Researching tutors' perceptions of effective online pedagogy: The Learning Activity Analysis Tool

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Abstract

The role of the tutor in online learning is critical and the tutor's pedagogic understandings influence the nature of the learning experience. In order to support the creation of an effective online environment for learning tutor's need to explore the relationship between their pedagogic beliefs and understandings and the strategies they use to support their online learners. For those working in Higher Education this exploration of pedagogic understandings and strategies can be problematic for several reasons and these represent barriers to effective practice. For example: pedagogic language can be quite specialized and subject discipline specific; theories of teaching and learning are not well understood by most Higher Education lectures/tutors and are often treated with some suspicion as being part of the 'Education' subject discipline area and not perceived as applicable across disciplines; teaching and learning strategies that are used are developed through personal experience and therefore tutors can tend to be quite defensive about these and as a result a critical discussion of practice can be problematic. This paper explores the use of a reflective analytic online tool, the Learning Activity Analysis Tool (LAAT), that was designed to explore ways of developing tutor's pedagogic understandings that addresses these barriers.

Keywords

Pedagogic understanding, activity theory, online tutor training, online pedagogy

Introduction

The tutor plays an important role in mediating online learning and behaviour is influenced by their understandings of effective pedagogy. An understanding of the relationship between pedagogic beliefs/ understandings and actual practice is therefore a key research area. However research into these understandings is problematic as there are apparent differences between espoused beliefs about teaching and learning and actual practice or enacted beliefs. Measurement and research design/instrument issues can account for part of the disagreements between these (Richardson & Hamilton, 1994). It can be argued that differing abilities to reflect on personal pedagogic practice as well as the diverse pedagogic language used by different lecturers and subject disciplines could also account for these differences. This paper explores the use of an online tool for researching online tutors understandings of effective practice by focusing on an analysis of an existing online learning activity and tutors' views about the nature of the learner support that might be needed.

The context for the study is the eEducator project within the e-learning International Sino-UK programme funded by the Higher Education Funding Council for England. This involved collaboration between the University of Nottingham, UK and Beijing Foreign Studies University, China to develop a module for training tutors of online learners - one that could be adapted for use in a variety of contexts (Joyes, 2007). As part of this project a reflective analytic online tool the Learning Activity Analaysis Tool (LAAT) was developed and this is the focus of this paper. The module was piloted at the School of Distance Education, Universiti Sains Malaysia, Penang. Six experienced tutors of undergraduate distance learners from different subject disciplines, teacher education, mathematics, biology, chemistry and English as a second language participated in the use of the LAAT. A fully functioning demonstrator is provided as part of the eEducator project case study on the eChina-UK programme website www.echinauk.org - this includes a version of the LAAT as used within the eEducator module.

Methodology

The LAAT is an adaptation of an activity system (Engeström 1987) informed by activity theory (Leont'ev 1978; Vygotsky 1978), which conceives of knowledge as being socio-culturally constructed. Activity theory is increasingly being applied to aspects of technology-supported learning because of its emphasis on the mediation of tools and social factors on human activity. It has been used in the study of Human-Computer Interactions (Nardi 1996) in research into online collaborative behaviour and distributed learning (Andreassen 2000; Russell 2002) and for supporting the e-learning design process (Jonassen et al 1999).

