The impact of code-switching on persuasion:
An Elaboration Likelihood Perspective

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Adina Nerghes
Abstract

The present experiment examined the impact of code-switching on information processing. Code-switching refers to the use of inserted English words into a text or discourse in a different main language. Code-switching and argument strength were manipulated in a 2 (code-switched message vs. no-code switched message) by 2 (weak arguments vs. strong arguments) design. The manipulation was performed on a text regarding a fictive new initiative of the Executive Board of Wageningen University. The results show that even though code-switching doesn’t lead to changes in attitude or behavioural intentions, it does influence the systematic processing of the message. It is concluded that code-switching is an effective strategy that leads to systematic processing of information especially when associated with strong arguments.
Setting the stage
In times when societies and people from around the world come closer and closer, language becomes the most important factor of contact. “Although not all communication is linguistic, language is by far the most powerful and versatile medium of communication; all known human groups possess language.”(Gumperz, 2009 pg.42)

The boundaries between cultures and nations are becoming almost invisible in times when communicating between thousands of miles can be done in a matter of seconds. The development of technology has now created the opportunity and even the likelihood of a global culture. The Internet, fax machines, satellites, and cable TV are reaching beyond any physical boundaries. Global entertainment companies form the perceptions and dreams of simple citizens, wherever they may be living. It should be evident by now that the trends of globalization and informatization have important implications at the foundational level for intercultural communication theory, namely, our very understanding of culture, society, and communication. The changes brought by this new era have radically changed how much and how we communicate to each other, it changed the way culture is formed and preserved and it changed our notion of society. Communicating with people from all over the world has never been easier, cultures from all over the world come in contact easily and societies are no longer seen only in physical terms. In this perspective, language is a very important factor. Language is the primary tool of communication at all levels. But which language is generally used in this form of communication? Looking at areas such as the media, science, the internet, education, business environments etc., it appears that English is the most used language. Recently, ‘English as a lingua franca’, ‘English as a global language’, ‘English as an international language’ are terms that emerge as a way of describing the communication in English between speakers of different first languages. In most cases, it is a ‘contact language’ between persons who don’t share a common native tongue or a common culture, and for who English is the chosen foreign ‘language of communication’ (Firth, 1996).

Although English is not the only choice people make in terms of a foreign language of communication, the present study will focus on the case of The Netherlands, where, as it will be shown, English has become the main ‘lingua franca’.

The 2005 survey of Eurobarometer shows that 87% of the population of Netherlands consider themselves able to speak English fluently and it is by far the most spoken foreign language in the Netherlands followed by German (66%) and French (24%) (Eurobarometer, 2005).
The high percentages reported by the Eurobarometer can be in part explained by the fact that English as a compulsory subject in primary education in The Netherlands was introduced in 1986 and pupils attend to English classes between 60 and 100 hours. English is also taught in all forms of secondary education (Ager, Muskens, & Wright, 1993). If in countries from central and Eastern Europe other languages are still competing with English, in the Netherlands such competition does not exist anymore. A language other than English will be taught only if the curricula include a second or third language (Truchot, 2002).

The use of English as a teaching language in primary and secondary education is still quite limited in Western Europe with the exception of international schools, but this function of English is developing more and more in higher education. In northern European countries, and particularly in The Netherlands, most university courses open to foreign students by use of English as a teaching language (Eurydice, 2008). Another factor that can offer a good motivation for the extensive use of English in Dutch universities is the use of English textbooks. The use of English textbooks and the specialist terminology coined by speakers of English leads to an increased use of English words during university lectures or seminars. (Ridder, 2008) This comes as no surprise if we take into consideration that in science and scientific publications, English is also spreading more and more as the common language. The observation study of Confland (in Truchot, 2002) shows that over 50% of 100,000 scientific journals published worldwide, were in English.

Considered by many the primary factor for which most people learn English, the communication language in the work place has not been researched much. After the Second World War, European economies started to become more and more internationalized and national companies found that the national language was not ‘enough’ anymore. Most of these companies turned to English as a business language. A study conducted by Hollqvist in 1984 (in (Truchot, 2002), showed that the use of English in Swedish firms lead to what he calls a "company language". “Within Europe, there is growing evidence that English has become the biggest business lingua franca”(Rogerson-Revell, 2007 pg.106). This statement as well as many others seems to reinforce the idea that it is now beyond disagreement, that the use of English for international business is a firmly customary practice in Europe. When looking at the job market, nowadays most job titles or job related terms are used in English which lead to the creation of a mini-dictionary of over 162 job titles (Ridder, 2008). Words as Consultant, Retail, Recruitment, Assistant, Team, Manager, Sales, etc., appear now in job titles very often.
In her article ‘English in Dutch’, Susan Ridder brings the translation of a briefing meeting which is also a great example of how coined English terms are brought directly into a Dutch discourse in a professional setting. The number of English terms and expressions is striking.

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**De tactics-briefing**

Luc Lutz – acteur, Den Haag

Het gaat hier om de tactics bij de hele campagne voor ‘Lime’. De nieuwe after-shave. Het is een prachtige campagne. Uit de briefing is duidelijk geworden dat we een deadline hebben die ruimte geeft voor uitgebreide prestiten. Deze brainstorming is dan ook voornamelijk bedoeld om tot een totale copyplanning te komen. We hebben een visual, ontwerpen voor een brand-image met copy en een duidelijk idee voor de aanpak van de client-service. Ik zal straks ‘s woord geven aan onze account-executive.

We denken aan een media-mix voor pers-, tv-, radio- en buitenobjecten, dat wil zeggen, uitsluitend beperkte maar gerichte affichage. Misschien kunnen we nog gebruik maken van de resultaten van de afgelopen week met mastheads toen we de Julius-after-shave brachten. Als ik ‘t goed heb, deden we ook een glue-seal-test. Misschien niet opportuun wat ‘Lime’ betreft. Maar het gaat om de attentiewaarde. Daarom moeten we nu al enigszins een overzicht hebben van de attitude van de consumer.

We hebben ook een duidelijk inzicht in het blokkerings- en deelstreekproef voor gedaan. Gelijk natuurlijk voor ‘t chermedium. Gezien de totale media-mix is kennis van leesbereik en luistergedrag van belang. Denk er dan aan dat je bij een Ster-spot de straangeest mist. Misschien kunnen we de opinion leader eens uittienen. Overdosering van direct mail moet ik afzien. De response-functie als totaal, daar gaat het om.

Wat doen we met de pass along reader en de secondary reader? Zit daar niet te veel waste? Hoe is ‘t spotbereik? Is een quota-streekproef relevant? Zij aan het ideale pack-shot toe zijn en ‘t zijn over de pay-off, staat ons veel werk te wachten.

Hoe bereiken we de doelgroep het effectief? Hoe werken we naar een optimale confrontation met dit produkt? Gezien de specifieke consumer ben ik tegen hard selling. Mijn vraag is hierom, hebben we een pilot study nodig voor de responsefactor en hoe snel hebben wij een inzicht in ‘t spotbereik?

Het woord is nu aan onze account-executive, Jaap Holland.

Author: Luc Lutz, acteur, The Hague.
Translator: Susan Ridder

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**Translation: The tactics-briefing**

We are here, gentlemen, to discuss the tactics for the entire campaign for ‘Lime’. The new after-shave. It’s a wonderful expectation. From the briefing it has become clear that we have a deadline which leaves room for extensive promotion. Consequently, this brainstorming was primarily intended to decide on a total copyplanning. We have a visual, designs for a brand-image with copy and a clear idea for the approach to client-service. Later I will hand things over to our account-executive.

We are thinking of a media-mix for press, TV, radio and outside media. That is to say, exclusively limited but focused advertising. Perhaps we can use the results of an aided recall with mastheads when we brought out the Julius-after-shave. If I am right, we also did a glue-seal-test. Perhaps not opportune with regard to ‘Lime’, but what counts is the attention value.

That’s why we immediately need some impression of the consumer’s attitude.

Also, we have a good idea of the audience profile. A partial spot check was done at the time. Refers to the other medium, of course. Considering the total media-mix, knowledge of the literacy and listening behaviour of the audience is important. Doing so, remember that in a commercial basic smell is absent. Perhaps we could put the spotlight on the opinion leader. I would advise against overdosing with direct mail. The response functions as a whole, that’s what it’s all about.

