

*Full Length Research Paper*

# University tutor proposal to plan and educating and ideas of study technologies

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**This research examines the practical knowledge of educating of 24 tutors who are educating on university courses involving face-to-face on study. The tutors are asked about how they think about study technologies and how they proposal the plan and educating of their courses across these two circumstances. Results show that there are qualitatively different ways of reasonable about study technologies that relate logically and positively to qualitatively different ways of planning and educating using study technologies. The results have suggestions for tutors and those interested in maximizing the probability of study for university students when tutors teach with study technologies.**

**Keywords:** Tutors proposals, Plan, Educating, Study technologies

## INTRODUCTION

Educating for quality student study at university is a dispute that never ends. For tutors and researchers who strive to follow how to realize successful student study consequence, the dispute becomes greater when new and undetermined features are introduced to the university classroom. This is true when study technologies are used. The literature does not offer a clear and constant comprehension of how study technologies can be used to empower students to employ in deep and purposeful ways. Seminal research has highlighted the significance of proposals to educating (Entwistle, McCune, and Walker, 2001; Ramsden, 2002) by identifying qualitatively different proposals to educating which are closely related to variations in the quality of student study. However, when study technologies are used as part of the proposal to educating, it is not clear how they are related to student study. Some features of the practical knowledge of educating come to the foreground when study technologies are used. This study argues that two important features are the proposals to plan and the conceptions of study technologies that tutor hold. Plan is important because it can be formed to help realize the aims underpinning educating. Conceptions of study technologies held by tutors are important because it is unlikely that a concept that prospects study technologies

as purely delivery mechanisms is likely to be related to a significant use of them. On the face of it therefore, it would seem that these two features are likely to be an important part of the proposal to educating, but there is yet to be continuous research into these parts of the practical knowledge and how they are related to variations in the quality of proposals to educating.

The purpose of this study is to explore alliances amongst the way tutors report reasonable about study technologies, their proposals to plan when study technologies are used and their proposals to educating when study technologies are used to empower student comprehension. Tutors from two research-detailed, mainly campus-depend on institutions on two different continents were interviewed with a prospect to better follow variations in practical knowledge's of educating involving study technologies, so that we might be in a better position to offer insight into ways of reasonable about and using study technologies in educating proposals at university.

## Prospect of study and educating and prior research

Related research for this study falls across two areas; research into relational student study in higher education

(Ramsden, 2002; Marton and Booth, 1997) and study technologies in higher education (Hawkrige, 1999; Reiser, 2001). This study follows a prospect of study and educating which is a relational one, one that links the practical knowledge's of educating to the student practical knowledge's of study. The key parts of this prospect of educating in this study include the tutors' prior practical knowledge's, the situation they find themselves in when educating, their perceptions of the circumstances, their proposals to educating and the consequence that take place as a result of their educating (Prosser and Trigwell, 1999). This research proposal is part of a tradition of research into student study in higher education (Marton and Booth, 1997). Broadly expressed, it follows the prospect that qualitative differences in proposals to educating are logically related to qualitative differences in the way student's practical knowledge their study. In terms of the tutors' practical knowledge, the quality of the proposal to educating adopted is related to their perceptions of the circumstances, the conceptions of study which they bring to the practical knowledge, the situation they find themselves in and the consequence they are able to realize. Studies in this area have focused on the conceptions of, and proposals to, educating adopted by tutors and links between these features and the student practical knowledge of study (Trigwell and Prosser, 1996). Another area of related research for this study is study technologies. For the purposes of this research, study technologies are defined as those technologies used to help students to accomplish the study consequence of their course. The field of study technologies has been a significant part of the higher education landscape for more than 30 years (Hawkrige, 1999). As a field it has been influenced by instructional plan ideas, pedagogical ideas, ideas related to motivation, experiential validity, and cooperation study, most of which have been situated in relation to each to help guide proposals to plan and evaluation (Reiser, 2001). Perhaps because of its integration with so many other fields, the field of study technologies continues to be a rapidly evolving one which must continue to seek to inform its principles and application with the latest developments across the international educational sector (Kozma, 2000). Relatively recent books have provided frameworks which allow tutors to make the most of the affordance of the current generation of study technologies mostly for mainly online circumstances (Anderson and Elloumi, 2004; Clark and Mayer, 2002; Garrison and Anderson, 2003; Salmon, 2001, 2002). This study complements and extends the existing research by focusing on the suggestions of the practical knowledge of educating when study technologies are included to support student study. Little research has been undertaken which attends to alliances amongst qualitatively different practical knowledge's of educating

