

Illustration for the Guidelines on Language for Specific Purposes Tests

1. Scope/ Context/ Structure of the Illustration

The Guidelines for the Development of Language for Specific Purposes Tests are now illustrated with the development process of an examination for specific academic purposes (LSAP) – the examination at the end of the course of specialised language: biological and biomedical sciences, offered as part of the academic programme of preparatory year in Romanian, at the Faculty of Letters, Babeṣ-Bolyai University, Cluj-Napoca. All the information and comments included in this material refer to this particular examination and the whole material has the purpose of showing the way in which our institution followed the steps in the Guidelines in the development and administration of this examination, with direct comments related to this experience, the problems we encountered and the possible solutions which were suggested. All the problems listed here appeared during the development process of our examination. However, we included all the solutions we received from experts, whether we applied them in our case or not, considering that these solutions might help other testing institutions facing the problems listed here.

The structure of this material mirrors the one of the *Guidelines*, focusing on test development, especially on needs analysis (NA).

Components of the *Illustration*:

- Descriptions of the test development stages:
 - the parties involved
 - the actions taken
 - comments
 - problems we faced during the process (where it is the case)
 - possible solutions (coming mainly from the external LSP experts)
- Supporting documents (e.g., semi-structured interviews questions and answers; questionnaires for different categories of informants; previous and new exam specifications)

Audience and usability

Intended audience:

- LSP/LSAP exam providers (e.g., universities, language centres, testing organisations)
- curriculum developers in the domain of LSP/LSAP
- researchers in the domain of LSP/LSAP test development

Intended use:

- to demonstrate the usability of the *Guidelines* for the development of concrete examinations
- to list the concrete problems which appeared during the process of exam development in our case and which might appear in the development process of other LSP/LSAP examinations (e.g., related to the level of authenticity of language use, tasks and context; the crossover between language and content; the involvement of content and context specialists; the problem of human and material resources, etc.);

- to suggest solutions for the problems occurring during the process of LSP/LSAP test development.
- to point towards possible washback of the LSAP examinations.

Recommended procedure

The users of these materials are advised to follow the steps in the Manual for Language Test Development and Examining, developed by ALTE and the Guidelines for the Development of language for Specific Purposes Tests for specific test information.

The present material can provide an insight into the development procedures of a concrete LSAP examination which might help the exam developers anticipate problems and apply solutions we were suggested, if they consider them adequate for their own context.

The type of examination

The examination described here

- is a broad LSP exam
- is administered to the students who intend to pursue medical studies (general medicine, dentistry, pharmacy, biochemistry, veterinary medicine, biology).

Supporting documents			
name	link	content	
1.target_population_data	Document 1	- characteristics of target	
		population	
2.previous_structure_of_exam	Document 2	- the previous structure of the	
		examination	

2. Developing the LSAP test

Test developers

Participants in the test development process:

- experienced teachers of general Romanian and assessment experts from the Department of Romanian language, culture and civilisation, Babeş-Bolyai University, Cluj-Napoca
- assessment experts participating in LSP SIG (Language for Specific Purposes Special Interest Group) of ALTE (Association of Language Testers in Europe)
- context experts (LSAP teachers)
- subject experts (e.g., doctors, nurses and clinical academics), whose collaboration we considered as being extremely important, could not be involved in the development process of this examination.

The decision to provide a test

The exam is part of the students' educational trajectory (the academic programme of preparatory year).

The stakeholders:

- the students themselves, who take the course and the exam as part of their educational trajectory;
- the clinical academics, who will teach the students once they enrol in the medical school;
- the specialists who will work with the students during their practical formation (e.g., doctors and nurses);
- the authorities in the field, responsible for the implementation of the educational programmes (e.g., ministry of education, rectors of universities).

Planning

The experts

Assessment experts

- local assessment experts: experienced teachers of general Romanian and of medical language
 - ultimately responsible for the construction and administration of the test
 - even if "professional subject matter is not their field of expertise" (*Guidelines*), assessment experts covered also the contribution (or at least a part of that) which should normally come from the subject and context experts, mainly because getting access to subject expert input was very difficult
- external assessment experts: ALTE LSP SIG participants, who contributed invaluable information, input and suggestions in every step of the process.
 - consultation with external assessment experts (with experience in LSP/LSAP testing) was very relevant.

