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ICT and Feedback Practices in the Lower-Secondary Foreign Language Classroom

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Abstract: A central part of language teachers’ work consists in providing written corrective feedback for their students using well-known pen-and-paper practices, and they are often unsure of the return on their investment of time in this task. This article will describe the results of a survey among close to 300 Danish teachers of lower-secondary EFL aimed at uncovering their practices, not least the role of ICT in their work. The results indicate that they use ICT much less in this part of their work than in others, depriving both teachers and students of the benefits that technology can provide. The article also presents and discusses some of the advantages that may result from increasing the adequate uses of ICT in this aspect of (foreign) language teaching.

Introduction

Language teachers around the world spend many hours of their time providing written corrective feedback (WCF) to their students in order to help them become better writers (Hairston, 1986; Lee, 2003, 2009) – and in the case of especially foreign language learners, also to help them come closer to mastering the language they are learning. Danish teachers of English as a Foreign Language (EFL[1]) are no different from their colleagues around the globe. However, many teachers worry that this work is futile and that their students don’t really benefit from it (Lee, 2009), but they keep doing it, and students want it to be done (Lee, 2005; Straub, 1997). The study described in this article set out to uncover lower-secondary EFL teachers’ practice and particularly their use of ICT for this task, based on the hypothesis that teachers do not use ICT to a very large degree and that their practice and student learning outcomes could be greatly enhanced through the use of ICT.

Background

Setting

Denmark is generally considered a technology-rich country, and Danish schools are also quite technology rich (OECD, 2015). However, although the technology is there, it is not always used in ways that support subject-specific learning. Instead, it is used more for general tasks, e.g. information search and communication as also shown in a report from The Danish Evaluation Institute (Danmarks Evalueringsinstitut, 2009). Danish teachers are expected and required to integrate ICT in their teaching, but they have a high degree of autonomy, and few concrete requirements are made in the official documents (Undervisningsministeriet, 2015, n.d). Thus Danish teachers are reasonably free to choose their approach, and their practice may be informed by their beliefs (Borg, 2006) arising from their own school experiences, from their training, and from the in-service professional development they have attended in the course of their years of teaching.

The role of feedback in language acquisition

We know that, in general, feedback is a highly efficient instrument to assist student learning (Hattie, 2009), and this is no less true for language learning, where students not only aim to learn a skill, but need to develop a personal means of expression (Ferris & Hedgcock, 1998). Based on a communicative view of language learning, which is the dominant view of the ministerial orders for the teaching of EFL in K-10 in Denmark

[1] I use the term EFL as English is a foreign language formally taught in Denmark from grades 1-12, but the article is no less relevant for ESL, ESOL, EAL.
(Undervisningsministeriet, n.d.), we acquire (a foreign) language by forming hypotheses of how the target language works, by testing these in interaction with others, and reformulating them based on the feedback received (Gass & Mackey, 2015; Lund, 2015). Therefore, individual feedback might be assumed to be even more important for language learning, and many studies have contributed to our understanding of the role of feedback, oral as well as written (Binglan & Jia, 2010; Bitchener, 2012; Bitchener & Knoch, 2010; Ferris, 2006; Lee, 2004; Lee, Mak, & Burns, 2015; Lyster & Ranta, 1997). However, the practices of Danish lower-secondary EFL teachers is unchartered territory, especially concerning the extent to which they choose to use technology for WCF.

**The Study**

As part of a larger study on the potential impact of ICT on EFL teachers’ WCF practices, a request for teacher participation in an open survey was sent to all principals of lower-secondary schools in Denmark. The survey aimed at uncovering:

1. The degree to which teachers receive their students’ work in electronic format and the channel
2. The degree to which teachers use technology for giving WCF
3. The feedback strategies used by teachers
4. Their follow-up practices (with students)

**Data**

The questionnaire was built and distributed online using SurveyXact (Ramboll Management Consulting, 2015). An email was sent to all principals of Danish public schools, requesting that they encourage their English teachers to answer the questionnaire, and they were provided with a link to allow teachers access [2]. Teachers were ensured that they could be anonymous, but if they wanted more information on the overall project or wanted to volunteer as participants in the subsequent, planned intervention study, they would have to provide an email address. The teachers were asked various background questions concerning training and experience, but in general, the questionnaire was kept short consisting of only seven question batteries (=seven screens), of which two were only shown if respondents wanted to either follow or be part of the subsequent research project.