and their relationship to conceptions of study technologies. Research methodologies from Prosser and Trigwell, 1999 are adopted in this study. They are particularly suited to identify qualitatively different practical knowledge's of study and educating. The research methodologies aid the researchers in unpacking the internal and external structures of the incident under study in order to identify its key features and qualitative variation of those features. In the circumstances of this study, study technologies provided the means by which students were able to employ in on-line study. The key features that are focused on in this study are tutor conceptions of study technologies, proposals to plan for university courses when students are expected to learn across face to- face and on-line circumstances, and proposals to educating when students are expected to learn across face-to-face and on-line circumstances. In the circumstances of the interviews with tutors, the combination of practical knowledge's of study and educating across face-to face and on-line circumstances is referred to as combined practical knowledge's of study and educating.

## METHOD

This study arose from collaboration between researchers at two campuses-depend on, research-detailed universities of Kurdistan and Islamic azad university of Kurdistan. Its structure follows earlier studies, but focuses on different variables (Ellis, Steed, and Applebee, 2006). As the study and interviews progressed, it became clear that for the majority of the tutors being interviewed the course each chose as the focus of discussion had previously been taught completely in a face-to-face circumstances. Through continued curriculum development over the past two years on-line activities and materials were introduced to support the student practical knowledge of study, and practical knowledge which provided some significant disputes for the tutors required. The interviews help to unpack variation in these practical knowledge's of educating.

## Research site and participants

Tutors with varying practical knowledge's of planning and educating in a combined study circumstances (that is, combinations of face-to-face and on-line study) were randomly sought as offers. 24 tutors offered from a range of undergraduate and postgraduate courses in different disciplines, 20 males and 4 females. The range of ages was from 33 to 59 years old, and all had a similar amount of practical knowledge of educating using study management systems. Tables 1 and 2 summaries the circumstances of the courses from which the tutors came.

**Table 1.** Profiles of courses of interviewees from the first university

Level	Discipline	Course size	Type of technologies and resources used		
			LMS	Interactive	Informational
Undergraduate	Engineering	<100	WebCT	Discussions	All courses had a mixture of course outlines, assessment instructions and course readings as a minimum
Undergraduate	Management	<100	WebCT	Case-based problems	
Postgraduate	Finance	<300	Blackboard	Financial problems on Excel	
Undergraduate	Science	<100	WebCT	Inquiry-based exercises	assessment instructions and course readings as a minimum
Postgraduate	Education	<50	WebCT	Discussions	
Undergraduate	Physics	<100	Blackboard	Discussions	minimum
Undergraduate	Mathematics	<100	WebCT	Case studies	
Undergraduate	Camas try	<100	WebCT	Case studies	

**Table 2.** Profiles of courses of interviewees from the second university

Level	Discipline	Course size	Type of technologies and resources used		
			LMS	Interactive	Informational
Undergraduate	Arts	<180	WebCT	Discussion	All courses had a mixture of course outlines, assessment instructions and course readings as a minimum
Undergraduate	Management	<200	Moodle	Discussion	
Undergraduate	Management	<180			
Postgraduate	camas try	<10	WebCT	Discussion	instructions and course readings as a minimum
PG&UG	Arts	<50	WebCT	Discussion	
Undergraduate	Sciences	<80	WebCT	Project-based	minimum
Undergraduate	physics	<30	WebCT	Simulations	
Undergraduate	Humanities	<120	Moodle	Discussion	
Postgraduate	Architecture	<10	Moodle	Blogging	writing tools
Undergraduate	Arts	<40	WebCT	Collaborative	
Postgraduate	camas try	<20	Moodle	Discussion	

Table 1 provides summary information which indicates the description of courses taught by interviewees from the first university. The sample includes 6 undergraduate and 2 postgraduate courses, totaling approximately 950 student enrolments. All students used a study management system (LMS), interactive and informational resources to support the student study practical knowledge's. Interactive resources included discussions which required postings on-line, inquiry-depend on tasks such as case studies and problem solving which required acceptances. Information resources included course information and readings as well as instructions for activities. Table 2 provides summary information which indicates the description of courses taught by interviewees from the second university.

