CHAPTER 4
DATA ANALYSIS

4.1 Introduction

In this chapter two analyses will be carried out. The first is empirical which concludes with some theorising in the psycholinguistic processes of online learning, while the second is judgemental that covers the nature of input and output for email, the nature of NBLT activities, time pressure, and finally an evaluation of the two online tasks using Skehan’s (1998) five criteria. Both analyses are based on the group and one-on-one email discussion data collected in this study.

4.2 Empirical Analysis

The data analysed below are taken from the archived email of the one-on-one and group settings. Email messages can sometimes be multithreaded, discussing different topics in the same message without any attempt by the author to make one topic coherent with the next or the previous one. However, the topics discussed will usually be taken up in subsequent emails and the relevant text from previous email will be quoted to remind the recipient of the topic discussed. This constitutes a unique intertextual relationship between emails. In view of this, for the extracts below, whenever there is an exchange between two parties, only those portions of text between which there is an intertextual relationship will be excerpted to demonstrate the interactions across emails.

The analysis starts by looking at the various focus on form strategies that can be used in email discussion for online language instruction.
4.2.1 Pre-emptive Focus on Form: Translation

Code-switching is common when students do not have an appropriate term for the meaning intended in the L2 or target language. Thus, a tutor may see code-switching as a problem in language production on the part of the student. In such cases, the tutor will usually provide a translation of the term or phrase that has been switched, as in Extract 1 below (Extract 1 includes 6 excerpts from 6 email exchanges), where the student (S1) code-mixed freely. The tutor (T) provided the translation for the student’s Mandarin transliteration “Dafangsu”, highlighting the word “SWEET” by capitalising it. The student took this up immediately in the next exchange, while adding the word “big” which stood for the syllable “Da” in “Dafangsu”.

Extract 1

<table>
<thead>
<tr>
<th>S1:</th>
<th>May God bless you to become other person bless. Dafangsu, Chinese New year is coming now, don’t become more bigger dangfasu. Hahaha....</th>
</tr>
</thead>
<tbody>
<tr>
<td>T:</td>
<td>And it’s not dafangsu. It’s SWEET potato. See how good the English Language is? All bad words sound sweet and nice in English.</td>
</tr>
<tr>
<td>S1:</td>
<td>Oh, you admit that you are the big sweet potato. That’s good, it’s mean you don’t mind i call you like that. Dafangsu in mandarin is also sound good, never forget you are the dragon zuriat.</td>
</tr>
<tr>
<td>T:</td>
<td>Dragon zuriat? That's a Malay word. You can try Dragon's descendents.</td>
</tr>
<tr>
<td>S1:</td>
<td>Yes, drogan's descendents, I love the song very much.</td>
</tr>
<tr>
<td>T:</td>
<td>It is “dragon”, not “drogan”. You know what, you actually spelt it correctly when you first wrote &quot;dragon zuriat&quot;. Accident, perhaps.</td>
</tr>
</tbody>
</table>

Such a contingent pre-emptive focus on form by the tutor created a meaningful context for the student to map the Mandarin transliteration to the English equivalent. Furthermore, the tutor made an intentional effort to involve the student’s affect by generalising it to say “All bad words sound sweet and nice in English”. This immediately caused a reaction from the learner who reminded the tutor of his Chinese roots.
A second instance of code-switching can be observed immediately in the word "zuriat" and a translation of the term was promptly introduced by the tutor, which was mistakenly reproduced by the student with two spelling mistakes, where one of them, "drogan" was selected by the tutor to focus on in the subsequent email.

In both cases the focus on form was pre-empted by the tutor as he considered it an opportunity to teach the respective new vocabulary. The second instance showed that the focus-on-form was selective, as too much of form focus could sometimes be off-putting as it interrupts the communicative nature of the exchanges.

Extract 2 shows an example where the student pre-empted a focus on form, asking for a Chinese translation of the idiom. The tutor gave two English equivalents, where the second was again an attempt to appeal to the affective faculty of the student, even though it was not an accurate translation of the idiom, using the word "bad" for "obvious", for the sound "Ming" as in the Hanyu Pinyin provided by the student. However, such a repetition of syntactic structure in a more provocative form should help the student to process it at a deeper level. Again, the tutor ignored other errors.

**Extract 2**

<table>
<thead>
<tr>
<th>S1:</th>
<th>xxx is xxx. Ming Zhi Gu Wen. In english how to call it? I have to go out from this makmal. Bye.</th>
</tr>
</thead>
<tbody>
<tr>
<td>T:</td>
<td>For Ming Zhi Gu Wen, we say &quot;don't ask obvious question&quot;, or in bad English &quot;Don't ask stupid question&quot;.</td>
</tr>
</tbody>
</table>

It should be noted that in both extracts, the exchanges took place naturally as in normal conversations. Thus, even though the foci were on the form of the target language, undoubtedly they would still be perceived by the student to be authentic communication in real life.
4.2.2 Reactive Focus on Form

Extract 3

<table>
<thead>
<tr>
<th>S2:</th>
<th>Maybe she is more comfortable in writing to someone who is not &quot;critising&quot; (?) her grammar.</th>
</tr>
</thead>
</table>
| T:  | > Maybe she is more comfortable in writing to someone who is not "critising" (?) \> her grammar. \>
|     | I never "critise" her grammar in all my emails to her... |
| S2: | oppps.. yes!! it is the word "criticising". i forgot the spelling. :-b \> but, i'm sure i won forget it anymore. |

The student initiates the focus on form through the use of a bracketed question mark and putting the word "critising" in quotation marks. It should be noted that the focus was still on the meaning. The form focus here was carried out simultaneously and implicitly through the use of punctuation and the focus on communication was maintained. The tutor responded by quoting the student’s paragraph (those lines with the > symbol at the beginning), thus drawing attention to it, and provided a recast of the word in its infinitive form, “criticise” (the –ise word end variant is used here on purpose). The student’s response indicated that the problem was actually the spelling of the word and not the grammatical form, which she uptook promptly using the proper form (present participle) and corrected the spelling to “criticising”. The final assurance given by the student also indicated the involvement of affect on the part of the learner, which was likely to ensure a more effective intake of the form (Stevick, 1999).

4.2.3 Pushed Output with very low proficiency learner

Extract 4 shows an example of pushed output by a very low proficiency student. It seems that the student could not accept the sudden change of role on the part of the tutor from a sage on the stage to a mere facilitator in such an online language classroom.
Extract 4

S3: I still remembered when I was 6 years old, my tuition teacher his Indian guy, he taught me a lot of words about English. One day, he was incident and he want me finished a lot of English homework (actually I didn't mean because he was Indian guy, not relevant about racial.) Do you think it is a good way for learning English? I don't think so that's why made me hated it. But when in secondary school, I met an English teacher, she is Chinese teacher, I tried to impress actually what I want to learn and she tried to guid me and correct when I had mistake.

T: Can you explain a bit more on what happen to your Indian tuition teacher when you say "he was incident"? What do you mean by "incident"? Are you saying that he's a bit crazy? I also have problem understanding you when you say "not relevant about racial". What do you mean by that?......

......Do you think that we will learn English if we are corrected a lot by teachers?.....

S3: incident = accident
impress = I mean that to tell what I want
not relevant racial = not relevant with race
I think I need English teacher to correct me when I have mistakes.

Such a deep-seated belief in what a language teacher should do (i.e. to correct mistakes) was probably inculcated by the kind of language programs that the student had experienced throughout her primary and secondary school. The new role of the online tutor seemed to irk her so much that a blunt reply was given. Nevertheless the student seemed able to self-correct certain language items, but obviously without consulting a dictionary first, as can be seen in her equating "incident" to "accident". The expressed non-understanding by the tutor of what she had written (specific input as feedback) had probably helped the student to revise her assumption in the meaning of the lexical items.