The questionnaire answers were collected in April 2015. 250 teachers completed the questionnaire, 28 gave partial answers, and 57 just clicked on to the questionnaire without answering any questions.

**Findings**

**General**

As can be seen from Tab. 1, the majority (64 %) of the respondents are experienced teachers, i.e. teachers with more than 8 years of teaching experience. However, this was to be expected as this group should cover most teachers over the age of 40. Nevertheless, the question was asked to allow for the opportunity to detect differences in the practices of new or inexperienced teachers and teachers who have found their ‘style’ and what works for them. However, no significant differences were found.

<table>
<thead>
<tr>
<th>0-2 years</th>
<th>3-5 years</th>
<th>6-8 Years</th>
<th>&gt; 8 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 %</td>
<td>13 %</td>
<td>13 %</td>
<td>64 %</td>
</tr>
</tbody>
</table>

**Table 1**: Respondents’ years of teaching experience. (n=265)

**Dealing with student work**

[2] Denmark had a total of 2,457 K-10 schools in 2015 (Undervisningsministeriet, 2016), some of which do not teach lower secondary. There is no way of calculating the complete population of lower-secondary English teachers in Denmark, but the sample involves a small percentage, and additionally, due to the voluntary nature of participation, the sample may not be representative.
Although we know there are many advantages of having students work together in pairs or groups and provide peer feedback (AbuSeileek, 2013; Bitchener & Ferris, 2012; Bitchener & Storch, 2016; Ferreira, 2013), teachers say that students hand in their work individually 77% of the time and only in pairs or groups between 8-13% of the time.

When students hand in their work to their teacher, it most often happens in electronic format as can be seen from Tab. 2:

<table>
<thead>
<tr>
<th>Format of Student Work</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always in paper format</td>
<td>7%</td>
</tr>
<tr>
<td>Most often in paper format</td>
<td>19%</td>
</tr>
<tr>
<td>Equal distribution paper/electronic format</td>
<td>32%</td>
</tr>
<tr>
<td>Most often in electronic format</td>
<td>28%</td>
</tr>
<tr>
<td>Always in electronic format</td>
<td>14%</td>
</tr>
</tbody>
</table>

Table 2: Format of student work (n=278)

It is clear that 42% of teachers always or most frequently get student work electronically, while only 26% get it on paper, the remaining 32% receiving student work in an equal distribution between paper and electronic format. (Whether this is determined by student choice or teacher prescription or a combination of both cannot be seen from the data.)

Tab. 3 shows the channel for the electronic work to reach the teacher, very much reflecting the current general practices of Danish schools concerning ICT, where all teachers have a school email account and most have a municipally run intranet. It also reflects how some municipalities have decided to work with Google Apps rather than e.g. MS Office:

<table>
<thead>
<tr>
<th>Channel</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email</td>
<td>40%</td>
</tr>
<tr>
<td>Intranet</td>
<td>67%</td>
</tr>
<tr>
<td>Shared Google Doc</td>
<td>33%</td>
</tr>
<tr>
<td>Dropbox</td>
<td>2%</td>
</tr>
<tr>
<td>Other</td>
<td>12%</td>
</tr>
</tbody>
</table>

Table 3: Most frequent channels for receiving student work (more than one answer could be chosen) (n=205)

All in all, one might expect that these facilitative structures would make it easy for teachers to continue in an electronic workflow, but when asked how they deal with electronically delivered work, 54% of the teachers who always or most frequently get student work in electronic format (n=206) say that they print it and work with it on paper. In this way, they deprive themselves and their students of the potential benefits of ICT as will be described later on.

Considering that Danish schools are technology rich as stated above, this lack of ICT involvement by teachers in a practice they spend much time on could be seen as surprising. Therefore, to see if this apparently low ICT usage can also be seen elsewhere in relation to teacher feedback practices, teachers were asked whether they used technology-based language resources such as grammar books or other language materials both in their everyday teaching and in connection with feedback. The distribution is illustrated below in Fig. 1:
**Figure 1**: Use of language and grammar resources in everyday teaching and in connection with written corrective feedback.