The sample includes 7 undergraduate, 3 postgraduate courses and one mixed-level course, totaling approximately 840 student enrolments. All students used a study management system (LMS), interactive and informational resources to support the student study practical knowledge's. Interactive resources included discussions, blogging and project-depend on tasks, all of which required acceptances. Information resources included course information and readings as well as instructions for activities.

## Research questions and methodological analysis

The offer tutors were invited to semi-structured interviews, which lasted between 33 and 45 min and were fully recorded and transcribed. The interviews began with a discussion in which tutors were able to provide the salient characteristics of their circumstances of educating. The interviews were then divided into sections in which the tutors were given a chance to discuss their answers to three key questions:

1. What are study technologies? (Tutor conceptions of study technologies)
2. How do you proposal planning courses in which students are expected to learn in face-to-face and on-line circumstances? (Proposals to combined plan)
3. How do you proposal educating courses in which students are expected to learn in face-to-face and on-line circumstances? (Proposals to combined educating)

The interview procedure allowed probing of the interviewer reply's through follow up questions. This particularly takes place when tutors used words which could take on different meanings in different circumstances.

Four researchers then began an iterative research procedure which required creating and classifying the

**Table 3.** The communicability of the categories of the experience of blended teaching

	Conceptions of learning technologies		Approaches to blended design		Approaches to blended teaching	
	% Agreement after initial categorization	% Agreement after consultation	% Agreement after initial categorization	% Agreement after consultation	% Agreement after initial categorization	% Agreement after consultation
Researcher 1	100	100	90	100	90	90
Researcher 2	90	100	70	80	80	90
Researcher 3	80	90	80	90	90	100

tutors' interview transcripts using a phenomenographic proposal (Marton and Booth, 1997). An example of the analysis procedure for proposals to plan is given in the following.

\* All the tutor reply's to the question on proposals to plan were read to get a feel for the depth and breadth of variation in the practical knowledge's of plan.

\* Two researchers identified first take out from all the transcripts that identified the main themes in what the tutors were saying.

\* Themes were linked into logically related groupings.

\* Representative takes out and draft classifications were collated and discussed amongst all of the researchers.

\*Key features of the tutor practical knowledge's were discussed in terms of the strategies underpinning their proposal and the reference of the proposal (Marton and Booth, 1997). This procedure of analysis follows the phenomenographic position that any incident can be analyzed in terms of its structure and its reference .

\* Discussion ensued and on the basis of a combined reflection in which different features of the tutor practical knowledge of plan came to the fore, the draft classifications went through a number of iterations and were change to provide the final classifications which are presented in Section 3.

\* The categorization procedure drew on the SOLO taxonomy to help structure the hierarchies of the final classifications in Section 3 (Biggs, 2003). The taxonomy reports the nature of students' comprehension in stages ranging from pre-structural [which is collecting bits of information] to extended abstract [which requires making links with comprehension beyond the given subject area]. In this study, this framework is drawn on to shape qualitatively different classifications reported below for each of the key variables: tutors' conceptions of study technologies, their proposals to plan and proposals to educating in combined circumstances. The procedure reported above was used to analyses each of the research questions in the interviews. The discussion nearby the categorization procedure helped to clarify the classifications for all the researchers. Table 3 shows the percentage agreement among the three remaining researchers before and after consultations with the classification of one of the researchers. Percentage agreement after consultation for all classifications was

between 80 and 100% among the four researchers. During the interview and analysis procedures, it became clear that the circumstances of the tutors in the two universities had many similarities. This characteristic of the population sample was further emphasized when the analysis procedure of the interview transcripts was undertaken. The final classifications identified through the analysis procedure were not sufficiently distinct between the two universities to warrant their breaking up. Therefore, a decision to pool the data was taken. It is likely that the similarities in the nature of the two universities, that they are both campus-depend on, research-detailed universities, contributed to the similarity of educating practical knowledge's among the tutors in both circumstances.