What do we do with the pass along reader and the secondary reader? Isn’t there too much waste there? What’s the reach of ads? Would a quota spot check be relevant? There’s a lot of work waiting to be done before we can start with the ideal pack-shot and agree on the pay-off.

How do we reach the target group most effectively? How do we work towards an optimal confrontation opportunity for this product? Considering the specific consumer I am against hard selling. My question is, gentlemen, do we need a pilot study for the responsefactor and how quickly will we have knowledge of the effect of ads?

I will now hand things over to our account-executive, Jaap Holland.

Source: (Ridder, 2008 pg. 46, underlining added)
The internet can also provide important clues regarding the actual expansion of the English language. Being promoted worldwide as a source of information, marketing and entertainment, since its initial creation in the early 1990’s, the usage of internet has increased tremendously. If the Internet was created initially in English in the United States and developed exclusively in that language (in early 1990s, 98% of sites were in English), a 2001 study of the number of Web pages revealed that 68.4% are still in English. Correlating this to the wide spread usage of internet around the world, we can argue that English is the dominant language of the virtual space. Although the sites created within each country are by a large majority in the national language, when surfing the internet it is nearly impossible to limit your search to your national language. The below table shows a statistics of languages used in the Web:

<table>
<thead>
<tr>
<th>Top Ten Languages Used in the Web (Number of Internet Users by Language)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Top Ten Languages in the Internet</strong></td>
</tr>
<tr>
<td>--------------------------------------</td>
</tr>
<tr>
<td>English</td>
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<tr>
<td>Chinese</td>
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<tr>
<td>Spanish</td>
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<tr>
<td>Japanese</td>
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<td>French</td>
</tr>
<tr>
<td>Russian</td>
</tr>
<tr>
<td>Korean</td>
</tr>
<tr>
<td><strong>TOP 10 LANGUAGES</strong></td>
</tr>
<tr>
<td>Rest of the Languages</td>
</tr>
<tr>
<td><strong>WORLD TOTAL</strong></td>
</tr>
</tbody>
</table>

Table 1 Top ten languages used in the web (Internet World Stats, 2009)

All the above information shows that English is a language that has been around all domains in the Netherlands and it doesn’t come as a surprise that English is used on a daily basis by most Dutch people. When talking about using the English language we are not referring only to the speaking but also to the reading and listening of various English words, sentences or even full texts/speeches. Whether in the work place, among friends, listening to the radio, watching TV or surfing the internet Dutch people come in contact with the English language every day.
When surfing the .NL (Netherland’s web domain) is without doubt noticeable that the dominant language is Dutch and only a limited number of web pages offer a second language option. Just as easily though it can be noticed that English words or sentences can be found even when the main language of the web page is Dutch. To illustrate the kind of English a Dutch person comes in contact with when, for example, surfing the internet, a Dutch web page has been selected and as it will be shown below, English words or sentences are often used in presenting products or services. We used blue circles to highlight the use of English words when presenting products and services on the web page of Mediamarkt, a popular chain of stores selling consumer electronics with numerous branches throughout Europe.

Source: (“Mediamarkt,” 2010)

The above example has been selected to serve two proposes, one is that of showing how English is used in a Dutch language context and the second is to create a link between all the above and
the focus of this study. As it can be seen, the selected web page uses English insertions in an advertising context for products or services. The use of English in advertising is what this study intends to focus on and the effects this practice has on the persuasion levels consumers experience. The following chapter will detail more on the use of English in advertising, the reasons and implications of this phenomenon.
English in advertising
This extensive use of English in different domains in the Netherlands also reflects nowadays into advertising. A number of studies (which will be detailed below) show that in the Netherlands the use of English in different forms of advertising is a common practice.

A pilot study carried out in Amsterdam’s main shopping street (Kalverstraat) shows that eleven different languages are used in advertising signs: Dutch, English, Italian, Spanish, German, French, Japanese, Chinese, Greek, Polish and Swahili. The distribution of languages on all the 294 monolingual signs analyzed shows that 45% are in Dutch, 42% are in English and 13% in other languages. (Edelman, 2006) Gerritsen and colleagues investigated the use of English in various form of advertising in the Netherlands and elsewhere. Their data show that one-third of the commercials on Dutch television contain English (Gerritsen et al. 2000, in Gerritsen, Nickerson, Hooft, & F, 2007, pg. 295) and that 19% of product ads present in various newspapers and magazines were in English (Gerritsen, 1995 in Gerritsen, Nickerson, Hooft, & F, 2007, pg. 295). In a more recent study, Gerritsen and colleagues analyzed six issues of Elle magazine from 2004 for each country (Dutch-speaking Belgium, French-speaking Belgium, France, Germany, the Netherlands and Spain) and all ads of half a page or larger was analyzed. They found that out of 325 ads from the Netherlands 208 (64%) were in English. Out of the 208 ads in English 31 (15%) were completely in English and 177 (85%) ads were partly in English,(Gerritsen et al., 2007)

The presence of English advertisements in every form of media in the Netherlands is one of the central points for this research. In the studies summarized above the authors talk about ‘ads partly in English’ or about commercials that contain English. These are key terms which we will use to narrow down the field of interest and to introduce the next concept. By ads party in English or commercials that contain English we will understand advertisements that present a message constructed in Dutch with the insertion of English words or sentences. This practice of using elements of more than one language or language varieties in the same discourse it is called code-switching. A concept that has been used in linguistics, sociolinguistics and psycholinguistic, Code Switching is used by bilinguals, people who speak two or more languages or language varieties (dialects) when conversing with one another (Boztepe, 2003).
**Code-Switching**

Code switching has been defined in various ways over time. Scientists have formulated very simple definitions for code-switching as “the alternation of two languages” (Valdes Fallis, 1976), or more complex ones: “code-switching [is] the use of two or more linguistic varieties in the same conversation or interaction.” (Scotton & Ury, 1977) DiPietro defines code switching as “the use of more than one language by communicants in the execution of a speech act.” (DiPietro, 1977)

The list of definitions can continue as the topic gained scientific interest in the last years and most definitions highlight the same characteristics or the concept. However, one definition has been selected and will be followed in this study and proposes that code-switching is “the alternate use of two or more languages in the same utterance or conversation.” (Grosjean, 1982)

In the linguistic literature different terms are associated to the use of more than one language in a single conversation. While we have defined code-switching above, there is another term that refers to more or less the same practice, namely code-mixing. Code-mixing is defined as “all cases where lexical items and grammatical features from two languages appear in one sentence.” (Muysken, 2000 pg.1) Because the separation between code-switching and code-mixing is often unclear in literature, it is important to differentiate and explain the choice we have made. Unlike code-switching, code-mixing also includes the use of grammatical features from two or more languages in the same sentence.

The term that will be used in this study is code-switching and it will be understood as the practice of shifting from one language to the other in terms of lexical features and not grammatical features. Our main interest will be the grammatically and phonetically un-integrated English words or expressions used into a Dutch discourse. Narrowing down the concept even more, the practice that will be used in this study will be restricted to *intra-sentential code-switching*. Intra-sentential code-switching refers to the practice of shifting from the base language to a second language or language variety within the boundaries of a sentence or a clause. To better illustrate this practice in Dutch, an example has been chosen from Bogaerde & Baker (2005):

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Ik wil dat je mij een kiss geeft
I want that you me a kiss give
‘I want you to give me a kiss’
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Source: (Bogaerde & Baker, 2005 pg. 3)
The above example perfectly demonstrates how inter-sentential code-switching appears in Dutch discourses. The main language in this example is Dutch and the sentence is built by Dutch grammar rules, the English word being inserted without grammatical integration.

To summarize, we have discussed so far evidence for the extensive presence of the English language in the Netherlands in various domains with a clear emphasis on advertising and the concept of code switching. In the following chapter a link will be created between the two concepts and a detailed description of the aims of this research.

