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Pedagogical Innovation in Call

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Abstract

The word innovation is used frequently in education circles, often without clarity around its intended meaning. In this entry we look at the different ways the term has been used and how innovation can be understood as a complex, localised construct. We look at ways in which innovation can be fostered and how it can be integrated into educational contexts.

Keywords

Innovation · Change · Novelty · Development · Stakeholders · Activity system

Introduction: What Is Innovation?

Despite its common usage in everyday language, it is surprisingly difficult to find agreement on what constitutes an innovation in CALL. 'Change' is perhaps the most commonly accepted attribute, but although every innovation involves change, of course not every change amounts to an innovation. Similarly, 'improvement' is what most innovations aspire to achieve, but this could operate at many different levels, from pedagogical practices to administrative processes, and is not always easy to operationalise. And in some cases, innovation is designed to avoid potential problems, so there is no directly observable advancement. 'Novelty' is also problematic, because what is new in one context is not new in another. Many innovations involve the 'development' of new ideas or solutions to existing problems, but an innovation can also involve the removal of existing practices or obstacles.

An early definition by Delano et al. (1994, p. 489) sees 'an innovation in a second language teaching program as an informed change in an underlying philosophy of language teaching/learning, brought about by direct experience, research findings, or other means, resulting in an adaptation of pedagogic practices such that instruction is better able to promote language learning as it has come to be understood'. In other words, innovation is characterised by conscious (and often proactive) processes of change aimed at augmenting understanding and practices that go beyond surface-level changes.

In addition, innovation is first and foremost situated in a particular educational context. For example, the introduction of tablets may be a decade past in most schools in affluent countries, but in many parts of the Global South they are just being introduced. It is also situated in the sense that it is rooted in specific pedagogical practices, which in some way need to be challenged. For example, a school that introduced tablets a long

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time ago but never adapted its classroom practices has not achieved the same level of innovation as a school that has recently started using the devices to encourage learning beyond the classroom (one of the affordances of mobile technologies; Reinders & Pegrum, 2016). Innovation thus needs to be both implemented (otherwise it remains merely an idea) and integrated into genuine educational environments in ways that key stakeholders (teachers, learners, tech support, parents, etc.) can realise in practice and benefit from. In other words, 'solutions' are not solutions until they work in the context for which they were created. To that end, innovation is often more a dynamic process than a static product. This process begins with imagining what is possible and 'pushing the boundaries of existing practices and views of teaching and learning' (Siemens & Tittenberger, 2009, p. 20). The actual implementation has to take into account myriad factors that may facilitate or hinder its success. A process of trial and error is required to establish what these factors are. Structured approaches to this include the use of 'educational engineering' (Colpaert, 2016) and 'instructional design' (including models and methodologies such as ADDIE, SAMR and AGILE; see Sweller, 2021, for an overview). Many CALL projects have failed because they do not clearly distinguish between these different phases of the innovation process. We will focus on the integration of educational technology in the following section.

Fostering Pedagogical Innovation

Many attempted CALL innovations never launch or quickly disappear. Although figures for our field are, to the best of my knowledge, not available, Rogers (2003) estimates that across multiple disciplines on average 75% of innovations fail. Even if at a technical level innovations were successful in achieving their aims, their uptake remains low. There is now a considerable body of literature that has documented the cycles of innovation and the reasons why some projects are successful in the long term and others are not. Rogers (1995) proposes five attributes that determine whether an innovation will be adopted or rejected:

1. Measurability, of the relative advantages to be gained.
2. Compatibility, or how (dis)similar it is from current practice; projects that are evolutionary are usually more likely to be accepted (Reich, 2020).
3. Complexity, or how easy or challenging it is to adopt an innovation.
4. Trialability, or whether an innovation can be tried out before complete adoption.
5. Observability, or whether the innovation is visible to stakeholders. This also relates to the extent to which its benefits can be evaluated.

There are other factors that contribute to the likelihood that an innovation will be accepted by its intended users. For example, it is important that an innovation has multiple entry points, meaning that everybody can use the innovation for something, whether they are experts in the technology or completely new to it. Another factor is the extent to which the technology is taken out of the innovation, meaning that it seamlessly integrates into the educational environment and is seen to serve the interests and needs of its stakeholders. Of course, beyond adjusting the characteristics of the innovation and the way it is implemented, the organisation can ready itself for change.

This involves, amongst others, the provision of professional learning opportunities for staff, with an emphasis on enhancing initiative. Stoller (2009) talks about the need to see every innovation as an opportunity for professional development and a concomitant willingness to experience failure. Stoller also emphasises the need to nurture a sense of ownership, not only by those leading the innovation, but also by those who will be impacted by this. This final point reminds us of the need to recognise that people will be impacted differently by proposed innovations, with subjective perceptions playing a particularly powerful role. For example, an experienced teacher may see a junior colleague's attempt to introduce AI into the materials design process as a threat, even if

this is not at all so intended. For innovations to find fertile ground, an atmosphere of mutual trust and a willingness to collaborate needs to be cultivated across the organisation, with teachers being encouraged to assume forms of teacher leadership (Reinders, 2023).

Integrating CALL Innovation

Underpinning all of the above observations is that pedagogical innovation is best considered as a holistic and interrelated constellation of processes involving multiple stakeholders. This holistic view aligns quite closely with Engeström's description of complex organisations (such as schools) and their emergence and iteration as activity systems. Such systems have a number of key components, as shown in Fig. 1.

