

# ***Self-evaluative practices to enhance e-pedagogy***

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## **Abstract**

New technologies and an evolving higher education landscape create pedagogical challenges for educators. This environment demands e-pedagogy — the capacity of technology to satisfy real learning which bolsters the student experience. However, how can educators be supported to make the cultural shift necessary to embrace technology in convincing ways? This social practice research draws alongside seven educators studying a postgraduate award in e-learning in academic and professional practice at an English university. Educators who are making and evaluating a technology enhanced learning innovation. The study's rather unusual object is their self-evaluative practices and knowledge on this is co-constructed via dialogical conversations with participants. The significant output is a series of seven typologies built-up around RUFDATA, an established evaluatory framework with seven categories: reasons and purposes, uses, focus, data and evidence, audience, timing and agency. Substantial new knowledge of how educators do self-evaluation when making a technology enhanced learning innovation in higher education is created. This knowledge is about constellations of routine behaviours; behaviours which seek out value and are themselves intrinsically worthwhile. Collectively known as SEPT4TEL (self-evaluative practices typologies for technology enhanced learning), these 25 guiding principles depict self-evaluative practices and are promoted to educators seeking guidance on pragmatic ways to enhance their e-pedagogy. Evaluation is about judgements and it is the attribution of worth which distinguishes self-evaluative practices from other deliberative ways educators explore their professional practice, like reflection and action research. Self-evaluative practices are promoted as a foil to academics' tendency to adopt their pedagogy uncritically, simply merging it with habitual institutional practices. In this paper the introduction and research methods are followed by an exposition of self-evaluative practices which forms the main part of this paper. Numerous quotations illustrate how dialogical conversation leads to the SEPT4TEL framework. For example, the transformational effect of 'evaluative creep' on change processes and its ability to advance educators' competence is profiled. Ultimately, self-evaluators become 'carriers' of practices as they knowingly or unknowingly exert a bottom-up influence on the use and effectiveness of technology for learning. I conclude that self-evaluative practices can benefit use of new technologies for learning and recommend the SEPT4TEL framework to educators seeking to improve connections between technology and learning. Indeed, a sufficient constellation of self-evaluative practices is potentially powerful in a sociocultural sense, acting as a catalyst — with the power to leverage more widespread change.

## **Keywords**

Self-evaluative practices, e-pedagogy, technology enhanced learning, higher education, SEPT4TEL

## **Introduction**

New technologies and an evolving higher education (HE) landscape persist in creating pedagogical challenges for educators. In this environment there is a demand for e-pedagogy — the capacity of technology to satisfy real learning which bolsters the student experience. Underlying my research aim is the fundamental question of how educators can be supported to make the cultural shift necessary to embrace technology in convincing ways. This paper presents insights into educators' real-world experiences of using self-evaluative practices when making a Technology Enhanced Learning (TEL) innovation. Indeed, my focus on what really happens echoes Patton's view that evaluation "use concerns how real people in the real world apply evaluation findings and experience the evaluation process ... it is about 'intended use' by 'intended users' " (2011:13-14) ('emphasis' in original). So, the object of this study is the use of self-evaluative practices to enhance e-pedagogy. I explore how participants develop new knowledge and ascribe worth to their self-evaluative practices, and present a framework to guide other educators. Networked learning practitioners intent on making TEL innovations more effective can use this knowledge about self-evaluative practices to inform their own professional practice and, moreover, to influence the development of self-evaluative practices by other educators less familiar with making TEL innovations.

I use the concept of self-evaluation presented in Saunders et al.'s (2011) fourth domain of evaluative practice: self-evaluative practice, that is, evaluations which take place to inform the professional practice of either solitary practitioners or groups of practitioners. Evaluation is about judgements and it is the attribution of worth which distinguishes self-evaluative practices from other deliberative ways educators explore their professional practice, like reflection and action research. Such judgements about worth are "profoundly evaluative" and "[n]ew knowledge is developed as people engage in a process of reflection related to real problems and issues in their own context" (Saunders, 2011:14-15). Self-evaluative practices are promoted as a foil to academics' tendency to adopt their pedagogy uncritically, simply merging it with habitual institutional practices (Bamber, 2011b). Indeed, "evaluative practices which work with social realities can offer powerful support for change" (Bamber, 2011a:160) and self-evaluation is promoted as a useful social practice which embraces reflexivity (Dahler-Larsen, 2012; Saunders, 2011). Indeed, this study into self-evaluative practices when making TEL innovations in HE is significant because "[i]t is unusual to focus on evaluation practice as an object of study" (Saunders, 2011:1).

