2
Analysing Needs

2.1   Introduction

This chapter discusses the importance of needs analysis in ESP and describes how teachers and course developers set about investigating needs. The first section defines needs analysis. The second section presents and discusses a set of hypothetical scenarios in which ESP courses were set up without a careful investigation of needs. The third section describes the role of needs analysis in course design. The fourth section suggests ways ESP course developers and teachers can use published needs analyses to help them investigate needs in their own contexts. The final section outlines the various types of information that can be collected in a needs analysis project.

2.2   Definitions of needs analysis

ESP courses set out to teach the language and communication skills that specific groups of language learners need or will need to function effectively in their disciplines of study, professions or workplaces. Because ESP focuses on teaching specific language and communication skills, ESP course design usually includes a stage in which the course developers identify what specific language and skills the group of language learners will need. The identification of language and skills is used in determining and refining the content for the ESP course. It can also be used to assess learners and learning at the end of the course. This process is termed 'needs analysis'.

Over the years needs analysis has become increasingly sophisticated. In the early years of ESP, needs analysis tended to be construed as a fairly simple pre-course procedure involving analysis of the target situation. However, this is no longer the case (Garcia Mayo, 2000; Tajino, James and Kijima, 2005). Read the two definitions below. The first appeared in the initial volume of the journal *English for Specific Purposes* in 1980 and the second appeared in 1998.

How has the notion of needs analysis in ESP been expanded?

1. Chambers (1980):

   Needs analysis should be concerned with the establishment of communicative needs and their realisations, resulting from an analysis of the communication in the target situation – what I will refer to as target situation analysis.

2. Dudley-Evans and St John (1998) offer a 'current concept of needs analysis' (p. 125):

   A. Professional information about the learners: The tasks and activities learners are/will be using English for – *target situation analysis* and *objective needs*.

   B. Personal information about the learners: Factors which may affect the way they learn such as previous learning experiences, cultural information, reasons for attending the course and expectations of it, attitude to English – *wants*, *means* and *subjective needs*.

   C. English language information about the learners: What their current skills and language use are – *present situation analysis* – which allows us to assess (D).

   D. The learners' lacks: The gap between (C) and (A) – *lacks*.

   E. Language learning information: Effective ways of learning the skills and language in (D) – *learning needs*.

   F. Professional communication information about (A): Knowledge of how language and skills are used in the target situation – *linguistic analysis*, *discourse analysis*, *genre analysis*.

   G. What is wanted from the course.

   H. Information about how the course will be run – *means analysis*.

West (1997, pp. 70–1) reports on the expanding concept of needs analysis and uses the metaphor of a journey to describe the elements involved. In the early days needs analyses focused largely on *necessities* or *objective needs* representing '*the destination* of the learner's journey'. These analyses aimed to determine priorities, such as, which skills (reading, writing, listening, speaking), and which situations or tasks, such as speaking on the telephone or writing minutes from meetings, were more or less important in the target situation. Later the concept of needs analysis was expanded to include 'deficiency analysis' (*lacks* or the gap between what the learner needs to know to operate in the target situation and the learner's present language proficiency). This analysis represented *the point of departure* for the language-learning journey. In time 'strategy analysis' (the preferred approaches and methods in teaching and learning) was also included in needs analysis. This represented *the means of travel*. And later 'means analysis' (identification of the constraints and opportunities in the teaching situation) was added. This analysis included gathering information on the classroom culture, learner factors, teacher

profiles and the status of language teaching in the organization. Means analysis represented *the ESP journey*. Amalgamating the ideas described above, the definition of needs analysis that will be used in this book is given below.

Needs analysis in ESP refers to a course development process. In this process the language and skills that the learners will use in their target professional or vocational workplace or in their study areas are identified and considered in relation to the present state of knowledge of the learners, their perceptions of their needs and the practical possibilities and constraints of the teaching context. The information obtained from this process is used in determining and refining the content and method of the ESP course. The needs analysis process involves:

• Target situation analysis: Identification of tasks, activities and skills learners are/will be using English for; what the learners should ideally know and be able to do.
• Discourse analysis: Descriptions of the language used in the above.
• Present situation analysis: Identification of what the learners do and do not know and can or cannot do in relation to the demands of the target situation.
• Learner factor analysis: Identification of learner factors such as their motivation, how they learn and their perceptions of their needs.
• Teaching context analysis: Identification of factors related to the environment in which the course will run. Consideration of what realistically the ESP course and teacher can offer.