**Code-switching and advertising**

Even nowadays, when English seems to gain a global language status, advertising campaigns have to consider the consumers perception and effectiveness of campaigns that use English. Whether they aim at Asian, European, or Latin-American consumers, advertisers seem to view the use of English words, sentences, and even entire texts as a proficient strategy to sell brands and products to consumers. Researchers and authors that are busy with the topic have exposed a number of explanations for the use of English in advertising, such as a marketing strategy of a campaign, the cultural connotations English carries, or English can be used for creative-linguistic reasons. (Baumgardner, 2006)

English as a marketing strategy can bring some advantages by having a uniform campaign or slogan which will create a worldwide brand image but can also reduce costs. (Alm, 2003)

Using English as a creative-linguistics tool is often used to fill a lexical gap (when there is no proper correspondent for a word or expression in the host language or the word is considered taboo), or because English words are shorter than the equivalents in the host language, or “because they (are believed to) attract the attention of the consumer.” (Ustinova & Bhatia, 2005 pg. 116)

A third reason for the use of English in advertising relates to the cultural connotations that English carries. English is used because the values or stereotypes linked with it are thought to reflect positively on the product or to appeal to the consumer. Being used for its symbolic value rather than for its communicational value, English is believed to be associated with values “such as youth, prestige, modernity, globalization, cosmopolitanism, and internationalism”. (Ustinova & Bhatia, 2005 pg 117)

In the past years, a great number of studies have been dedicated to researching the effectiveness
of such strategies as described above (Alm, 2003; Baumgardner, 2006; Berns, 2007; Bulawka, 2006; Gerritsen et al., 2007; Hornikx, Meurs, & Boer, 2010; Kuppens, 2009; Ustinova & Bhatia, 2005). Some of these studies investigate the effectiveness of minority/majority language switching, some investigate the effectiveness of such strategies in terms of perceptions associated with the language, and others analyse these strategies in terms of identity construction.

Depending on the context and level of a particular research, the effectiveness of code-switching can be discussed in such terms as perceptions, associations and identity construction. Of course all of these studies offer important reasons and explanations for which English should or should not be used in advertising but, without disregarding the importance of the studies already conducted on this topic, we will focus more on answering a series of questions that relate strictly to the effectiveness of code-switched messages in terms of persuasion.

The occurrence of English words in advertising messages built in various host languages across the globe is a common practice nowadays, and the Netherlands is no exception. Finding an ad like the one presented below, in any form of media, is not at all difficult. When reading a magazine, surfing a web page, watching television etc, messages like this one, which are built in Dutch but also contain English words, can be easily seen.

Randomly selected, the ad above is the perfect example of a code-switched message (from Dutch to English) and by reading it the questions that will be the centre of this study can easily emerge: Are these kinds of messages that we very often see more appealing to consumers? And most importantly, are they more effective in persuading consumers?
These are the kind of questions this study will try to answer by using The Elaboration Likelihood Model (ELM) of persuasion. The ELM will be used as a tool to investigate whether these messages are more persuasive and also to explain the process through which this happens. Summarizing the main aim of this research, a proper research question can now be formulated:

**Main question:** What are the effects of code-switched advertising messages on persuasion?

**Sub-question:** Are subjects that have exposed to a code-switched advertising message more persuaded?

**The Elaboration likelihood model**

The ELM (R. Petty & Jt Cacioppo, 1986) integrates a number of variables that have an impact on attitude change under a single theoretical umbrella. Based on the idea that people want to form correct attitudes after being exposed to a persuasive message, the central concept of this model is the "elaboration continuum". In a persuasion context, elaboration refers to the extent to which individuals thinks about issue relevant arguments in a message. When a people are both motivated and able to involve in issue relevant thinking the elaboration likelihood is said to be high. The elaboration continuum ranges from low elaboration (low issue-relevant thinking) to high elaboration (high issue-relevant thinking) but these two extremes of the continuum should not be regarded as mutually exclusive. Associated with the elaboration ranges the model predicts two relatively distinct routes to persuasion, the ‘central route’ and the ‘peripheral route’ to persuasion.(R. Petty & Jt Cacioppo, 1986)

The “central route” to persuasion involves effortful thinking about issue relevant arguments, where individuals centre their attention on message relevant information, and depict on prior experience and knowledge to consider and elaborate on the offered information. This occurs when people have both the ability and the motivation to listen carefully to a communication and will generally result in new arguments or a person’s translation of them. When central processing occurs individuals may objectively process the message for its true merits governed by the strength of the arguments presented or the individual’s strong prior opinions/initial attitude towards the issue will lead to biased processing. Attitudes formed or changed through the central route are said to be more persistent, good predictors of behavior and more resistant to change.

The second route to persuasion is known as the “peripheral route” and occurs when the receiver of a message lacks the ability and/or motivation to engage into issue relevant thinking.
Individuals do not think much about the content of the message (the elaboration likelihood is said to be low) using non-content elements related to the message (i.e., peripheral cues) for attitude formation. Peripheral cues can be the number of arguments in a message, the length of the message, source characteristics (e.g., likability, expertise, attractiveness), affective reactions generated by the message etc. Attitudes that are formed or changed via this route are less persistent, less resistant and not good predictors of behavior.

Whether individuals will follow the central or peripheral route, when receiving a message, is moderated by the likelihood of elaboration, which is influenced by the individual’s motivation and ability to process. “When the elaboration likelihood is high (i.e., the person is both motivated and able to process a communication), the central route to persuasion occurs. But as the elaboration likelihood decreases, the person becomes more likely to rely on the peripheral route.”(Cacioppo, Strathman, & Priester, 1994 pg. 88)

According to the ELM, a variable can have an impact on persuasion by affecting the extent or direction of argument elaboration, the extent to which a person is motivated or able to carefully evaluate the issue relevant information provided. When conditions enable people’s motivation to engage in issue relevant thinking the elaboration likelihood will be high.(R. E. Petty, J. T. Cacioppo, & Schumann, 1983) Following this argumentation we will hypothesise that code-switching will act as a variable that will influence the elaboration likelihood by increasing a persons’ motivation to evaluate the presented message.

In the context of this study, code-switching will be done from a base Dutch message to English words inserted in the text and it is predicted that the English words will motivate people to carefully scrutinize the arguments presented to them. This effect of code-switching closely relates to the associations people have with the English language in terms of socio-psychological functions. As argued by Bulawka (2006), “the primary function of English in the non-anglophone commercial context has been to serve as a symbol of modernity, technological development and/or reliability.” Because of these kinds of associations with globalization, modernity, internationalism, innovation, and prestige, code-switching to English will be an effective motivation enhancer.

Different studies support our hypothesis either by considering English as a “… purposeful strategy to attract the attention of the customers.”(Ustinova & Bhatia, 2005 pg. 505) or “…by associating a product with a social stereotype, and thus indicating more general features
characteristic of modern societies such as social advance or economic development.” (Haarmann 1989).

To summarize, code-switching will draw the participant’s attention and will enhance their motivation to carefully scrutinize the message presented due to the associations of English with modernity, globalization, innovation etc. When people’s motivation and ability is present, elaboration likelihood is said to be high and they will address the arguments presented vigilantly, this means that the quality of the arguments is of critical importance. Because message quality (strength of arguments) has the greatest impact on persuasion when elaboration is high (R. Petty & Jt Cacioppo, 1986), code-switching is expected to be most effective when presented together with the strong arguments condition and will result in attitude change. If participants are presented with low quality arguments in high elaboration conditions the subjects will not be persuaded (J Cacioppo et al., 1994). Hence, the effects expected are presented in the graphic below:

![Figure 1: Interactive effect of code-switching and argument quality on post-communication attitudes.](image)

The second independent variable of this study, the quality of arguments, is closely related to the first one (code-switching) based on the ELM model. Returning to our hypothesis, when presented with a code-switched message respondents will be highly motivated to process the message, thus strong arguments are expected to yield favourable cognitive and affective responses to the message, while weak arguments should lead to counter argumentation and generally negative reactions to the message.(Areni & Lutz, 1988)
**Method**
Based on the hypothesis a 2 (code-switched message vs. no-code switched message) by 2 (weak arguments vs. strong arguments) factorial design has been employed. Participants were exposed to a set of strong or weak arguments supporting a new initiative of the Executive Board of Wageningen University with or without code-switched elements. Thus, four messages were created for each of the conditions of the study. The first group was exposed to a 379 words message with no code-switching and three weak arguments; the second group was exposed to a 345 words message with no code-switching and three strong arguments; the third group was exposed to a 400 words message including 28 English words (code-switching) and three weak arguments; the last group was exposed to a 352 words message including 25 English words (code-switching) and three strong arguments (see Annexes 1-4).

The participants exposed to the messages that included code-switched elements were expected to show increased elaboration especially when presented with strong arguments. Consequently, participants exposed to the messages without code-switched elements were expected to show the same levels of elaboration, regardless of the quality of arguments.