This paper prioritises a detailed exposition of substantial new knowledge. First, this introduction briefly contextualises the object of this research, namely the self-evaluative practices used by educators when making a TEL innovation in HE. However, a fuller discussion on social practice, TEL in HE, and, evaluation and self-evaluative practices in HE can be found in an earlier paper (Raistrick, 2013b). Second, the research strategy is outlined. Third, this study's significant output — the SEPT4TEL (self-evaluative practices typologies for technology enhanced learning) framework — is introduced and aspects of the raw data which led to the SEPT4TEL framework are shared. Seven typologies are presented as pragmatic guidance on self-evaluative practices which this study finds to be associated with making and improving TEL innovations. These are promoted to educators seeking to develop their e-pedagogical expertise.

## Research strategy

The study's participants are seven HE educators studying a postgraduate award in e-learning in academic and professional practice at an English university around 2011. Completion of this award requires each educator to make and evaluate a TEL innovation which they then write-up and submit as the award assessment. Each educator undertakes a solitary project, implementing an innovative use of technology to enhance the learning environment in which they work. This study accesses these participants because they are making and evaluating a TEL innovation and thus developing their e-pedagogical expertise. The purpose of this study is to generate and analyse data to help explain what is meant by self-evaluative practices in the context of making a TEL innovation in HE. The focus is not on the TEL innovations per se; rather it is on the self-evaluative practices participants use to evaluate their innovations.

Using dialogical conversation(s) (DC(s)) (Knight & Saunders, 1999) data are generated and analysed with each participant as we seek to co-construct knowledge of their evolving self-evaluative practices. The majority of the 1½ hour, one-to-one DCs consist of unrestrained conversation on implementation of the participant's TEL innovation and their approach to evaluation. Then, towards the end of each DC, I ask questions associated with an established evaluatory framework (RUFDATA) which is associated with evaluation in other domains (Saunders, 2000). This provides a back-up, prompting responses on categories previously associated with evaluation or confirms that we have discussed similar points. The seven categories in the RUFDATA acronym are: Reasons and purposes, Uses, Focus, Data and evidence, Audience, Timing, and Agency. Later, I elect to use these same categories to structure this study's data as they are surprisingly representative.

Co-construction is an important methodological construct in this study. As so little is known about self-evaluative practices I want participants to be free to influence the generation and analysis of data. Thus, co-construction helps authenticate this study's outputs. Thereafter, during further analysis, I develop the SEPT4TEL framework as a representation of the ways this group of educators undertake self-evaluative practices. All the way through I am only involved as the researcher and am not connected with the postgraduate award that participants are undertaking concurrently. Thus, the data co-constructed in this study create (or reveal) new knowledge on use of self-evaluative practices in HE. Use of these self-evaluative practices informs how participants effect change and improve their TEL innovations. Moreover, the knowledge we co-construct may, via the SEPT4TEL framework, contribute to use of self-evaluative practices by educators in other contexts. The next part of this paper shows how the data contribute to sense-making and lead to the SEPT4TEL framework.

1. What are my **Reasons and Purposes** for self-evaluation?

To benefit student learning

- Establish the worth of an innovation.
- Improve pedagogical aspects of a TEL innovation, by undertaking deliberate evaluative acts.
- Realise and sustain *evaluative creep* towards continuously provisional endpoints.
- Achieve professional development.

3. What will be the **Focus** (foci) for my self-evaluation?

The effect(s) of the TEL innovation

- Be aware of the TEL innovation's effect(s) at different stages of its implementation.
- Determine what aspect(s) of the TEL innovation interest you, e.g. interaction, learning gains, educator gains, fit with other learning or lifestyle events.
- Identify forms of data that are sufficient to convince decision-makers (including the self-evaluator), e.g. metadata; stakeholder feedback; records of change/improvements/activity; indicators of success; problematic gaps affecting the integrity of the innovation.

5. Who will be the **Audience** for my self-evaluation?

Learners, close colleagues and other educators within and beyond the institution

- Accept the centrality of yourself as evaluator.
- Engage the attention of others with the potential to influence development of the innovation, including current and future target groups and sub-groups, i.e. users.
- Make connections with wider issues or questions about which you are curious.
- Show, promote and share self-evaluative knowledge (outputs) interactionally, rather than only by presentation or distribution, to influence other educators' practice (use and engagement).