## RESULTS

The results are presented in three sections: (1) tutor conceptions of study technologies; (2) tutor proposals to combined plan; and (3) tutor proposals to combined educating. The main findings of the study presented below present qualitatively different classifications of conceptions and proposals to educating using combined study environments.

### Tutor conceptions of study technologies

The interviews identified variation in how tutors reported reasonable about study technologies. In the classifications presented below, the first two classifications attend to focus more on technologies as tools and the last two classifications attend to focus more on the student.

#### Classification A: study technologies as tools for entry

In reply to the question 'what are study technologies?' some tutors reported reasonable about technologies primarily as a mechanism to improve issues related to entry. In this classification of conception, study technologies are formulated as tools and their main

**Table 4.** Conceptions of learning technologies

<b>Structural</b>	<b>Referential Fragmented – focusing on tools</b>	<b>Cohesive – supporting student learning</b>
Tools for access	A	
Tools for information delivery	B	
Ways of providing active learning opportunities		C
Ways of building knowledge		D

function is seen as overcoming constraints or problems related to distance and time. When pushed, the ideas of entry came to the fore rather than an emphasis on how the technologies could be used to support and improve study. In this conception, technologies can provide a way of getting to something, but are not formulated of as contributing substantially to the development of comprehension.

**Classification B: study technologies as tools for information delivery**

In this classification of conception, study technologies are akin to receptacles that carry things. The purpose is basically to expand the resources that the students have at hand to learn. I mean texts are great but they're very limited and really the Internet and the computer entry just opens up a really, really broad range of information that they can find, can get resources through. Study technologies – well, it's a way of delivery on new media which can be used – which are often used as an end in itself, which should not be the case. I'm very keen on technology myself, so in a way I'm probably carried away – just use it for the sake of using it. This conception of study technologies associates them with the idea of tools delivering something. Transcripts classified in this section did not disclose any consciousness of how the technologies might be related to activities that required some evidence of student employment. Rather it was as if the agency in the relationship between the student and the technology lay in the technology with the delivery of information, rather than the use of the technology by the student to improve comprehension.

**Classification C: study technologies as ways of providing active study opportunities**

In this and the next classification, the focus of the conception has moved away from the technology and towards the student. In classification C, it is about relating the technologies to study consequence. Their purpose is

to increase and support things that students are study. And like it comes back to what I said originally, that they have to support the study outcome or graduate attributes that I'm aiming for by providing something that is not available in a face-to-face circumstances or that the student utilizes in a different way when it's online. In this classification, the focus shifts from the technology towards study opportunities that technologies can offer. For some it is about providing study opportunities which are rare or cannot be provided in face-to-face circumstances alone. For others it is about using the study consequence of the course as a way to ensure the study technologies are supporting the students' practical knowledge of study.

**Classification D**

Study technologies as ways of creating knowledge like classification C, study technologies in this classification are related to active practical knowledge's of study. This classification is different in that it conceives the technologies in a supporting role for the construction of knowledge. And I found that again planning group work into the study management system is quite an effective way to provide the students with the opportunity to talk to each other. . Because I'm convinced by the literature that when you are constructing new knowledge, that when you take things in here and here, the way that there's some formula that happens in your brain that when you get it out here, or at least speak it out, I have to put it into words that the procedure of reasonable once concretized into words is a part of the procedure of affecting knowledge construction. Student study is the focus of this classification. It offers a more theoretical prospect of how students learn than some of the lower classifications, relating it to ideas of study and knowledge construction. It follows a student perspective on the technologies, one that seems combined with ideas of educating and study. Table 4 summarizes the referential (meaning) and structural features of conceptions of study technologies classified from the interviews. Table 4 has divided the classifications of conceptions

into cohesive and fragmented (Ellis et al., 2006; Prosser and Trigwell,1999). Cohesive conceptions of study technologies are those that relate the technologies in some way to study, showing a consciousness of how a use of the technologies by students can support their study. Fragmented conceptions of study technologies are those that separate the idea of the study technologies from a strong consciousness of how they relate to study practical knowledge's and the development of comprehension.

