Practitioner's task design considerations and choices for blended mode large language classes

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In recent years there have been works on developing generic and reusable frameworks, or design patterns and pattern language to facilitate learning designs. No doubt such works have contributed tremendously to the reusing and sharing of useful learning designs and improve their transferability to other similar contexts. However, even though such high or medium-level descriptions of learning designs provide useful guidelines and models for practitioners to source and reapply into their unique contexts, decisions of which designs to employ, for what kinds of learner, and in which educational contexts remain complex design decisions to make for practitioners everyday. The appearance of learning technologists in many higher education institutions with the aim to assist the teaching staff in learning design may ease some of the contextualisation and localisation issues, especially for a fully online course, but in blended-learning environments, the face-to-face classroom contexts are inaccessible to anyone but the teaching staff themselves. Thus there is a need to explore and document the common considerations made by such practitioners teaching in a blended mode and the design constraints for them. The paper intends to documents the experiential knowledge of design by the practitioner at such ground level.

Keywords: learning design, design contextualisation, design experiential knowledge, teacher dependency

Introduction

Designing online tasks requires specialised knowledge and skills. For educators who wish to migrate to the online world and mostly end up straddling between the bricks and clicks in their teaching, juggling with the myriad of design considerations that come from both worlds can be intimidating. Learning design for practitioners can be a constant trial-and-error attempt to get at the desired results. As a result of this, there have been attempts to formalise learning designs by proposing a descriptive framework to describe learning designs (Oliver et al., 2002) or a pattern language to facilitate learning designs (Goodyear, 2005). These are tremendous help for practitioners to understand and obtain useful learning designs that work. But such designs are intentionally incomplete solutions to design problems and yet they are responsive to context, informed by theory and best practices. Such incomplete nature of the design patterns is necessary due to transferability concerns as best practices are usually context dependent. Thus they only "focus and advise but do not constrain creativity" (Rohse & Anderson, 2006). They need to be contextualised and recontextualised when transferred from their original design contexts.

On the other hand, it has been observed that designs for practitioners would not stand still but constantly evolve over time (Vogel & Oliver, 2006) and the factors that drive such evolution would need to be identified.

Thus, despite the ease now to obtain and reuse high quality designs and the availability of the language and framework to describe them to the practitioners, either through direct access to such resources or disseminated through learning technologists, there are still gaps to be filled when it comes to contextualising and recontextualising the designs to meet local needs. The resident learning technologists, who have now grown in number and have more specialised knowledge in learning design, may assist the teaching staff to contextualise the designs. But when it comes to blended learning, where only the teachers have direct experience with the learners and their physical classroom activities, the final design decisions and contextualisations must lie with the teaching staff since only they have access to the

complete learning context first-hand. Thus the blended learning context presents a unique scenario where low level considerations and choices have to be made by the practitioners even when design exemplars are followed closely in addition to guidance and support from learning technologists.

The aims of this paper is to identify the factors influencing the localisation and evolution of design in the field, to document the practitioner's perspectives toward learning design, and how design exemplars are appropriated and adopted in the field.

Blended learning context

The local blended learning context will serve as a point of reference for most of the discussion that follows though attempts are made to generalise the considerations.

The institution where the following considerations are situated is a private college that delivers instruction through conventional lectures and tutorials. Due to the huge student enrolment, there are usually 30 to 45 students for each tutorial group and each lecturer usually handles 6 to 7 tutorial groups each semester, totalling about 200 students. There are 3 hours of English Language class over 2 lessons each week. Due to this short face-to-face contact time, network learning is incorporated into the English programmes to extend the contact time with the huge number of students and to expose students to a wider range of learning resources on the Web. But E-Learning has never been incorporated into the existing curriculum and so there is no formal requirement for the teaching staff to adopt E-Learning in their teaching and assessment, nor is there any formal requirements for students to participate in it.

For those who use E-Learning they use it to supplement their classroom teaching and to provide learning support in those areas where the electronic medium can present better learning opportunities than the conventional classrooms.

It is in this context of large classes, short contact time, supplementary and non-compulsory E-Learning implementation that the following design considerations are conceived.

Design considerations

The following 9 major considerations, with their subcategories, are the main factors that have influenced the design of tasks by the first author who is an English lecturer and have been using E-Learning in such blended mode described above for the past 8 years, initially through online community building sites and later through an LMS.

