AN INTRODUCTION TO TEACHING LANGUAGES REFLECTIVELY WITH TECHNOLOGY

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ABSTRACT

The purpose of the present volume is in demonstrating a variety of ways in which teachers using technology can do so more effectively by 1) identifying and incorporating findings from others' research and practice, and 2) reflecting both during and after employing technology to determine what worked as expected and what did not in order to improve outcomes in the future. In this introductory chapter, we expand on the notion of teaching English and other languages reflectively with technology and offer guidelines for incorporating this into teaching practice. In doing so, we hope to help bridge the current gap between formal research and practice in this field.

INTRODUCTION

The field of language learning and technology, commonly known by such acronyms as CALL (computer-assisted language learning) and TELL (technology-enhanced language learning), has a large and growing research base. There are dedicated journals like *Language Learning and Technology*, the *CALICO Journal, ReCALL*, and *Computer Assisted Language Learning*, and there are research-focused conferences and research strands within more general conferences. Some of that research is exploratory and descriptive, aimed at capturing the attitudes and activities language teachers and learners are currently engaged in with technology. However, many of these studies explore ways that using technology can make language learning "better".

Early work in CALL was aimed at showing it was more effective than face-to-face teaching, but that comparison has faded over time. The questions typically addressed by researchers now involve not *whether* to use technology but rather *what* technology to use and *how* and *when* and *with whom* to use it. Just as technology pervades our everyday lives, it is now an assumed part of the language teaching landscape. Correspondingly, the concept of "better" has expanded across dimensions other than effectiveness, and research also encompasses the following areas:

- learners pick up language knowledge or skills faster or with less effort (learning efficiency);
- learners can get materials or experience interactions that would otherwise be difficult or impossible (access);
- learners can learn with more or less equal effectiveness across a wider range of times/places (convenience);
- learners enjoy the language learning process more or are willing to engage in it more (motivation);
- learners require less space, less teacher time, or less expensive materials (institutional efficiency).

(see http://web.stanford.edu/~efs/callcourse2/CALL6.htm)

Despite this broad and growing collection of studies, the insights and generalizations from this research, even when they include clear practical suggestions, are often unknown to rank and file language teachers. There is an unfortunate, and at times seemingly enormous, gap between research and practice in this field.
And it is not just the typical teacher that lacks awareness: from presentations at conferences and publications in practice-oriented venues, we see evidence of a large and growing use of technology by language teachers who seem oblivious to relevant research. Often, teachers simply appropriate existing applications and online resources intended for purposes other than language teaching and learning. Some of these teachers are in fact "serial adopters", practitioners comfortable enough with technology to experiment with new options as they develop. They use the technology applications with their students, share their ideas with colleagues in their programs, and present their experiences at local, regional, or even international conferences, all without reference to available underlying literature.

This is one issue, the lack of appreciation and appropriation of the research of others. But there is another. We have long observed that this sharing, through conference presentations, workshops, newsletters, mailing lists, and other vectors, all too often occurs without any explicit report or evaluation of what *actually* went on. In fact, teachers presenting their work may focus solely on the technical and positive aspects of it uncritically, seeing their students' interactions with and through technology through digital rose-colored glasses. Although what they offer may still have merit and their students as a group may be well-served by it, their report tells less of the story than it could. These presenters should report not just on the positive features but on the challenges they faced, how they worked to overcome them, and what similar challenges would exist for others attempting to incorporate the same technology and tasks. In a classroom of individuals, not everyone is equally engaged and empowered by a new application or task, but presenters often give the impression that this is the case.

Add this process of critical reflection to knowledge and understanding of some relevant research and practice literature

to support technology integration, and the presentation is further enriched. There is a literature of more than three decades on technology and language learning, and much of it is freely available. Teachers using technology owe it to themselves and their students to be aware of what others have done so that they do not repeat the same mistakes or, as is so often the case, reinvent the wheel. Spending even a short time doing some background reading before launching into a project (or even during it), is likely to yield a better result. Our point here is that critical reflection can—and should—be supported not just by experience, but by knowledge.

The title of this opening chapter differs from that of the book in one key word, replacing *English* with *languages*. In many of the chapters that follow, a similar exchange could be made. The technologies, tasks, and activities reported there—along with the evidence of reflective teaching and links to prior work—have value for the broader landscape of second language teaching and learning. In the remainder of this chapter, we will expand on these notions and offer some guidelines for how to be a more reflective language teacher with technology.