This suggests that whenever there is a shift in pedagogical paradigm, student orientation is necessary in order to explain the new type of instructional strategies and also teach the new learning strategies needed by the students in order to gain maximal benefits from such a naturalistic environment, despite the fact that such a natural approach does help the student to learn (as Extract 4 shows).
4.2.4 Feedback

Feedback can be provided to the students using the flooding technique and yet making it look natural in a communicative setting. While such flooding can be cognitively demanding in a face-to-face conversation, the cognitive load can be greatly eased in an asynchronous setting such as using email. Extract 5 shows such an example. Here the word “trust” was shown in its various forms, in addition to the original nominal form. In this example the feedback was implicit semantically but explicit typographically. Such typographical feedback is only possible in this electronic channel that allows character formatting.

Extract 5

I need to correct myself about what I said about total trust because I think I was not thinking right. I took the lack of total trust to mean no trust. But now I see it to be a question of degree. Not trusting someone totally does not mean we do not trust them at all but that there could be some trust too, 70% or 80% perhaps. And I think for most of us, though we do not trust people totally, we trust them to a certain degree at least. 10% of trust would not do a lot of harm to us right? Though 98% of trust could be a bit too much, even for husband and wife. When we see trust like this, how many per cent of trust do you have in me? Maybe this varies according to what issues you are dealing with too. If you are telling me about your boyfriend then of course there can’t be a lot of trust, as I don’t trust myself either! But talking about fixing the computer for you, do you think you have more trust in me? No doubt, of course.

4.2.5 Implicit Negative Feedback (Recast)

In Extract 6 below, the corrected use of the word worship by S2 constituted a successful uptake as an implicit reaction to the instructor’s intention to draw attention to the spelling of the word, which was also done implicitly. The subsequent correct production of the word worship without being prompted indicated that the word had indeed being acquired.
When the student was asked later in a face-to-face meeting concerning her use of the word *workshop* and whether she noticed the instructor’s incorporated recast of the word *workshop* as *worship* in his following email, she commented that the difference was immediately noticed. In fact, she had come to realise that every time when her use of certain words was repeated by the instructor with different spellings, something must be wrong with those words. She had thus realised that she was expected to correct herself in subsequent correspondence, even though such corrections were not required nor requested by the instructor. This suggests that the covert intention of repeated and sustained corrective feedback in email by the instructor, at least what had been experienced by this student in a semi-instructional setting, can be precise and clear.

It should be noted here that the uptake by the learner did indeed contribute to the acquisition of the words, as the sequence above indicates. This was confirmed by a later unrelated email, where the correct form was produced again without any prompting by the instructor. Though such modified learner output is rare, it nevertheless proves the point here.
The issue of whether such reactive focus on form can be provided without unduly interfering with the focus on meaning in a classroom context seems to have a clear answer here. This can be seen when the repair by the student in her subsequent reply to the instructor's recast sounded perfectly natural without the meaning of the exchanges being interfered with by the recast's implicit focus on form (workshop—worship).

This is in accordance with Seedhouse's (1997) suggestions about "camouflaged" repair. Seedhouse (1997) suggests two techniques that the teacher can use. They are (1) producing the correct form without any overt or explicit negative evaluation or indication that an error has been made and (2) avoiding marking the correction by pitch, loudness, or a decrease in the tempo of speech, so as to provide extra attention to the correction and thus emphasising the errors by contrast. What was carried out by the instructor above was in the first category. In text-based CMC, the second suggestion can mean any character formatting (such as bigger font size, italicisation, bolding, underlining or the change of colour of the word concerned) that can be done through the current HTML-based email or through punctuation marks such as capitalisation or the use of quotation marks. This is exactly what is discussed in the second chapter on the articulation of written language (see section 2.11.4).

The incorporated recast above did not make use of any textual emphasis and the error was not overtly indicated. Seedhouse (1997) has noted that such episodes, with a dual focus on meaning and form, were very rare in his data. However, with the new possibility that is afforded by HTML-based textual communication and the freedom from the constraint of time in an asynchronous CMC medium such as email, it seems that such camouflaged episodes can be injected into an instructional communicative setting quite easily and as frequently as it is deemed necessary.
On the other hand, Ellis (1999) has pointed out that there is a theoretical difficulty regarding research investigating negative feedback through recasts in interaction involving L2 learners (in the normal classroom). Acquisition can only take place if learners pay attention to the form of the recast produced by the instructor, but it is not clear that this is what the learners typically do. In fact the contrary would seem more likely.

Generally utterances are not stored verbatim, in the original form of production, but semantically (Clark and Clark, 1977), and this post certain problem for the effectiveness of recast. In view of this, Ellis (1999) suggests that two conditions must be met in order for recast to work for language acquisition. First, the learner must possess the necessary proficiency to process the recast as form (since more proficient learners would have more of their cognitive resources freed to process the form), and second, the learner must be oriented towards form rather than meaning in order to undertake the necessary formal representation of the utterance (p. 11). While many learners may not be so inclined or even be able to do so in the context of an on-going conversation due to limited attentional resources, in CMC such adverse situation may be easily overcome through simple visual feedback of the text as seen in Extract 6.

In CMC, especially asynchronous CMC, all text-based utterances are stored verbatim to the letter and can be retrieved easily where side-by-side comparison can be made. It is only through such availability and precision in a visual medium that the implicit corrective recast can be noticed by the learner, and indeed make it possible for the error itself to be picked up by the instructor for form focus in the first place. If this were to happen in a spoken medium, the conversation would most probably have continued without the error being identified due to the ephemeral nature of speech. In
fact the learner should have heard the word (worship) being used many times by
others but, presumably, thought it was spelt workplace through generalisation and then
mistakenly, but confidently, produced it in the written form. As to the first condition
delineated by Ellis (1999), the elimination of time constraint by the asynchronous
nature of email should allow learners from a lower proficiency group to process form.
To meet the second condition, if camouflaged recast fail to help the learner notice the
error, despite the strong formal nature of the written text, the various character
formatting strategies pointed out above should be able to bring any learner to attend to
form, with the possible caveat that meaning focus could be interrupted.

4.2.6 Explicit Negative Feedback

In the extract below the teacher provided an explicit negative feedback to the
student when he commented that "...it has now changed for the worse...See the
paragraph below?". The comment following the quotation, "One word you correct, a
mistake you add", can at best be seen as curt.

Extract 7

<table>
<thead>
<tr>
<th>T:</th>
<th>Do you still remember my comment on your first email which I received some months ago? I said your English was good. But it has now changed for the worse... See the paragraph below?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&gt; yes, I'll try to remember the spelling of &quot;continuously&quot; by heart.</td>
</tr>
<tr>
<td></td>
<td>&gt; it's not my false, mis-key in mahhh...</td>
</tr>
<tr>
<td></td>
<td>One word you correct, a mistake you add. I would suggest &quot;fault&quot;.</td>
</tr>
<tr>
<td>S:</td>
<td>hey, u see! i already knew my mistakes will be critisized. actually, i'm not sure about the word &quot;dare not&quot;, should i correct it as &quot;don't dare&quot;? anyway, thank q for helping me to correct my grammar mistakes. :-P</td>
</tr>
</tbody>
</table>

Despite the obtrusiveness of such explicit feedback, it seems to be well taken
by the student in Extract 7. It is obvious that both the teacher and the student still
perceived the exchanges as part of a friendly conversation. The student’s subsequent request for confirmation confirms that she was not disturbed at all by the explicit negative feedback and appeared to take the opportunity to further extend the focus-on-form episode. The expression of gratitude to the teacher indicates an end to the form-focus episode and acts as a transition to later topics. Right after this, the student went back and continued to discuss in subsequent paragraphs other issues raised in the previous email by the teacher.