The LAAT (figure 1) is a way of visualising and then analysing a complete learning activity in which the subject (the learner) uses tools to work on an object (task) which they interpret into an activity to produce an outcome. Learners will usually work within some form of community taking on particular roles within their learning and in formal settings will be subject to regulations.
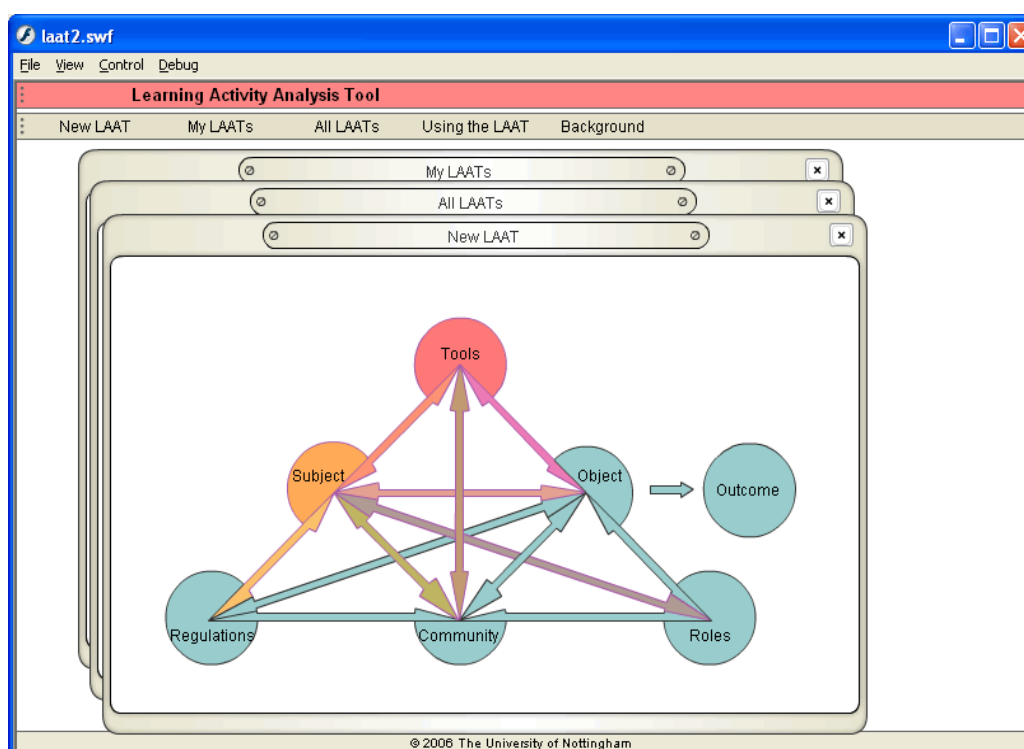

Figure 1: The LAAT - home screen

Data Collection

Six Malaysian tutors used the LAAT within the eEducator training module to analyse an online reading group activity which was originally designed to be studied by learners on an online MA in English Language Teaching course for use in China. In this activity a video clip of an experienced student is seen working with two students and the reading group activity is explained by this experienced student who acts as the chair person. This involves the students in reading a book chapter and providing a written report on the chapter which they then read to each other. The experienced student then sets the same reading group activity to the online learners who are viewing the online video presentations. The learning design sets out to model good practice in effective reading at Masters level, but it raises a number of issues in relation to what is effective reading and how one might carry out this task with online learners.

Each tutor completed the LAAT online. This involved them selecting each element of the LAAT - each element reveals a screen containing prompt questions and a space to complete the analysis - see figure 2. On completion of all of the elements of the LAAT the tutors were asked to complete a summary section in which they listed a number of strategies that could be used to support the learners, then to select one of these and an explanation for their choice - an example of a completed summary section is shown in figure 3. The tutors could return to edit any part of their analysis and when they were satisfied with this they were then asked to select to share this with the other tutors. All of the six tutor's shared LAATs could then be viewed by selecting 'All LAATs' from the top menu bar - see figure 1. This sharing was followed by an online asynchronous discussion about similarities and differences in the nature of the support they would offer.
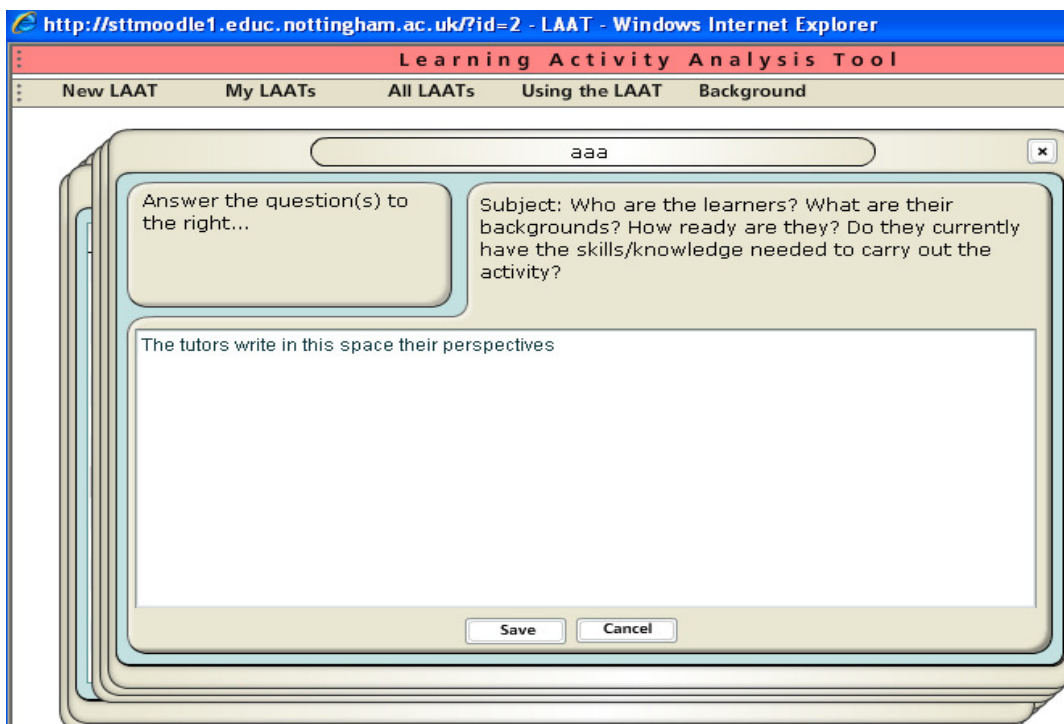