DIMENSIONS OF TEACHING REFLECTIVELY

The notion of teaching reflectively is widespread within the field of language education and has a long history. Richards & Lockhart (1994) devote a whole book to the topic. Teacher candidates are regularly oriented to the concept and in their practicum experiences are often required to demonstrate their ability to reflect and learn from that reflection. Our goal here is to focus on incorporating technology into this process without rigorously defining or limiting the range of interpretations and models of teacher reflectivity that can be drawn on. However, for those without a solid background in this area, we believe a brief discussion of the concept and a simple framework can serve as a starting point.

One way of understanding the notion of teaching reflectively is by looking at what it *isn't*. Brookfield (1995) famously contrasts

it with *teaching innocently*. Teaching innocently occurs when the teachers assume that they understand what they are doing and the effect it is having on their students. Teaching innocently, they do not challenge the assumptions underlying their teaching actions. Examples relevant to our situation would be to assume that our students are naturally autonomous language learners (a *paradigmatic* assumption according to Brookfield), that we should therefore basically provide them with an appropriate technology and motivating task and then stay out of their way (a *prescriptive* assumption in his framework), and that assigning them a collaborative task to do on a social media site will provide that natural experience, leading to successful language learning (what Brookfield would label a *causal* assumption). The failure to teach reflectively, then, is not necessarily based on laziness or time limitations or even arrogance. Rather, we would argue, it is a case of not knowing what we don't know and then letting the exploration stop there.

In a recent chapter on reflective teaching, Murphy (2014) draws on the work of Schön (1983) for a conceptual framework based on the cognitive dimensions of *reflection-in-action*, *reflection-on-action*, and *reflection-for-action*. Reflection-in-action is "the online, real-time decisions teachers are continually making while teaching" (Murphy, 2014, p. 15). This kind of reflection, which allows teachers to make changes in lesson plans and interaction with students as the class is ongoing, is based on a combination of a teacher's background knowledge and experience, the context, and situational awareness. Reflection-on-action in contrast occurs after the lesson is over and allows the teacher time for deeper consideration of the events that occurred in the classroom—as Murphy notes, this additional time, free of distraction, offers the possibility of incorporating metacognitive as well as cognitive processes. The final category, reflection-for-action, is most clearly associated with the goals of this book. It represents a proactive mindset, reflecting on knowledge and experience of the technology, the learning objectives, and the teaching situation to craft a more efficient and effective language learning experience than presumably would have been possible without taking this step.

We would like to make one final point before concluding this section. Teaching reflectively is often presented in a relatively absolute fashion (as in Brookfield's contrast to "teaching innocently"), but the real world is not at all so binary. Reflective teaching can be more—or less—effective depending on the quality of the knowledge base, the depth of critical thinking, the simplicity or complexity of the teaching setting, the familiarity of the teacher/reflector with the full range of the setting, and no doubt many other factors. Ultimately, it is not *whether* a teacher reflects on his or her teaching in-action, on-action, and especially for-action, but how well the teacher does so that is likely to make a positive difference in the results. Indeed, through reading and internalizing the reflective experiences and insights from the authors of the following chapters, teachers can build a more substantial schema to guide them throughout both the planning and implementation phases of a project integrating technology into their own teaching.

SUPPORT FOR TEACHING REFLECTIVELY WITH TECHNOLOGY

Calls for teachers to be reflective when using technology are not new. Meskill, Mossop, DiAngelo, and Pasquale (2002) report on an in-service project incorporating expert and novice teachers using technology, where the five novices were required to keep a daily reflective journal. Slaouti & Motteram (2006) argue for technology integration in to professional development as a reconstructive practice for language teachers. Kolaitis, Mahoney, Pomann & Hubbard (2006), show how collaborative reflection by teachers in the role of language learners using technology helped them better understand their students' challenges in using English language learning software.

An important initiative aimed at bridging this gap between research and practice is represented by the TESOL Technology Standards for teachers and learners (TESOL, 2008; Healey et al., 2011).

Goal 2, Standard 4 in the Standards for Teachers states: "Language teachers use relevant research findings to inform the planning

of language learning activities and tasks that involve technology" (TESOL, 2008, p. 35). This means that as fundamental standard, teachers have a responsibility to be aware of the research base for CALL so that they can search effectively for—and interpret—findings that are of value to their students' learning goals. As an aside, this also entails that a 21st century language teacher preparation curriculum should include content and tasks to ensure teacher candidates' familiarity with that base. Goal 4, Standard 2 directs language teachers to "regularly reflect on the intersection of professional practice and technological developments so that they can make informed decisions regarding the use of technology to support language learning and communication" (TESOL, 2008, p. 39). Though not directly mandating reflective teaching, this standard sets the target of a reflective mindset for language teachers using technology.