**Participants**
The study was conducted on a sample of 80 subjects, all students of Wageningen University and native Dutch speakers. Each participant was exposed to only one of the four conditions of the study and their participation was compensated with a drink and a snack. In addition, three of the 80 questionnaires were marked beforehand as winners of a 50 euro prize. After completing the study and handing in the winning questionnaire the participants received an envelope containing vouchers with a total value of 50 Euros. Participants were randomly assigned to one of the four conditions of the study and the number of participants per condition was 20. The average age of the 80 participants was 22.99 years (SD = 3.17); the youngest participant being 18 and the oldest being 33. 60 of the participants were female (75%) and 20 were male (25%). As students of Wageningen University, the participants were registered to 26 different study programs (see Annex 7).

**Stimulus Materials**
The stimulus material used for this study was a specifically designed fictive message which presented participants with a new initiative that was being discussed by the Executive Board of Wageningen University. The fictive initiative proposed that senior students would take over some of the work of professors regarding lectures and student contact. A specially designed
message for this particular study fulfilled two purposes, one is that of assuring a medium level of involvement (personal relevance) across the four groups, and the second is that of avoiding repetition.

Personal relevance or involvement with the issue refers to the extent to which people believe the issue to have considerable consequences for their lives. If the issue is expected to have important consequences for their lives, personal relevance is high and people become more motivated to cautiously process the issue-relevant arguments presented as it is more important for them to form a correct opinion. (R. Petty & Jt Cacioppo, 1986) Thus, to ensure that the level of personal relevance is not high but not low, the message has been created taking into consideration one common trait of all the participants, namely their enrolment as master students of Wageningen University. It is likely that involvement with this message did not vary much among participants.

The specifically designed message also enabled us to avoid repetition of stimuli which can lead to an increase in a person’s ability to process the content of a message. As proposed by the ELM, repetition of stimuli leads to a “two-stage attitude-modification process”. In the first stage, repetition can increase a person’s ability to process the arguments of a message by providing greater opportunities to consider the implications of a message in a fairly objective manner. In the second stage, the objective processing stops and reactance is elicited by the excessive exposure which will result in decreased message acceptance. (R. Petty & Jt Cacioppo, 1986) Therefore, we chose to design our own message rather than using an existing message which would have influenced the results in terms of repetition.

The same message topic has been used across the four conditions to ensure that all other factors that may influence the perception of the message will be equal across conditions.

**Procedure**

To ensure that forewarning does not play a role in the message evaluation (see Richard E. Petty & John T. Cacioppo 1977) participants received no information about the nature of the study before their actual participation. Flyers have been handed out and posters have been displayed around the university buildings searching for research volunteers (an example of such a flyer/poster can been seen in Annex 8). After their arrival in the experiment room, the experimenter handed each participant a booklet containing one A4 page of text and five pages containing the questionnaire. Participants were instructed to read the provided text and fill out the questionnaire. Following this, participants were debriefed about the exact nature of the study and thanked for their participation. An example of the debriefing text that was handed to all participants.
participants can be found in Annex 9.

After exposure to the message, each participant filled in a questionnaire of eleven questions which were written fully in Dutch. According to our second independent variable, argument strength, two different questionnaires have been used for the four groups, one questionnaire included the three strong arguments and the other included the three weak arguments (See Annex 5 and Annex 6). The questionnaires have been designed to measure six different variables, as follows:

**Argument strength** To check whether or not the manipulation of the argument strength has been successful participants were asked to rate the strength of each argument present in the message. For this rationale, each argument was presented again, one by one, together with a rating scale from 1 (very weak) to 5 (very strong). The results of this rating have been summed to create a single variable named quality of arguments.

**Attitudes** To assess the attitudes participants have towards the new initiative that has been presented to them by the message, four questions were posed with a 5-point answer scale. The first three questions asked participants to rate on a 5-point scale from 1 (Highly disagree) to 5 (Highly agree) the extent to which they thought the initiative should be implemented, brings advantages or improves the general academic quality of the university. The last questions asked participants to rate on a 5-point scale from 1 (Very bad) to 5 (Very good) their assessment of the quality of this initiative. A reliability analysis showed that the four items form a reliable measurement scale for attitudes (α=.91).

**Cognitive responses** Immediately after message exposure, participants were asked to write down all the thoughts that came to mind while reading the message in a specially designed part of the questionnaire booklet containing empty boxes. Participants were instructed to fill in only one thought per box. The thought-listing technique was used because the number of issue-relevant thoughts listed by the participants can be an indication of the extent to which the message was systematically processed. It is assumed that the more warily a message is processed, the more issue-relevant thoughts will be generated (Jt Cacioppo & R. Petty, 1981). Thus, if code-switching influences the extent to which a message is systematically processed this will be shown by a main effect of code-switching on the number of issue-relevant thoughts listed. The thoughts listed by the participants were categorized into two categories, relevant or irrelevant to the issue, by two independent judges blind to the conditions of the experiment. The scores of the
two judges were averaged.

**Behavioural intentions:** The persuasiveness of a message is not shown only by an attitude change following exposure but also by behavioural intentions. To measure whether or not code-switching affected the behavioural intentions of participants at the end of the questionnaire, participants were given the option of casting their vote pro or against the implementation of the new initiative.

**Liking of the message** In literature, liking of the message has often been associated with message persuasiveness. One example of such associations comes from Rice, and Atkin, (2001) that argue that any effects of enhanced liking of a message and behaviour effects could be ‘due to better attention and learning of the message content’. Another association made by the same authors is that liking of a message could lead to a positive mood effect that will make the recipient more ‘mellow and accepting’. To assess whether or not the liking of the message will influence our end results we asked our participants to rate on a scale from 1 (strongly dislike it) to 5 (like it very much) the extent to which they liked the message they have read.

**English proficiency self-report** Because the code-switching was done in English, an English proficiency self-report was added to the questionnaire to determine whether or not this can have an impact on any of our dependent variables. A main rationale for this measurement is to ensure that all participants have the appropriate English level that will enable them to understand the code-switched messages. Participants rated their English proficiency on a scale from 1 (very bad) to 5 (very good).
Results

Argument strength manipulation check: An ANOVA was performed with argument strength and code switching as independent variables and argument quality as dependent variable. The results yielded only a significant main effect of argument strength, $F(1, 80) = 9.88, p = .002$. Strong arguments received significantly higher ratings of strength than did weak arguments: $M = 2.98, SD = 0.74$ and $M = 2.50, SD = 0.63$; this confirms the validity of the argument strength manipulation.

Attitudes: Based on our hypothesis that code-switching will influence a person’s motivation to systematically elaborate the content of the message we tested to see whether this also had an impact on the attitudes towards the content of the message. An ANOVA with Code-switching and Argument strength as the independent variables and attitude as a dependent variable was performed. The analysis showed no significant main effect of code-switching, $F(1, 80) = .009, p = .926$. Also the expected interaction effect of code-switching and argument strength proved insignificant, $F(1, 80) = .001, p = .975$. It thus appears that our manipulations did not affect participant’s attitude towards the content of the message.

Cognitive responses: To test our hypothesis that code-switching will increase the systematic processing of a message, an ANOVA with code-switching and argument strength as independent variables and issue-relevant cognitive responses as a dependent variable was performed. Results show a strong main effect of code-switching on issue-relevant cognitive responses, $F(1, 80) = 30.78, p = .000$. This shows that when participants were exposed to a code-switched message, they listed more issue-relevant cognitive responses, $M = 3.40, SD = 1.89$ and $M = 1.55, SD = 1.20$. The same analysis also showed a significant effect of argument strength on issue-relevant cognitive responses listed by the participants, $F(1, 80) = 8.12, p = .006$. The significant effect of argument strength on issue-relevant cognitive responses shows that when presented with a code-switched message, participants in the strong arguments condition generated more issue-relevant cognitive responses than when presented with weak arguments, $M = 2.95, SD = 1.90$ and $M = 2.00, SD = 1.51$. The results also show a qualified marginally significant interaction effect of code-switching and argument strength, $F(1, 80) = 3.80, p = .055$.