Needs analysis should not be seen as an entirely objective procedure. Hyland (2008, p. 113) reminds us, 'Needs analysis is like any other classroom practice in that it involves decisions based on teachers' interests, values, and beliefs about teaching, learning and language.'

Sysoyev (2001) makes links between needs analysis in ESP and L. Vygotsky's (1978) notion of the Zone of Proximal Development. In this notion there are two stages in the development of an individual. The first stage represents what the learner can do independently. The second stage represents the potential of that individual and what he or she can achieve with the help of another more competent person. The Zone of Proximal Development is the distance between the two stages. The mediator is the person who helps the learners move from the first to the second stage. In ESP, the mediator is the teacher and the second stage is the realization of their needs.

2.3   Hypothetical scenarios

In this section a number of hypothetical scenarios are presented. Each shows an ESP course that set out to address language needs but despite all good intentions failed to do so in some respects. After reading each scenario, consider what went wrong and suggest reasons why the ESP course failed to meet expectations.

2.3.1   The English for general academic purposes discussion skills course

The Department of English Language Studies in a university decides to offer a discussion skills course to complement the existing English for General Academic Purposes programme for undergraduate students. The programme currently has courses on academic writing and listening. Students on the programme have mentioned that they are struggling to communicate orally and participate in their subject classes. The teachers in the English Language Unit meet to discuss what the content of the discussion skills course should be. They recall their own student days. Most of them had studied arts subjects such as history, foreign languages and literature and could remember the heated seminar discussions they participated in and the lively discussions they had enjoyed. They decide to develop the discussion skills course around a set of general interest topics and issues, such as whether the government should continue to fund student fees. When the teachers tell the students in their writing and listening classes about the discussion skills course that will soon be offered, the students appear enthusiastic.

The next year the course and materials are ready. In the first semester relatively few students enrol for the course and most of those who do already have very good speaking skills. In the second semester even fewer students enrol and these seem to have even better speaking skills.

- What seems to have gone wrong?
- What was missing from the investigation of needs?

2.3.1.1   *Analysis*

It is clear that the type of students the course had aimed to attract have in fact not been attracted to this course. In fact, the course appears to be attracting students who already have good speaking and discussion skills. What has gone wrong in terms of needs analysis here? The teachers/course developers did not find out how important academic speaking events actually are in the target situation. Students nearly always need to write assignments and answer examination questions and attend some form of lectures (and this explains why they are attracted to the courses offered on academic writing and listening). However, for many students, speaking events are relatively infrequent in their academic studies. The teachers did not investigate how important speaking is. The teachers had mainly studied art subjects themselves. Such subjects often include more discussion and seminars than other disciplines such as the hard sciences. Needs may vary considerably in different disciplines. Was this considered? The teachers reflected on the modes of instruction they had experienced as university students. But what may have been true in the past may no longer be so.

The teachers/course developers also needed to find out students' perceptions about the importance of academic speaking (learner factor analysis). For example, are the students assessed on their participation in discussions and seminars? In which disciplines and subjects are the students required to make presentations and how important are the grades they receive for them? If a skill or aspect of language use is not particularly important, it is unlikely that students will be motivated to invest valuable time in it.

The teachers/course developers neglected to investigate how often the students participate in class discussion in their subject classes and the students' perceptions of how important discussion skills are. Questions such as those below could have been used to survey the students:

1. Do you need to participate in class discussions as part of your university studies?
   Yes/No

   If yes,

   How frequent are class discussions?

   How are you assessed (if at all) on this?

2. Are you required to give presentations?
   Yes/No

   If yes,

   How frequent are these presentations?

   How are you assessed (if at all) on these?

3. Rank the following skills in terms of their importance for your academic studies:

   Writing
   Speaking
   Listening
   Reading

4. How important on a scale of 0–5 are the following for success in your studies? 5 is very important and 0 is not important at all.

   Academic writing
   Academic speaking
   Academic listening
   Academic reading

Had the teachers/course developers found that speaking does feature quite strongly for the students and is important for them, they could have investigated needs in more detail by observing speak events in the university (target situation analysis) and learners' ability to speak in academic events (present situation analysis).