Such a result contrasts with what has been pointed out by Ellis (2001a), that explicit negative feedback is usually dispreferred. This is perhaps due to the reduced social cues in a computer-mediated medium and the lack of connectedness between paragraphs in email massages, which ease the transition of focus between paragraphs and removes the usual awkwardness in face-to-face encounters.

Explicit feedback provided through linguistic means can be either incorporated into the email message as in Extract 7 or provided as separate episodes, as in Extract 8 below. In Extract 8 the feedback did not form the communicative part of the email message but was added to the end of the email as some form of postscript and was thus made explicit with the fact that it was separated from the main message and given a title that made its instructional intention obvious.

**Extract 8**

<table>
<thead>
<tr>
<th>Grammar lesson for today:</th>
</tr>
</thead>
<tbody>
<tr>
<td>When we want to say that something has the same characteristics as something else, we just use the word &quot;like&quot; instead of &quot;likely&quot;, as in &quot;it (does) not (feel like) a Christmas day but more like a holiday&quot; The words in brackets are the words you've left out in your email but should be there in order to make it correct grammatically. &quot;Likely&quot; does not mean &quot;look like&quot; or &quot;similar&quot;. It means &quot;probable&quot; or &quot;probably&quot;, as in &quot;It is likely that he would not be able to come&quot;, which means &quot;Probably he would not be able to come.&quot;</td>
</tr>
</tbody>
</table>
Furthermore, the explicit grammatical explanation is enhanced through typographical means by highlighting the words under focus in blue (see Extract 5 above for another example under a different context). This should help the student to zoom in on the specific words that were problematic to them.

4.2.6.1 Repetition as Uptake

The norm of replying to an email by quoting the previous email (this is usually done automatically by the email program through the use of the > symbol at the beginning of each quoted line) has eased the uptake process by the student, as shown in Extract 9 and 10 below (words in italics).

In Extract 9, the quoted lines were by the tutor. Theuptaken words by the student were highlighted in italics (a joy giver, playful and mischievous; italics added in the Extract 9). Extract 10 shows another instance of uptake (the lack of total trust) by the same student.

The permanence of the written form of email and the juxtaposition of text by different writers in the same email have made more complex uptake by student possible (see the general discussion below under section 4.2 for advantages from a psycholinguistic point of view). Such uptakes in proper context in subsequent exchanges suggests possible learning opportunities for the learners concerned.

Extract 9

<table>
<thead>
<tr>
<th>I agreed with you which xxx is a joy giver, playful and mischievous little girl. I like to work with her.</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;xxx is</td>
</tr>
<tr>
<td>&gt;really great. She is a joy giver, playful and mischievous. But one thing I</td>
</tr>
<tr>
<td>&gt;like about her is that when she needs to get serious, especially something</td>
</tr>
<tr>
<td>&gt;that is under her responsibility, she gets REALLY serious.</td>
</tr>
</tbody>
</table>

115
The lack of total trust. Sometimes I would not totally believe to other people which also give some space to myself so that they would not hurt me too deep, (one kind of protection), the experience taught me to be aware to some people.

>Even if you said that you may not be
telling me everything, it could just be because you're too shy or
embarrassed to tell me everything, instead of the lack of total trust.

4.2.7 Empowerment of Learner

Extracts 11 to 17 are all extracted from the emails of one student in the group email discussion setting who had a high command of English and was a frequent user of email.

The student was a quiet and soft-spoken student who barely talked in the class and would have easily gone unnoticed in any face-to-face conventional classroom. The extracts will demonstrate how an advanced level student reconstructed a new representation of self (an online virtual identity) in the online classroom and assumed power similar to that of the tutor, breaking away from the constraints of contents, relations, and subjects (Fairclough, 2001). Extracts 18 to 22 are extracted from the tutor/moderator’s and two other students’ emails that were related to an episode that involved an explicit power struggle between the tutor and the students. These were also taken from the group email discussion setting.

Extract 11

Yes, we are just teenagers but our opinion is worth more than gold because once the oldies like Mr.XXX [tutor] (no offence) pass over the reins to us, we'll be the ones controlling this world! EYAHOO!!!!

In Extract 11 the tutor is referred to as one of the oldies, a situation that was very unlikely to happen in a face-to-face (FTF) classroom for such a quiet student.
The student seems to treat his tutor as an equal status interlocutor. The student can be seen to be empowered by the online classroom while the tutor was disempowered.

**Extract 12**

| hey what is this SMS thing? Sir, I thought our next article would be about LOVE?? I've already prepared all the powerful things to say about LOVE... |

It was hinted in the class by the tutor that an article about love would be posted soon to the email discussion group. Since then this student had been referring to the love article in most of his emails. When the article about love was postponed due to technical problems, this student explicitly expressed his dissatisfaction with the tutor (Extract 12). Again such use of language that disregards all elements of face and will very likely embarrass the teacher is very unlikely in an FTF classroom. Most probably this was due to the filtering of social cues by the technology’s interface (see Figure 4.1 on the four types of interaction) which is necessarily a lean channel of communication compared to the rich FTF interaction.

**4.2.7.1 Learner’s Contribution**

**Extract 13**

... Alright before I dive into the topic of SMS (have you read the title of this mail?) let's clear up a few things first... I WANT LOVE!!! No wait, of course I'm not that desperate. Yes Mr.XXX [tutor] I will try to keep my raging hormones in check but me being the pitiful little teenager that I am, I certainly cannot give you any guarantee... I WANT LOOOOVEE!!! (there we go again) ...

... If in the future I get myself a handphone with SMS features, I would probably use it to SMS my wife at home to tell her that I'm coming home late tonight, that I LOVE her and she should go to sleep not wait up for me (oh cool I'm turning this SMS thing into a REAL LOVE topic) And I'd SMS my boss to request for shorter working hours so I could get home early to be with my darling wife, and while I'm at it, I might as well request a salary raise and overtime pay as well... Later on in the evening, I'd SMS the local florist shop to confirm my booking for a dozen red roses ahead of Valentine's Day... ok I think all of you are really puking all over your keyboard right now so I'll quit the mushy stuff. SMS is good, and it's also bad, like everything else, there's always two sides of a coin. I don't mind if using SMS is beneficial and adds another channel of communication into my life. However what I DO mind is information overload. Like what Kong Ming said, spam messages... unnecessary intrusion from direct marketing agents, bombarding me with offers of 24-hour slim-wrap, buy one get one free, Viagra, limited time offer only, 50% discount off retail price if you buy using Mastercard or Visa. VISA? *bloop bloop bloop* Irritating advertisement... As with conventional e-mail, the same abuse is bound to happen, albeit SMS! being more expensive than e-mail. OK I will
Here in Extract 13 it can be seen that this student clearly had a good grasp of the topic at hand especially in his in-depth discussion of and reference to SMS as an additional channel of communication. In a very real sense he was contributing to the store of learning material by summarising the contribution of others (the latter part of Extract 13), thus playing a similar role to that of a tutor.

4.2.7.2 Learner’s Self-Regulation

In his reply to a classmate’s response (Extract 14), he admitted that most of his remarks online were meant to be tongue-in-cheek. It would be interesting to note that in an FTF class this student was serious most of the time and had never joked with the tutor. Towards the end of Extract 14 he showed a clear understanding of what was relevant and what was not, calling others who had obviously sidetracked to return to the topic at hand. This shows a high degree of self-regulation of learning activities. Again here he was playing the role of a moderator that guided others back to the right track of discussion.
Extract 14

> Hey,
> Yeah right. SMS and LOVE is two different thing you know. Why do
> you need to make it as one? Think about it. SMS is a technology and
> LOVE is not. SMS can still be expand this its fullest potential but
> whether it is important in our life or not depend on our
> environment. So why else is there to say about yourself, B boy.