### **Tutor proposals to planning for combined circumstances**

In reply to the question, 'How do you proposal planning courses in which students are expected to learn in face-to-face and on-line circumstances?', tutors reported proposals which varied in intent and strategy.

#### **Classification A: planning for combined circumstances for pragmatic ends**

I think one bit was very straightforward. I thought, we thought we would put lecture material on there for sheer convenience because we know there are students with clashes and things like that. And we say to them, I mean in the first kind of meeting I say all this will be available but if you think that not turning up to the lecture and just looking at what's on Moodle is going to substitute, you're completely wrong. On the other hand, during the contact hours of course, we've got no entry to a computer. When we go to a classroom everybody's looking at the computers and nobody would listen to me if I held a seminar or gave a lecture or something like that. In this classification, practical knowledge's of plan were not related to the study goals of the courses in which the students studied. Rather, they focused on goals that were more about resolving inefficiencies and practical problems that students sometimes face. In some cases it was related to issues of programming such as planning to avoid timetable clashes, in others it was a consciousness that the students needed some on-line resources, but that ideas of how to combine these with evaluation and study were yet to be developed.

#### **Classification B: planning for combined circumstances in order to add on**

I think that it's not only the content of the, you know, that sort of dictates when you use the computers and when you don't. It's also, as I said, is the variety of media that could offer to your students. As I said, because now-a-days our life is so – you've got a choice of those tools to

use..... In this classification of proposal, the strategies employed do not attend to indicate attempts to synthesize or combine the on-line practical knowledge's with the face-to-face. There attends to be some consciousness that there are some things that could be useful for students, but the motivation is more about adding on resources rather than improving comprehension. For some tutors, it is about adding on more tools, for others it may include some consciousness of the benefits of socialization, but without any explicit patterns of plan to harness such affordances.

#### **Classification C: planning for combined circumstances to encourage active study**

In classification C, qualitatively different ideas are associated with the proposal to plan. A greater consciousness of orientating the plan nearby the technologies towards the consequence of the course is evident. Well, I guess you'd have think about first of all what you want to realize with the course – what your study aims are basically. And then once you've decided on that then you're going to decide on how you're going to realize those study aims in the most efficient and effective way possible I suppose. And determining – well evaluation is a big part of it I guess so trying to align your evaluation with your aims and making sure that they complement each other. One reflects the other. And I think that would basically determine the plan of your courses – what kinds of evaluations you're going to do and how you want the students to be able to realize those study aims..... In this type of proposal to plan, there is a more consciousness of how the face-to-face and on-line features of the students' practical knowledge can be linked through the study aims. There does not appear to be an artificial breaking up of the two circumstances. Rather the focus on common goals for both circumstances, such as study aims and consequence, reflection and autonomy, encourages a more combined proposal to plan.

#### **Classification D: planning for combined circumstances to develop applied comprehension**

In this proposal to plan, the extracts classified disclosed some consciousness of circumstances greater than the course itself, in which students could apply some of their study. So it's coming up with integrative problems that build on the lecture material. And it's always constantly comes back to the utilitarian thing. This knowledge is useful because I will put it into application one day..... A consciousness of the students' circumstances from which they have come or to which they are going seems to be related to this proposal. The strategy of the plan