7. Who should be the **Agency** conducting the self-evaluation?

Myself, as the educator making the TEL innovation, with input from interested outsiders

- Take responsibility yourself, for:
  - Progress, including accessing resources.
  - Involving stakeholders.
  - Potential bias.
- Recognise that external entities (person or structure, e.g. RUFDATA framework) can provide valuable input.

2. What will be my **Uses** of my self-evaluation?

To inform change processes

- Reveal new knowledge both to focus and inform evaluative acts at various stages of the implementation cycle, i.e. the identification, development, and assessment of the effect, of the TEL innovation.
- Gain clarity regarding what aspect(s) of the TEL innovation is to be changed / improved.
- Enable a responsive approach which increases educators' confidence and competence, regarding implementation of the innovation and outputs from the evaluation.

4. What will be my **Data and Evidence** for my self-evaluation?

Accessible, straightforward, manageable data and evidence

- Recognise, provoke and/or facilitate opportunities to generate, capture and analyse physical and non-physical forms of data and evidence, using these to inform decision-making as part of the change process.
- Encourage and welcome wide participation, via provision of candid feedback, from diverse sources (stakeholders), including reflexively.
- Realise that collating multiple knowledge resources has a potent effect on sense-making.
- Prioritise the pursuit of new knowledge with the practical potential to influence change processes, and attribute worth, exhibit:
  - Tenacious perseverance in seeking knowledge resources.
  - Alertness to strategic and serendipitous opportunities.
  - Dedication to repeated, iterative refinement of the innovation and its evaluation.
- Accept that data and evidence needs to be sufficient for its current purpose and no more

6. What will be the **Timing** for my self-evaluation?

Within and beyond the confines of the award submission date (and then other provisional endpoints)

- Select a project that is important to you to increase the likelihood of having sufficient time.
- Identify an initial provisional endpoint to work towards and continually adjust processes (nudge) to achieve timely accomplishments; consequentially, accumulating multiple, revised, provisional endpoints.
- Remain attuned to temporal issues to maximise momentum by sustaining an iterative, continuous cycle of planning, evaluation, reflexivity, and adaptation.
- Build-in staging posts to provide space and time for self-evaluative processes

Figure 1 SEPT4TEL framework: Guiding principles for self-evaluative practices when making a TEL innovation

## Exposition of self-evaluative practices

This substantial part of the paper has seven sections, one for each evaluative category in the RUFDATA framework. Each section shares raw data and summarises the typology created regarding that category. These guiding principles or typologies which together comprise SEPT4TEL borrow the over-arching structure of the RUFDATA categories, as indicated by the following seven sub-headings. Figure 1 shows the SEPT4TEL framework, denoting its guiding principles alongside what emerges as a typical response to the RUFDATA question associated with each of the seven typologies produced by this study.

### Reasons and purposes

'Reasons and purposes' is the first RUFDATA category and, overwhelmingly, these educators associate the reasons and purposes for self-evaluation with benefiting student learning and enhancing professionalism. Professionalism is characterised by participants' commitment to undertake a postgraduate award: the "original driver" (P11:45) is CPD (continuing professional development) and a desire to "try out a new e-learning innovation ... write it up and ... get more active research wise" (P11:41). Personal motivation drives a desire to create success for learners whilst simultaneously attending to educators' own professionalism. The desire to learn is shown via explanations like: "the meaningfulness of the learning is what we really want ... how useful is it ... does it have an impact ... that's the evaluation" (P9:193). So, deliberate self-evaluative acts stimulate participants' learning, including seeking knowledge of student learning. Thus, determining the value of innovations is crucial. Participants mention and thus attribute value to self-evaluative acts which monitor an innovation's effect, informing iterative changes: "monitoring ... and trying to adapt ... so that [changes are] useful" (P8:128). Lack of knowledge of the value to learners causes concern: "what I'm not getting to is how [the innovation contributes] to the learning [is it] worth getting to work properly" (P7:136). Self-evaluative practices involve noticing the unexpected, including surprises, to gain new knowledge: "[a person] says something that you never even thought of before and that again will make you think (P8:174). New knowledge influences the progress of innovations, and effects change, acting to prevent learners' "struggling", to show them "gaining" from the innovation and "moving on" (P8:238). Inevitably, acting on new knowledge means the previous state of the innovation is provisional. The iterative, responsive nature of self-evaluative practices makes provisionality endemic.