I'm sorry, most of my remarks online are meant to be tongue-in-cheek, I'm not really serious
about it. Sorry to cause any misunderstanding, but of course they're two very different things
and should not be compared with each other. Well, like what Mr.XXX said, the LOVE article is
not gonna come until the technical difficulties are sorted out, so let's just focus on SMS now.
That means NO MORE COMPARISONS on which one is better, everybody!

Extract 15

Actually I can be talkative if I have something that I can talk about, it might seem like I'm very
quiet in class because most of the time, I have nothing to talk about (I'm quite a boring person
sometimes)... if I can avoid it, I don't really like to talk nonsense... usually I'm very silent to
people that I do not know so well, people I'm not so close to... yet... I will only open up once I
get to know a person better... then I won't seem so silent to him/her.

Extract 15 was the student explanation to other group members about why he
was quiet in class, perhaps trying to justify his unusual talkativeness online. He
commented that he was very silent to people that he did not know well. But he
seemed to have forgotten that he had been both quiet (silent) and talkative to the same
group of people, encountered in two different environments (virtual through the email
discussion group and face-to-face in class). This seems to suggest that the mediated
online environment has an influence on the way relationships were perceived by
participants. The same group of people who were situated in the virtual and the
physical world were differentially constructed and perceived by this student,
suggesting that there was a perceptual difference between the physically presented
reality of the group and the discursively constructed subjectivity in the virtual world.

It can be concluded from this observation that the online virtual experience
can be a better learning environment where participants are less inhibited in their
language production and are more open to social interaction. At least for the case of
this student, not only his online talkativeness benefited himself by providing him with more opportunities for language output, from the Output Hypothesis point of view, the language he produced also served as a model for others to imitate and thus encourage possible uptakes and learning opportunities for the whole group.

4.2.7.3 Shield of Computer Mediation

In Extract 16, the student reflected on the effect of email on a shy personality (probably referring to himself). He seemed to believe that communication and relationship mediated by email was immune from the rejection of others, that the real life environment was hostile and this caused one to withdraw and limit oneself in real life. This again confirms that the virtual world constructed through email interaction was perceptually different from the real world and was perceived by the student to be somewhat protected.

This has important implications for the anxiety that is usually associated with learners' language production. When the learners perceive the consequences of their language production as less threatening, more language will be produced. According to Output Hypothesis, this will force the syntactic processing of language and help develop automaticity for the weaker students, together with other benefits that can also be derived from the increased language output (see section 2.10.2.1).

**Extract 16**

ps: perhaps e-mail gives a person with a shy personality the opportunity to be outspoken without fear of rejection, but is it perhaps also possible that this person is not in reality shy, circumstances exist which makes this person hesitate and try to limit himself in real life...

Towards the end of the semester, this student posted a totally unrelated email (Extract 17) to the group, which he hastened to make clear at the outset, suggesting
two e-book readers and a brief account of his reading experience. With such an unprompted posting, the student was in fact assuming the role of a tutor without even realising it himself. Indeed, his short comment on the "Dracula book" was on its linguistic properties, which was directly relevant (despite his own comment of this being unrelated in the beginning) to such a language-learning group. What he was doing here reflects the abilities of an autonomous learner as identified by Dickinson (1993):

1. they understand what is being taught, i.e. they have sufficient understanding of language learning to understand the purpose of pedagogical choices;
2. they are able to formulate their own learning objectives;
3. they are able to select and make use of appropriate learning strategies;
4. they are able to monitor their use of these strategies;
5. they are able to self-assess, or monitor their own learning. (pp. 330-331)

Extract 17

Alright this is completely unrelated to anything we're discussing here and I don't know if anyone would be interested in this but if you'd like to get some free online books, here are some links...

Adobe ® Acrobat ® eBook Reader

Microsoft Reader
http://ebooks.barnesandnoble.com/ms_reader/special_features/free_ebooks.asp

I've downloaded the Dracula book and read it and it's wow, really nice... but the language may be a bit advanced for some (I found it a little bit difficult myself) but I think it's still worthwhile.

Extract 18 shows another example of such unelicited behaviour by another student. Here an article relevant to the discussion at hand was attached right away for the reference of other students. The tutor's reply (Extract 19) seems to show that for the first time the tutor realised that it was possible for the students themselves to make contribution to the group through citing external resources and subsequently suggested that the rest did the same. This is an example of learner-centredness that
was not initially intended but later adopted due to the influence of the online environment. Such a shift in power in making instructional decisions was again unlikely in an FTF classroom. The reduced social presence of the tutor in the online group and the ease in obtaining online resources could be the reasons for such self-initiated behaviour online.

Extract 18

hello everyone,
i came across these techniques on line, therefore i think it would be better if everybody understand or have a rough idea about what human cloning is. it would be a great help for those blank-minded ones....so enjoy!!!

[Message truncated]

Extract 19

Thanks xxxx. The info sure help to clear up some fog from our discussion last week. If there's anyone who has something similar or on some other topics could you please share with the group too?

4.2.7.4 Equalisation of Teacher-Learner Status

Extract 20 shows the tutor's attempt to bring to order a deviant student who repeatedly refused to follow instructions. The tutor seemed to realise that it would be difficult for him to exert his power through email and thus threatened to confront the student in the FTF class (there were three hours every week). It was because of this inability to exert the usual power of a teacher that strong words were used (capital letters, which is the typographical equivalence of shouting) in the email to ensure student's obedience.

122
The strong call to order above attracted the reaction of another student (in support of the deviant student) who pointed out to the tutor what she saw as the appropriate behaviour in the online group and what constituted group discussion. In her postscript the student even pointed out to the tutor that it was not right for the tutor to scold those who were seen by the tutor as deviant. Such an open criticism of the tutor by a student who was much lower in status would be unusual if not outrageous in an FTF classroom.

This suggests that the status of a teacher and a student has somehow been equalised due to the properties inherent in the computer-mediated environment. However, such equalisation should not be seen as a problem in an online classroom but should be fully exploited to promote a learner-centred approach to language teaching and learning (see section 4.1.7.5 for the implications).
Extract 21

sir,

it's purely my opinion. what we need here is article, ya, that's we know. however, if there's nothing interesting article(or funny ones like xxxx, xxxx), i believe that group discussion is not there. here will become a compulsory place for us to write e-mails, but not a place for communication, which almost all of us thought it should be!!

therefore, i think what we could do is just minimized that kind of article, but not to forbidden them. that's the fun part of e-mail...(like what we discuss here)

ps: it's not the right way to scold those who wrote that kind of reply. it'll hurt their feelings, because before that we all don't quite understand that we can't crack joke on this place.

Naturally the tutor retorted by asserting his ideological power, i.e. the power inherent in being a teacher, over the student. However from the long-winded justification posted (Extract 22) we can see that the tutor was forced to adopt a status equal to that of the student. Teachers who usually enjoyed the strong ideological power that had been normalised by the students need not justify his or her behaviour to such an extent (see Fairclough, 2001, for a detailed discussion on the relationship between language use and power).

Extract 22

xxxxxx

It's not that I don't know I'll hurt xxxx with the strong words I use. I intended it to hurt. And I did that not because he had cracked jokes, but that his postings so far, except two, have not contributed to the progression and development in the discussion. I'll give you a chronological listing of his nonsense in the following quotations.