Fig. 1 shows that, in general, teachers use electronic language resources to a very high degree and use books somewhat less. Also, it shows that teachers use both grammar books and electronic language resources less in connection with feedback than in the general teaching. However, the drop in the use of electronic resources in connection with written corrective feedback is much more pronounced than in connection with everyday teaching. Thus one might assume that the ‘printing practice’ of many teachers in relation to feedback spills over into their use of materials and that teachers do not consistently make reference to the materials they use in their everyday teaching when they practice WCF.

Looking at the teachers who do work electronically with the student papers (n=205), the majority (84 %) use ordinary word processing programs (e.g. MS Word), a few (5 %) use video feedback (e.g. as described by Mathisen (2012) or Stannard (2015)) or sound comments (8 %), while only 4 % use a well-known, dedicated “correction program” [3]. 11 % ticked “Other” [4]. When answering “Other”, teachers were prompted for a description, and here, they mention things like oral conferences, color coding, post-its, comments in pdf files, coding keys etc. Some of the uses described here are tied to teachers’ use of an iPad, e.g. Showbie, an iPad app. In some instances, teachers seem to be using iPad tools that allow them to continue their traditional, paper-bound practice, e.g. handwritten comments in a pdf file. The very few (n=4) who actually do use a dedicated correction program all use the program LangCorr (LangCorr, n.d.), which is an add-on to MS Word.

Teachers who use word processing (n=80) typically use the ’insert comment’ function (88 %), they write directly into the student’s text (46 %), they use track changes (28 %), or “Other” (16 %) [5]. In many instances, the category “Other” and the following free-text answers reflect that teachers wanted to describe how they also gave students a general comment on their work, among other things to point out focus areas for the individual student.

**Feedback Strategies**

Language (and other) teachers employ different strategies in the way they approach student work. For language teaching, several studies have shown that some approaches are more useful and effective than others although it is an area where results are not always unambiguous or generally agreed on (Ferris, 1997; Lee, 2003). Some of the characteristics of good feedback practice that seem to be generally agreed on are that:

- Feedback should be selective, not comprehensive, i.e. focus on selected areas of student language (Bitchener & Knoch, 2009; Bitchener & Knoch, 2010; Ellis, Sheen, Murakami, & Takashima, 2008);
- It should be indirect rather than direct, i.e. the teacher should leave the actual correcting of a mistake to the student (Ellis, Loewen, & Erlam, 2006);
- A coding system may be useful in helping students to identify and correct their mistakes (Depieri, 2015; Elicker & Fürstenberg, 2013; Sampson, 2012).

When asked to prioritize their practice when given 8 possible strategies, the 1st priorities of the teachers in the sample were distributed as shown in Fig. 2:

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[3] 10 % stated that they used a dedicated program, but on closer inspection, looking at the tools they said they used, they had clearly not understood the term. The number has therefore been corrected so as to include only those who actually used a dedicated program, i.e. a program that had feedback as its main intended affordance.

[4] Teachers could tick more than one category. Hence the total is not 100 %.

[5] Again, teachers could tick more than one category.
When you provide Written Corrective Feedback for your students, which of the following is your most frequent choice?

- I correct all errors: 24.3%
- I correct selected errors: 35.8%
- I highlight all errors without correcting them: 9.3%
- I highlight selected errors without correcting them: 8.6%
- I always make a comment explaining what is wrong: 7.8%
- I use a coding system to indicate the various error types: 7.8%
- I seldom explain what the error is: 0.4%
- Other: 1.5%

Figure 2: Distribution of teachers’ most frequent choice of WCF strategy (n=268)

This clearly shows that 60.1% of the teachers choose to correct students’ mistakes rather than let them do so themselves – or encourage them to. However, on the positive side, most teachers who correct their students’ mistakes do not do so comprehensively but make some sort of selection.

Teachers were also asked to indicate their most frequent choice of follow-up strategy, the results being shown in Fig. 3:

Figure 3: Frequency of first-priority follow-up strategy (n=265)

As can be seen, most teachers (44.5%) indicate that they go over characteristic mistakes with the whole class, and 23% do the same but in combination with giving students time in class to work on correcting their errors [6]. Only 17% ask students to revise and resubmit their papers. However, if the teacher has already done the work as seems to happen very frequently (see Fig. 2), this practice will be of little value and perhaps make little sense to students.

