I have conducted we have come to the conclusion of the opposite. Could this phenomenon also play in the case of Open Content?

These three angles of attack – the teacher, the author and the researcher - bring me to stating that a fundamental re-engineering of content for language teaching is absolutely needed in order to reduce the workload of teachers, and at the same time to increase the general quality of language teaching. It is obvious that technologies in the form of tools, interfaces and generic models will be needed, but most importantly, I see some indications on psychological level that might seriously hamper the break-through of Open Content for Language Teaching. Before embarking on this psychological aspect, let's first explore the concept a little further.

Open Language Teaching Content

Open Educational Resources (OER) can be defined as "digital materials that can be re-used for teaching, learning, research and more, made available for free through open licenses, which allow uses of the materials that would not be easily permitted under copyright alone" (www.wikipedia.org). With '*Open Language Teaching Content*' we refer to a specific activity where teachers co-construct language teaching materials on a peer-to-peer basis in order to share them freely and by receiving feedback progressively increase the quality of their production.

Let's first have a look at the content types involved:

- Text documents (grammar, vocabulary …)
- Wiki content
- Lesson plans
- Syllabi
- Graded readers or adapted authentic material
- Presentation slides
- Content for Interactive Whiteboards
- Course design
- Tests
- Lessons recorded on video
- Interactive Exercises (in Hot Potatoes, Moodle, Blackboard, Exe)
- Pictures, audio and video material
- Lists of authentic material

- Webquests
- Learning objects
- …

Let's now focus on the role of the actors involved. First of all, the government. In Flanders, the department of Education has created the www.klascement.be site, where teachers can download, adapt and upload materials of all types as described above. This system however should insist on having teachers freely use the materials intensively so that they can discover the real reason why one day they would be willing to contribute. Secondly, some people will argue that all content developed by language teachers are paid by all tax-paying citizens and should be considered public property as such. Finally, the government as manager of this public property should provide an API to facilitate access and stimulate the emergence of many new services in the field of language learning and teaching.

The publishers are facing a huge revolution. They will have to invest in a generic in-depth structure for reusable content based on the requirements discussed at this conference. They could reduce their production cost and increase sales through output to several new devices and services. Although in Flanders funding channels are available and several attempts have been made to convince publishers, our attempts to convince them have failed. Secondly, in a market where the concept of product is changing considerably (people do not buy products any more but services), publishers urgently should redesign their own role and financial strategy. Thirdly, in the Open Source Education approach, teachers develop content together, but ask a publisher to put the product on the market. Interesting idea and new role.

How will teachers react to the new challenge? Which factors can we identify as predictors of their behaviour? This was the starting point for a small-scale research project.

The best predictor of future behaviour is past behaviour

At this workshop there will probably several examples of good practices, valuable initiatives, but also colleagues pointing out risks and pitfalls.

Dr. Phil, famous for his too frequently repeated but thoughtful one-liners, often said: "The best predictor of future behaviour is past behaviour". Given the potential effects (time, quality and self-efficacy), some scholars expect teachers to react in a very positive way, on the basis of some hypes we have seen in the past. However, we have also learned that both learners' nor teachers' reactions are predictable. So in our view, their unpredictability is the predictor of their future behaviour.

Why did teachers accept and embrace the word processor immediately, and why did the government have to invest a huge amount of money in Informaton, Dissemination, Awareness-Raising and Responsibilisation activities in order to promote the use of language labs, interactive whiteboards, CD-I, or the Olympus

satellite? Many of these technologies eventually failed. Why did learners react in an enthusiastic way to commercial programs, and why did they give up on other applications developed by design with the best possible pedagogical principles? In an earlier publication (Colpaert 2010) I have tried to explain why we have to be very careful. We have to analyse which psychological factors play in order to be able to foresee what will happen and act accordingly.

The Open Language Teaching Content project

Started as a bet between this author and a CALL colleague, the question quickly arose above the level of a daily coffee debate. We decided to adopt a staged approach, starting with a forum discussion and a survey in order to see in which directions findings would point. Depending on their significance, we were planning to continue this research line through master thesis, projects, and later Phd research.

The LinkedIn Group Discussion

In January 2012, we started a discussion in the LinkedIn group *Computer Assisted Language Learning* (www.linkedin.com). My statement was: "Language learners and teachers worldwide urgently need an Open Content approach. But most resistance seems to come from publishers and teachers themselves. Your opinion please ...". An overview of the reactions:

- Mary-Ann Lyman Hager was the first to respond and she set the tone: "Open Content is a concept that has found its milieu. With everything escalating in price, Open Content allows for the distribution of quality content at GREEN and AFFORDABLE prices. Are we worried about intellectual property, sure, but are there not ways around this?". Quality, price, and … intellectual property.