**Table 5.** Approaches to blended design

<b>Structural</b>	<b>Referential Unintegrated</b>	<b>Integrated</b>
Design to achieve pragmatic ends	A	
Design to add on	B	
Design to encourage active learning		C
Design to develop applied understanding		D

seems to be to emphasize the usefulness of the study tasks by showing how they are relevant in the students' broader circumstances and is motivated by making the tasks as useful as possible. Table 5 summarizes the mention and structural features of proposals to combined plan classified from the interviews. Table 5 has divided the classifications of proposals into combined and un-combined. While these terms have not been used specifically for proposals to plan before in exactly this way, their alliances are constant with similar terminology in related research (Biggs, 2003; Prosser and Trigwell, 1999; Ramsden, 2002). Combined proposals to combined plan are those that focus on study and comprehension, are aligned to study consequence and encourage activity on the part of the student that combines across face-to-face and on-line circumstances. They may even display a consciousness of circumstances for applied study which is greater than the course circumstances alone. Un-combined proposals to combined plan are those that are more concerned with a list of things, adding things on, usually without showing any consciousness of how they might be combined in a more significant way to support the students' practical knowledge of study and comprehension.

**Tutor proposals to educating in combined circumstances**

In reply to the question, 'How do you proposal educating courses in which students are expected to learn in face-to-face and on-line circumstances? Variation in the way tutors proposal educating in such circumstances was identified.

**Classification A: proposing educating in combined circumstances to manage student activity**

So I communicate with them by email to say 'look on the WebCT course event, oh you guys have a deadline coming up you know, thanks for your posting. I noticed three people didn't post. Could you let me know if there's a problem about whatever'. So a few days before they make their first presentation, I want to put something up

that says here are some key things about presentation. 'We expect you to do these. Good presentations will get marks for doing these..... In the above quotations, the focus is on whether or not students have completed something, following instructions, or using tools, rather than the quality of the outcome. In some ways, the proposal attends towards a prospect of the educating, rather than developing a prospect of how students are developing their comprehension.

**Classification B: proposing educating in combined circumstances by trying things out**

In classification B, the proposals reported were yet to develop a holistic comprehension of how the study technologies were related to the student practical knowledge. A willingness to experiment was a key aspect of this classification. So, for example, I can't you know just shove up the balance sheet on the screen, and say well this is this anymore. Instead, I'll be saying well right, what you need to know when you're running a business and what is this telling you..... In this proposal to educating, the tutors are experimenting with resources. There is often a goal to create something, but perhaps because the means are new, a consciousness of how the innovation can lead to the development of student comprehension is yet to be articulated. Such proposals do not typically offer an over prospect or theory to explain how they are combining the circumstances.

**Classification C: proposing educating in combined circumstances through integrating practical knowledge's of study**

In classifications C and D, there is a qualitative shift in comparison with the first two classifications. The underlying aim in the proposal to educating is to combine and force the benefits from both the face-to-face and the on-line circumstances of study in ways to improve a more holistic practical knowledge take place across both circumstances. In this proposal, tutors do not perceive artificial boundaries between the face-to-face and on-line circumstances. They join together with the student being

**Table 6.** Approaches to blended teaching

Structural	Referential	
	Technology-focused	Student-focused
Teach to manage student activity	A	
Teach to try things out	B	
Teach to integrate experiences of learning		C
Teach to encourage student autonomy		D

the point of departure for the focus. In comparison with the previous two classifications, the proposal seems to derive more from the student perspective and how both circumstances work together to support the students' study.

#### **Classification D: proposing educating in combined circumstances to encourage student autonomy in study**

Transcripts classified in this classification attended to disclose a relatively stronger consciousness of the student perspective of study, typically realizing this through a goal of developing student autonomy in study. They have the practical knowledge of researching and following leads and trying to make sense of information on their own. Which is the core skill that you should be getting at university? But which is expensive to deliver by traditional methods. So they have some practical knowledge of that. So the blending bit – where's the blending bit come in – they get some practical knowledge of that and then are reassured because their vocabulary works, the bits of information that they've picked up are the bits of vocabulary in use by the professionals. The ways of presentation, the subjects under discussion in scholarly papers, etc. So they have some, they have some exposure to procedure in actually researching something and reading something following their own leads to some extent. That's what I would hope the blend would bring out..... In this proposal to educating, a key aim is not just the combination of the two circumstances to support the development of student comprehension. This type of proposal values and tries to create situations in which students can take creativity in their study, through engaging in research and inquiry for example. One of the goals appears to be to help the students take more responsibility for their study to prepare them for similar types of tasks outside of the classroom. Table 6 summarizes the referential and structural features of proposals to combined educating classified from the interviews. Table 6 has divided the classifications of proposals to educating into student-focused and technology-focused proposals. In this study, student-focused proposals to educating are those that adopt a student perspective that combine practical knowledge's of study across face-to-face and on-line circumstances