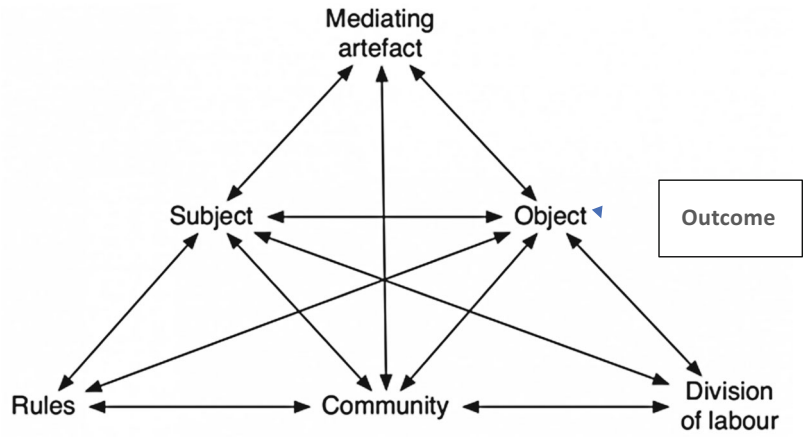
In the context of CALL innovation, in this figure 'subject' refers to the person or entity that initiates the change (e.g. a teacher, teaching team, principal, or Ministry of Education). The 'object' refers to what is to be changed and the intended result is the 'outcome'. For example, the introduction of digital storytelling in the curriculum, with the intention of enhancing learners' Willingness to Communicate. 'Community' covers the different stakeholders (e.g. learners; teachers; administrators and managers; parents; future employers; educational, legal, and regulatory bodies; teachers' associations) and 'division of labour' the roles played by different parts of the community and the activities they are expected to engage in. For example, in a development project, this concerns who is expected to be actively involved in, for example, the creation of new lesson plans using digital storytelling, whose approval needs to be obtained, who will be responsible for providing technical support, and so on. 'Rules' guide the way people are expected to work together (covering both formal educational policies and informal rules) and 'mediating artefacts' include the ways that the different elements of the organisation are supported in working together (e.g. having regular meetings; articulating shared values; encouraging open communication; creating an atmosphere of trust).

An Illustration

A lack of understanding of the system as a whole may adversely impact innovation. By way of illustration, consider one teacher's experience (vignette adapted from Reinders, 2023). Andrea (the 'subject') wants to improve language learning outcomes in her class. Specifically, after attending a conference she has become excited about the potential of using language exchange programs to encourage learners to interact more in the target language. She has learned that this can help lower learners' anxiety and enhance their L2 confidence (the 'outcome') so she decides to implement some activities around games in her 'Communication Skills' course and asks her students (the 'objects') to bring their cell phones to school.

Unfortunately, her good idea does not work out. Firstly, the WIFI at her school (one of the 'mediating artefacts' or tools, as are the cell phones) does not support 25 students all using the internet at once, something she had not anticipated. More worryingly, she receives an upset email from the IT department. Apparently, mobile phones are not supposed to be used without prior authorisation (she has broken the 'rules') and without adhering to the appropriate security and privacy protocols. The next day she is summoned to her manager's office. Apparently, all teaching innovations are coordinated by a dedicated central team (the 'Learning & Teaching Department', i.e. other members of the 'community') who do not approve of individual changes made by teachers. There is a process for new projects to be reviewed and approved, and their implementation is carefully monitored by the Quality Team ('division of labour'). Andrea is embarrassed and upset that her enthusiasm and good intentions have landed her in hot water. She vows to keep her head down and not take any more risks.

The above outcome is the worst possible, both for the teacher and the institution. To avoid this, better organisational knowledge would have helped the teacher know what processes to follow. By raising awareness and especially inducting new team members into the organisation, a great deal of confusion can be avoided. This is also



Pedagogical Innovation in Call, Fig. 1 Engeström's activity system

where collaboration between colleagues can help to anticipate challenges (and, more positively, opportunities). Adding a standing agenda item 'upcoming projects' to staff meetings can be a help, as can inviting colleagues from other departments (the wider 'community') to explain what objects and outcomes are important to them, what artefacts they use, how they divide the labour and how they understand the rules. If an organisation has a project office (or similar), its manager can be invited to explain the procedures for encouraging, inviting, approving, funding, monitoring, reporting and evaluating projects. Examples of successful initiatives can be shared.

Longer-term, CALL innovation can benefit from encouraging all stakeholders, including teachers such as Andrea, to display initiative, to raise ideas and to experiment. A rigidly hierarchical organisation where initiatives only come from the top down does not develop a culture of innovation and resilience, needed in the quickly changing landscape of education. Designating a particular course as one that can be used to rapidly generate and implement new ideas for observation can act as a type of 'sandbox' where risks can be taken safely, as can establishing a departmental project team whose purpose is to raise suggestions for improvement, and whose leader reports these 'up the chain' for feedback and (possibly) approval.

Conclusion

Pedagogical innovation in CALL clearly involves much more than simply offering an idea for a new tool or application. Beyond ideation, communication (with stakeholders), experimentation, dissemination, integration and evaluation are all critical to the long-term sustainable enhancement to the 'underlying philosophy of learning and teaching' (Delano et al., ibid.) that is sought. Activity systems theory offers one window onto the complex landscape that most educational environments comprise. Regardless of the perspective taken by stakeholders in CALL pedagogy, innovation involves a holistic process, the success of which depends on the extent to which the intended outcomes align with the community it serves.

Cross-References

- ▶ CALL Teacher Communities of Practice
- ▶ Complexities of Becoming a CALL Teacher
- ▶ Lessons Learned from Emergency Remote Teaching
- ▶ Professional Learning
- ▶ Technology Standards for Language Teachers

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