2.3.2   The writing course for overseas-trained dentists

A number of overseas-trained dentists have immigrated to an English-speaking country. They are preparing to sit the registration exams which, if they pass, will allow them to work as dentists. A government-sponsored bridging programme has been established to help them prepare for the exams. The course is run at a university. The programme provides courses on medical and dental topics, ethical issues and the law surrounding medical practices in the country.

The English-language-teaching unit at the university has been approached by the organizers of the bridging programme and asked to provide an English writing course. It has been noted that the writing of some of the overseas-trained dentists who sat the registration exams to date was poorly organized and expressed. The English-language unit appoints a teacher. The teacher, who is given very little time to develop the course, devises a syllabus focusing on paragraph and essay organization and based on topics related to dentistry, such as, the addition of fluoride to tap water and the relationship between smoking and diseases of the mouth (topics that the teacher has discovered from reading recent issues of the regional dental journal).

In teaching the course, the teacher devotes a good deal of time to responding to the students' writing. She provides feedback and corrections on the students' writing in terms of organization and breakdowns in meaning. Often she reformulates the students' sentences.

Half way through the course the teacher conducts a course evaluation. The class members are very positive about the efforts of the teacher on their behalf and they have clearly appreciated the very detailed feedback on their writing the teacher has supplied. The teacher is surprised to find that although they feel the writing course has been useful for developing their ability to write in English generally, they think it will have limited impact on their actual performance in the registration exams and would prefer to spend the remaining time before the exams preparing by self-study rather than continuing with the writing classes.

- What seems to have gone wrong?
- What was missing from the investigation of needs?

2.3.2.1   Analysis

The class members are voting with their feet. They feel the course does not meet their needs and would prefer to spend their time in self-study. Why did

the teacher set up and run a course with limited relevance to needs? The teacher has relied exclusively on one source of information about the students' needs – the bridging course organizers. The organizers are not language teachers and most probably have a limited understanding of the nature of language use and communication and only a partial understanding of the nature of writing and written text. The bridging course organizers have requested a course in 'written English' and the teacher has provided one without conducting her own investigation and analysis of needs. She has not investigated the students' perceptions of their needs (learner factors analysis). In assessing needs it can be important to consider more than one party's view of needs.

What the teacher could have done was make her own assessment of the tasks the students would be using English for. In this case, the overseas-trained dentists are focused entirely on passing their registration exam. They are less interested in developing their general ability to write English even on topics related to dentistry. We would expect that the dentists want to know what writing tasks or genres they are expected to write on in the exam and that they would like to have these genres described and deconstructed for them so that they can master them. There is also a clash here between the bridging course organizers' focus on long-term needs – to develop the dentists' ability to write in English – and the short-term needs, as seen by the dentist themselves, to know enough about what text types they will be required to write in the exam. The teacher needs also to make a teaching-context analysis and ask what can realistically be achieved by the ESP course. In this case, the course is short term and so realistically cannot do much to develop writing proficiency per se.

The teacher could have talked to the overseas-trained dentists as well as the bridging course organisers before she developed the course and materials. She could have examined past copies of the registration exam and analysed the writing tasks and the discourse and genre features they entailed (discourse and genre analysis).

Some questions to guide the teacher's investigation of needs can be suggested:

1. How do the different parties (the bridging course organizers and the overseas dentists) describe needs?
2. What kinds of writing (text types) are involved in the exam and what difficulties do the students have with them?
3. What realistically can be taught about writing these texts types in a limited time period?

The teacher could also interview the dentists to find out about their learning styles. It is possible that as mature and highly educated adults they would prefer self-study options and some one-on-one or small group sessions to get feedback on their writing rather than through a whole class, teacher-fronted option.

2.3.3   The language for care home workers course

Anna has been asked to provide language support for a small group of care home workers. They have come from an East Asian country to work in a rest home and hospital facility for the elderly in an English-speaking country. Most of the care workers were formerly nurses in their home countries. Their role as care workers involves looking after the physical and emotional needs of the elderly residents. The facility's nursing and medical staff members are pleased with the work the new care workers do. However, there have been some complaints from the residents about difficulties communicating with the new group of care workers. The nursing manager reports that when she questioned the residents about the problem they mentioned poor pronunciation and not being able to understand the care workers' accents.