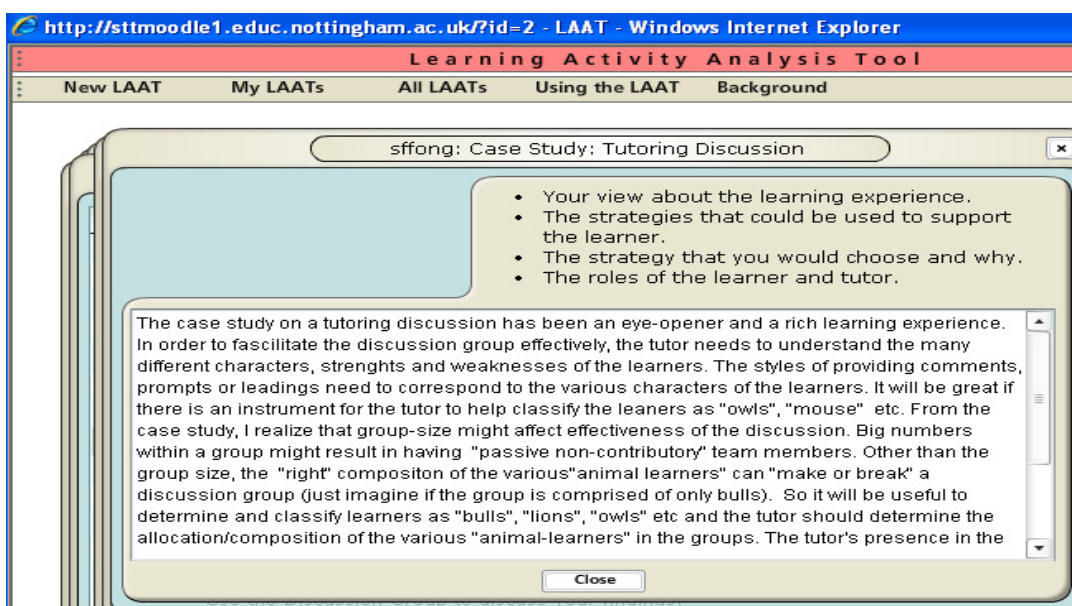**Figure 2: The LAAT - tutor completion screen**

Figure 3: The LAAT - summary screen example

Data Analysis

The completed LAATs and the discussion about the learning activity provided a vehicle for the tutors to explore different pedagogic approaches to online tutoring ranging from teacher to student centred and provided a means of discussing the nature of effective support. This provided a rich source of data into the tutors' notions of effective practice in relation to support for online learners. This text data was analysed to elicit, for each tutor, their perceived value of the LAAT, the range of strategies for learner support explored and the underlying pedagogies behind these. The ways the tutors responded to the online discussion about their strategies was analysed for any new pedagogic understandings that emerged. In addition similarities and differences between tutors strategies and understandings were explored.