CONCLUSION:
VIDEO GAMES IS GOOD FOR EVERYONE !!!! 100% ++ support my own point...

<Sweeping statement without justification.>

can i know who is sakai sakai and who dare to use lengcai as his e-mail name

<Such statement is allowable if comes together with other relevant and helpful comments on the article. All by itself? I'll have to call him to order.>

hey hey hey, who say going to cybercafe will easily influence by others such as smoking,gambling etc bad habits????? DO YOU SEE ME SMOKE? GAMBLING AND OTHER BAD HABITS??

<Another typical samseng like provocative statement. Try say this yourself out loud and tell me what do you think of yourself.>

124
hmmmm, all of your opinions are quite useful for me. i really appreciate.

<If this is personal and one-on-one, it's perfectly OK. To the whole class and create 28 (including me) useless mails? I'll call this littering in the cyberspace.>

sir, i think u must talk with him (xxxxx). anyway sir, he does type "don't read" for the title and why you click it and read???

<1 think this is a really bad joke, especially when this comes from someone who has never shown that he's serious in any discussion, both in class and here.>

I'm receiving almost 100 emails everyday. And I do not wish to waste my time reading contentless emails which don't help anyone to improve their English. If this email discussion group is set up for chit chatting I would have told you so. It's not. That's why the 50 words limit. That's why I post one article every week. That's why I spent 2 hours everyday reading your emails. That's why I spent so much class time to explain to you how email writing in proper English and to write with a clear purpose (except pure joking) will help you improve. That's also why I'm spending so much time writing this reply to you, just to make sure that everyone knows what is useful and acceptable behaviours in cyberspace classroom so that we can all learn together.

Mr xxx

4.2.7.5 Learners’ Empowerment Discussion

From the discussion in the previous section, it seems that the equalisation phenomenon between students’ participation suggested by Dubrovsky, Kiesler, and Sethna (1991) seems to happen between the student and the tutor too. This holds special promise for the learner-centred approach to language education. This is because one of the biggest problems in implementing a learner-centred approach is the unwillingness of the teacher to give up power to control. In a conventional teacher-centred approach to language teaching, the teacher is the one who controls the classroom activities. If there should be a shift to a learner-centred approach to instruction, which implies a shift of power from the teacher to student, it seems that the teacher would be one of the most important factor who can make this shift possible, prevent it. So if the teacher is unwilling to give up power to control, external forces need to be called upon to make this shift of power happen. One of these external forces seems to be the computer-mediated online learning environment.
From the discussion above we see that:

1. The students vie for and assume power through the mediation of computer
2. The teacher was forced to relinquish power due to the suppressed physical
   appearance and status.
3. The teacher-fronted position was not projected through the computer interface
   (see Figure 4.1).

We can thus conclude that the online learning environment has a built-in
environmental support for student autonomy and the effect of equalising the status
between teacher and students. It is thus a good candidate for promoting a learner-
centred language learning environment.

In section 2.10.2.1, where the development of discourse skills through output
is discussed, Carter (1998) has pointed out the importance of being discourse
literate. Most were not sensitive to the presence of an audience and thus showed
no attempt to influence the opinions of others, even when to engage in a dialogue
with other students in order to exchange each other's opinions was stressed at the
outset by the tutor. These students were not aware that individuals can be
manipulated and controlled by language (Carter, 1998).

Extract 23 shows such an example by a student in response to an article. The
tone is neutral and there is no sign of any attempt to manipulate others through
language:
Although the sound produced by telephony might sometimes fuzzy, this is not a frequent matter. People communicate through sound contact is because such kind of discourse give opportunities to themselves in understanding each other's feeling better. When we laugh, whisper or worried, the tone of our voice fluctuate accordingly to express ourselves better to the listener. Of course, text form can also show someone expression by using smiley, different size or colour of the font, but you could only perceive when does he is showing it and not how. Conversing using text also cause some lost in originality. One may be very good in writing congenial and interesting "chat text", but when it come to spontaneous, that might become a different thing. In my point of view, if I want to have a sincere talk with someone, then, I will definitely choose telephony; email for otherwise.

One other unexpected observation of students' response to online explicit corrective feedback on language form given by the tutor was that they were mostly ignored. Most students did not respond in any way to the tutor's feedback, either in the one-on-one emailing or email group discussion, and thus, in these cases, demonstrated no uptake at all. One possible explanation is that, since the interaction with the tutor was mediated by computer and thus not direct, the students felt less obliged to respond. This is understandable, as most social cues are not transmitted through the computer interface.

4.2.8 Network Effect and Vicarious Learning

From the group email discussion data, only about a quarter of the class participated actively in the discussions (posting from about 15 to 35 emails over three months). One would ask whether those who did not participate actively in the group benefited from the email discussion. While it is possible that some might not have learnt anything from the group discussion, lack of overt participation (i.e. posting email to the group) need not suggest that no learning has occurred.

Sutton (2001) points out that from the literature four types of overt interactions have been defined, namely, leaner-content interaction, learner-instructor interaction, learner-learner interaction (Moore, 1989), and learner-interface
interaction (Hilman, Willis, & Gunawardena, 1994). This is shown in Figure 4.1 below.

\[ \text{Figure 4.1 Four Types of Interaction} \]

Sutton (2001) suggests that those who are not participating overtly can learn through vicarious interaction. This happens when an otherwise passive student “actively observes, absorbs, and processes the ongoing interactions between other students and between other students and their instructor” (Sutton, 2001, p. 236), as shown in Figure 4.2.

\[ \text{Figure 4.2 Vicarious Interaction (Adapted from Sutton, 2001, p. 233, Fig. 1)} \]

Sutton’s proposal above is supported by studies conducted by Slimani (1989, 1992) and Dobinson (1996). They discover that low participating and even non-participating students often recalled as much or more from lessons as did high-participating learners.
Slimani (1989) also finds that students recalled more previously unknown linguistic items from lessons if they were topicalised or introduced into the text by students rather than by the teacher. She deduces that low-participating learners were directly benefiting from the high-participating learners. This seems to justify the importance and contribution of learner-learner interaction, even in situations where the learners themselves are not directly involved in the interactions.

Dobinson (1996) confirms Slimani’s finding when she finds that the five students who did not contribute a single turn in their lessons recalled a total of 27 previously unknown words, while the five students who contributed the most turns (37.2 turns) in their lessons only recalled a total of 30. He also finds that the 12 students who took least turns in lessons (25 turns average) recalled exactly the same number of new words (76) as the twelve students who took most turns in lessons (224 turns on average). In essence, some learners appear to learn vicariously from the interactions that they do not take part in directly.

From these studies by Slimani and Dobinson, we can conclude that vicarious learning does occur for certain learners and the effect can be as good or even better than those who participated overtly. Slimani’s finding even suggests that topicalisation by learners (i.e., learners’ contribution) instead of by teachers seems to give more saliency to the language used in the interactions. This can be seen from Extract 24 where one student commented on the language use of a very proficient student (this highly proficient student also produced Extracts 11 to 17).

Extract 24

HEY>that's a long message...I thats really cool! I wonder how you'd have learnt all the funny words and so clearly understood. I mean, good words. thats funny. I was reading it and really amusing.

cy a later. @!
This verbalised sincere admiration for the “cool” language shown in the extract above suggests that weaker learners actually paid attention to such eloquent and articulate use of language. No such comment is likely to be given to the tutor/moderator regardless of how well a tutor writes because a tutor’s proficiency in the target language is presumed and is seen as not comparable to the student’s standard. However outstanding performance by a peer will surprise most especially the weaker learners and may sometimes encourage a sense of competition among learners. Thus more saliency will be accorded to peer contributions compared to those by the teacher.