THE PRESENT VOLUME

When we sent out the call for proposals for this book, we knew we wanted more than just a report of what teachers did, but at the same time, we did not expect full-blown empirical research articles as we felt that that many practitioners did not have the time or the training to embark on that. Specifically, we stated the following:

> ... please bear in mind that although decidedly practice-centred, the contributions are expected to go beyond simply describing an application of technology as is often done in conference presentations and informational publications such as newsletters. We seek examples of teaching with technology that provide a clear rationale for the claimed benefits of using the chosen technology by incorporating the following: 1) links to relevant literature in language teaching and learning, teaching with technology, and especially, language teaching with technology; 2) teacher reflection on the process and outcome, with discussion of not only the positive aspects but also the pitfalls, challenges, and lessons learned. The inclusion and analysis of some teacher and/or student data to support the claims is especially encouraged.

We asked contributors to be sure that their work incorporated the following features:

1) Represent practical uses of recent and emerging technologies or innovative applications of more established ones.

2) Include an explicit rationale for incorporating the technology tied to language learning goals and objectives, supported with references.

3) Incorporate thoughtful reflections based on observation and/or collected data regarding what worked, what did not, and why, connected where possible to relevant literature.

In the end, we received papers representing a range of approaches to reflectivity. In the next section, we combine concepts from the previously cited literature, including the TESOL Technology Standards, our own experiences, and insights from the authors of the chapters in this volume to produce seven guidelines as a starting point for those venturing into teaching reflectively with technology. We encourage others to refine this list further.

SOME GUIDELINES FOR TEACHING REFLECTIVELY WITH TECHNOLOGY

1) Build a base in understanding the range of options for integrating technology into your language teaching. The TESOL Technology Standards vignettes (Healey et al., 2011) provide an excellent starting point. They offer situated examples of implementing the standards in a range of settings and levels of technology resources.

2) Before incorporating a technology-mediated activity or task, do some online research, looking for others who have reported on using similar technologies for similar tasks. For example, if you want to try using a Facebook group for your EFL class, try searching for 'efl Facebook group'—if you have difficulty getting useful sources, try searching on Google Scholar (http://scholar.google.com) to find published material. The chapters in the present volume provide a rich place to start your search as well as examples of how to make use of the literature you discover.

3) Understand both the technology and the environment in which you and your students are likely to be using it. For example, if you are relying mobile devices, be aware that an app may look and behave differently on an iPhone and an Android system, be available on one system but not the other, or be free on one and paid on the other. Additionally, you need to consider your and your students' context carefully. You may read about an "exciting" new app, see it demonstrated at a conference, or even hear about it from a colleague. Just because it works in their context, with their students, does not mean it will work as well in yours (if at all).

4) Run a thought experiment, just as Einstein used to (an example of reflection-for-action at the onset of a project). First, describe what it is that you are trying to accomplish—your expected outcome. Then, visualize a set of actions by you and your students that are likely to achieve that outcome. Finally, reflect on challenges that you are likely to encounter and think about what you could do to avoid or overcome them. Taking these steps will help you avoid 'teaching innocently' (Brookfield, 1995).

5) Consider learner training, both as an initial step and as an ongoing process. Even if you have students that you believe are technically proficient, do not assume that they will know how to connect their personal use strategies to learning (see the chapters by Cunningham and by Nurmukhamedov & Kerimova, this volume).

6) If your project involves colleagues, connect with them early and often to work out the details of your plan and to 'co-reflect' (see Claro & Akai, this volume).

7) Keep a record of your experiences and reflections at every stage; this is especially useful when those reflections are shared and discussed (see Coleman & Yamazaki, this volume). Journaling is an excellent way to accomplish this.

FINAL REMARKS

This project started as a way of combining voices from IATEFL's Learning Technologies special interest group and TESOL's Computer Assisted Language Learning interest section in a common chorus. Our hope was not only to connect the two organizations in a joint venture, but also to work toward bridging the gap between those attached more to the academic research side of language learning technologies and those who fall predominantly on the practitioner side. The authors of the chapters in this volume have done an exemplary job of meeting that goal. We hope readers will find it both valuable for its practical content and inspiring in its demonstration of the variety of ways in which knowledge of others' work and reflection on one's own can be usefully integrated into the digital frontier of language teaching.

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