- Fred Riley grabbed the baton and wrote "Copyright is a dead concept walking. 'Intellectual property' is an oxymoron and impossible to legally enforce in today's Internet. Open Educational Resources (OER) and Creative Commons are now the standard in many subject areas, including languages." He also mentioned current successful initiatives at Open University and Nottingham University. But he later adds that "a major problem in OER isn't the availability of resources - there's an amazing amount of OER out there in all fields of study, not just languages - but the lack of technical tools to reuse that OER.", and exemplifies this statement.

- Biljana Belamaric-Wilsey on the contrary switched to the other aspect of my statement: the publishers: "Open content doesn't have to compete with publishers - look at less commonly taught languages!". She mentions that U.S. publishers are not interested in producing textbooks for Macedonian, as the market is too small, and suggested that this is an opportunity for Open Content. Biljana also mentioned the lack of pedagogical grounding of materials produced for non-formal settings.

- Viky Zouka, a teacher of Modern Greek, agreed with Biljana. "Unfortunately, most resistance towards OER seems to derive from teachers' and material producers' perspectives, I suppose. Not publishers, really. Qualified

teachers/material producers seem unwilling to share content and methodologies, basically unwilling to cooperate and to contribute. I think all we need is to get rid of old concepts about knowledge distribution and educational materials' ownership."

- Claire Bartlett agreed: "Take a look at the new Center for Open Educational Resources & Language Learning (COERLL) in the USA: http://coerll.utexas.edu/coerll/.

- Finally, Mike Copleston added from a publisher's point of view: "Publishers and some teachers have not yet grasped the reality that not only is the way materials are created and distributed changing but that new technology and free access to resources by learners contributes to successful outcomes.", and concluded: "Yes we do retain copyright but we make it easier for users to use and adapt our materials".

Price, emerging initiatives, quality, intellectual property, less spoken languages, non-formal settings, tools for reusing OER, insight … these are the main topics of this (hopefully) ongoing discussion. No mention of resistance in the teacher's mind (yet).

The Worldwide Survey on Open Language Learning

In January 2012, we also posted a survey on SurveyMonkey: the Worldwide Survey on Open Language Learning. 962 language teachers started the survey, while 752 successfully completed it. Some minor technical problems were reported. We have no indication of the response rate, as invitations were sent through listservers like Eurocall, Calico, Linguist and the like, and announced through all available channels. Responses came from more than 100 countries. 62,7 % of the respondents were women. Generally speaking, we could expect respondents to be active, committed, reflecting and researching language teachers. The responses to the multiple choice questions are given in annex.

There were two open questions. At the time of writing this document, we still have to analyze the responses in depth. In the following table we show the frequency lists calculated on the basis of all responses:

I see the following problem(s) in reusing and sharing content for language learning		I see the following advantage(s) in reusing and sharing content	
content	117	time	175
materials	89	materials	114
material	69	ideas	112
students	69	content	84
copyright	65	new	66
teachers	48	students	62
problems	44	sharing	61
needs	38	teachers	58
problem	34	material	58
need	33	teaching	56

language	33	use	55
time	32	wheel	54
share	30	saving	46
own	30	saves	46
sharing	29	good	44
used	28	learning	41
issues	28	better	39
context	28	different	36
adapt	27	work	35
lack	25	resources	29
level	24	save	29
people	24	less	28
adapted	23	variety	27
quality	22	share	27
teaching	22	language	27
find	22	available	25
work	20	learn	24
difficult	19	teacher	24
shared	18	reinvent	23
learning	18	access	23
appropriate	18	own	20
original	18	collaboration	19
specific	18	need	18
class	16	needs	17
suitable	15	adapt	17
credit	15	great	16
teacher	14	colleagues	16
…		best	16
		community	16
		…	

These frequency lists point at predictable aspects already mentioned in other contributions. Coming back to the general output, we can say that it is far too positive, and does not correspond to what I have been observing so far worldwide. Again, the specific nature of the respondents' population (positive attitude towards research and new technologies) partially explains the phenomenon. But in our view, we have to pursue our efforts in identifying personal goals which might help to predict future behavior and attitude of language teachers towards the phenomenon of Open Content.

Conclusion

Open Content for Language Teaching has all the reasons for becoming successful as it clearly responds to some needs related to cost, time, quality and efficacy of educational activities. It will entail significant changes in the role of government, publishers and teachers themselves.