To control whether or not our other dependent variables had an effect on issue-relevant cognitive responses listed by participants we included message liking and the self-reported English level to our main analysis. Although 50% of participants liked the message presented (as shown in
Figure 4), results show that message liking had no effect on issue-relevant cognitive responses, $F(1,80) = 1.11, p = .361$. The second variable we controlled for, self-reported level of English also showed no significant effects on issue-relevant cognitive responses, $F(1,80) = .74, p = .482$.

In figure 5 we show that 49 (61.3%) of the total of 80 participants rated their English level as good, 20 participants (25%) rated their level as very good and 11 participants (13.8%) rated their English level as intermediate.

To further explore the nature of our main analysis results Table 2 shows the differences in means of issue cognitive responses listed by participants for each experimental condition. The table shows notable differences between groups that have been reading a message with weak or strong arguments but the most notable difference appears between the two groups were code-switching was present. Participants in the fourth condition of our experiment, where both code-switching and strong arguments were present, have the highest mean of listed issue relevant cognitive responses.

<table>
<thead>
<tr>
<th>Weak Arguments</th>
<th>Code-Switching</th>
<th>2.60 (SD=1.57)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong Arguments</td>
<td>1.70 (SD=1.17)</td>
<td>4.20 (SD=1.88)</td>
</tr>
</tbody>
</table>

Table 2: Descriptive statistics for issue relevant cognitive responses

These differences were further explored in a simple main effect analysis. The results show that in the weak argument condition the issue-relevant cognitive responses of those presented a code-switched message differed significantly from those presented with a non code-switched message $F(1,80) = 6.48, p = .013$. The results also show that that participants in the strong argument condition presented significant differences of issue-relevant cognitive responses listed when presented with a code-switched or a message without code-switching $F(1,80) = 28.10, p = .000$.

Further, the participants in the code-switched condition presented significant differences of issue-relevant cognitive responses listed between those presented with weak and those presented strong arguments $F(1,80) = 11.51, p = .001$. In the no code-switching condition participants did not present significant differences of issue-relevant cognitive responses listed when presented with weak or strong arguments $F(1,80) = .41, p = .527$.

To summarize, what the simple main effect analysis showed is that when participants read a message fully in Dutch, the number of issue-relevant cognitive responses they listed was not significantly different between the weak or strong argument conditions. However, when code-
switching was part of the message participants read, significant differences appear between the weak and strong argument conditions. Participants in the strong argument condition listed considerably more issue-relevant cognitive responses. In the weak argument condition, participants listed more issue-relevant cognitive responses when the text included code-switched elements than those who read a message fully in Dutch. In the strong argument condition the results are similar, participants presented with a code-switched message listed more issue-relevant cognitive responses than those in the non code-switched condition.

These results confirm our hypothesis that code-switching influences the systematic processing of a message. The number of issue relevant cognitive responses indicates whether or not the message has been processed systematically, and the presence of code-switching had a highly significant influence on the number of issue relevant cognitive responses listed by our participants. The above results also show that code-switching was most effective in the strong argument condition.

**Behavioural intentions:** A three-way loglinear analysis was performed. The likelihood ratio of this model was $\chi^2(2) = 0, p = 1$. The analysis indicated that neither code-switching nor argument strength had a significant effect on the behavioural intentions of the participants, $\chi^2 (6) = 2.41, p = .88$.

**Summary of Results**

To summarize, our analysis showed that even though code-switching doesn’t lead to changes in terms of attitude or behavioural intentions, it does influence the extent to which participants systematically processed the message presented. Our results also show that code-switching better influenced the extent to which participants systematically processed the message when strong arguments were used.
Discussion

Summary

The present experiment examined the impact of code-switching on the extent to which information is centrally processed and persuasion. Code-switching was introduced into a Dutch text regarding an initiative put forward by the Executive Board of Wageningen University as a possible solution to the work overload of professors. The initiative was of course fictive and the information to be processed was about the implementation of this initiative.

Hypothesising that code-switching will exert a motivational effect on information processing and persuasion, we studied the impact of code-switching in comparison with a control group in which code-switching was not present. To sum up, our results show that although code-switching does not lead to persuasion in the sense of attitude or behavioural intentions change, it does lead to an increased scrutiny when a message is processed. The results brought forward by this study can be of course very useful but they are also very intriguing because for many years persuasion theories have used attitude change as the benchmark for effective persuasion (Wood, 2000). Very few authors have focused to explain why a persuasive message that has been centrally processed would not result in behavioural intentions or attitude change. Below we will discuss several studies that are relevant to our results and can offer a good rationale for the lack of attitude change.

Implications for research

The fact that people who carefully process a message’s arguments that they judged high in quality are not persuaded in terms of attitude change can be explained through the sleeper effect. The term sleeper effect has been used to explain a delayed persuasive effect of a message when a discounting cue present when the message is communicated becomes unavailable or “dissociated” in the memory of the recipients (Kumkale & Albarracín, 2004). Persuasive messages are often accompanied by information that can raise suspicions of invalidity. This kind of information that can raise suspicions has been called a ‘discounting cue’. A good example of a discounting cue is source credibility (e.g. the source is considered untrustworthy). It is argued that when recipients are presented with a message that contains a discounting cue, the effect of
the message on persuasion will be greatly decreased. Over time, though, recipients may recall the message but not the information that raised suspicions and hence become more persuaded by the message at that time than they were directly following the communication (Kumkale & Albarracín, 2004). For the present study, the findings of Kumkale and Albarracin (2004) may mean that if any of the information presented to our participants was perceived as a discounting cue (e.g. the source was perceived as not credible), than the persuasive effects of messages including code-switching could have emerged only at a later time. This line of argument can be viewed as a critical reflection over our study but also as a valuable input for further research in this area of interest. The sleeper effect, as described above, can only be detected if the measurement of attitude/behaviour changes done right after exposure is repeated at a later time. Because in the case of the present experiment such a delayed measurement is not possible, this certainly should be taken under consideration for further research.

A second study that we will discuss regards the effects of code-switching on the comprehension of the message participants have read. Even though when establishing the criteria for participants selection we tried to ensure a proper level on English language (by selecting only students of Wageningen University that follow courses mostly in English, and by asking them to self-rate their English language proficiency), questions about message comprehension can still be raised and consequently questions about how code-switching influences message elaboration.

One of the very few studies regarding comprehension's role in persuasion is the one of Ratneshwar and Chaiken (1991). They focused on how message comprehensibility may moderate the persuasive impact of other persuasion variables (in their study the variable was source credibility). Participants in the low-comprehensibility condition expressed more favourable attitudes when the product was attributed to an expert versus inexpert inventor (Ratneshwar & Chaiken, 1991).

Applied to our results, their results could mean that the systematic processing of information shown by our participants that did not result in persuasion could be the result of a moderating effect of comprehension. For our study, the findings of Ratneshwar and Chaiken can offer a different perspective of results interpretation and a valuable reflection on the measurements used. In terms of methods, the study mentioned above shows that a measure of message comprehensibility should be included in further research to assess the moderating role of
comprehension. The research on the effects on code-switching has very rarely been done on a sample of participants that are not bilingual in the strict sense of the word, thus, such a measurement seems now like an obvious choice and should be included in any further research of this kind.