and that seek to emphasize the development of comprehension. In contrast, technology-focused proposals to educating are those that are yet to emphasize the student perspective. Technology features largely in these classifications of proposals as the motivation or stimulation for the activity adopted rather than a focus on an outcome which is linked to how students develop their comprehension of the course aims. These proposals may be more managerial in nature, may attend to focus on efficiencies, may experiment with new ways of doing things with technologies, but are yet to develop a combined over prospect of how educating innovations can be used to support student study.

#### **Alliances among the practical knowledge's of educating**

This section of the study explores alliances among parts of the practical knowledge of educating in circumstances that combine face-to-face and on-line practical knowledge's of study. The analyses begin with a presentation of a distribution table showing the dispersion of classifications across the 12 classifications constituted from the interviews. Then to explore patterns in alliances among this distribution, 2\_2 contingency tables are used. Since the population sample is relatively low, that is, the sample in at least one of the cells is less than 5; the Fisher exact method of statistical significance is used. Table 7 shows the distribution of the classifications of conceptions and proposals in the practical knowledge of combined educating. Tables 8 and 9 show the statistically significant contingency tables. To assess whether or not the distribution of tutor reply's as shown in Table 7 was statistically significant, a 4 coefficient was calculated and a Fisher exact procedure was used. The Fisher exact procedure of testing the statistical significance of the 4 coefficient is preferably used when the population is small and one of the numbers in the 2\_2 table is less than 5. Table 8 indicates a positive and significant relationship between cohesive conceptions of study technologies and combined proposals to plan. Table 9 indicates a positive and significant relationship between combined proposals to plan and student focused proposals to educating. Note that although the distributions in the two tables are the same, the cases making up the numbers in each cell

**Table 7.** Distribution of categories in the experience of teaching

Parts of the experience of teaching		Category	Number	Percentage
Conceptions of learning technologies	Fragmented	A	4	48
		B	8	
	Cohesive	C	8	52
		D	4	
	Total		24	100
Approaches to blended design	Unintegrated	A	6	47
		B	6	
	Integrated	C	7	53
		D	5	
	Total		24	100
Approaches to blended teaching	Technology-focused	A	8	51
		B	5	
	Student-focused	C	4	49
		D	7	
	Total	Total	24	100

differed between the two tables. No alliances were identified between conceptions of technology and proposals to educating.

**Limitations of this study**

The consequence of this study should be explained in relation to its characteristics. The population sample comes from two research-detailed, campus-depend on universities and due to its qualitative nature, the sample is relatively small (n = 24). As a result, some of the classifications have only two or three replies' in them which may be one of the reasons why no alliances were found between conceptions of study technologies and proposals to educating. It is worth noting that the sample size is similar to related studies in the literature (Prosser et al., 1994, n= 24; Ellis et al., 2006, n = 22). To explore the nature of the alliances in more detail, a larger study involving greater numbers of tutors should be undertaken. Such a study might also look for alliances between practical knowledges of educating with study technologies and gender or age. Despite these limitations, this study has identified important appearing alliances in the practical knowledge of educating at university when technologies are used to support student study.

**DISCUSSION**

This study was planned to explore the appearing alliances in the practical knowledge of educating at university when study technologies are part of that practical knowledge. This is an important focus for

research into study in higher education because of the increasingly everywhere use of technologies in student practical knowledge's of study, which is yet to develop a substantial, evidence-rich, research base. Without studies into this area, uninformed proposals to plan and educating using technologies could result in impoverished practical knowledge's. Consequently it is important that we develop a deeper comprehension of qualitatively better ways of reasonable about and using technologies to support student study.