Subject experts:

- clinical academics
- doctors
- nurses

Context experts:

• LSAP teachers.

- In case of our examination, we could not have access to subject experts, but we benefitted from the contribution of context experts (the LSAP teachers). Their participation in the test development process was extremely valuable due to the following aspects:
 - They could offer relevant information about the learners/ test takers and their needs (e.g., in terms of: linguistic competence; communicative language activities and strategies).
 - They could help situating the test on the continuum between general and specialised language tests (the test needs to reflect the language aspect of TLU activities specific to teaching/learning; communicating with other students, understanding conversations between doctors and patients rather than highly specialised content).

- They observed and could provide input regarding the cultural differences which might impact on the learning and assessment process (e.g., level of engagement in dialogue; willingness to address questions in order to clarify information; manner of interacting with patients).

Problems:

- The LSP teachers/ examiners are well prepared in teaching general language, but do not have detailed information in the LSP field.

- possible solutions:

- a) access medical academics or experienced medical staff as informants; even if only one or two representatives from each category are available, their contribution will help make the processes/ functions authentic to TLU;
- b) facilitate direct collaboration between LSAP teachers and subject experts; this might help bridge the technical language gap.

Needs analysis

The examination used to reflect closely the syllabus of the course, based on different textbooks and course materials, but the needs of the students had not been thoroughly investigated. During the development process of the new examination, we gave the stage of needs analysis special attention.

Steps in the process of needs analysis:

1. We conducted semi-structured interviews with representatives from the main group of informants, the students in the medical school, conducting their studies in Romanian or in English or French.

- This action proved to be extremely relevant as a first step in the NA process because it gave the test developers a clear idea upon the role of the language in the following situations: the students' learning context (courses, laboratories, exams); the context in which the students develop their practical activities and interactions (clinics, hospitals); the broad academic context (interaction with fellow students, general communication with clinical academics).
- The information we obtained through this first step was very relevant for the design of the NA questionnaires we then distributed to different groups of informants.
- The format of a semi-structured interview (or a focus group) was very adequate for this activity. A lot of information could be obtained from the students who shared their personal experience in the frame of the learning environment, much of which had not been considered by the test developers.
- It was very useful the fact that we selected for this activity students in the medical school who had had the experience of the course and the examination we reviewed. We had the

chance of evaluating the relevance of the course and examination in comparison with the students' real needs and of deciding upon necessary improvements.

- We engaged in the interview teachers who knew personally the students who were invited for this activity. This contributed to a more confident attitude and implicitly more relevant information from the participating students.
- Because the exam we reviewed is taken by students preparing for various specialisations, we invited students representing as many of these specialisations as possible (e.g., general medicine, dentistry, veterinary medicine, biology) and in this way we could observe what needs and problems are common to the students who chose these domains and which needs and problems should be addressed separately.
- It was not possible for us to observe the students at courses in the medical school. However, we consider that this might be a good addition to the stage of needs analysis.

Supporting documents		
name	link	content
3.semi-structured interviews	Document 3	the questions addressed during the semi structured interviews;a synthesis of the students' answers for each question

2. We prioritised, together with the participants in the LSP SIG, the questions we needed to address during LSAP test development (see the list of questions in the *Guidelines*, chapter 2.3.5) and we decided upon the categories of informants to be addressed.

- This stage in the process helped us focus on the most important elements to address through needs analysis and identify the ones resulting from regulations related to the education system, which need to be considered (e.g., since the exam is part of the preparatory year programme, its administration is related to the syllabus of the course taken by the students and the possibility of retaking the exam is strictly regulated).
- Consultation with external assessment experts and discussion of the questions in the indicated list were very important for determining the categories of informants which would be addressed during NA.
- We created a checklist of questions we needed to have in view so that no important aspect would be ignored during the process (e.g., official regulations which might apply to the test; general and specific language skills necessary for functioning in the new study environment; the role the jargon, technical language, pronunciation, register might have in the study context).
- During discussions with local and external assessment experts the list of questions was expanded, targeting aspects related to the local context in which the exam is constructed and administered (e.g., Who will administer and mark the exam? In the case of our exam,

the administration and marking of exam is part of the teachers' didactic activity, thus the course and the exam are closely related. However, if this is not the case, the test developers can address the matter of the most adequate administrators and markers for the exam.)