In our view, teachers will need tools, technologies and models for allowing them to access, adapt and share content in a peer-to-peer approach. But we need to research which other psychological factors might impact on the eventual success of this approach.
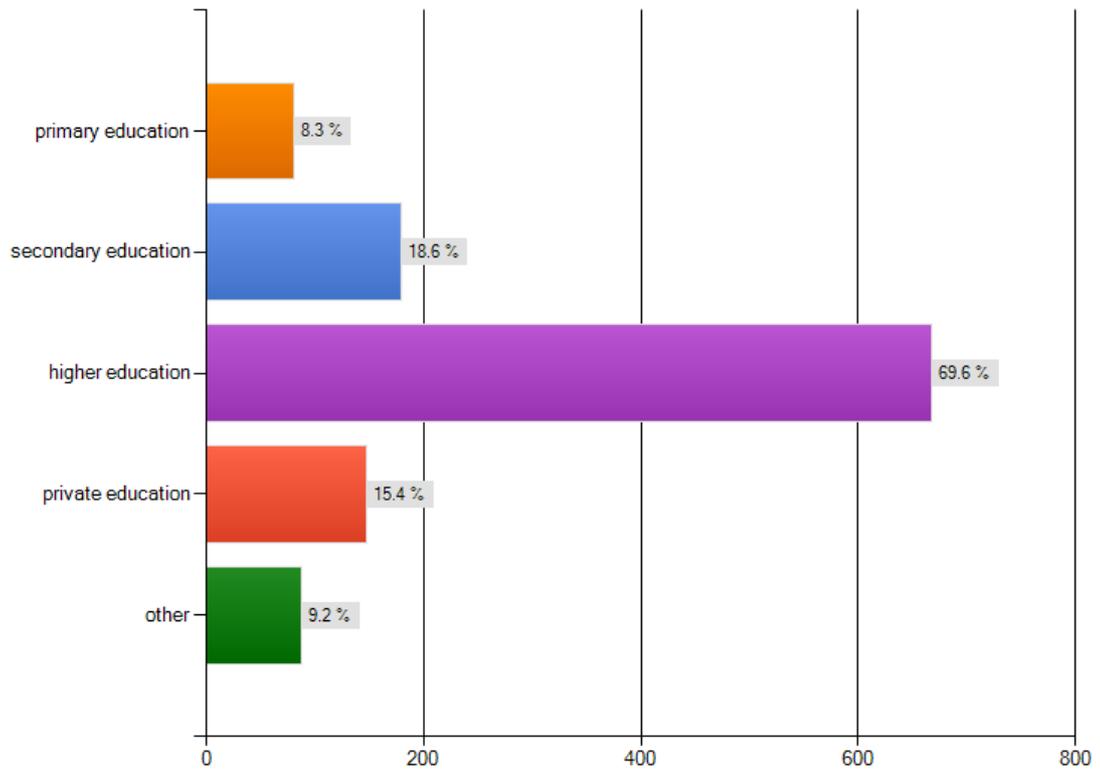
At the Bologna workshop, we will discuss the orientation of our next step in this research project, and after summer involve master