Innovating puts these educators in atypical situations; they become novices seeking to discover how to improve their e-pedagogy by undertaking deliberate self-evaluative acts. Improvement incorporates how the innovation is implemented as well as effects on the student learning experience. In other words, these educators want to uncover the worth of their innovation to learners. Self-evaluation is revealed as a gradual, applied process by which each participant comes to realise or know their innovation's worth. Achieving this 'evaluative creep' requires sustained effort towards provisional endpoints. These four guiding principles for the reasons and purposes for educators' self-evaluation of TEL innovations are summarised in Figure 1.

### Uses

Second, regarding the 'Uses' RUFDATA category, participants use self-evaluative practices to inform change processes as they identify, develop and/or assess the effect(s) of their TEL innovations. First, self-evaluation can help to establish the status quo, informing decision-making on the potential applicability of an intended innovation: "which ideas are applicable to which parts of the School" (P2:378). Second, during development of an innovation participants typically respond to unfolding events rather than taking a proactive, pre-planned approach to self-evaluation. This responsive approach is helpful because making an innovation is a new experience. Also, self-evaluation may occur after implementing an innovation, to assess its effect: "use it as it is until ... then do an overall evaluation (P9:229). Using self-evaluative practices enables instrumental learning, providing: "something to go on" (P2:166). Gradually, self-evaluators become better informed about what changes or tweaks to make to innovations. As well as being a way of learning from and consequently making decisions about what changes to effect (two reasons and purposes for self-evaluation), self-evaluation as a process is also shown to be a valuable way to drill into the detail and decide how to improve innovations (a use of self-evaluation). Consequently, participants form conclusions, albeit provisional ones, and improve the effectiveness or use or value of their TEL innovations.

Self-evaluation moves participants' innovations forwards, supporting changes and connecting participants to the reality of an innovation's effects. Repeatedly engaging with this reality and by doing so recognising new knowledge, informs, directs and provides momentum to drive change processes. It can be a shock when

moments of realisation occur: “like walking into a brick wall” (P10:98). Equally, repeated consideration of what is happening tracks an innovation’s effect, allowing it: “to be improved next time” (P8:210). Each realisation joins a sequence of self-evaluative acts — single points of contact that cohere — transforming a provisional innovation to an improved yet still provisional version. So, the concept of a provisional endpoint is an interpretation that aligns with participants using self-evaluation to identify their next steps and drive change.

Self-evaluation, as a process, justifies reflexivity: a prominent, cross-cutting theme and a significant use of self-evaluation. Reflective acts lead to each next step, facilitating identification of changes. Thus, self-evaluation leads to learning: “I’m going to ensure that I communicate more effectively ... my excitement ... might have put them off” (P10:182). Such rich knowledge assists progressive improvements. Amidst change processes and the messy contingencies of real-life innovations, practitioners, the innovations and the learners, are benefiting. Thus, an important use of self-evaluation is to help educators recognise their accomplishments — to enhance their confidence and competence. Participants develop sufficient confidence to make interim recommendations (P2) or feel: “more confident” because the innovation “ran smoother, probably [because I] took out parts that definitely didn’t work.” (P10:358). Likewise, participants are motivated to hold CPD events: “telling and showing something that works” (P11:224). Participants reach out to others — their self-evaluation acting as an anchor, giving them something they consider worthwhile to say.

Thus, self-evaluative practices are helpful throughout the implementation cycle: identifying potentially beneficial innovations; during development or initial implementation (i.e. first use); and, crucially, when assessing the effect(s) on student learning. New evaluative knowledge is revealed, focusing and informing more self-evaluative acts. Hence, participants gain clarity on how to evaluate and on improving innovations. Being responsive generates personal theory in practice to direct implementation, increasing educators’ confidence and competence. Consequently, self-evaluation increases educators’ faith in innovations and in the veracity of their self-evaluative outputs. Figure 1 summarises these three guiding principles regarding uses of self-evaluation.