An interesting observation was made during the experiment. The participants in both code-switched conditions, after reading the debriefing, mentioned that they couldn’t recall if they had English words in the text or not. This particular observation can be interpreted by arguing that code-switching is very common and that we are so accustomed with its presence that we don’t even notice it. However, this doesn’t necessarily come as a counterargument to the assumed effect of message comprehensibility. Being used to the presence of code-switching in various texts doesn’t necessarily mean that we comprehend the exact meaning of the English words. An experiment that had only Dutch high-school students as participants, showed that they only looked up the meaning of an English word when this word was deemed relevant to understanding the content of the message presented to them and independent of their English language vocabulary knowledge. If the word’s meaning had no real relevance to understanding the content of the message, the meaning was not searched for (Hulstijn, 1993). An overview of our code-switched elements used in the messages presented to our participants shows that we had English words that had no interference with the overall content of the message, but we also had elements that were deemed as relevant to the content of the message. For our results this could mean that those code-switched words that had a clear influence on the content of the message may have lead to comprehensibility issues and thus to source credibility effects, and that those code-switched elements that were not related to understanding the overall content of the message led to disfluency and implicitly to central information processing. Disfluency refers the technique of modifying the appearance of a text to make it slightly more difficult to read (e.g. introducing fonts that are more difficult to read) (Diemand-Yauman, Oppenheimer, & Vaughan, 2010). The study of Diemand-Yauman, Oppenheimer, and Vaughan (2010) showed that participants in the disfluent condition recalled 14% more information presented to them than those in the fluent condition and they concluded that disfluency leads to deeper processing of information. If the code-switched elements we introduced in the messages have had a disfluency effect, our participants found the text harder to read than those in the no code-switched condition, and implicitly they employed more cognitive effort in reading the message.
The assumed disfluency effect of code-switching can provide great insights for the results of our experiment, and for the process through which the presence of code-switching led to more systematic processing of information and no attitude change. As shown by our data analysis, in the conditions where code-switched elements were not present, our message had no effect on the attitudes of participants independent of the quality of arguments and the information processing was not done centrally. In the code-switched conditions, the information was processed centrally and the quality of arguments had an impact, strong arguments leading to even more systematic processing of information. Interpreting these results in relation to the disfluency effects of code-switching, we can argue that even though our messages were not persuasive, participants exerted higher cognitive effort when reading the messages and thus, the information retention was increased (Diemand-Yauman et al., 2010; Roediger, Gallo, & Geraci, 2010) as well as information retrieval from the memory (Craik & Tulving, 1975; Pyc & Rawson, 2009). The advantages of such effects of code-switching are very complex and we will use this further to elaborate on the different types of advertising campaigns that code-switching can be effective for.

**Implications for practice**

The fact that code-switching has benefits in the world of commercial advertising can be seen by its usage in various campaigns in Dutch media. A few examples of such advertisements have been discussed in the introductory chapters of this thesis and many others can be noticed on a daily basis. A very brief internet search brought about numerous such advertisements of very different brands and products. A few examples have been selected and are presented in Annex 10.

This extensive use of code-switching in commercial advertising may be a statement regarding its effectiveness or just a preference of companies for their advertising campaigns. Adding English words to an advertising campaign oriented to selling goods or services to consumers may be a strategy employed by companies for the sole purpose of obtaining a specific image (e.g. trendy, modern, youthful etc), image that will increase the effectiveness of the overall campaign (Fuertes-Olivera, Velasco-Sacristán, Arribas-Baño, & Samaniego-Fernández, 2001) but our results show that the effects of English words can go beyond image associations. Thus, combining the results of our study with the observations regarding the extensive use of code-
switching in advertising, our recommendations will extend to a more integrative research approach that will include quantitative as well as qualitative elements. Variables such as perceptions and attitudes towards the English language, identity construction in bilingual advertising, social processes related to language etc, have been researched by various authors (Bot & Evers, 2007; Cargile, Giles, Ryan, & Bradac, 1994; Cargile & Giles, 1997; Peracchio, 2010) but very few of them have linked this to a more practical approach of advertising (Gerritsen et al., 2007; Hornikx et al., 2010; Krishna & Ahluwalia, 2008; Piller, 2001). An integrative research approach will most likely bring important insights of how code-switching works but also of how its usage can be made more effective in other types of campaigns that are not necessarily commercial (e.g. awareness raising campaigns, public health campaigns, information campaigns etc).

Awareness raising, public health, or information campaigns fall into a rather different category than commercial (consumer oriented) campaigns. Targeting a very specific receiver group, public campaigns are of three main types: awareness, education (‘how to do’) and persuasive (Rice & Atkin, 2001). Even though the content of each type can be quite different, it is safe to assume that systematic processing of these messages is desired and thus, the inclusion of code-switched elements can be an effective strategy. As discussed, systematic processing leads to better retention and better retrieval of information prior to exposure and this in our view should be highly required in the case of public campaigns. Whether a public campaign has an awareness raising strategy or an educational strategy, it is likely that higher cognitive efforts of the targeted recipients will significantly increase the effectiveness of the campaign and thus the insertion of code-switched elements can help achieve this. But, again, if the goal of the campaign is to change attitudes, then we must reconsider.

An observation made over the public campaigns on Dutch television in a period of three months, from January 2011 until the end of March 2011, revealed that none of the four public campaigns observed used any code-switched elements. The four public campaigns observed (Leprastichting, Stop Kindermisbruik, Hartstichting, Diabetes Fonds) use very different topics and are addressed to different target groups but they are composed fully in Dutch. All four campaigns provide important information about the problem they are fighting against and even though the arguments they use are of high quality, using code-switched elements will increase the probability of receivers centrally processing this information and acting upon it.
Conclusion

Several ways of interpreting the way in which code-switching influences systematic processing of a message but doesn’t influence attitudes have been elaborated upon. These are of course hypothetical situations and empirical evidence is needed to further investigate the role of code-switching and its implications for persuasion further than systematic processing. However, our attempt to explain the results of this study in regard to previous experiments and theories should not be seen as minimizing the importance of our findings. The intriguing results of the present study should be accounted for as a valuable breakthrough in the field of information processing and most of all should be regarded as a call for further and more in-depth research.

To conclude, we will make a number recommendations and critical comments about our experiment which should be taken into consideration for further research. Firstly, further research should include a delayed measurement of attitude change as a result of stimuli exposure to assess whether or not code-switching leads to the discussed ‘sleeper effect’. Secondly, the sample of participants use for this study was entirely formed of students which may be seen as a limitation for the usefulness of our results. When working with a more heterogeneous sample of people the results can be extended and generalized as a better reflection of real advertising situations. Lastly, to be able to study the alleged interaction between code-switching comprehension levels and source credibility, assessments of the influence of these factors could provide valuable information.

Prior research of the effects of code-switching on persuasion was conducted almost exclusively on samples of bilingual participants. The present study suggests that code-switching can be a valuable and effective persuasive strategy for various campaigns targeting receivers that are not necessarily bilingual. The impact of code-switching on systematic processing shown by the analysis of our data brings us to the conclusion that research in this area offers promising starting points for increasing the effectiveness of such strategies.
References:


Annex 1

Message group 1: No code-switching and weak arguments

De Raad van Bestuur van de universiteit Wageningen is een nieuw initiatief aan het ontwikkelen met betrekking tot het wetenschappelijk personeel aan de universiteit. Het initiatief is een reactie op de toenemende vraag naar onderzoek en de onderzoeksresultaten van de professoren van de verschillende departementen.

In de afgelopen jaren hebben professoren hun tijd evenredig moeten verdelen tussen het doen van onderzoek, publiceren en lesgeven. Deze verantwoordelijkheden samen met andere meer administratieve verantwoordelijkheden zorgen voor een teveel aan werk voor iedere professor. Dit leidt tot een afname in de kwaliteit en effectiviteit van hun werk. Het aantal onderzoeksprojecten waar iedere professor in deelneemt is significant toegenomen, net zoals de druk om te publiceren.

Het initiatief van de Raad van Bestuur probeert dit teveel aan werk op te lossen en tegelijkertijd het hoge kwaliteitsniveau onderwijs te behouden voor de studenten aan de universiteit.

Het initiatief houdt in dat lessen voortaan gegeven zullen worden door ouderejaars studenten, en dat de professoren zich meer zullen richten op onderzoekprojecten en publicaties. Elk vak zal een professor hebben die toeziet op de kwaliteit. Het lesmateriaal (zoals bv literatuur, examens, etc) zal ontwikkeld worden door deze toezidiend professor in samenwerking met de assistent die de lessen geeft aan de studenten.

Eén van de hoofdargumenten van de Raad van Bestuur is dat als de verantwoordelijkheid overgedragen wordt aan ouderejaars studenten, de relatie tussen de studenten en de docent aanzienlijk verbeterd wordt aangezien de ouderejaars studenten meer bekend zijn met de moderne technologie en nieuwe communicatie technieken. Dit houdt in dat de communicatie tussen student en docent verbeterd wordt.

Een ander argument dat naar voren gebracht werd, is dat ouderejaars studenten door het minimale leeftijdsverschil meer geliefd zullen zijn bij de studenten die de lessen volgen. In andere woorden, de studenten kunnen zich makkelijker identificeren met de ouderejaars studenten.

Als laatste argument gelooft de Raad van Bestuur dat als het nieuwe initiatief in werk gesteld wordt, ouderejaars studenten die gestudeerd hebben en dus getraind zijn aan de universiteit Wageningen, in de toekomst als voltijds medewerkers zullen blijven werken aan de universiteit.