Supporting documents		
name	link	content
4.questions_prioritised_and _categories_of_informants	Document 4	 the questions needed to be addressed during LSAP test development the categories of informants targeted for needs analysis

3. We studied the literature in the domain and similar projects conducted in different educational/ test developing contexts

Comments:

- Consultation of the literature in the domain was relevant for two main aspects:
- a) The studies helped us operationalise the stage of needs analysis, through access to possible instruments and procedures.
- b) Research in the field presenting similar processes of LSAP test development provided us with ideas related to relevant aspects which need to be included in needs analysis (especially in the case of similar educational contexts), instruments for applying needs analysis and for processing the results, problems which might appear in the process and possible suggestions/solutions to overcome them.
- c) We included in the test developing team an IT and statistics expert, who could help with processing and interpreting needs analysis results. He was able to relate to the technical part of the exam development process in similar projects we studied.

Supporting documents			
name	link	content	
5.suggested_bibliography	Document 5	- literature in the domain (a list of books, studies, reports on similar projects)	

4. We drafted the questionnaires for needs analysis and discussed them with the experts in the LSP SIG; there were successive forms of the questionnaires.

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- Even if it might be redundant, we restate the relevance the stage of needs analysis had for the entire process of test development, especially through the answers we received from the respondents to the survey.
- Based on our own experience and acknowledging that this is a strenuous process, involving significant human and technological resources, and that it might not be an action to conduct frequently, we recommend for NA to be performed at least every few years.
- The fact that we discussed the componence of the questionnaires with as many internal and external experts as possible gave us access to different perspectives, which was extremely beneficial for the optimal form of the questionnaires, in terms of content and of phrasing of the questions.
- We tried to access as many categories of informants as possible, in order to have represented different ways of relating to the future test takers and, in consequence, different interactional patterns.
- We included a short text in the beginning of the questionnaire, informing the respondents on the purpose of the survey with the benefits which might concern them directly, the protection of their personal data, and the time necessary for completing the survey.
- We included a section of open questions in the questionnaires (e.g., for current students or graduates from the medical school: Name three main problems you experience/ experienced when you participate/ participated in courses and laboratories of medicine; Do you consider that you should be taught information related to the patients' attitude and behaviour in the medical system in Romania (e.g. the attitude of the patients coming from the countryside, of older patients, of the patients with strong religious beliefs, etc.)? The answers to this type of questions broadened the matters which we took into consideration when discussing the content specifications of the exam. It is important to control the number of open-ended questions. If they are too numerous, the necessary time for completing the survey will expand and this might discourage the respondents. Moreover, an area of very different answers from respondents might make it difficult to represent these aspects in the exam content specifications.
- When preparing the questionnaires, we used a programme (SurveyMonkey) which could offer us the instruments for optimising the survey (e.g., in terms of length of questions, number of questions, use of images, number of open-ended questions, etc.). This probably helped increase the number of respondents more willing to engage in the survey. We followed the feedback from the programme and made our instrument easier to manipulate, not very extensive and less time consuming.

Supporting documents			
name	link	content	
6.Q1.current students and graduates_medical_school 7.Q2.students about to start LSAP_course	Document 6 Document 7 Document 8 Document 9	- the questionnaires sent to different categories of informants	
8.Q3.LSAP_teachers 9.Q4.clinical_academics	Document 10		

10.Q5.doctors_and_nurses	Document 11	
11.Q6.patients		

5. We tested the questionnaires with representatives of the categories of informants for clarity, accessibility and relevance of results

Comments:

- This stage proved very useful in the process, as we were able to add relevant questions and to clarify the existing ones. For example, an experienced potential respondent, who had already graduated from the medical school in a different language, indicated a type of text which needed to be included in the list of texts necessary to be written by students as part of their activities in the clinic. Other potential respondents helped us identify the unclear or interpretable phrasing in some questions.
- Even if we could not do this with representatives from all the categories of informants, given the lack of time and resources, appealing to representatives of the categories we considered the most relevant (current students in the LSAP course and current students in the medical school) proved to be very useful. Our respondents helped us eliminate any unclarities, but also possible overlapping of responses. This stage proved to be also a final check for possible relevant elements ignored from the survey (e.g., relevant types of texts to be produced by the students in the medical school).