4.3 Empirical Analysis Discussion

The immediate advantage of having the types of feedback discussed above can be seen with a brief discussion of the psycholinguistic model of language production, using Levelt’s model of language processing (1989, 1993, see Appendix C for the model), which is by far the most widely accepted.

During language production, the surface structure is constructed by the formulator through input from the lexicon that consists of the lemma and the morphophonological information (lexeme). Since the lexicon only represents the current development of the learners’ current interlanguage development that is still not free from “gaps” when compared to the native speaker’s competence, the result of output necessarily reflects these “gaps” in the learner competence. This, however, is not the only linguistic source that the learner can use during language production. The learners can also try to recall from long term or short term memories chunks of target language fragments that they have heard or read and utilise these for wholesale language production, instead of producing from scratch through the mental lexicon.
In the spoken medium this seems to be the only choice available, due to the evanescent nature of speech. In an online written medium such as that of email, there is an additional linguistic source external to the learners’ mental resources for the reuse of language chunk in language production. This resides in the quoted text(s) of the other interlocutor that is automatically attached by the email client software by default (as shown in Extracts 9 and 10 above). This has three important advantages over retrieval from the learners’ memory, be it short or long term. The first is that the original text (or language source) is reproduced in full, including all typographical emphases, instead of the fragmented recalls of the language chunks, and the second is the record is a more or less permanent record that can be subjected to further future manipulation. Third, due to its written permanency, it is a tangible and reliable source for comparison and juxtaposition of learners’ language output, in contrast to the ephemeral and unreliable nature of memory recall.

Feedback received through external input and invariably used for later language production can be stored as unanalysed (memory-based) or analysed (rule-based) language. In the words of Lightbown and Halter (1993), unanalysed memory-based language can still be decoded and the meaning of the message understood in comprehension processing. But for language to be analysed and converted to rules will require the code breaking process. Swain in the formulation of her Output Hypothesis has given primacy to language output as a code breaking process that demands greater analysis and control on the part of the learner. Indeed, as Skehan (1998) has argued, effective comprehension may actually leave the underlying interlanguage system of the learner untouched, as comprehension is partly an autonomous system and relies to certain extent on strategy use. However, since the code breaking process demands greater cognitive effort on the part of the learner, it
will be mentally resource hungry and any provision of extra time for the code breaking process will translate into better language production quality.

In addition to this, in language production, code breaking and the process of language production are simultaneous real-time processes. Thus, bearing in mind that learners’ attentional resources (working memory span) are limited, online localised and contingent planning during language production will provide L2 learners with the best working environment for language production, and language internalisation, as the processes of noticing the linguistic forms will also be optimised.

4.4 Judgemental Analysis

In the following sections, macro-level analyses will be carried out and are aimed at providing valid arguments for the implementation of the two forms of asynchronous NBLT conducted in this study. First, judgemental analyses will be carried out based on the direct participation experience of the researcher in the one-on-one and grouped email discussions of this study on the nature of input and output in email, the NBLT activity features, and the issue of time pressure in the asynchronous email discussion for the learning of an L2. Arguments will then be put forward based on the a priori categories determined by SLA theories and research.

4.4.1 The Nature Of Input In Email

Based on the judgemental analysis of the archived data of this study on the nature of input in email, ten characteristics have been derived:

1. Linguistic forms in orthographic nature, compared to streams of speech in the air.
2. "Waiting" visual data, compared to the ephemeral nature of speech.
3. Extended discourse, sometimes across emails, and not fragmented as in speech.
4. Relatively well structured globally compared to spoken language.
5. Mediated by computer, not direct as in FTF conversation.

6. Socially constructed and interactionally produced as in speech.

7. Has reduced social presence and media richness compared to FTF interaction.

8. Linguistically "pure", no paralinguistic "noise".

9. Finely tuned input as meanings are negotiated interactionally to ensure understanding.

10. Pushing output, unlike monologic essays.

4.4.2 The Nature Of Output In Email

Based on the judgemental analysis of the archived data of this study on the nature of output in email, another five characteristics have been derived, in addition to the ten above on input:

1. Delayed and planned output—internal speech can be fed back to the speech comprehension system repeatedly to be monitored before articulation.

2. Socially constructed and rooted in discursive histories (all previous email exchanges).

3. Generate highly specific input that the language processing system needs to build a coherent set of knowledge.

4. Increased self-initiated output.

5. Resemble oral discourse.
4.4.3 Activity Features in NBLT

Through the judgemental evaluation of NBLT in general, the two settings in this study in particular, I arrive at the following conclusions:

1. Software does not (and cannot) control the goals, the topics, or the duration of activities. Rather, it is the approach adopted by the teacher and the type of task selected for students’ participation.

2. The teacher is free to choose and specify the goals, the topics and the duration of the activities or tasks. However, through their preferences and their use of language, the learners can also play a significant role in shaping the nature of the activities.

4.4.4 Time Pressure in Email Discussion

The time pressure found in email discussion can be quite pressing, especially for those who are used to online communication and receive a lot of emails everyday. The following example, Extract 25, taken from an email discussion group comprising English Language teaching professionals, illustrates the tension between language production monitoring and the existence of time pressure in asynchronous CMC.

A participant like B usually develops a sense of urgency, most probably due to the large amount of email he receives everyday. But such large amount of emails as claimed by B is an extreme case. This is unlikely for most L2 learners who would probably choose to disregard the inherent urgency in email correspondence and make full use of all the time they have to ensure accurate output (at least as accurate as their interlanguages allow), especially when the pronounced goal of an online group is to learn the target language.
8. Learner autonomy is supported

Such a control of time over language production by L2 learners would create a learner-centred online environment that gives students increased autonomy. The teacher or moderator does not control the step-by-step pace of task completion and the responsibility of learning lies to a great extent on the learners themselves (though the general time-frame of task completion is still determined and closely monitored by the teacher/moderator). Thus in an asynchronous learning system teachers would act as guide and facilitator who provide necessary modelling, mediation and scaffolding to the students to ensure optimal learning experience. More importantly, due to individual differences, the teacher can provide varying degrees of control to individuals as and when required by the students. Such a request and feedback process is greatly eased by the convenience offered by CMC, which can be carried out anytime and anywhere at very low cost.

4.4.6 Effective Task-Based Instruction

The first one-on-one instructional setting involved a naturalistic communication task in which the students were to carry out socialising activities through sending emails to the instructor. On the part of the instructor, even though the explicit intent would be everyday exchange of emails in fulfilling socialisation needs, the generally implicit intent was to provide second language instruction and a conducive online environment for language learning.

The second email group discussion only served to provide an online host environment for the learning of the target language that was English. Only occasional explicit teaching of the language was provided (even then it was not posted to the group address but to the individual concerned only) and the instructor/moderator only sought to facilitate online discussion by posting articles (in line with the ESP goal of
possible constraints. Thus, when used as a tool for learning and teaching, such a conception of freedom in interaction will, by default, create the best possible environment for unhindered interaction. Such freedom will sometimes even prevent regulation by the instructor, as seen in the empirical analysis above.

Negotiation of meaning is inherent in all exchange of ideas, as no two persons can mean exactly the same with their use of words. This can be easily observed in all authentic exchanges of authentic ideas between authentic participants. These negotiations of meaning would be different from the negotiation as found in the turn-at-talk in everyday speech. But rather, it is a matching and reconstruction of the mental lexicon of the participants during the reading of individual email, which should be seen as an inseparable part of interaction with the email text, and which may or may not be explicitly expressed in observable verbal behaviour. However, we can get a glimpse of this mental process in the extended reply found in email exchanges, such as in Extract 22, by the tutor.