Findings

The following provides an indication of the value of the LAAT and a critique of its use in not only expanding the online tutors' repertoire of strategies for supporting students but in engaging them in considering the underlying pedagogy behind the strategies to help them develop new understandings of effective practice.

The tutors perceived value of the LAAT

The tutors were asked to reflect upon the value of the LAAT and all six were very positive about their experience of using it and felt it to be a 'very useful or effective' tool for analysing learning activities. For example:

> *I find the LAAT to be very effective in analyzing all important and interrelated aspects of any teaching-learning activities.* (Nor)

It was viewed as

> *'....an eye opener..it prompts the tutor to think before giving a task to students. It raises my awareness of key issues like the objectives of the proposed task, who my learners are, the roles etc. before I give a task. Hence, I consider all aspects of the teaching-learning process. By doing the LAAT, the task would be well-planned and focussed, making the teaching-learning process clear.'* (Puv)

The tutors appreciated the ways the LAAT focussed on

> *'the whole picture of an activity and not leave out any components that might be important.'* (Naz)

As well as supporting online tutors in *'a critical discussion on the approaches used.'*(Zur)

The nature of language used

The LAAT analyses revealed a distinct lack of use of pedagogic terminology. Whether this was due to the fact that the tutors had received little if any pedagogic training or whether this was a feature of the LAAT is not clear from this study. However the LAAT does provide a framework for discussion that encourages a focus on pedagogic strategies rather than theoretical stances. This has some advantages initially as it enables notions of effective practice and tacit pedagogic knowledge to be shared unhindered by formalised pedagogic language. However there is a need to engage tutor's in considering the value of the pedagogic approaches that underlie the specific strategies that they choose for learner support. A model for achieving this is introduced later in this paper

Similarities and differences between tutor's pedagogic strategies.

The tutors' suggested strategies can be categorised as those that support a self-study mode, a tutor centric mode or a peer centric mode - see table 1.

Table 1: Pedagogic strategies

Mode	
Self study	• A step by step guide to the review process • Structured guidelines to support the writing of the book review • Good and bad examples of a book review
Tutor-centric	• Tutor formative feedback to individual • Tutor summative feedback to individual
Peer-centric	• Establish a learning community to provide ongoing support • Peer review with guidelines for the feedback • Tutor formative feedback to group

Of course a blend of strategies might be used, but it appears from the tutors' responses that although strategies within all modes were mentioned by all tutors, it was the tutor-centric mode that seemed to be the most valued approach. It is important to note that although some differences in strategies between tutors emerged through the use of the LAAT there was a clear similarity in intention for all of these, i.e. there was an intention to ensure each student was given as much individual support as possible preferably by the tutor. It is evident that these tutors were looking to new learning technologies to support their ideal of individual student support/feedback.

> *The main reason (for using peer feedback) being that the tutors are humans that are under the limitation of time and energy. Unless... some form of artificial intelligence (AI) is being employed to provide individual feedback... this would always be the ideal.*(Fon)

This indicates that the value of peer review and feedback does not appear to be fully understood.

Differences between pedagogic intentions and actual practice

As part of the online discussion of the strategies the tutors were asked whether there would be any difference in the approaches they might choose to use with a small group of 20 online learners and a large group of 200 plus online learners. Many of these tutors have experience of working with very large groups of students online and it was felt that moving discussion in this direction would encourage them to refer to their actual practice rather than an 'idealised' version and this was in fact the case. In this discussion the preference for the tutor centric mode for feedback by all the tutors became even clearer. It appears that these tutors would adopt a peer-centric mode for feedback with their large groups for practical rather than pedagogic reasons, the 'ideal' tutor centric mode being maintained for the smaller group size. Even the one tutor who favoured a peer-centric approach for all groups was attempting to provide as near as possible the same quality of tutor feedback to both large and small groups. He was clearly basing his approach on something he had tried.