Supporting documents			
name	link	content	
12.questionnaires_list of suggested changes	Document 12	- changes suggested while testing the questionnaires	

6. The questionnaires were sent to the different categories of informants

Comments:

- It was very important to allow enough time for the possible respondents to complete the questionnaires.
- We sent two reminders before closing the stage. Every reminder brought a new surge in the number of responses.
- We tried to use various resources and modalities in order to access as many respondents as possible (e.g., we encouraged respondents we knew to explain their colleagues the relevance of the survey; we tried to target group leaders, for example, head nurses, and ask for their help with their colleagues).

Problems:

1) We received a rather reduced number of answers. Moreover, we received no answer at all from the subject experts (both clinical academics and doctors and nurses).

- possible solutions:

- a) identify expert informants (even if they are in a limited number) and ask them about the TLU (e.g., What do the students need to do? What kind of speaking activities are the most common?)
- b) check the CEFR descriptors for mediation in the attempt of completing the information obtained from the survey answers (e.g., try to have an observant of the work environment communicate on the facts they notice a nurse might offer information on the difficulties in communication she notices between doctors and students; the cooperating aspect of mediation can offer means of facilitating access to possible respondents)
 - c) organise a meeting with doctors and nurses and try to obtain relevant information
 - d) visit hospital/doctors who work with students for collecting information
- e) organise the survey as part of a larger project involving directly doctors and nurses
 - f) contact the clinic management in order to facilitate personnel's collaboration
- 2) The answers we received from patients were in a reduced number and rather irrelevant

- possible solutions:

- a) apply the questionnaires in person rather than through a computer programme (patients still in hospital will rarely be willing to engage in filling out survey responses or will not have the resources to do so; on the other hand, once released from hospital, the patients will not remember (clearly enough) their experience related to the topics of interest for the investigation
 - b) contact the clinic management in order to facilitate the patients' collaboration
- 3) Only about 50% from the students enrolled in the LSAP course at the moment when we applied the survey answered it

- possible solutions:

- a) engage the teachers from the LSAP courses in the process; they can help by urging the students to answer the survey, ensuring their cooperation;
 - b) administer the questionnaires in class, before or after the course.
- 7. Answers were collected and processed
- 7.1. Quantitative results

Comments:

- The quantitative data proved extremely relevant for understanding the students' needs and difficulties and were used in redesigning the exam specifications;

- A comparison between the answers from different categories of respondents revealed the necessity of a change in balance between the subskills (e.g., the activity of listening to the patients is rated the highest as importance by the students in the medical school, but not practiced very much and not included constantly in the examination by the teachers);

Document 13	- quantitative
Document 14	results
Document 15	
Document 16	
	Document 14 Document 15

7.2. Qualitative results

Comments:

- In order to be able to mention the obtained results (e.g., in exam documents or in studies, research, including in this document), we processed the answers so that they cannot be linked to the person who gave them, following the GDPR regulations;
- The information we obtained from the qualitative results exceeded the aspects we could address through the review of our examination (e.g., the students referred in their answers to the lack of materials and instruments for their practical activities, to the fact that some of their professors speak much too fast in the course or that the amount of information exceeds the time they have for assimilating it). However, these aspects might be communicated to the decision factors (e.g., deans, rectors, chiefs of departments) in the institutions where the students are enrolled since this might contribute to the improvement of the learning conditions for the students.