Dit voorstel is nog steeds in discussie, en er zijn nog geen beslissingen genomen over de invoering van dit systeem. Op de volgende pagina stellen we je een paar vragen over wat jij vindt van dit initiatief.
De Raad van Bestuur van de universiteit Wageningen is een nieuw initiatief aan het ontwikkelen met betrekking tot het wetenschappelijk personeel aan de universiteit. Het initiatief is een reactie op de toenemende vraag naar onderzoek en de onderzoeksresultaten van de professoren van de verschillende departementen.

In de afgelopen jaren hebben professoren hun tijd evenredig moeten verdelen tussen het doen van onderzoek, publiceren en lesgeven. Deze verantwoordelijkheden samen met andere meer administratieve verantwoordelijkheden zorgen voor een teveel aan werk voor iedere professor. Dit leidt tot een afname in de kwaliteit en effectiviteit van hun werk. Het aantal onderzoeksprojecten waar iedere professor in deelneemt is significant toegenomen, net zoals de druk om te publiceren.

Het initiatief van de Raad van Bestuur probeert dit teveel aan werk op te lossen en tegelijkertijd het hoge kwaliteitsniveau onderwijs te behouden voor de studenten aan de universiteit.

Het initiatief houdt in dat lessen voortaan gegeven zullen worden door ouderejaars studenten, en dat de professoren zich meer zullen richten op onderzoekprojecten en publicaties. Elk vak zal een professor hebben die toeziet op de kwaliteit. Het lesmateriaal (zoals bv literatuur, examens, etc) zal ontwikkeld worden door deze toeziend professor in samenwerking met de assistent die de lessen geeft aan de studenten.

Eén van de hoofdargumenten van de Raad van Bestuur is dat als het lesgeven overgedragen worden aan assistenten, de professoren de mogelijkheid hebben om hun tijd te gebruiken voor onderzoek.

Als dit initiatief doorgezet wordt, zullen ouderejaars studenten een betere kans krijgen om kostbare onderwijservaring op te doen die zij momenteel ontberen.

Het laatste argument is dat de Raad van Bestuur gelooft dat als het nieuwe initiatief wordt goedgekeurd, iedere student zal profiteren, aangezien de professoren meer tijd zullen besteden aan het begeleiden van scripties. Hierdoor krijgen scriptiestudenten meer feedback en begeleiding.

Dit voorstel is nog steeds in discussie, en er zijn nog geen beslissingen genomen over de invoering van dit systeem. Op de volgende pagina stellen we je een paar vragen over wat jij vindt van dit initiatief.

Vind je dat het initiatief moet worden ingevoerd? Je feedback wordt zeer gewaardeerd.
De Executive Board van de Wageningen University is een nieuw initiatief aan het ontwikkelen met betrekking tot de wetenschappelijk staff aan de universiteit. Het initiatief is een reactie op de toenemende vraag naar research en de research resultaten van de professoren van de verschillende departementen.

In de afgelopen jaren hebben professoren hun tijd evenredig moeten verdelen tussen het doen van research, publiceren en lesgeven. Deze verantwoordelijkheden samen met andere meer administratieve verantwoordelijkheden zorgen voor een overload aan werk voor iedere professor. Dit leidt tot een afname in de kwaliteit en effectiviteit van hun werk. Het aantal research projecten waar iedere professor in deelneemt is significant toegenomen, net zoals de druk om te publiceren in verschillende journals.

Het initiatief van de Executive Board probeert deze overload aan werk op te lossen en tegelijkertijd het hoge kwaliteitsniveau onderwijs te behouden voor de studenten aan de Wageningen University.

Het initiatief houdt in dat lectures voortaan gegeven zullen worden door ouderejaars studenten, en dat de professoren zich meer zullen richten op research projecten en publicaties. Elk vak zal een supervising professor hebben die toeziet op de kwaliteit. De content van de lectures (zoals bv literatuur, examens, etc) zal ontwikkeld worden door deze supervising professor in samenwerking met de assistent die de lessen geeft aan de studenten.

Eén van de hoofdargumenten van het Executive Board is dat als de verantwoordelijkheid overgedragen wordt aan ouderejaars studenten, de relatie tussen de studenten en de onderwijzers aanzienlijk verbeterd wordt aangezien de ouderejaars studenten meer bekend zijn met de moderne technologie en nieuwe communication tools. Dit houdt in dat de communicatie tussen student en onderwijzer verbeterd wordt.

Een ander argument dat naar voren gebracht werd, is dat ouderejaars studenten door het minimale leeftijdsverschil meer geliefd zullen worden door de studenten die de lectures volgen. In andere woorden, de studenten kunnen zich makkelijker identificeren met de ouderejaars studenten.

Als laatste argument gelooft het Executive Board dat als het nieuwe initiatief in werk gesteld wordt, ouderejaars studenten die gestudeerd hebben en dus getraind zijn aan de universiteit Wageningen, in de toekomst als full-time medewerkers zullen blijven werken aan de Wageningen University.

Dit voorstel is nog steeds in discussie, en er zijn nog geen beslissingen genomen over de invoering van dit systeem. Op de volgende pagina stellen we je een paar vragen over wat jij vindt van dit initiatief.

Vindt u dat het initiatief moet worden ingevoerd? Je feedback wordt zeer gewaardeerd.
De Executive Board van de Wageningen University is een nieuw initiatief aan het ontwikkelen met betrekking tot de wetenschappelijk staff aan de universiteit. Het initiatief is een reactie op de toenemende vraag naar research en de research resultaten van de professoren van de verschillende departementen.

In de afgelopen jaren hebben professoren hun tijd evenredig moeten verdelen tussen het doen van research, publiceren en lesgeven. Deze verantwoordelijkheden samen met andere meer administratieve verantwoordelijkheden zorgen voor een overload aan werk voor iedere professor. Dit leidt tot een afname in de kwaliteit en effectiviteit van hun werk. Het aantal research projecten waar iedere professor in deelneemt is significant toegenomen, net zoals de druk om te publiceren in verschillende journals.

Het initiatief van de Executive Board probeert dit overload aan werk op te lossen en tegelijkertijd het hoge kwaliteitsniveau onderwijs te behouden voor de studenten aan de Wageningen University.

Het initiatief houdt in dat lectures voortaan gegeven zullen worden door ouderejaars studenten, en dat de professoren zich meer zullen richten op research projecten en publicaties. Elk vak zal een supervising professor hebben die toeziet op de kwaliteit. De content van de lectures (zoals bv literatuur, examens, etc) zal ontwikkeld worden door deze supervising professor in samenwerking met de assistent die de lessen geeft aan de studenten.

Eén van de hoofdargumenten van de Executive Board is dat als het lesgeven overgedragen worden aan assistenten, de professoren de mogelijkheid hebben om hun tijd te gebruiken voor research.

Als dit initiatief doorgezet wordt, zullen ouderejaars studenten een betere kans krijgen om kostbare onderwijservaring op te doen die zij momenteel ontberen.

Het laatste argument is dat de Executive Board gelooft dat als het nieuwe initiatief wordt goedgekeurd, iedere student zal profiteren, aangezien de professoren meer tijd zullen besteden aan het begeleiden van thesis. Hierdoor krijgen scriptiestudenten meer feedback en supervision.

Dit voorstel is nog steeds in discussie, en er zijn nog geen beslissingen genomen over de invoering van dit systeem. Op de volgende pagina stellen we je een paar vragen over wat jij vindt van dit initiatief.

Vind je dat het initiatief moet worden ingevoerd? Je feedback wordt zeer gewaardeerd.
Annex 5
Questionnaire for groups 1 and 3

1. Hoe vond je het om bovenstaand bericht te lezen?
   □ Helemaal niet leuk om te lezen
   □ Niet leuk om te lezen
   □ Niet leuk, maar ook niet niet leuk om te lezen
   □ Leuk om te lezen
   □ Heel leuk om te lezen

In welke mate ban je het eens met de volgende stellingen:

2. Dit initiatief gaat voordelen opleveren.
   □ Zeer mee oneens; □ Mee oneens; □ Niet oneens, niet eens □ Mee eens; □ Zeer mee eens;

3. De uitvoering van dit initiatief zal de algemene academische kwaliteit van de Wageningen Universiteit verbeteren.
   □ Zeer mee oneens; □ Mee oneens; □ Niet oneens, niet eens □ Mee eens; □ Zeer mee eens;

4. In hoeverre ben je het eens met het invoeren van dit initiatief?
   □ Zeer mee oneens; □ Mee oneens; □ Niet oneens, niet eens □ Mee eens; □ Zeer mee eens;

5. In het algemeen, wat vind je van het initiatief?
   □ Zeer slecht; □ Slecht; □ Niet slecht, niet goed; □ Goed; □ Zeer goed;

6. Gebruik onderstaande boxen om de gedachten op te schrijven die je had terwijl je het bovenstaand bericht aan het lezen was. Elke verschillende gedachte moet in een aparte box geschreven worden.