Anna, a relative of one of the facility's medical officers, has just finished a MA programme in English Language Teaching and before that she taught English in a small language school in Thailand for a year. On the MA programme she took courses in a range of subjects such as second-language acquisition, descriptions of modern English language and language testing. There was no ESP course on offer. Anna is employed by the rest care facility to provide a weekly two-hour session to help the care workers improve their pronunciation and speaking. Anna works with the care workers to help achieve clear enunciation. She finds out from the care workers which language expressions, conversational routines and vocabulary they use regularly with the residents. Anna uses role plays in her teaching and encourages the care workers to use 'clear enunciation' in them. She introduces them to a number of self-study techniques for working on pronunciation and speaking.

Anna is surprised to find that even in her first teaching session with the care workers she had almost no difficulty understanding the care workers' accents or pronunciation herself. The language sessions prove to be a lot of fun and the care workers take their self-studies seriously. The care workers enjoy their time out from caring for the elderly residents. Everyone is happy, except that is for the residents who continue to complain.

- What seems to have gone wrong?
- What was missing from the investigation of needs?

2.3.3.1   *Analysis*

The course that Anna has offered has appealed to the care workers but has clearly not met the needs for which it was set up as the patients do not feel communication has improved. As in the previous scenario, the initial analysis of the problem has been made by a non-language specialist (the nursing manager) who simply took the patients' assessment of the problem at face value.

The question remains – what perceived needs of the patients are the care workers failing to meet? If Anna can follow the care workers' pronunciation, then it is unlikely that pronunciation is the cause of the problem here. There is a communication problem but it has been wrongly identified.

Anna needs to conduct her own investigation to try to identify the source of the problem. She could observe the patients interacting with the care workers and try to identify for herself the root cause of communication difficulties rather than relying on second-hand reports. Possible causes of the problem include the care workers' speaking too softly or not using enough repetition and confirmation checks. Anna could usefully compare interactions between patients and the established care workers in the facility and between them and the cohort of new care workers. What is it the new cohort does differently in terms of communication and interaction? Is it possible that the established care workers give fuller explanations to the patients about what is going on or what they need to do? Is it possible that more experienced care workers use less technical medical terms or less formal language? Is it possible that they use more humour in their interactions? Is there really a problem here at all? Is it a language problem? Is it a problem related to some or all of the new care workers? Is it a problem of unrealistic expectations on the part of the residents? She could observe how the experienced care workers and the new cohort of care workers interact with the patients. These are the kind of areas Anna could investigate.

2.4   Needs analysis as a course design process

The above scenarios show how important it is to explore and consider needs before setting up a course of instruction. It the first scenario, a more considered analysis of needs and the situation may have deterred the teachers from setting up an academic discussion skills course. In the second case, the information gleaned from needs analysis could have helped the teacher focus instruction on key written genres important for the registration exam. The focus of the course may then have been sufficiently narrowed down to appeal to the class. In the third case, findings from observations may have led to the development of a course with a very different focus such as interaction skills.

Needs analysis also plays a role in refining and evaluating ongoing ESP courses. For example, in the second scenario, in coming years the dental registration exam may change and different types of writing may be required. Clearly, the ESP teacher will need this information to revise her course. Or, the teacher becomes increasing familiar with the medical staff on the bridging course and this allows her to examine past exam papers to see what strengths and weaknesses are evident in candidates' writing. She may be able to interview those who mark the exams to find out what they see as strengths and weaknesses in sample papers. She could then include a focus on these precise areas in her teaching.
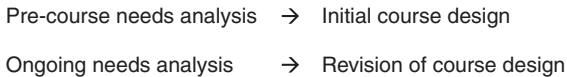
Pre-course needs analysis   →   Initial course design

Ongoing needs analysis   →   Revision of course design

Figure 2.1   The role of needs analysis in course design

Teachers working on ESP courses often find that their understanding of the target situation or learners' needs develop as they work on the ESP course and that they use this developing understanding to modify the course. If the teachers work within the target situation such as the teacher on the bridging course, they are often able to gain increased access over time to information such as the end users' perspectives. All of this provides valuable information that can be used to refine the existing ESP course.