> *My approach for the small and large group would be about the same. For instance, I will break-up the 20 online into 4 groups (5 students per group), while the 200 students will be broken-up into 40 groups (5 students per group). For the small and large group, I use the SAME RULE for maintaining active and dynamic interaction among groups, it will be as follows: Group 1 will be required to comment, question and provide feedback to the work done by Group 2; Group 2 will need to respond to the questions and comments given by Group 1. Similarly, Group 2 will be required to comment, question and provide feedback to the work done by Group 3 and Group 3 will need to respond to the questions and comments given by Group 2. The difference will be the feedback from me. As for the SMALL GROUP, I will provide specific feedback to the individual groups PLUS a general comment for all. As for the LARGE GROUP, I will provide feedback for any randomly chosen groups PLUS a general comment for all. If there are helping tutors, then I would get them to help provide specific feedback for all the groups within the large population.*(Fon)

The value of individual student feedback from tutors in the learning process seems to be strongly held by these tutors. The quote below indicates the ways a Wiki, is being piloted to ensure individual support, but to also enable assessment of individuals.

> *I would choose different approaches with a small group and large group. Learners in a small group would get detailed feedback individually. Most probably the number of formative assessments will be more than the large group. Students in the large group would have a copy of answers/solutions to the problems with common errors pointed out. The current practice in my courses is, students send in their assignments in hard copy. So for a small group I will go over the assignment individually, commenting on mistakes and misconceptions that occur. At the same time I will post complete answers online. For a large group (> 1000), the assignments are done in groups. Students in each group will get the same grades. General comments on overall performance will be posted online. This year (2007) we have started to use a WIKI for the group assignment. Individual contributions from each group member can be monitored and assessed.* (Zur)

There are of course many strategies that could be applied to provide effective student feedback and some of these were suggested and seem to be being used by the tutors, for example providing examples of assignments together with the critical feedback, clear criteria for assessment, FAQ's etc. These approaches coupled with peer review can be effective in supporting student learner and importantly helping them take more control over the learning process. This aspect is something that did not appear to be considered by any of the tutors, there appears to be a reinforcement of dependency behaviour rather than supporting the students to become more autonomous as learners.

It is interesting that these tutors problematised their current practice in relation to the tensions caused by the difficulties in engaging all students and the lack of time to engage with them all. The current default was an acceptance that some students would not engage effectively online and so would not demand tutor time, whereas the tutors were beginning to experiment with gaining larger student online engagement and clearly their current strategies are problematic. If the use of the LAAT is to raise awareness of these issues it needs to raise awareness of the pedagogic underpinnings of the strategies being suggested. This is discussed in the following section in which a model for developing pedagogic understandings is discussed.

A model

The value of the LAAT is clear from the tutor's responses. The use of the LAAT overcomes the barrier of specialist or discipline specific pedagogic language through a discussion of intended pedagogic action in relation to a neutral rather than a personal learning activity - the focus is on possible pedagogic strategies rather than actual personal strategies or on theoretical stances. This initial stage of sharing 'intended' pedagogic action is important as this enables a wide range of potential strategies to be explored without the tutors feeling threatened by having to necessarily to divulge and defend their own practice. There is however a need to move beyond this safe territory to engage with the tutor's actual practice. In the current research this was afforded by asking the tutors to consider the application of the strategies with small and large groups. It appears that there is then a need to move the discussion to a critical perspective of the value of the pedagogic actions that goes beyond merely considering the strategies but considers their value for the students beyond the 'here and now', i.e. what is the value of the strategies for moving the students from a position of tutor dependence to one of understanding how to work more autonomously and to value the feedback from peers. This step has not been achieved within the reported research but will be explored with the tutors as it was only through writing this paper that this need occurred to the author.