These 9 considerations are not exhaustive and there may be others that have remained tacit to the lecturer. It has been pointed out by the collaborating learning technologist (second author) that the overarching design principle of the first author when localising and contextualising suggested learning designs is the practicality of tasks that still meet specific instructional goals, and this practicality principle is realised through the following detailed considerations. This had remained tacit, however, until it was pointed out and subsequently confirmed by the first author as being operational in all this design considerations. Such a phenomenon is what Polanyi (1974) observes when he says "they know many more things that they can tell…" (p. 88), or what Schön (1983) refers to as "knowing-in-action" (pp. 49, 52).

The factors that influence practitioners' practices are undeniably complex, contextually dependent on the constraints of each individual teaching environment (Bright, 2002). As the teaching environments vary from one to another the influencing factors will vary too in amount, kind, and prominence. The following factors are in a way unique to one particular teaching context (as described above), but the factors will be shared among those who shared similar environment and settings.

Learning milieu

The subcategories of the learning milieu considerations are:

- course requirements
- degree of IT adoption by students
- accessibility of Internet
- student-teacher ratio

Without any course requirements for online tasks and participation, all online tasks designed should be simple enough to be completed in one or two sessions for no more than one hour per session. This is important to create a sense of achievement for students, avoid boredom, and to maintain a high motivation to log on to the course site again.

A generally low degree of IT adoption by students causes the consequent low accessibility to the Internet and low level of electronic literacy among students, which will affect students' participation in online activities. This has implications for peer pressure to go online, sharing of online learning experience, and a critical mass of student participation online.

A high student-teacher ratio is a major design consideration as the amount of student works generated, the diversity of student profiles, learning support and technological support issues, and the monitoring of student progress will be overwhelming and unmanageable even for the best supported teachers if the online tasks demand high participation rate on the part of the teacher.

Teaching milieu

The subcategories of the teaching milieu considerations are:

- teaching and course requirements
- time constraint
- degree of IT adoption by lecturers
- lecturers' accessibility of Internet

If there is no course requirement to provide online tasks and assignments, there can hardly be a case to formally require the lecturers to teach online. All efforts to provide additional online learning tasks and learning support can only be driven by a strong sense of providing enhanced learning experiences. And if the entire curriculum is conceived without an online component, any additional online tasks added to the curriculum by the E-Learning adopters will not only make the existing curriculum bloated but also strain the lecturers in terms of time and energy. In such a situation, the main design concern will lean towards online tasks that are manageable and practical within such time and energy constraints while maximising immediate learning impacts.

Without an institutional effort to drive E-Learning adoption, lecturers' IT adoption is understandably low and resources for Internet accessibility lacking. The diffusion of E-Learning practices will have difficulty in developing a critical mass.

The difficulty of practising blended-learning in such adverse environment is to take the route of mere survival and thus the principle of practicality dominates all design concerns.

Learner

The subcategories of considerations for learners are their:

- attitude towards technology use
- IT savviness
- self-directedness
- learning awareness
- learner's expectation of teaching and learning

Learners' attitude towards technology use in teaching and learning usually determines the level of success of online tasks. Positive attitudes should be encouraged through online tasks with high social and teaching presence (see Garrison & Anderson, 2003) at the initial stage to deliver a positive impact on learners.

It should be realised that low IT savviness can be a source of negative attitudes and a real learning hindrance for online tasks. Simplicity of tasks with little technological requirements at the beginning of the semester, coupled with an apprenticeship arrangement between students, can prepare the way for later more advanced tasks.

Students' degree of self-directedness and learning awareness determine the degree of teaching presence that needs to be projected by the lecturers to engage learners online. These concerns determine the amount of instructional pointers and pedagogical reasoning by the teacher for the online tasks.

Learners' expectations of the teaching and learning processes are heavily influenced by past learning experience and can only be recast through the experience of the new learning and teaching mode of a virtual learning environment. However a suitably designed orientation programme at the beginning of the semester will be able to refocus some of these expectations and build some confidence into those participating in a VLE for the first time.

Teacher

The subcategories of considerations for teachers are their:

- IT savviness
- teaching presence

The teacher IT savviness determines the complexity of tasks, the technological requirements of tasks, and the degree of online moderation/facilitation (which projects corresponding teaching presence) that can be provided by the teacher.

In a blended learning environment, the teaching presence of a teacher can be projected from the physical classroom to the online learning environment, in terms of instructions given to students face-to-face and the sheer prospect of the student facing the teacher later if the online tasks required are not completed according to requirements or deadlines. This is an advantage of the blended mode not enjoyed by a fully online course, but this does not preclude the need to provide detailed task descriptions online.