In its simplest form, needs analysis is a pre-course design process in which information is gathered to help the teacher or course developer decide what the course should focus on, what content in terms of language or skills to include and what teaching/learning methods to employ. Over time needs can change and teachers also gain increased understanding of the situation and the learners' needs in relation to it. Thus needs analysis also plays a role in refining the ESP course once it is set up and running. See Figure 2.1.

2.5   Building on existing knowledge

It has been suggested in the previous sections of this chapter that teachers or course developers need to carefully investigate needs when setting up or refining ESP courses. The examples given so far about how to investigate needs have all been suggestions for collecting primary data, that is, suggestions for analysing needs from scratch. However, sometimes other ESP courses have been set up for similar situations or students and reports on these have been published. The teacher or course developer can glean useful information or ideas from these reports to help in his or her own needs analysis project. The teacher or course developer can use the reports on these established courses as a starting point for conceptualizing needs and getting ideas about what kind of data to collect and how to gather it. In other words, not all the thinking and information gathering needs to be done ab initio.

2.5.1   The English for general academic purposes discussion skills course

It would have been possible to delve into some of the research literature in the initial stages of considering whether to establish the course. A number of studies have aimed to identify the skills university students need. The studies investigated needs in other contexts and so the actual findings have only limited

relevance. However, the studies often raise a number of issues that could have been a useful point of departure for the teachers in our scenario.

Two published studies focusing on identification of students' listening and speaking needs that could have helped in this scenario are *Students' Views of Academic Aural/Oral Skill: A Comparative Analysis* by D. Ferris (1998) and *Academic Oral Communication Needs of East Asian International Graduate Students in Non-Science and Non-Engineering Fields* by S. Kim (2006).

Ferris (1998) surveyed over 700 ESL students and 200 faculty members at three tertiary institutions in the US. In one part of the survey, students were asked about the aural/oral skills needed in their studies. The study revealed that the two speaking skills most students required 'always' or 'often' were class participation and small group work and the skills required only 'sometimes' or 'never' were class debates, student-led discussions and formal speeches (p. 299). Interestingly, the speaking skills the students reported as 'always' or 'often' finding difficult were those they least required (formal speeches, discussion leading and class debate).

The survey showed that the skills needed varied according to institution, course level, class size and academic discipline. It also showed that student and faculty responses differed considerably. In explaining these differences, Ferris points out that professors 'may not always be the best judges of the ways in which their students are struggling … by the same token, students may not be the most accurate informants on what the professors actually require' (p. 307).

Kim (2006) investigated the needs of East Asian graduate students at a US university using a web-based questionnaire to survey 280 students. The questionnaire asked about their listening/speaking skill requirements, their perceptions of their difficulties in meeting these requirements and which particular listening or speaking skills they saw as important for their academic success.

Some results from Kim's (2006) study contrasted with the results of Ferris' (1998) study. Kim found, for example, that the great majority of students reported they always or frequently were expected to participate in whole-class discussions, discuss readings or participate in small group discussion activities in class. Some findings were similar: raising questions in class was a common requirement. The respondents in Kim's study found leading class discussions the most difficult listening/speaking skill, followed by participating in whole-class discussions, then participating in small group discussions and next giving formal oral academic presentations. The survey asked the respondents to rank the degree of importance of the skill areas including pronunciation, understanding lectures, general listening comprehension, note-taking skills, oral presentations and class participation. Students ranked oral presentations as the most important and pronunciation as the least important.

Kim discusses some of the discrepancies between the findings of her study showing the emphasis the students put on small group discussion compared to that of Ferris saying:

> While the current study identified small group discussions as one of the most frequently required oral classroom tasks, following whole class discussions, Ferris reported that students were rarely asked to participate in small group activities. These findings may indicate that graduate-level classes tend to be smaller than undergraduate classes, so it is easier for graduate course instructors to set up discussion in small groups followed by group reports to the whole class. It may also come from instructors' changing instructional preferences. (p. 6)

These two studies offer a number of issues and ideas for needs analysis.