Instances of negotiation of meaning as found in face-to-face conversation, where negotiation is carried out in a series of exchanges, were rarely found in email interaction. This is the case both for the one-on-one setting and the email discussion groups in this study. In those few cases when it happened, they were settled immediately in the response move right after the initiation questions (Extract 22). This could be explained by the textual permanence of email, where the text would always be available for the reader for any confirmation checks, as opposed to the ephemeral nature of speech. Thus ambiguity in speech does not usually translate directly to the written medium, except for a spelling mistake, which is analogous to a mispronunciation in speech.
In addition, most responses made would be quite comprehensive in clarifying any ambiguous meaning. Furthermore, experienced emailers would anticipate further questions and give an extensive response so as to avoid further exchange of emails on the issue.

2. **Learners interact in the target language with an authentic audience**

Two things are involved in this condition. The first is that the interaction will need to be in the target language and the second is that the interaction will need to engage an authentic audience.

Due to the written mode of communication, unconscious code switching will be unlikely. This is because the degree of focus on form during written text production would be very high. If they occur at all it would be intentional, probably due to the unavailability of a mental construct in the target language (as discussed above in section 4.1.1 and illustrated by Extracts 1 and 2). This will encourage the noticing of the correct form if the response contains the target form that was unavailable at first. This is what is meant by a fine-tuned input in section 4.3.1 above. Generally, the focus on target language will be maintained.

Due to the ease and low cost of sending an email and the immediate availability of a virtual space for online interaction, designing a task that involves only authentic audience is now easily attainable, as compared to a traditional classroom that is constrained by the physical setting. Any activities thus carried out with an authentic online audience will guarantee purposeful interaction and ensure subsequent motivation for the participants to engage more fully and longer. This will ensure sustained student interest when the novelty of the activities wears off in the long run.
3. Learners are involved in authentic tasks

Authentic tasks are those that have the same types of cognitive challenges that are as complicated as real-world tasks. As exemplified in the two online tasks discussed in previous sections, the direct involvement in the everyday socialising activities is a real-world task itself, both in the one-on-one setting and the group email discussion setting.

For the email group discussion, even though the task was not entirely authentic, it resembled the many discussion list activities set up for various special interest groups (SIGs). A class of students could hardly be seen as homogeneous in terms of their interests and be treated as an SIG even though they are taking the same professional course (e.g. computer science). Thus a common reading schedule would need to be introduced to impose some structure and effect an alignment of interest among the students. The outcome, after this preliminary task manipulation, would to a great extent resemble those of online SIGs where exchange of personal opinions, ideas and critical comments to each other through online interaction is a norm.

Such a level of authenticity can only be achieved in a virtual environment (created by the use of CMC) which is much more malleable in terms of environmental factors compared to a physical class in an institution.

4. Learners are exposed to and encouraged to produce varied and creative language

Spolsky (1989) claims that the outcome of language learning depends in large measure on the amount and kind of exposure to the target language (p.166). Krashen and Terrell (1983) also argue for the importance of having a variety of sources of language input. However, it is not just in input that variety and creativity is essential, as output is also seen as a means for language development (Swain, 1985, 1993;
Swain and Lapkin, 1995). Thus, a condition will have to be created to ensure that learners are exposed to varied and creative language use and have the opportunity at the same time to produce them. In an essentially dialogic environment such as that of an email discussion group, such opportunities are abundant and the learners will be able to fully engage their receptive and productive language skills. CMC owes its existence to interaction that entails language input and output between interlocutors through the mediation of the computer. Thus, the fact that CMC is used will ensure the incorporation of receptive and productive skills.

The virtual online learning environment, as created through the use of CMC, is itself a community in its entirety despite the disembodied experience it offers. Just as a physical community is an arena for varied and creative language use, a virtual online learning environment is also capable of catering to the needs of different personal learning styles and idiosyncratic preferences, and thus their varied language use. A virtual community that exists in cyberspace should be operating in the same manner with similar accommodating processes in force.

5. **Learners have enough time and feedback**

The fact that learners need adequate time and feedback in their learning of an L2 is obvious, as this facilitates the formulation of ideas. However, due to individual differences in ability, motivation, and other factors, the time required and the type of feedback required can vary to a great extent. Thus, some flexibility must be built into the time line of task completion so that every learner can complete his tasks successfully in his own time and preferred ways.

This is where the asynchronicity of email and other forms of asynchronous CMC comes in. Learners can take as much time as they need to complete the task at hand without feeling the pressure of time. Delay in such an asynchronous system is
assumed and taken for granted by all participants. Indeed it is this nature of normalised asynchronicity that constitutes the strength of instruction and potential learning in such an online environment.

In the same light, instructors also benefit from the written and asynchronous nature of email. Explicit and implicit feedback can be provided in the instructor's own time so that the most appropriate and optimal type of feedback can be given after careful evaluation of the learner's email text and context. In giving feedback through email, explicit grammatical feedback can be given at the end of the email as asides, without interrupting the main meaning-focus discussion of the email. In many cases, a discursive implicit feedback given as recasts can be made explicit through textual formatting (use of colour and different font size for inflectional suffix\textsuperscript{30}). Such precise feedback is usually not possible in a physical classroom when an instructor needs to provide feedback right on the spot as required by the situation at hand and usually do not have enough time to decide on the appropriateness of the type of feedback given. In fact, most feedback is given instinctively without the instructor's realisation.

6. **Learners are guided to attend mindfully to the learning process**

This concerns whether the learners will take the opportunities provided by the first five conditions and make the best of them. This arises from Salomon's (1990) suggestion that learners must be mindful of the learning process. Egbert, Chao, and Hanson-Smith (1999) suggest the need for metacognitive guidance, for example, on how to learn, in order to ensure mindful attention from students.

\textsuperscript{30} This is increasingly possible when almost all email clients (such as Microsoft Outlook Express, Netscape Messenger, etc.) support Hypertext Mark-up Language (HTML) and with the proliferation of free web-based email accounts, such as Yahoo!Mail and Hotmail.
I would argue, however, that a positive orientation (integrative and instrumental) on the part of the students, as suggested by Lambert (1974) and discussed in Chapter Two, is a more relevant issue here and will need to be cultivated.

CMC can be a community-building tool that entails an online culture. This culture regulates the virtual persons with unique identities in cyberspace. Such a characteristic will instil an interest in the online learning of an L2 because of a sincere and personal interest in the people and culture represented by the online language group, which is a group of L2 learners communicating in their target language. This can be motivating for the weaker students due to the fact that the more proficient students will have a louder and more dominant voice in the online group and thus serve as a model for emulation. A louder “voice” will mean longer and more frequent emails sent to the group and dominance will have to be expressed through convincing and powerful arguments through cogent language use. This will contribute to the overall quality of the email postings of the online group and thus serve as an acquisition rich environment.

CMC will also cultivate an instrumental orientation as communicating with an authentic audience will help students see the practical value and advantages of learning a new language as they try out authentic communication tasks.

The argument here is that with a positive orientation, learners will be mindful of the learning process because they see a reason to do so. As to whether they know how to be mindful instead of relying on metacognitive guidance, the collaborative learning environment of the online discussion group is believed to provide the needed scaffolding for the weaker learners.
7. Learners work in an atmosphere with an ideal stress/anxiety level

Most of the stress and anxiety experienced by L2 learners is due to the fear that they may not be able to perform as expected by others, especially in a face-to-face context, where effort is needed to maintain face. However, for weaker L2 learners such experiences are usually intimidating as they are not able to produce the desired language as fast and as accurately as is required, given their limited interlanguage, to sustain a free flowing conversation. Such experiences are likely to be debilitating for the learners, and the subsequent natural response will be to avoid such embarrassing situations by refraining from speaking in future occasions. A reduction in language production will in turn reduce interactive input from others and ultimately isolate the learners from opportunities for language contact (Spolsky, 1989) and thus opportunities for them to acquire language. In a disembodied and faceless interaction with others using CMC, face issue is greatly reduced and this can encourage a bolder and higher degree of language use.