thesis students and apply for funding through recognized channels. Hopefully, we will also be able to discuss the extent to which Open Language Teaching might affect teacher education, and the language learning community in general.
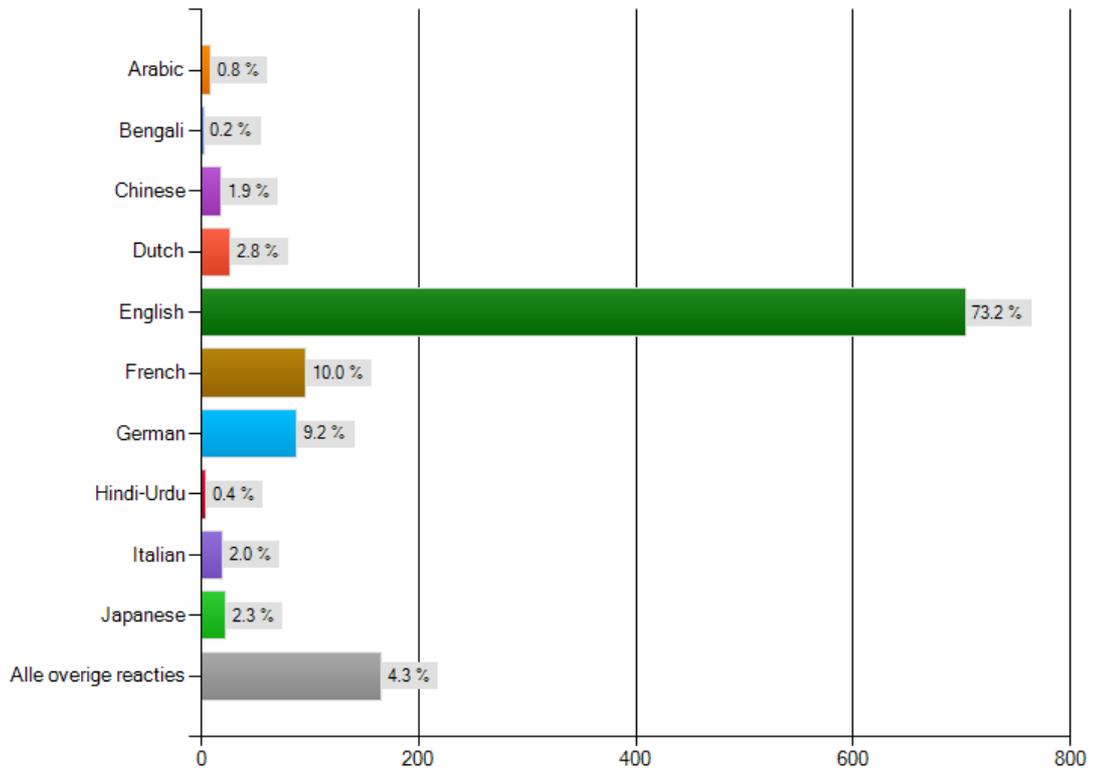
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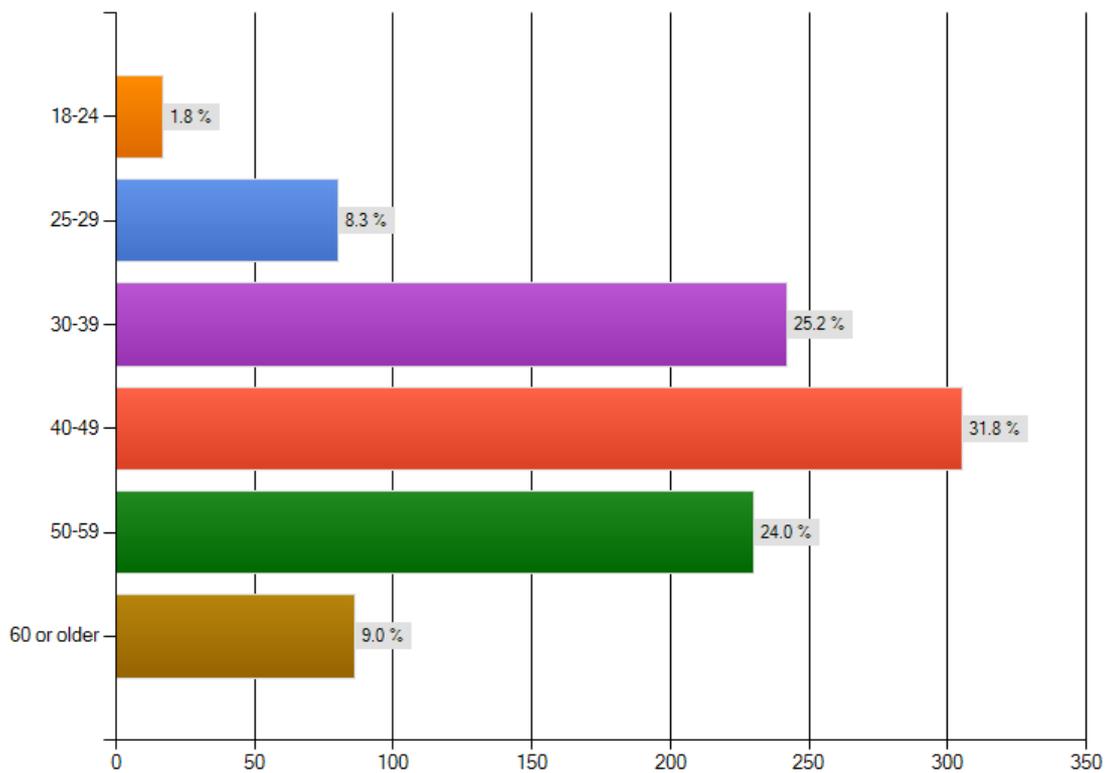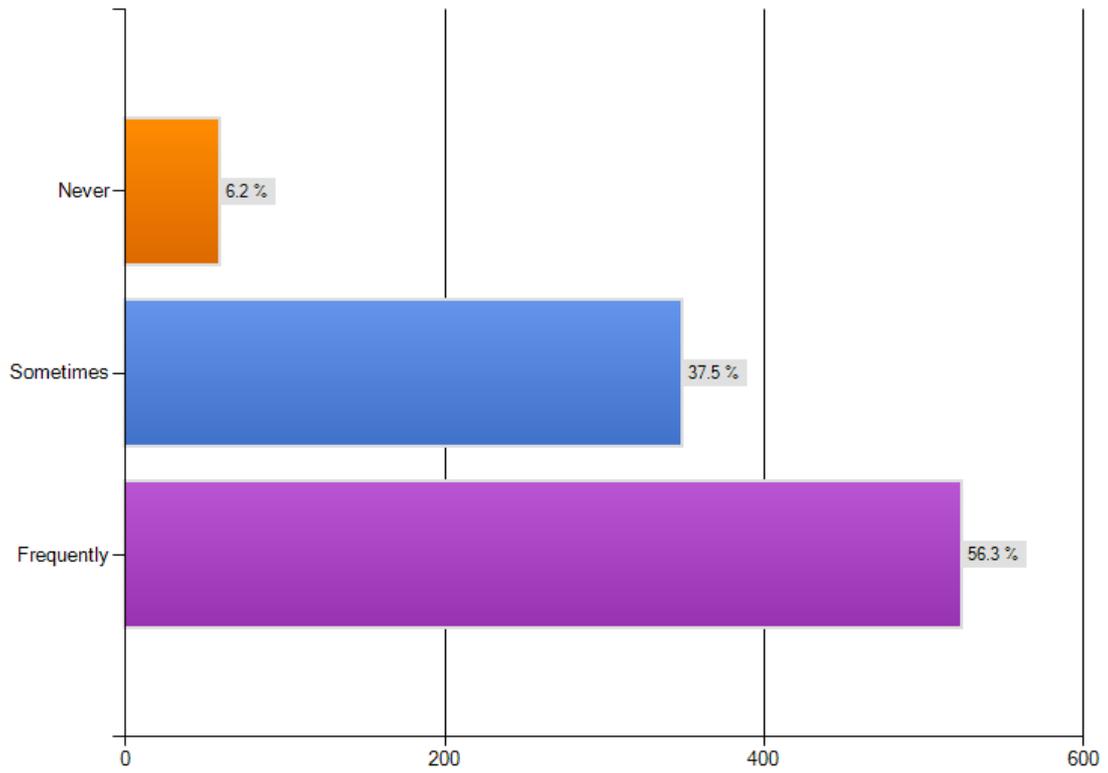
I teach languages in ...