1. The studies show that graduate and undergraduate speaking/discussion needs can vary. The teachers in our scenario fondly recalled the lively discussion they had participated in during their studies but did these take place during their undergraduate or graduate level studies? Memories are not the best source of data. And, as Kim (2006) argues, instructors' preferences change.
2. The report of Ferris' study includes the survey used. The teachers in the scenario could use the questions and format involved as a source of ideas to help them develop a questionnaire or set of interview prompts for use in their own context.
3. Both the study by Ferris and the study by Kim centred on three issues: what skills were needed, which were perceived as more or less difficult by the students and which were perceived as more or less critical for academic success. This conceptualization could be of help to the teachers in our scenario. For example, an EAP course could be devised to address the specific skills needed but if the students do not perceive themselves to have difficulty with these skills the course is unlikely to be well received.
4. Ferris' study showed that professor's and students' perceptions of requirements and difficulties diverged somewhat. The implication for needs analysis is that ideas on needs may need to be gathered from the different parties concerned.

2.5.2   The language for care home workers course

In considering needs for the care home workers course, Anna could have usefully consulted some of the literature on language needs of care workers or nurses in similar situations. One study offering useful perspectives in this area is 'From

Needs Analysis to Curriculum Development: Designing a Course in Health-Care Communication for Immigrant Students in the USA' by Susan Bolsher and Kari Smalkoski, published in *English for Specific Purposes* in 2002. Bolsher and Smalkoski's study investigated the needs of immigrant nursing students, many of whom were enrolled in ESL programmes in a college setting in the US. The needs analysis comprised a number of sources of information (ESL nursing students, ESL programme director and nursing faculty members) and different types of information including interviews, observations and questionnaires. The needs analysis revealed that the main area of difficulty for the students was communicating with clients and colleagues in clinical settings. The faculty reported that the nursing students sometimes had difficulty understanding the clients (the patients). An example of such a difficulty is reported below:

> I'm not sure if Mary [a pseudonym] just doesn't understand clients because she is an ESL student or if she doesn't comprehend what the clients are saying, or both. Just last week one of her elderly clients in the orthopaedic rotation was asking her questions about medication. Instead of asking the client for clarification she acted like she understood what the client was saying. … We teach students that certain clients will be more difficult to understand or even comprehend. It's not just ESL students who are having trouble with this. (p. 62)

Other difficulties pointed out by faculty included students not being comprehended because of inappropriate stress and intonation and their low volume of speech. Observations of the students' performance in interactions revealed additional problems such as the immigrant nursing students' lack of assertiveness with clients and their avoidance of eye contact with the clients. Additional findings brought to light included difficulty with rate of speech, especially with elderly clients; understanding clients, particularly those who spoke non-standard dialects of English; making small talk with and understanding when clients were making small talk with them; and understanding how cultural values may impact on interaction with clients.

This report could have been of help to Anna in the following ways:

1. Firstly, the report identified a range of communication difficulties. This could have provided food for thought for Anna in trying to work out needs in her own situation. The analysis of Bosher and Smalkoski showed that communication problems could not be attributed to a single factor such as the immigrant nurses' pronunciation but to a number of factors.
2. Secondly, it provides a useful list of potential difficulties in a somewhat comparable situation. Anna could have used this list as a point of departure for her own investigation of needs in the rest care facility.

3. Thirdly, the report offers an example of use of multiple methods in needs analysis. Anna might have considered using a variety of methods in investigating needs in the rest home.
4. Finally, the appendix to the report provides the questionnaire used to elicit the nursing students' perspectives of their difficulties in health care communication. Possibly, Anna could have used or adapted this survey for use in her own situation.

2.6   Types of information to collect

In needs analysis the quality of the data collected depends in large part on selecting appropriate data collection techniques. Unless the course developers or teachers conducting the needs analysis have large quantities of time to devote to the project, they will need to be selective about what type of data to collect. Needs analysis can take a number of forms including questionnaires, interviews, observations of interactions and analysis of language use in the target situation, tests of performance and observations of ESP learners carrying out tasks replicating those in the target situation. Figure 2.2 shows the questionnaire Bacha and Bahous (2008) developed for an investigation into the English-language needs of business students at the Lebanese American University. Item 1 in the questionnaire inquires into the students' perceptions of the relative importance of different language skills. Item 2 inquires into how they perceive their abilities in the various skills. The remaining items focus on the writing skill in particular.

Student questionnaire

(A parallel questionnaire was used for the Faculty as it relates to their students)

Dear Student: Fill out this questionnaire as accurately as you can by circling the appropriate number according to the following scale with 4 being the most.

Please do not write your name. The purpose of this questionnaire is to find your opinions of your writing in the major.