In brief, this study required 24 tutors from 2 research-detailed, campus-depend on universities, who between them, teach over 1600 students across more than a dozen disciplines. The tutors undertook interviews which were subsequently analyzed by a team of four researchers. An iterative analysis procedure disclosed qualitatively different classifications of ways of reasonable about study technologies and proposals to plan and educating in combined circumstances. Small-scale quantitative analyses of the qualitative classifications then disclosed appearing patterns in the data suggesting promising alliances among key features of the practical knowledge of educating. The results provide consequence worth reflecting on in two areas: The qualitative differences within each of the features of conceptions and proposals and the alliances between these features. Not all tutors reported reasonable about or proposing the plan and educating of courses with study technologies in the same way. There seem to be some key differences in conceptions of, and proposals to using, study technologies in plan and educating. Some conceptions of study technologies are more about efficiencies and the technologies themselves, while others are comparatively more adjusted towards enabling study. In terms of plan, some proposals seem to make

**Table 8.** Associations between concepts of learning technologies and approaches to design

		Concepts of technology		Total
		Fragmented	Cohesive	
Approach to design	Unintegrated	8	4	12
	Integrated	4	8	12
Total		12	12	24

$\phi = 0.58, p < .05, n = 24$

**Table 9.** Associations between approaches to design and approaches to teaching

		Approaches to teaching		Total
		Technology-focused	Student-focused	
Approach to design	Unintegrated	8	4	12
	Integrated	4	8	12
Total		12	12	24

$\phi = 0.58, p < .05, n = 24$

more of the affordances of the technologies, such as enabling communication about task aims; they attend to be situated in relation to the face-to-face practical knowledge, aligned to the course consequence and aimed at developing an applied comprehension. In contrast, other proposals to plan seem to be limited to simply adding resources to the practical knowledge or using technologies for more pragmatic goals such as avoiding timetable clashes. Some proposals to educating aim to provide new ways of experiencing study and autonomy. They focus on the practical knowledge from a student perspective and encourage students to take more responsibility for their study. In contrast, other proposals to educating seem to have a technology-focus that requires trialing what the technologies might empower having yet to fully combine them into a holistic proposal.

Perhaps the more significant results of this study are the appearing alliances between the parts of the practical knowledge of educating that were indicated by the analyses in Tables 8 and 9. These suggest that conceptions of study technologies that are adjusted towards entry and information delivery attend to be related proposals to plan that do not display a consciousness of how to combine them to support student study and are more about efficiency. Conversely, the conceptions of study technologies that are adjusted towards active study and creating knowledge attend to be related to proposals to plan that aim to encourage student study that can lead to applied comprehension. Similar explanations can be made about the alliances between proposals to plan and educating. Proposals to plan, which are practically adjusted and aim at adding things on, attend to be related to proposals to educating that require trial and error and are yet to develop a more holistic proposal to their use. In contrast, those proposals to plan that encourage active study and applied comprehension attend to be related to proposals to

educating which combine practical knowledge's of study across face-to face and on-line circumstances in which students are able to develop autonomy. The suggestions of these results are promising for those seeking to support university tutors to improve their proposals to plan and educating when study technologies are required. It seems that some work needs to be done on how we think about study technologies in the student practical knowledge. Some ways of reasonable about them do not seem to be helpful if we seek to make the most of their use in plan. If we can orientate conceptions of study technologies towards those that are more closely related to student study, then we may be able to more readily encourage proposals to plan which are similarly inclined. Furthermore, given the results suggest that proposals to plan and educating are also related, it suggests that if we work carefully on how tutors plan with study technologies, then this may encourage proposals to educating which are more student centered and vice-versa. The introduction of study technologies into practical knowledge's of educating and study is creating new alliances in university practical knowledge's which are yet to be fully understood. Without talking to those required in how they think about, and proposal using the technologies, we will not fully follow how to make the most of the technologies in such practical knowledge's. Such a state of affairs in the profession of educating at university must not be allowed to develop. More studies are needed into how tutors practical knowledge educating when technologies are used to empower student study if we are to be able to reduce risk when introducing such new features into the practical knowledge.

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