[6] Although there is a difference between mistakes and errors in EFL literature (e.g. (Gass & Selinker, 2008)), they are used interchangeably in this paper since Danish has only one word covering both (‘fejl’), and thus it is not possible to know whether teachers refer to one or the other.
However, not following up with revision and resubmission also means that once a paper has been handed in and the student has received his or her due feedback, the cycle has been completed as illustrated in Fig. 4 and logically, students check the paper for their grade, do little more with it, and do not look at the paper again.

![Diagram](image)

**Figure 4:** Illustration of existing feedback workflows

Hence, although the students hand in many papers during the English lessons of their lower-secondary cycle, in the practices seen with the majority of the teachers in this sample, the collected feedback students receive might be characterized as a succession of summative feedback instances rather than individually targeted formative assessment, helping them on their way by giving them actionable advice to take from one paper on to the next, creating some sense of continuity.

One teacher states that one of the reasons she has not asked students to revise and resubmit is that, despite having tried to find a system or a technology that could facilitate this, she has not succeeded in finding a viable solution: “One of my aims is that I need to find a system where students can resubmit their paper to me. I just haven’t had enough time to do so during the months I have taught 8th and 9th grade, but it’s an aim. I do realize that the mistakes won’t be processed if student work doesn’t focus on doing so.” (Free text comment by teacher)

Another describes how the whole procedure would be too time-consuming: “Ideally, I would like to give them [the students] time to work on corrections during class and possibly also resubmit, but it simply takes up too much time, and therefore I leave it up to the students themselves to correct their mistakes.” (Free text comment by teacher)

Based on what we saw concerning teachers’ choice of strategy and the above two comments (and others with the same basic messages), it seems that there might be three obstacles to adding value to teacher feedback through student revisions and resubmissions: One is that in many instances the teachers have already corrected the errors. Secondly, some teachers lack a suitable technological solution, and finally, the time-consuming aspect of this practice is also seen as an obstacle [7].

### The potential contributions of ICT

Having seen that 54% of the teachers in the sample here, despite their technology-rich environments, do not use ICT in their feedback practices, we shall now consider some of the ways in which ICT may enhance the quality of feedback processes for language learning.

If we consider what we know about WCF processes that are conducive to language learning, they can be said to be characterized by collaboration (Arnold, Ducate, & Kost, 2009), active revision by students (Campbell & Fauster, 2013) as a way of furthering “deep processing” (Henriksen, 2014; Hulstijn & Laufer, 2001), and the processes may form a “dynamic interaction between task, teacher and learner” (Reitbauer & Vaupetisch, 2013, p. 39). However, many language teachers feel that very often, the hours spent correcting have little or no sounding board with the students (Lee, 2003, 2011), who might be more interested in the grade that they can see at the end of the teacher’s comments – and many make little use of the feedback given by the teacher to actively improve their language.

We know that ICT provides new tools for collaboration, synchronous as well as asynchronous (Beatty, 2010; Caviglia & Neutzky-Wulf, 2014; Chapelle, 2001), and thus would enhance student possibilities for working together, both before and after teacher feedback as peer feedback (Tang, 1999) is also facilitated. It may seem paradoxical that intangible digital data appear to be more permanent than a sheet of paper; however, this is the case as paper is not as retrievable or searchable as a computer file. In this way, digitization adds permanence, retrievability and searchability for both students and teacher, helping both to keep an overview of status and progress. In this sense, technology can also make possible a workflow that is different from the separate, unrelated sequences like the ones illustrated in Fig. 4.

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[7] It also needs to be said that as of 2014, after a long labor dispute, a new law governing teacher working hours was passed, fundamentally changing the rationales of teacher time allocation, and this may also play a role in teachers feeling a lack of time.
One could imagine a workflow that is more conducive to the above-mentioned dynamic interaction by suggesting a more continual workflow with a greater focus on the formative elements of feedback, allowing students to track their progress through easy access to old and current papers alike. However, this will not be gone into in more detail here.