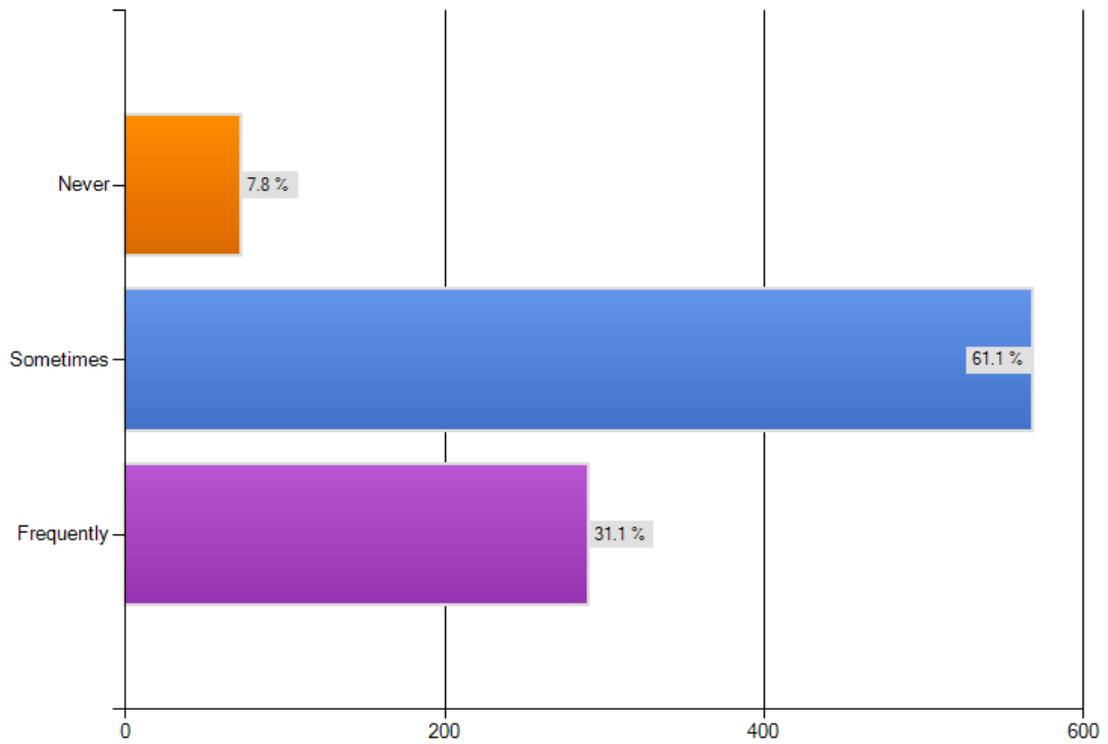| Category	Value
primary education	8.3 %
secondary education	18.6 %
higher education	69.6 %
private education	15.4 %
other	9.2 %