## Focus

The third RUFDATA category is 'Focus'. All participants' self-evaluative practices focus on the effect(s) of their TEL innovation at various stages in the implementation cycle, as discussed above. Nevertheless, participants’ primary focus is implementing their innovation rather than its evaluation, for example, deferring seeking evaluative feedback: “because we can’t get the [TEL innovation work] done” (P9:241) and want it “to look reasonably professional before [others see it]” (P9:261). Despite implementation being the primary focus self-evaluation is still important and participants notice problems, difficulties and gaps in evaluative data. This process of drilling down into 'what matters' is helped when they know which aspects of the innovation interest them (e.g. interaction, learning gains, educator gains, fit with other learning or lifestyle events). Such knowledge helps participants decide where to focus. One educator focuses on a gap in tracking an innovation's success: “that students have done it [i.e. used the TEL innovation]” (P9:102). Another's focus is on a perceived gap: difficulty obtaining evaluative data and the lack of a baseline against which to evaluate their innovation’s success. This gap disturbs them during the DC and by dwelling on it they germinate an idea and nearly at once notice existing data which might be useful: “students are fully informed ... when [X occurs] that’s not a shock ... real success [will be] I don’t actually do [name of task] ... I would be overjoyed with that” (P9:109).

Additionally, participants seek contributions from stakeholders. This alters the actual and potential evaluative input, another contribution to the provisionality of self-evaluation. Awareness of 'what matters' also helps identify the type of data and evidence (e.g. metadata; stakeholder feedback; records of change /improvement/ activity; indicators of success; problematic gaps affecting the innovation's integrity) which will influence decision-makers (including the self-evaluator) and this helps focus self-evaluation.

Thus three guiding principles emerge regarding foci during self-evaluation of TEL innovations by educators (see Figure 1). First, focusing on the innovation’s effect(s) at different stages of the implementation cycle is valuable. Second, educators’ benefit by determining what interests them. Third, a clear focus helps to identify data which is sufficient to convince relevant decision-makers.

## Data and evidence

The fourth RUFDATA category is 'Data and evidence' and, in this respect, the evaluatory imperative of attributing worth is influential. All participants seek and obtain data and evidence on use of their TEL innovation, characteristically selecting accessible, straightforward and manageable sources. The generation,

capture and analysis of suitable sources are vital. Consequently, educators who recognise, provoke, and/or facilitate these opportunities, access knowledge to inform decision-making. Non-physical data and evidence includes: conversations with stakeholders; and participants' observations and reflexivity. Conversations keep up momentum and provoke learning: "very informal feedback about [learners'] experiences of using [the TEL innovation]" (P7:214). Ad-hoc observations provide feedback, like students: "asking more questions" (P8:162). Participants highlight the value of: "reflective chat [to oneself]" (P11:258); or "just thinking about how this helped" (P7:254). All of these contribute to their self-evaluative data-banks. Physical data and evidence is collected deliberately, and simple, straightforward, manageable forms dominate. Participants make records: "I made notes afterwards" (P7:218) or simply note evidence of use as success. They draw on data generated via use of the innovation: "what happened [was] ... compare ... draw some conclusions" (P7:292). Other physical forms are: simple questionnaires: "what [learners] liked" (P11:29); or, problematically, official student evaluation questionnaires which "[are not] specific for the e-learning part" (P10:288). Also, meta-data: "logs of ... how much time [learners] spent online" give a: "really rich picture" (P11:100). Participants display concern about the worth of data and evidence, e.g. responding to feedback: "if it doesn't help you ... I'll move on to something else that will" (P11:75). Existing analytic skills are used: "spreadsheet ... graphs ... very simple analysis ... percentage ... frequency breakdown ... rough idea" (P11:138). Thus, collecting data and evidence does important work with practical potential to improve local contexts.

Success requires evaluative data, denoting evaluative acts: "the only way you can make the [TEL innovation] a success is continuously monitoring what's going on, if something's not quite right changing it" (P8:276). This process requires: users to interact with the innovation; effective ways to capture data and evidence; and analysis of feedback. Also, DC leads to insights: "we've got data on ... did collect some data ... needed to do that quite a while ago ... more important than I thought (P2:404). So, amidst uncertainty and provisionality ideas tumble out and tenacity and perseverance emerge as key attributes for self-evaluators. Using evaluative data and evidence leads to learning and individual self-evaluative acts cohere, creating an organic rather than synthetic composite. The process of creating a composite of evaluative knowledge is holistic and in the moment, though this does not deny planning and forethought. One participant accesses a wider target group than anticipated; allowing analysis of "differences between the two [groups]" (P5:136). Conversely, receiving limited feedback creates difficulty for another. Thus, moments of serendipity and tactical decision-making are recognisable.