Resource availability and accessibility

The subcategories of considerations for resource availability and accessibility include existing resources:

- in digitised form
- in printed form
- as teacher's knowledge,
- as archived, indexed or tagged digital information
- as online tools

The availability and accessibility of resources in these various forms, especially those archived, indexed or tagged digital information, determine the resourcefulness of the teacher who will in turn make any additional information/content not covered in a physical class available online. The more external online information is accumulated (e.g. tagged browser bookmarks) by the teacher the more likely those resources will be delivered online. The different combinations of these various resources will determine the blend of resources used between the physical setting and the virtual setting based on ease of deployment and minimal effort by the teacher.

Degree of learner interaction

The subcategories of considerations for the degree of learner interaction include:

- individual work
- one-to-one
- one-to-many
- many-to-many

The degree of learner interaction will determine the degree of social presence for an online task. Social presence is a major determinant of online participation and needs to be carefully designed into learning tasks, though this does not negate the value of tasks that require only individual work, such as writing a reflective journal online with the interaction constrained to just the viewing of each other's journal entries. The learning involved in such situation will be vicariously experienced.

Simulation of blogs (one-to-many) through discussion boards and the setting up of social forums within the learning environment where there are no limits to the kinds of topic that can be discussed are highly motivating and may be used to help students overcome negative attitudes. But such blogs or social forums have very low learning focus, if any, and thus need to be capitalised further through follow-up tasks that have a clear learning goal. This can be achieved through a spin-off forum where a designated issue is

discussed, either as a brainstorming session, or to invite the best solutions to an ill-defined problem, such as those found in a problem-based approach.

Degree of task interactivity

The subcategories of considerations for the degree of task interactivity include:

- degree of user interaction with contents,
- use of interactive technology (Flash),
- multi-step tasks

All tasks with high interactivity require a complex design of the task contents or resources, usually packaged through SCORM, Shockwave/Flash technology, or others. Though higher interactivity can increase the interest level of the task, the demand on the designers who are usually lecturers themselves may be highly prohibitive. Highly interactive tasks also place a high demand of IT savviness on the students and may contribute to many of the technological frustrations experienced by students if they are not properly supported (see Hara & Kling, 1999).

Learning and teaching support

The subcategories of considerations for learning and teaching support include:

- technical support for learners and teachers
- degree of involvement by learning technologist(s)

The amount of support received by both the learners and the teachers determines the complexity of tasks that can be carried out. Task complexity is closely related to technical frustrations experienced by both learners and teachers and thus needs to be adequately supported. If adequate support is not available task complexity will have to be reduced.

In terms of teaching support, help can be provided by external parties such as the learning technologist in generating user statistics, analysing and assessing the effectiveness of learning designs (e.g. conducting content analysis of forum submissions), suggestions for new learning designs or dissemination of learning designs sourced from elsewhere.

Task types

The subcategories of considerations for task types include:

- task complexity
- duration
- degree and kinds of blending between online and classroom tasks
- follow-up tasks

The task type sub-considerations are heavily influenced by the previous considerations. While the 32 exemplars divided into 5 design foci provided at the University of Wollongong's Learning Designs website (http://www.learningdesigns. uow.edu.au) are good starting points for task types, they need to be adapted according to the local contexts, such as the length of a semester and contact hours, the availability of resources, the division and the blending of tasks between a physical class and an online class, and others. The best task types for a given learning goal and conditions need not be the one with the best learning design conceived in ideal conditions, as these tasks and their underlying designs can only exhibit their full potentials in the given ideal conditions.

Conclusion

This paper presents a set of 9 factors to be considered when contextualising a learning design in a blended learning environment. Such considerations are necessary when the designs are adopted from a different context, suggested by an external party (such as a learning technologist), or sourced from sites that provide exemplars' or generic designs. This is especially so for exemplars and generic designs because they are usually conceived in ideal or at least conducive instructional and learning conditions. The factors and the subcategories above will serve to complement and constrain these higher level models (generic designs or design patterns) and those from other contexts to ensure a more practical and realistic

implementation of online tasks (blended or purely online) by individual practitioners, where learning tasks are and should be variably conceptualised in their unique contexts.

In sub-optimal learning conditions, learning designs may not and should not be the learning designs that are conceptualised with an idealistic context in view. These decontextualised design best practices can at best serve as guides in designing tasks but practicality and realistic considerations of learning tasks in individual design contexts are the key to successful implementations of all online tasks, and a step towards reducing students' frustrations (Hara & Kling, 1999) with web-based activities.

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