I teach ... (any variant of)

Language	Percentage
Arabic	0.8 %
Bengali	0.2 %
Chinese	1.9 %
Dutch	2.8 %
English	73.2 %
French	10.0 %
German	9.2 %
Hindi-Urdu	0.4 %
Italian	2.0 %
Japanese	2.3 %
Alle overige reacties	4.3 %

My age is ...

Age	Percentage
18-24	1.8 %
25-29	8.3 %
30-39	25.2 %
40-49	31.8 %
50-59	24.0 %
60 or older	9.0 %

I use commercially available content (textbooks, CD-ROMs, ...):

Never	6.2 %
Sometimes	37.5 %
Frequently	56.3 %

0   200   400   600

I use copyrighted materials (movies, songs...) which I consider 'fair use for educational purposes':

Never	7.8 %
Sometimes	61.1 %
Frequently	31.1 %

0   200   400   600

I use authentic materials available from the Web:

Category	Percentage
Never	2.0 %
Sometimes	47.5 %
Frequently	50.5 %
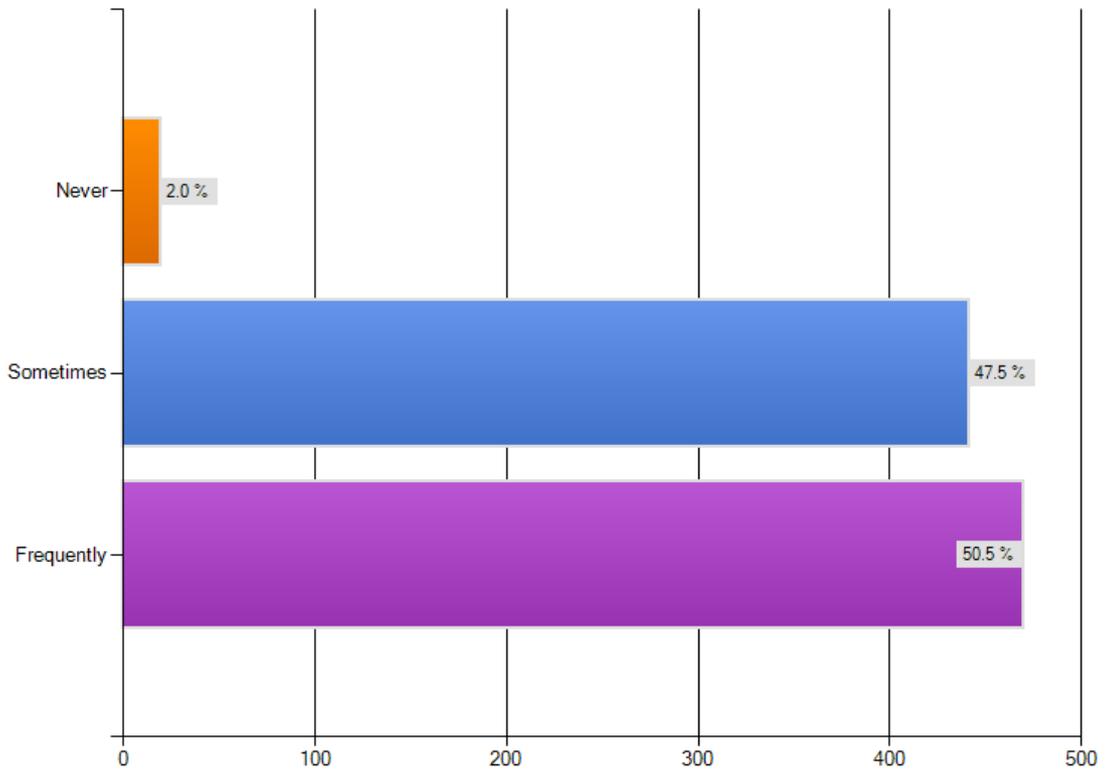
I use content I develop myself:

Category	Percentage
Never	2.6 %
Sometimes	40.7 %
Frequently	56.7 %
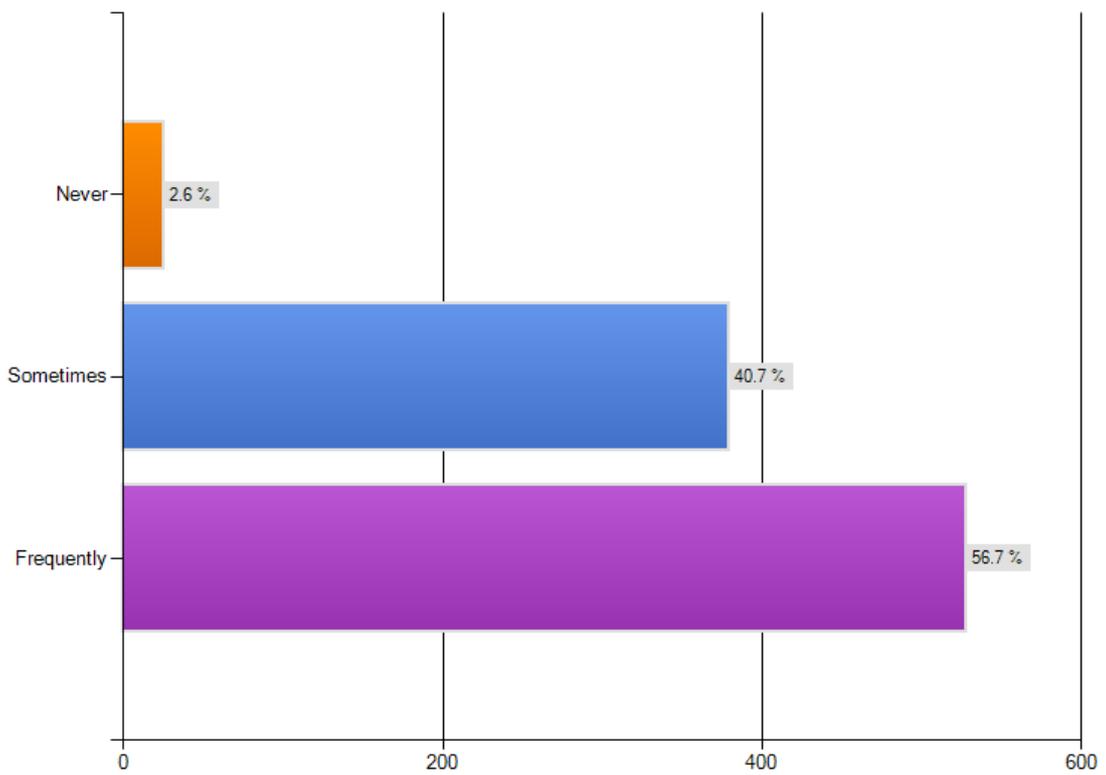
I use content I develop with my colleagues:
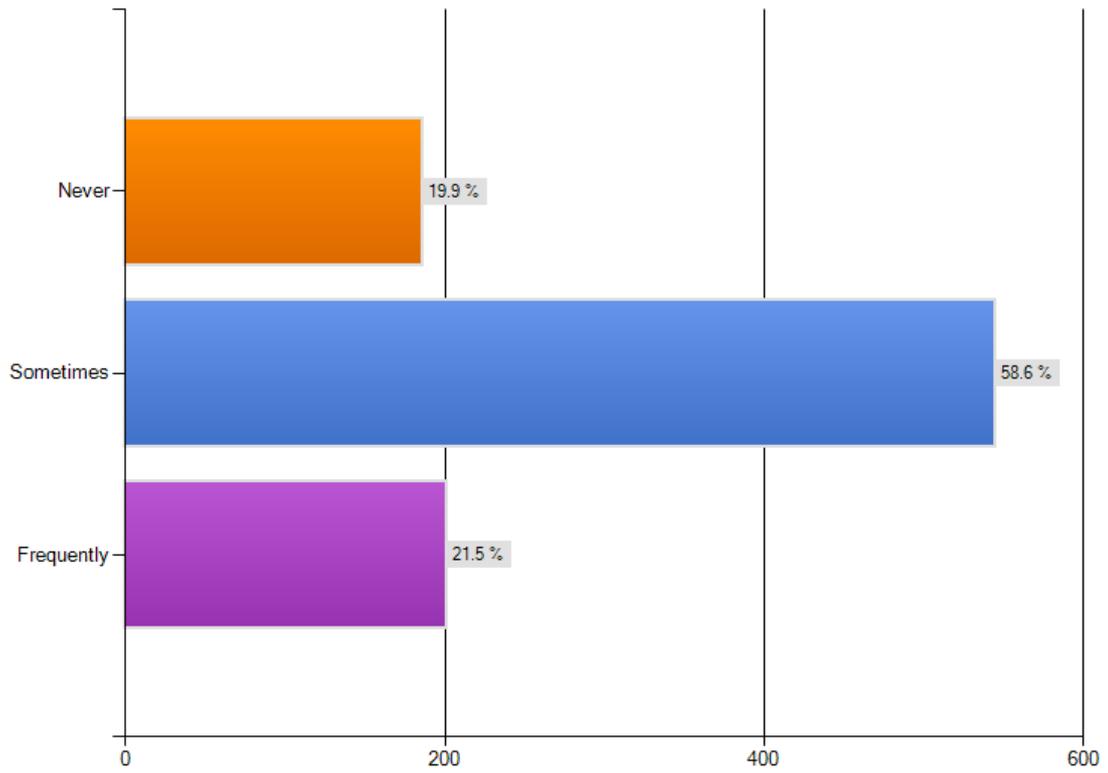
Never	19.9 %
Sometimes	58.6 %
Frequently	21.5 %

0   200   400   600

I use content shared by other language teachers on a non-commercial basis:

Never	15.1 %
Sometimes	67.9 %
Frequently	17.0 %

0   200   400   600   800
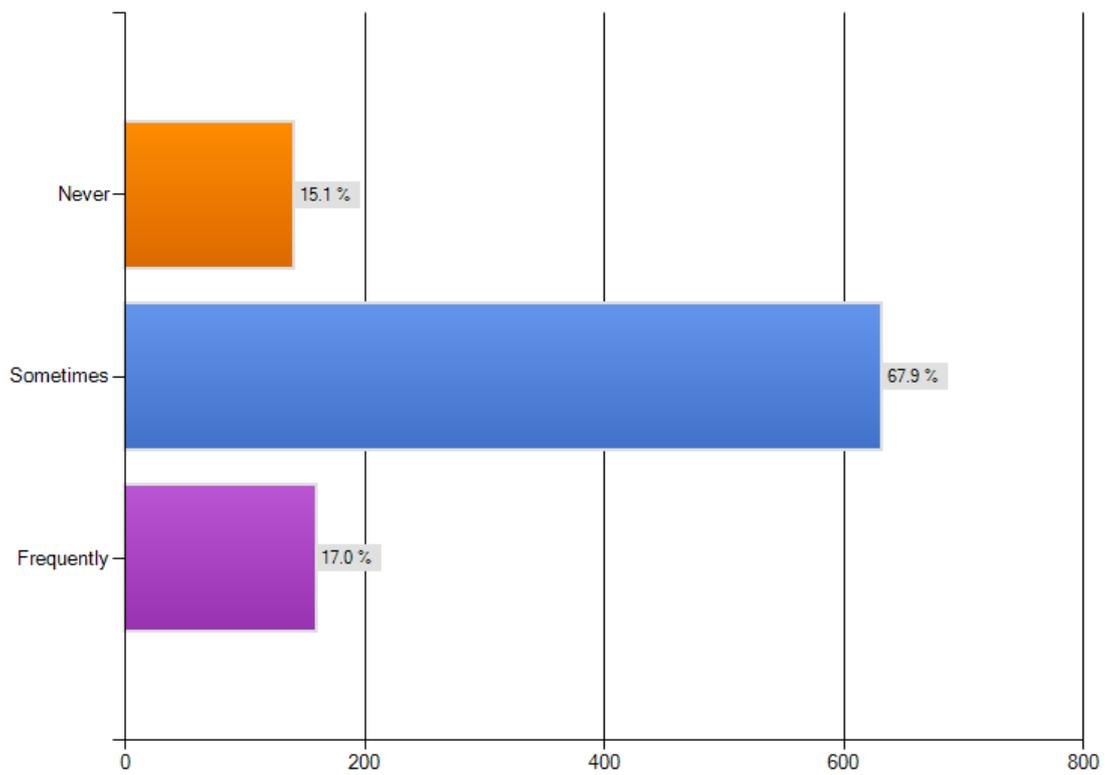
I adapt content shared by other language teachers on a non-commercial basis:

Never	14.6 %
Sometimes	65.2 %
Frequently	20.1 %

0   200   400   600   800
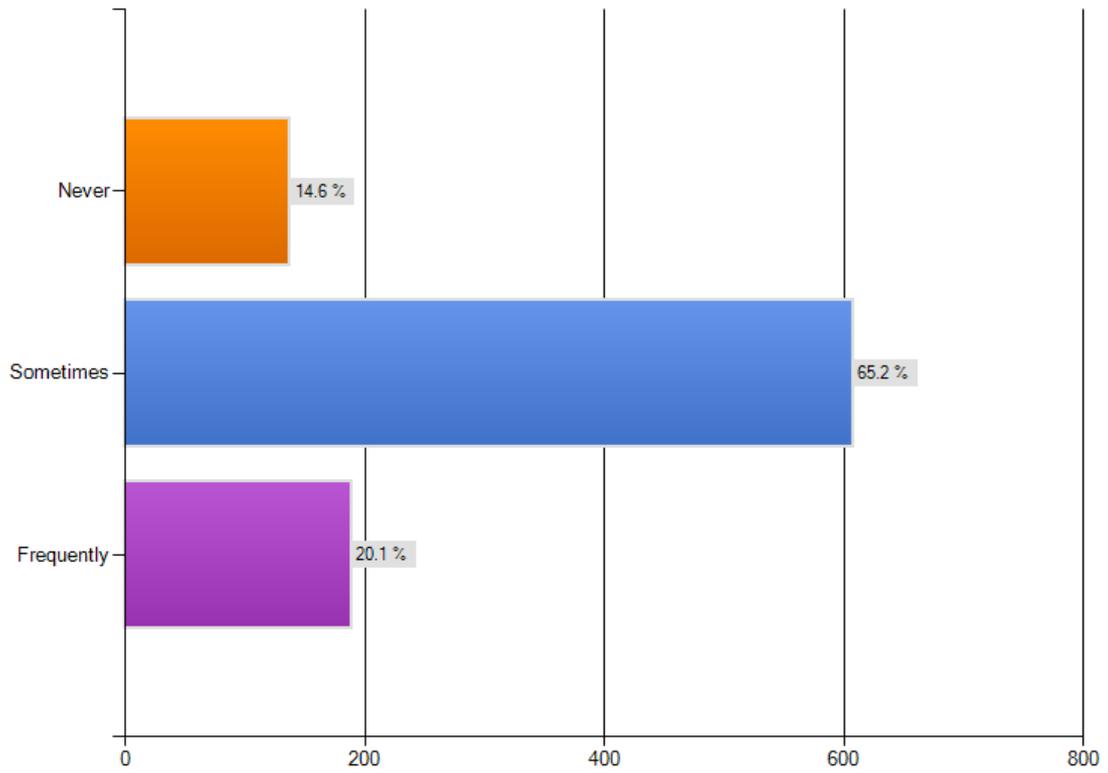
I share my content on a non-commercial basis with other language teachers:

Never	12.7 %
Sometimes	61.7 %
Frequently	25.6 %

0   200   400   600