ICT may assume various forms in the WCF practices of language teachers: Working with standard word processing programs makes it possible for teachers – and students – to either comment or use track changes (see also AbuSeileek (2013), AbuSeileek & Abualsha'r (2014), and AbuSeileek & Al-Olimat (2015)). Working with wikis (Arnold et al., 2009) is another example of the use of ICT, just as there are dedicated WCF programs, either stand-alone online or offline programs (e.g. Markin (Holmes, 2009) and KungFu Writing (KungFu Writing, 2016)), or systems that are integrated with other programs, e.g. GradeMark (GradeMark, 2016), which is part of the plagiarism suite turnitin (www.turnitin.com), or programs like LangCorr (LangCorr, n.d.) or EasyCorrect (EasyCorrect, n.d.), which are add-ons to MSWord.

Each of these programs has different affordances (Gibson, 1979) in relation to WCF and language learning, but these will not be gone into more here. Suffice it to say that they do, of course, need to be adapted to the relevant context, unleashing only those affordances that make sense; there is a major difference between giving WCF to an insecure, unmotivated 8th-grader and a university major.

**Discussion**

**Teacher Practices**

It is quite obvious that the possible contributions of ICT are lost when teachers print their students’ work and do not work with it on screen. But what, then, might ICT actually contribute with that could be an advantage for both teachers and for student learning? Several things can be highlighted:

First, technology can facilitate systematicity in the WCF work of teachers as well as students. Most of the dedicated programs in existence, e.g. KungFu Writing, Markin, and LangCorr, provide statistics on error numbers and types, allowing both students and teachers to follow progress made – in general or (more appropriately) on select points. Additionally, teachers can gain easy access to generating statistics covering all or selected groups of students, something that may not only inform the student and the teacher as to student progress, but also assist the teacher both in the selection of topics to work with in class and in the choice of ways of working.

Second, some degree of automaticity can be achieved as these programs can hold auto text that can be inserted at the click of a button, reducing the need for teachers to keep writing the same comments over and over, and allowing students to get more exhaustive explanations than if all had to be written from scratch every time. In this way, grammar teaching may be to some degree personalized and be felt as immediately relevant.

Third, as already mentioned, the permanence afforded by digital format and storage can be a clear advantage to students as well as teachers.

Fourth, as also described above, peer collaboration and response as well as a more appropriate, interactive workflow may be supported by the use of ICT.

**Student practices**

If students never take a second glance at their papers except to get the grade given, it is obvious that the feedback will have little effect. In addition, if teachers have already corrected the mistakes in the students’ papers (i.e. have used direct feedback as we saw it done to a high degree in the sample of teachers described above), students might feel that there is little for them to gain from perusing the feedback. They may be content to read the grade and – perhaps – a brief general comment telling them what their main problems are – grammatically, content- or otherwise. However, if students are to revise their papers, they are forced to address and respond to teacher feedback, requiring them to work more in depth with the changing of the (faulty) hypotheses they have made concerning the target language.

Additionally, as hinted above, students may be getting more to-the-point feedback that is also actionable if the semi-automatic comments that the teacher has built into the system are of a nature that helps them actually understand and correct their mistakes.

Finally, it seems obvious that ICT might facilitate student collaboration through simple tools such as peer feedback using the revision tools in e.g. MS Word or similar, or through synchronous or asynchronous co-writing in
e.g. Google Docs. This, however, would require teachers to make more assignments pair or group work rather than individual work compared to what was seen in the sample above.

**Conclusion**

All in all, then, there seem to be many potential advantages to integrating ICT in the giving of WCF. However, as we have seen above, despite receiving large portions of student work electronically, the majority of teachers in this study tend to print much of the work before engaging in feedback. Additionally, they tend to give feedback in ways that are not conducive to student learning, and also their follow-up strategies seem to perpetuate a student-teacher interaction around feedback and writing tasks that is more attuned to summative than to formative feedback.

That ICT has not been integrated into teacher practice to improve the giving of WCF even though there’s a strong case for doing so is likely to hinge on several things: First, feedback practices come from a very old pen-and-paper tradition that may be hard to challenge for its validity and assumed practicality. Second, changing teacher practice in the direction of more ICT integration is often a difficult task (Albion, Tondeur, Forkosh-Baruch, & Peeraer, 2015; Kjaergaard & Fougt, forthcoming), and teacher professional development will be required. Finally, there is a need for more research into the ways that the introduction of a relevant ICT use for WCF in the context dealt with here may actually challenge and change not only teacher beliefs and practices but also student attitudes and practice.

**References**