Major: _____

1. Rank choices 1–4 which skill is most important to your major.

    a. Reading   4 3 2 1
    b. Writing   4 3 2 1
    c. Speaking 4 3 2 1
    d. Listening 4 3 2 1

2. Circle the number that best indicates your perception of your language ability in the major.

    a. Listening 4 3 2 1
    b. Speaking 4 3 2 1
    c. Reading   4 3 2 1
    d. Writing   4 3 2 1

Figure 2.2   An example questionnaire used in needs analysis
Source: Bacha and Bahous (2008), pp. 89–90

3. Circle the number that best indicates your writing ability of the below in the major.

    a. Sentence structure and vocabulary   4 3 2 1
    b. Ideas   4 3 2 1
    c. Organization of ideas   4 3 2 1

4. What kind of writing do you do in the major ☐ (4 a lot, 3 sometimes, 2 rarely, 1 never)

    a. Essay assignments   4 3 2 1
    b. Essay tests   4 3 2 1
    c. Letters   4 3 2 1
    d. Lab and reports   4 3 2 1
    e. Research papers   4 3 2 1
    f. Summary of lectures 4 3 2 1
    g. Note-taking in class   4 3 2 1
    h. Note-taking/internet   4 3 2 1
    i. Other: Specify _____ 4 3 2 1

5. To what extent do you improve in the writing needed for the major over the semester ☐

    a. A great deal
    b. A sufficient amount to deal with the course work
    c. Not enough
    d. None at all
    e. Already have a satisfactory level

6. The teaching of writing should be the responsibility of (check all that apply).

    a. The English teacher
    b. The content-area teacher in the major
    c. Both the English and content-area teacher in the major
    Other: specify _____

Faculty interview questions

Do your students have language problems? ☐
Do you use languages other than English in the class to explain the material? ☐
What types of language problems do they have? ☐
How do you deal with these problems? ☐
Do you find that students improve by the end of the semester? ☐
Do you think they are improving due to English? ☐

Figure 2.2   Continued

    Most needs analyses include the use of either questionnaires or interviews. Works on research methodology often include discussions on how to construct and administer a questionnaire or interview. See, for example, Kumar (1996), Mackey and Gass (2005) and Nunan (1992). It is not uncommon for needs analysis projects to include both questionnaires and interviews, often interviewing a subset of respondents who completed a questionnaire, or developing a set of questionnaire items from information collected in interviews.

    Kumar (1996) discusses the advantages and drawbacks of questionnaires and interviews. Questionnaires do not take long to administer and it is often possible to get information from a large number of respondents. The responses are anonymous and thus respondents will hopefully offer their opinions and ideas frankly. Interviews are time consuming and because of this the investigator can

often only interview a few people. However, in an interview the investigator can probe responses and thus gain an in-depth understanding of the opinions and information offered. Additionally, unclear questions or answers can be clarified during an interview.

Both types of data collection potentially have drawbacks. For example, people tend to think carefully about questionnaire items before responding. This may lead respondents to try to provide idealized responses (responses they see as socially desirable). Good interviewing skills do not come naturally to everyone and some interviewers may let their own opinions come across too strongly and lead to bias in the interview. See Figure 2.3.

Questionnaires and interviews allow the needs analyst to explore people's opinions of needs, difficulties and the importance of language skills and areas. However, needs analysts also investigate actual samples of language use or learners' performance in events in the target situation. Direct means can be used to investigate these areas. To investigate language use in the target environment, examples of the types of texts used in them can be collected and analysed. For example, if the care workers in Anna's rest home facility were required as part of their work to write reports on their clients and were understood to have difficulties with this, Anna could collect samples of the reports written by a number

Questionnaires	
Advantages	Disadvantages
Less time and energy consuming to administer	Self-selecting bias. Not everyone who receives the questionnaire returns it and those who do may have different attitudes than those who do not
Offer greater anonymity to respondents	Lack of opportunity to clarify issues
	Do not allow for spontaneous responses
	Respondents may consult with one another before answering
Interviews	
Advantages	Disadvantages
More useful for collecting in-depth information	More time consuming
Opportunity for questions to be explained and responses clarified	Quality of the data obtained depends on the skills of the interviewer
	The interviewer may introduce his or her bias
	Less standardized. For example, the quality of the data may vary when different interviewers are used.