The iterative process of self-evaluation continues during DCs, provoking new thinking. One participant suggests undertaking a "pilot" study; even if lack of "time" is a barrier (P9:179). Further thinking leads to an idea: "we've got a group of students ... a sort of pilot ... evaluative feedback" (P9:189). Iterative processes are also evident in data analysis. One participant explains how they identify "strengths and weaknesses", recognising they do not yet "have enough data" (P2:158). Analysis identifies changes for subsequent iterations of participants' innovations, like: introducing "a questionnaire [to] find out [learners'] IT skills" (P10:184). Recognition of gaps motivates participants to identify new data and evidence. One participant intends to ask students: "how useful was the [TEL innovation] ... only kind of data we're going to get" (P9:106); a view that changes during DC having recognised fresh data sources. Uncertainty about perceived gaps arises: "wobble between ... hardly got any data ... other extreme ... got loads of data" (P7:204). Others focus on performance, intending to evaluate their innovations' effects on: quality of assessments; class of degree; and workload. A lack of rigour causes concern: "flaw in my evaluation strategy ... I'm evaluating my own [innovation]" (P11:75); and "[I did not design a] rigorous questionnaire. I didn't have the time" (P11:230). Thus, gaps occur.

Hence, a considerable array of sources of data and evidence contributes: physical and non-physical forms. Fundamentally, feedback is required — candid, diverse and all-encompassing — stakeholders, including the self-evaluator (whose reflexivity is integral) are critical in operationalising knowledge resources. These self-evaluators create a bricolage, realising new knowledge which has a potent effect on sense-making. Personal characteristics which evince success include tenacious perseverance in seeking knowledge resources; alertness to strategic and serendipitous opportunities; and dedication to iterative refinement of the innovation and its evaluation. Pragmatism is critical — accepting that data and evidence needs to be sufficient for its current purpose and no more. These guiding principles (see Figure 1) highlight the centrality of data and evidence to self-evaluative practices.

## **Audience**

The fifth RUFDATA category is 'Audience'. Typically audiences comprise: learners, close colleagues and other educators within and beyond participants' institutions. Self-evaluative practices benefit current students and

subsequent cohorts: “one or two comments towards the end [of the course]” (P8:150), assimilating future students into the audience. Participants are also audience members: doing “evaluation of the students’ abilities” (P10:90); and establishing: “which students were keeping up” (P11:102). Awareness of stakeholders evolves: colleagues and clients as well as students. Meanwhile, colleagues “learn” from using the innovation “as well”, or receive CPD (P7:250). Also, audiences interested in participants’ work emerge: the boss who wants something “to happen” (P2:26). Thus, audiences are drawn-in and having a stake in these TEL innovations. Dissemination to colleagues occurs based on what participants learn: it is “the major thing” (P5:176). For two participants dissemination prompts evaluative activity, as they pull data into shape. Both get: “responses from [colleagues] ... to the findings” (P5:86), and feel colleagues are “obviously interested” (P5:172) and speak about the TEL innovation “in glowing terms” (P11:160). Thus, a cycle of influence begins to emerge.

Figure 1 summarises four guiding principles on the audience for educators’ self-evaluation of TEL innovations. Accepting one’s centrality as self-evaluator is vital. Participants connect their innovation to others whose feedback may improve both it and, thereby, student learning: current and future target groups, i.e. users. Also, participants value the way that self-evaluation creates connections with wider issues, prompting their curiosity and widening their pedagogical awareness. Sharing evaluative knowledge (outputs) interactionally rather than only by presentation or distribution can also increase educators’ influence (use and engagement).