7. Als een voorlopige evaluatie van het ingediende initiatief, zou de Raad van Bestuur je graag vragen om je stem uit te brengen over de betreffende kwestie. Gelieve het juiste vakje te markeren:
   □ Ik stem voor implementatie van dit initiatief
   □ Ik stem tegen
In het bericht heb je meerdere argumenten gelezen die de raad van bestuur heeft om dit initiatief door te voeren. We willen je nu vragen wat je van deze argumenten vond. Specifiek willen we weten of je dit goede, sterke argumenten vond. Geef van elk argument aan in hoeverre je het een zwak of sterk argument vond.

a. Als de verantwoordelijkheid overgedragen wordt aan ouderejaars studenten, zal de relatie tussen de studenten en de docentaanzienlijk verbeterd worden aangezien de ouderejaars studenten meer bekend zijn met de moderne technologie en nieuwe communicatie technieken. Dit houdt in dat de communicatie tussen student en onderwijzer verbeterd wordt.

□ Zeer zwak; □ Zwak; □ Niet zwak, niet sterk □ Sterk; □ Zeer sterk;

b. Ouderejaars studenten zullen door het minimale leeftijdsverschil meer geliefd zijn onder de studenten die de lessen volgen. In andere woorden, de studenten kunnen zich makkelijker identificeren met de ouderejaars studenten.

□ Zeer zwak; □ Zwak; □ Niet zwak, niet sterk; □ Sterk; □ Zeer sterk;

c. Als het nieuwe initiatief in werk gesteld wordt, zullen ouderejaars studenten die gestudeerd hebben en dus getraind zijn aan de universiteit Wageningen, in de toekomst als voltijds medewerkers blijven werken aan de universiteit.

□ Zeer zwak; □ Zwak; □ Niet zwak, niet sterk; □ Sterk; □ Zeer sterk;

Tot slot willen we je vragen naar je beheersing van de Engelse taal, in het bijzonder je leesvaardigheid. Hoe schat je deze in? Markeer het vakje dat het meest met jouw inschatting overeenkomt.

1. Markeer het juiste vakje dat overeenkomt met je Engels niveau.

□ Zeer slecht □ Slecht □ Niet slecht, niet goed, □ Goed □ Zeer goed

Je bent nu aan het einde gekomen van deze studie. Hartelijk dank voor je deelname.
Annex 6
Questionnaire for groups 2 and 4

1. Hoe vond je het om bovenstaand bericht te lezen?
   □ Helemaal niet leuk om te lezen
   □ Niet leuk om te lezen
   □ Niet leuk, maar ook niet niet leuk om te lezen
   □ Leuk om te lezen
   □ Heel leuk om te lezen

In welke mate ban je het eens met de volgende stellingen:

2. Dit initiatief gaat voordelen opleveren.
   □ Zeer mee oneens; □ Mee oneens; □ Niet oneens, niet eens □ Mee eens; □ Zeer mee eens;

3. De uitvoering van dit initiatief zal de algemene academische kwaliteit van de Wageningen Universiteit verbeteren.
   □ Zeer mee oneens; □ Mee oneens; □ Niet oneens, niet eens □ Mee eens; □ Zeer mee eens;

4. In hoeverre ben je het eens met het invoeren van dit initiatief?
   □ Zeer mee oneens; □ Mee oneens; □ Niet oneens, niet eens □ Mee eens; □ Zeer mee eens;

5. In het algemeen, wat vind je van het initiatief?
   □ Zeer slecht; □ Slecht; □ Niet slecht, niet goed; □ Goed; □ Zeer goed;

6. Gebruik onderstaande boxen om de gedachten op te schrijven die je had terwijl je het bovenstaand bericht aan het lezen was. Elke verschillende gedachte moet in een aparte box geschreven worden.

7. Als een voorlopige evaluatie van het ingediende initiatief, zou de Raad van Bestuur je graag vragen om je stem uit te brengen over de betreffende kwestie. Gelieve het juiste vakje te markeren:
   □ Ik stem voor implementatie van dit initiatief
   □ Ik stem tegen
Annex 6 (continued)

In het bericht heb je meerdere argumenten gelezen die de raad van bestuur heeft om dit initiatief door te voeren. We willen je nu vragen wat je van deze argumenten vond. Specifiek willen we weten of je dit goede, sterke argumenten vond. Geef van elk argument aan in hoeverre je het een zwak of sterk argument vond.

a. Als het lesgeven overgedragen worden aan assistenten, de professoren de mogelijkheid hebben om hun tijd te gebruiken voor onderzoek.

□ Zeer zwak; □ Zwak; □ Niet zwak, niet sterk □ Sterk; □ Zeer sterk;

b. Als dit initiatief doorgezet wordt, zullen ouderejaars studenten een betere kans krijgen om kostbare onderwijservaring op te doen die zij momenteel ontberen.

□ Zeer zwak; □ Zwak; □ Niet zwak, niet sterk □ Sterk; □ Zeer sterk;

c. Als het nieuwe initiatief wordt goedgekeurd, iedere student zal profiteren, aangezien de professoren meer tijd zullen besteden aan het begeleiden van thesis. Hierdoor krijgen scriptiestudenten meer feedback en supervision.

□ Zeer zwak; □ Zwak; □ Niet zwak, niet sterk □ Sterk; □ Zeer sterk;

Tot slot willen we je vragen naar je beheersing van de Engelse taal, in het bijzonder je leesvaardigheid. Hoe schat je deze in? Markeer het vakje dat het meest met jouw inschatting overeenkomt.

1. Markeer het juiste vakje dat overeenkomt met je Engels niveau.

□ Zeer slecht □ Slecht □ Niet slecht, niet goed, □ Goed □ Zeer goed

Je bent nu aan het einde gekomen van deze studie. Hartelijk dank voor je deelname.
## Annex 7

### Study Program Distribution

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Do you have 10 minutes to spare? Please come by and fill out our questionnaire!

Your participation will be *rewarded* with a drink and a snack and you will have the chance of winning one of our three prizes of 50 euros each!!!

**Time:** Monday 6th till Friday 10th between 9am and 15pm  
**Location:** Room 4052 (De Leeuwenborch, 4th floor)  
**Eligibility requirements:** MSc student of Wageningen University; Native Dutch speaker.
Annex 9

Debriefing text

Geachte deelnemer,

Bedankt voor het meedoen aan dit onderzoek. Graag geven we je nog wat informatie hierover.

De tekst die je zojuist hebt gelezen is opgesteld voor dit onderzoek, en de inhoud ervan is dus fictief. Wij onderzoeken of het gebruik van Engelse woorden in een tekst effect heeft op hoe mensen informatie verwerken. Iedere deelnemer wordt per toeval in een experimentele conditie ingedeeld; afhankelijk van in welke conditie jij zat heb je een tekst met of zonder Engelse woorden gelezen.

Jouw antwoorden zijn vertrouwelijk: je persoonlijke gegevens zullen nergens bekend worden gemaakt. Je emailadres, als je die hebt ingevuld, zullen we alleen gebruiken om je de resultaten van het onderzoek door te geven. We willen jou ook vragen om vertrouwelijkheid – vertel andere studenten niet over de inhoud van dit onderzoek. Zij zullen dan niet meer mee kunnen doen, en onze resultaten kunnen vertroebeld raken.

Mocht je nog vragen of opmerkingen hebben over dit onderzoek, neem dan contact op met Adina Nerghes (adina.nerghes@wur.nl).

Nogmaals, hartelijk dank voor je deelname!
Annex 10


(Source: http://www.zalando.nl/, retrieved 22.04.2011, 9:00)

(Source: http://www.gumnasbag.nl/, retrieved 15.04.2011, 15:20)