Figure 2.3   Advantages and disadvantages of questionnaires and interviews
Source: Based on discussion in Kumar (1996)

of different care workers and could adopt a genre-based approach to analysis by identifying the kind of information the reports typically include, how it is organized sequentially and any features of language use associated with it. This topic will be examined in Chapter 3. To investigate learners' performance in events in the target situation, learners can be observed while performing tasks in the target situation (or tasks replicating events from the target situation can be used in a classroom situation). For example, if the care workers in Anna's rest home facility are understood to have difficulties making small talk with clients, Anna could observe some of the workers engaged in episodes of small talk with the clients (and possibly compare their performance with that of workers seen as having good language/communication skills in this area). Anna could develop a protocol to structure her observations. Possible items for inclusion in the observation protocol are:

When and where does small talk take place?
How is it initiated? (Note some samples of language use.)
What topics are included?
What kinds of questions do the care workers or clients use? (Note samples of language use.)
What kinds of responses do the care workers or clients provide? (Note samples of language use.)
Are any difficulties apparent? (If so, what are they?)
What appears to keep the episodes going or to lead to an abrupt end?
How long do the episodes generally last?
How are episodes closed down? (Note examples of actual language use.)

Questionnaires, interviews and observations are often the main data sources used in needs analysis. However, sometimes additional information enhances the needs analysis project. Ethnographic methods were used to collect information in an investigation of academic writing needs by Molle and Prior (2008). These methods included in-depth interviews with faculty and students, genre analysis of students' texts, class observations and collection of course materials such as syllabuses and handouts (p. 545). Types of information in needs analysis listed in Johns and Price-Machada (2001) include interviews with experts (for example, with supervisors in the target situation in which the learners will work) as well as the workers or learners themselves, job-shadowing (the everyday language experiences of workers in a typical day at work), analysis of the learning style of the learners, analysis of modes of working (for example, team work or individual work) and spoken or written reflections (for example, learners could be asked to reflect on what they have experienced on an ESP programme as a basis for planning a new programme or revising the current programme).

2.7   Summary

As shown in this chapter, needs analysis is a key component in ESP course design and development. Johns and Price-Machada (2001, p. 49) argue that it is an obligatory step: 'In every genuine ESP course, needs assessment is obligatory, and in many programs, an ongoing needs assessment is integral to curriculum design and evaluation.' Over the years, needs analysis has become increasingly sophisticated and has come to encompass not only analysis of language use and skills in the target situation but analysis of learner factors and teaching context factors as well.

Various types of information can be collected in a needs analysis and ESP teachers and course developers decide what type of information to collect on a case-by-case basis. If they wish to investigate learners' difficulties in speaking, they might decide to observe the learners' performance in speaking situations. If they wish to investigate writing needs and difficulties, they may collect samples of their learners' writing and writing tasks from the target situation. If they wish to investigate the comprehension needs of their learners they are likely to use either questionnaire or interview items to elicit the learners' perceptions of difficulties as comprehension difficulties cannot generally be directly observed.

It has been argued in the chapter that one useful point of departure for a needs analysis project is to locate published reports of ESP-oriented needs analyses in roughly comparable situations. These reports often provide examples of how others have conceptualized the area or set about identifying needs in it.

2.8   Discussion

1. Suggest reasons why you might use both a questionnaire and an interview in a needs analysis project.
2. Select an article that reports a needs analysis, or an article that reports a course design but includes an account of the needs assessment on which the course was based. Possible sources of such published reports are *English for Specific Purposes*, the *Journal of English for Academic Purposes*, or journals published locally. Present a summary of what the needs analysis involved (target situation analysis, deficiency analysis, learner factor analysis, and so on), the procedure followed and the types of data collected.
3. Describe an ESP teaching situation you could conceivably face in the future. Which experts might you wish to interview in order to gain insights into the demands your learners face or will face in the target situation? Develop a set of interview prompts you could use to interview one of these experts.
4. The teachers who developed the academic discussion skills course in the first scenario did not observe subject classes in the university to determine what

types of academic discussion (if any) occur and the features of any such discussions. Develop an observation protocol that they could use.

5. You have been assigned to develop and teach an ESP course for bank tellers who will shortly be transferred to the foreign exchange sections of their banks in a country in the Middle East. Outline the steps you would take to investigate their English language needs.