Another factor that contributes to reduced anxiety is that with asynchronous CMC, any message can be composed in the learners' own time, with additional planning and editing time made possible through the asynchronicity of the medium. The time pressure is eliminated to a great extent (though not entirely, as shown in section 4.2.4). This will give the learners the time to plan their output and thus improve their output quality. The learners are, however, still not relieved of the need to communicate in the target language in CMC (Condition 2) and such a need to communicate, together with asynchronicity and lack of face, would create an ideal stress/anxiety level for language learning.
8. Learner autonomy is supported

Such a control of time over language production by L2 learners would create a learner-centred online environment that gives students increased autonomy. The teacher or moderator does not control the step-by-step pace of task completion and the responsibility of learning lies to a great extent on the learners themselves (though the general time-frame of task completion is still determined and closely monitored by the teacher/moderator). Thus in an asynchronous learning system teachers would act as guide and facilitator who provide necessary modelling, mediation and scaffolding to the students to ensure optimal learning experience. More importantly, due to individual differences, the teacher can provide varying degrees of control to individuals as and when required by the students. Such a request and feedback process is greatly eased by the convenience offered by CMC, which can be carried out anytime and anywhere at very low cost.

4.4.6 Effective Task-Based Instruction

The first one-on-one instructional setting involved a naturalistic communication task in which the students were to carry out socialising activities through sending emails to the instructor. On the part of the instructor, even though the explicit intent would be everyday exchange of emails in fulfilling socialisation needs, the generally implicit intent was to provide second language instruction and a conducive online environment for language learning.

The second email group discussion only served to provide an online host environment for the learning of the target language that was English. Only occasional explicit teaching of the language was provided (even then it was not posted to the group address but to the individual concerned only) and the instructor/moderator only sought to facilitate online discussion by posting articles (in line with the ESP goal of
the course) to set the topics of discussion and post relevant questions to students to get the discussion going.

I will now evaluate the above two online tasks using Skehan's (1998) five criteria for effective task-based instruction.

1. **Choose a range of target structures**

   Since SLA research has shown that instruction only serves to speed up the process of acquisition but is unlikely to speed up the sequence of development for particular structure, it would be wise to target a range of language structures instead of targeting one specific structure. This is because we often do not know what the acquisitional sequences are. For an intermediate learner, it could be argued that most of the linguistic features that were to be acquired are at a developmental stage. Thus a scattergun approach is more likely to reap more gains in terms of linguistic structures learnt, either in terms of new structures or more control over developmental structures.

   The incidental Type 3 FFI adopted in the one-on-one setting would naturally target a range of structures with optimal contingency. Even though in the group email discussion setting no specific target structure was chosen to be taught, the naturalistic online immersion learning environment would ensure that the weaker students would be exposed to all necessary and important structures provided by more proficient learners. The weaker can also benefit from the vicarious interactions they indulged in to actively learn certain language structures.

2. **Choose tasks which meet the utility criterion**

   Utility refers to the degrees of likelihood that a particular structure will be used by learners as they perform a task. If a structure has "utility" in a task, it would be a useful but not necessary structure for completing a task. Since this condition
depends on the first criterion mentioned above where a range of structures must be
targeted in order to ensure maximum utility, it can be assumed that both online tasks
in this study meet the utility criterion too.

More importantly, in the second group task, since all the students were
discussing the same topic and were carrying out online dialogues, it was very likely
that a structure used by one student to successfully communicate an intended meaning
could have some utility for the other students. This is because they were discussing
the same topic and would most likely find the structure used by their group members
useful. Taking vicarious learning into account, the possibility that a language structure
meets the utility criterion will be higher. This is because all actively observing group
members will also share the utility experienced by other group members

3. Select and sequence tasks to achieve balanced goal development

Skehan (1998) associates the goal of L2 tasks with three dimensions of
language performance: fluency, accuracy, and complexity. Fluency is achieved
through memorised and integrated language elements. Accuracy is achieved when
learners try to use an interlanguage system of a particular level to produce correct, but
possibly limited, language. Complexity is defined as a willingness to take risks, to try
out new forms even though they may not be completely correct (Skehan, 1998, p.5).

For the two online tasks, written fluency could be achieved through greatly
increased output. For the one-on-one email discussion, one subject produced 2963
words over 2 months, which is equivalent to about 8 essays with 350 words. For the
group email discussion, 2444 emails were sent to the 7 email groups over 3 months,
with each student averages around 10. Though this was not very high, it should be
borne in mind that such online activities were carried out in addition to the students’
normal class time and no credit was given for their participation online.
Accuracy could be achieved through real-time planning (plan as you write, which is not possible in face-to-face conversation), which was made possible in an asynchronous online environment, as time is always non-critical. The complexity of language can be improved through the reduced face factor, due to the mediating role of computer. The fact that language production was carried out in an asynchronous environment, selective attention can be paid to all three areas one after another, without communicative pressure and thus ensures a balance development in all three dimensions.

4. Maximise the chances of focus on form through attentional manipulation

Attentional manipulation for focus on form can be achieved through the teacher’s use of typographical highlighting as a replacement for prosodic means, in addition to the linguistic highlighting. On a text-based message, morphological features can be easily highlighted through detailed and specific typographical means (colour coding, capitalisation, etc.) without being too obtrusive so that the focus on meaning can be maintained at all times. This can be seen in Extract 5 where typographical and linguistic highlighting was used simultaneously.

Explicit negative feedback can be provided contingently as part of the message (Extract 7) or as asides and postscripts after the main message (Extract 8). With this, immediate feedback can be given without disrupting the integrity of the message where meaning will be the main focus.

5. Use cycles of accountability

Accountability refers to the learners’ responsibility to keep track of what they are learning. In a naturalistic online learning environment, the students who are engaged in both types of online tasks would need to be accountable for their own learning by keeping stock of what they have learnt. In other words, they need to be
autonomous in their learning. However, students cannot be left entirely on their own. Therefore, the teachers would have to draw their attention to the need to be aware of the language that they are acquiring in such a way that the students can take stock of where they are and plan for self-improvement. This can be seen in Extracts 14 and 15, where the students showed signs of self-regulation, unprompted by the tutor.

The cycles imply that this process needs to be ongoing as learners work with a variety of tasks in a somewhat unpredictable way. This is necessary especially when NBLT does not impose a fixed structure on what can be done and what cannot. This could be achieved with comparative ease and at anytime by the teacher as all the email exchanges were conveniently archived either in one’s computer (i.e. in the email client) or at the groups’ websites to help effective monitoring of language development by learners. It can be achieved through asides in email using explicit grammatical correction or explanation. However in actual meaning focused activity, students still have to take on an active role in identifying mistakes and self-monitor, as demonstrated by the student quoted in Extracts 11 to 17 above.

4.5 Judgemental Analysis Discussion

From the judgemental analysis above, it can be seen that both forms of NBLT (one-on-one online tutoring and online group discussion) can be effective in promoting language acquisition based on the principles derived from SLA research.

The text-based asynchronous CMC environment is found to be a conducive environment for second language instruction based on Skehan’s (1998) five criteria for effective task-based instruction, considering the kinds and nature of feedback that are made possible through the electronic time-displaced (asynchronous) medium. This is important as it shows that NBLT can be sound and viable not only at the theoretical
level but also at the lower task-based level. This should also suggest a higher potential and practicality when it comes to the stage of implementation.