The sequence of activities for developing tutors' pedagogic understandings using the LAAT discussed above is represented in figure 4 as a model for developing pedagogic understanding. In this research step 4 in the model would involve the tension between large groups and the need to provide quality feedback as well as to ensure this is applied to all students, not just to those who happen to engage fully in working online.
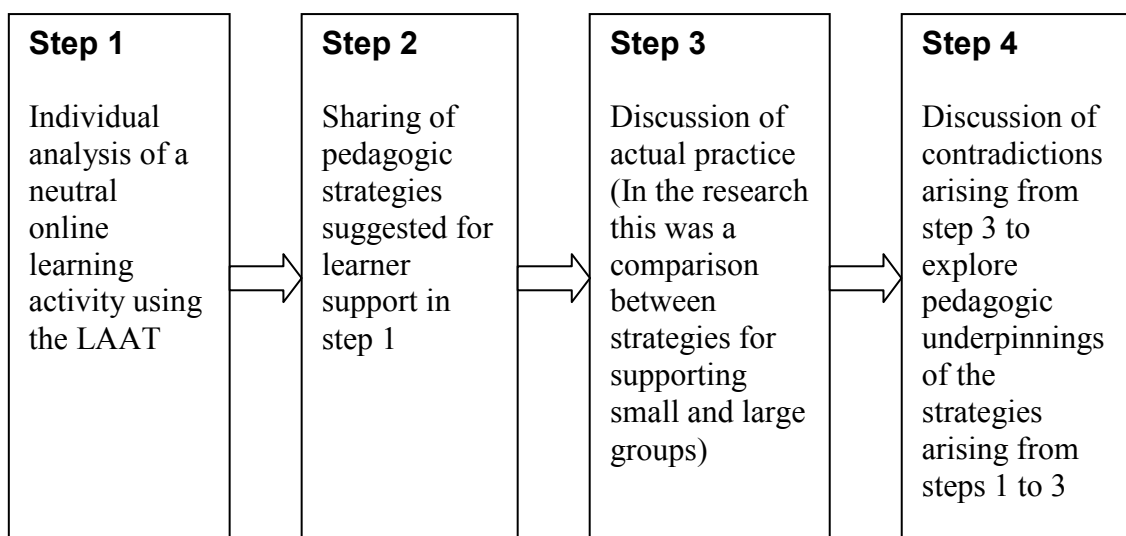
Step 1	Step 2	Step 3	Step 4
Individual analysis of a neutral online learning activity using the LAAT	Sharing of pedagogic strategies suggested for learner support in step 1	Discussion of actual practice (In the research this was a comparison between strategies for supporting small and large groups)	Discussion of contradictions arising from step 3 to explore pedagogic underpinnings of the strategies arising from steps 1 to 3

Figure 4: A model for developing pedagogic understanding using the LAAT

The value of peer review, collaborative working and learner autonomy would need to be discussed and explored. Even though this would be 'new' within the context of student learning for these tutors their personal professional practice is dominated by autonomous working and peer support and so the value of these approaches should be self evident. However the tutors did explain that the learners' expectations had been shaped by a school system that did not encourage autonomy or collaboration and thus dependency on their tutors might be considered to be culturally ingrained. Further research with these tutors will be carried out to explore ways of implementing step 4 and to research the impact on the tutors' perceptions of effective pedagogy and on their practice.

Conclusions

The strength of the LAAT in this context is that it ensures a holistic approach to analysing the nature of the support learners may need in relation to an online learning activity. Assumptions that are often made about the learners, their competences and backgrounds and their familiarity with expected ways of working can be revealed. All the tutors in the study indicated that the LAAT encouraged them to reconsider things that they were taking for granted. The implications for supporting effective networked learning are self evident, the LAAT encourages an analytic and enquiry based approach to developing effective learning environments. It is particularly helpful when considering activities that involve online communities of learners working within course based education where the elements of regulations and of roles play an important part in ensuring successful engagement in the learning process. The LAAT allows the supporting tutor or tutors to think through the design of the networked learning activity before it starts and predict points of tension and explore strategies to overcome these.

The limitations of the LAAT are a direct result of its strengths. The focus on a learning activity is helpful in that the focus is on intended actions and not on espoused theories or beliefs which may have little relation to actual enacted pedagogic strategies. However this focus means that the overarching pedagogic principles, philosophy may not be effectively addressed. The LAAT reveals contradictions between elements within an activity and supports the development of effective strategies used to overcome these. However the underlying pedagogic implications of these strategies need to be considered if new pedagogic perspectives are to be developed and this can only be achieved by taking a broader view of the nature of the learner and of learning. This limitation might be viewed as a limitation of Activity Theory itself and the ways it focuses on a specific activity. However third generation activity theory provides a

framework to focus on multiple, interrelated activity systems (Engeström, 2001) which would reveal the broader pedagogic issues.

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Brief cv notes

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