### Timing

‘Timing’ is the penultimate RUFDATA category. Temporal issues recur; participants highlight these in terms of the assessment submission date of the postgraduate award they are simultaneously undertaking. This dominates timing of evaluations, creating tension, although evaluation remains relevant after submission. Additionally, this study’s timing influences participants’ developing thinking. The award’s assessment submission date is six weeks after the DCs so talk on participants’ self-evaluative practices regarding their TEL innovations is timely: “I haven’t really worked out how I’m going to be doing my evaluation ... I’ve been working it out for the past half an hour” (P2:382). A common theme is sufficiency of time: being short of time, or running late, or doing things at the last moment: “I did it at the last minute ... just in time” (P5:60-62). Temporal issues affect progress and tensions emerge between desired and actual approaches to both the innovation and its evaluation. Temporality and momentum are allied to the iterative, continuous process of engagement with live projects. Unpredictable delays make it tricky to predict when evaluation might be timely: “very few people to work with ... very little time” (P7:120). Momentum is linked to success: one participant’s response to evaluative feedback is: “read ... responses ... make up a task list” (P11:86). Urgency also occurs: “very quickly evaluate” (P10:246). Responsive self-evaluative practices demand attention and time. A lot of learning is going on and the pace can be rapid: “on-the-hoof” evaluation contrasts with reflective elements which: “need time to emerge” (P10:457). Also, iterative processes are an aspect of timing: “I’m planning, I’m doing ... I’m reflecting ... saying yes this is good keep going, or no, something’s not working ... back to the planning stage” (P8:168).

Four guiding principles on timing are summarised in Figure 1. Importantly, selecting an innovation that is central to an educator’s role is associated with having sufficient time (and motivation) to both implement and self-evaluate it. Likewise, progression via small steps contributes to achievement, i.e. an initial provisional endpoint leads to revised provisional endpoints. Timely nudges or adjustments cause endpoints to accumulate, to progress self-evaluation and the innovation.

### Agency

The final RUFDATA question is about ‘Agency’. Given that the award assessment is about evaluation of participants’ TEL innovations it is unsurprising that these educators believe they should evaluate their own innovations. Nevertheless, the idea of input from interested outsiders is valued. The self-evaluator’s presence is evident via talk using first person personal pronouns: “I’ll be evaluating” (P8:78). The emphasis on ‘I’ is prominent throughout the transcripts. This is an important characteristic of self-evaluative practices and profound connections with the innovation and its evaluation drive change processes. Self-evaluation is particularly appropriate to evaluate educators’ own innovations. Participants’ relationships provide a natural advantage: one person jokes that they do not “lock the door” to ensure students complete the questionnaire; rather, the existing relationship persuades students to provide data (P11:82). Another is clear that “no-one else” will obtain the feedback they accomplish (P7:550). So, practitioners’ close involvement provides evaluative opportunities. By contrast, the distance of third-party evaluators’ may deny such opportunities, resulting in lost data and evidence, e.g. due to lack of rapport. Thus, the intimacy of self-evaluation is evident. Notwithstanding

views that self-evaluation is appropriate, some participants acknowledged potential contributions from others to offer a wider perspective. Equally, some participants acknowledged my contribution during the DCs.

This category prompts two guiding principles to offer other self-evaluators (see Figure 1). First, there is a clear requirement for self-evaluators to take responsibility for themselves: regarding progress with the self-evaluation (as well as making the innovation); by proactively involving stakeholders; and, being alert to potential bias the self-evaluator brings to the process. Second, it is recognised that external entities (people or structures like the RUFDATA framework) can provide valuable input or support to the process. Thus, self-evaluation does not mean that all must be done by the educator alone.

## Conclusion

In conclusion, this paper seeks to illustrate how the raw data, co-constructed by each participant in dialogue with myself as researcher, leads to the SEPT4TEL framework. In particular, I highlight the transformational effect of 'evaluative creep' on change processes and its ability to advance educators' competence. It is clear that the development of educators' practical competence whilst innovating is uncertain work in atypical social contexts. Throughout, participants' self-evaluative practices are directed at making improvements: to their TEL innovations; to their learning; and, implicitly, to their self-evaluative practices. Moreover, in this paper I exemplify constellations of routine behaviours associated with participants' efforts to seek out value regarding their TEL innovations; behaviours which they find intrinsically worthwhile. These constellations of routine behaviours are distilled into the 25 guiding principles or typologies of the SEPT4TEL framework (see Figure 1). Furthermore, this study's knowledge of self-evaluative practices is represented well by the seven evaluative categories originally associated with the RUFDATA framework. Overall, it is probable that self-evaluators become 'carriers' of practices (Reckwitz, 2002) as they knowingly or unknowingly exert a bottom-up influence on the use and effectiveness of technology for learning. I conclude that self-evaluative practices can benefit innovative use of technology for learning and recommend the SEPT4TEL framework to educators seeking to improve connections between technology and learning. Indeed, a sufficient constellation of self-evaluative practices is potentially powerful in a sociocultural sense, acting as a catalyst — with the power to leverage more widespread change.

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