Abstract

This presentation reports on an investigation into situated teacher learning and their developing understandings of the affordances of new computer-mediated communication (CMC) tools. In-service teachers need to identify the affordances that a new tool offers for language learning in order to make decisions about which technologies they will choose to support their teaching practice. While general typologies of affordance have been identified for technology use in learning, the kinds of affordance that language teachers perceive in technology have not been specified. Sixteen tertiary teachers in Australia and New Zealand were interviewed over a period of fourteen months with reference to the knowledge they acquired around the use of new technologies in their classrooms. The term ‘learning affordance’ was coined to describe ways in which teachers perceived use of CMC tools promoted language learning in the classroom. Participants identified that new tools allowed students to engage not only with the traditional content of language learning (language skills and learning about the L2 culture) but also to engage with the processes of learning language (in relation to communication, affective factors and autonomy). Teachers also saw affordances for their teaching in relation to these areas. Implications for in-service teacher development include supporting participatory activities for on-going teacher learning such as inquiry, observation and reflection.

Keywords: affordance; teacher education; CMC technologies

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1. Introduction

In-service teachers need to identify the affordances that a new tool offers for language learning in order to make decisions about which technologies they will choose to support their teaching practice (Chapelle, 2006; Chapelle & Jamieson, 2008). The term affordance was originally coined by the perceptual psychologist Gibson (1979) to denote action possibilities that exist between a tool in the environment and an organism which perceives the tool in relation to its own capabilities. A key aspect of affordance is that it is situated in the relationship between user and artefact, rather than being about tools that can be developed as independent components and integrated into any learning environment (Doering, Miller, & Veletsianos, 2008; Kirschner, Strijbos, Kreijns, & Beers, 2004). In this study, the term affordance is
defined as the potential that teachers perceive in a particular technology tool that will support learning and teaching activities in their educational contexts. The attributes of the tool and the characteristics of the teacher contribute to these perceived affordances.

Being able to perceive affordance in tools is integral to developing the ‘techno-pedagogical competence’ that Guichon and Hauck (2011, p. 191) advocate, but such perceptions develop over time and are specific to individual teachers and their situated contexts. While general typologies of affordance have been identified for technology use in learning (eg. Conole & Dyke, 2004), the kinds of affordance that language teachers perceive in technology have not been specified. This study sought to identify the specific types of affordance that in-service language teachers perceive in new CMC tools over time.

2. Method

This research was based on interviews conducted with sixteen tertiary language teachers in five different institutions in Australia and New Zealand. Snowball sampling led to a largely female group, and all except one teacher were over 40 years old. All teachers had more than 15 years of language teaching experience, and only five of the 16 participants were recent users of technology as part of their teaching (had started in the last five years).

Each teacher was interviewed on two or three occasions over a fourteen-month period. Teachers were asked to identify a new CMC tool used recently and then to discuss the knowledge they had acquired through using it. Most had been using their ‘new’ tool for one to two years. Based on data collected, affordance charts were created for each participant and respondent feedback sought in successive interviews, as well as discussion about new affordances that the teachers had perceived over time in the tool.

3. Discussion

The affordances or action possibilities that the teachers in this study recognised in their individual tools were very idiosyncratic, relating to the attributes of their particular tool, but also to their own personal characteristics and to their varying intentions for use. Initially, teachers appeared to identify learning affordances that were quite general, but over time affordances were seen as much more specific to their classrooms, to particular cohorts or to aspects of curriculum that they prioritized. The value of technology is not inherent in the tool itself or its attributes, or even the tool in a specific context, but in how individual teachers perceive its value and implement this with regard to their individual contexts.

However, there were similarities in the kinds of affordances that were perceived in the CMC tools used by participants in the study. As experienced teachers, participants in this study perceived affordances for students to engage with specific language skills as well as with the culture of the target language. While identifying affordances in relation to such ‘content’ areas was somewhat predictable, teachers also identified that CMC tools could be used to support ‘process’ aspects of learning. CMC tools clearly lend themselves to opportunities for communicating with others in the target language, but teachers felt that students were also engaged with learning from an affective perspective because of the development of class cohesion, for instance. As well, teachers suggested that the use of technology afforded students’ continued involvement with language out of class time. Such perceived learning affordances relate to the ‘process’ of student engagement through communication, with learning and in autonomy.

4. Conclusion

An affordance perspective has useful implications for sustaining the professional development of in-service teachers. Having an inquiry stance around the action possibilities of a new tool can focus teachers on tool’s potential pedagogical value rather than merely concentrating on its technical features. Observing how other teachers implement learning affordances in the classroom in relation to engaging students with content or with culture, or with learning processes themselves, such as autonomy or communication, can help with making decisions as to the value of a new tool for different teaching and learning contexts. Making such affordances explicit for initial use of tools, and supporting teachers’
reflective processes as they discover affordances that relate to their individual contexts, curriculum and the needs they identify in relation to their students’ learning are positive ways of sustaining teachers’ ongoing development over time.

One of the limitations of this research is that it relies excessively on interviews as a source of data. As well, the small group of experienced participants may have found it easier to identify affordances that engage students in learning than pre-service or beginning teachers might. Further research could investigate whether students perceive similar affordances in tools to those which their teachers identify. Finally, it would be helpful to look more closely at the degree to which the affordances that teachers perceive are realised in their classroom practice and in students’ learning.

An insight into teacher learning about technology suggested by this study is that these teachers placed importance on technology as allowing students to engage not just with the more traditional ‘content’ of language learning (language skills and learning about L2 culture) but also to engage with aspects of the ‘process’ of language learning. Affordances for communication and autonomy, as well as affordances for developing affective factors in the classroom were valued by these teachers.

5. References