Supporting documents			
name	link	content	
17.qualitative_students_graduates_ro	Document 17	- qualitative results	
18.qualitative_students_graduates_en_fr	Document 18		
19. qualitative_LSAP_teachers	Document 19		

Redesigning the specifications

Steps in the process of redesigning the specifications

1. The results from NA were discussed with the participants in the LSP SIG and suggestions were made concerning the necessary changes in specifications

Comments:

- The consultation with assessment experts, including experts from outside the administering institution, proved to be very relevant.
- The LSP SIG experts targeted first of all the weight of the components and made suggestions for the new specifications; the main changes indicated were as follows:
 - more weight needs to be given to the components of listening and speaking,
 - the reading component should be kept at the same weight,
 - the writing component should be reduced,
 - the vocabulary component should be integrated in writing as a subtest.
- suggestions concerning the listening component:
 - the tasks should target different types of cognitive operations,
 - the tasks should present more diversity,
 - the tasks should have a higher level of difficulty,
 - the input texts should be mostly authentic dialogues.
- suggestions concerning the speaking component:
 - it should have a greater weight in the exam,
 - it should include, besides presentations on a topic chosen by the students, interactional tasks
- the input texts for reading should be authentic texts, not too specialised;
- the writing component should target written interaction;
- there should be an integrated approach of the skills.

Supporting documents		
name	link	content
20.suggested_changes_specifications	Document 20	suggested changes in the exam specifications

2. The results from NA and the suggestions from the experts participating in the LSP SIG were discussed with the LMAP teachers and assessors

- The LMAP teachers agreed to most of the suggestions coming from the participants into the LSP SIG, discussing methods to implement the new specifications and to accommodate, at the same time, the practicality matters specific to this course and examination.
- We prepared the try-out stage for being administered during the following academic year; this can be done with potential future candidates or native speakers (with basic preparation in the field); the LMAP teachers can contribute greatly in this stage, involving their students in the process and collecting feedback.

3. Washback at the level of the LMAP course

Comments:

- The perspective of experts from outside the programme can prove extremely beneficial for offering a point of view on the structure and the organisation of the course (e.g., for our particular case, they suggested that the LMAP course should be done in two separate days two hours one day, three hours another day instead of five hours in one day; this way the students would have more time for preparing at home, for doing different homework and they would keep more in touch with the content of the course).
- We expect for the thorough (re)organisation of the LSAP examination to have a consistent washback on the LSAP course (e.g., if specific dialogues are used as input text for the listening tasks, this type of dialogues will also be used more during the LSAP class).
- We tried to accommodate the practicality matters and to find solutions for diminishing their impact on the quality of the LSAP course and examination.

Supporting documents			
name	link	content	
21.suggested_changes_course	Document 21	Suggestions of changes in	
		the organisation of the	
		LMAP course	

3. Assembling the LMAP exam

Item writers and experts

Like in the phase of needs analysis, the developers of this examination could not collaborate with content experts and they needed to develop the items themselves.

- We decided to use as input texts for the reading and the listening tasks authentic materials (medical courses, medical documents, recorded conversations (medical academic-student/student-student/doctor-patient, etc.), but not with a very high degree of specialisation.
- The courses included in an academic programme will not tackle a range of vocabulary with a very high level of specialisation, contrary to the LSP examinations taken by candidates who prepare for integrating in the job market; the item writer will train as well as possible in the field, using literature in the domain, dictionaries, sample courses and exams and other supporting materials.
- Item writing workshops must be organised, for getting to a common view concerning the type of tasks and items, their level of difficulty and the most adequate input texts.
- We discussed the marking and grading criteria and clarified the proportion between language and content, keeping in mind that the examination remains a language exam.
- We decided that an assessment expert will act as a supervisor of the item writing process.
- We decided to use the results of the NA process in order to respond as closely as possible to the TLU context.

Materials and quality control

The supervisor of the item writing production process should manage the materials and coordinate also the quality control phase

Comments:

- The produced materials are checked from two points of view: content or domain coverage and the language aspect.
- The language aspect is coordinated with the general language level (B1+/B2).
- The items are piloted or pretested every time when this is possible.

4. Delivering tests

The delivering context is usually set for the other language examinations, so the present one will adapt. In our case, no test taker registration is necessary and the venues are already arranged.

5. Marking, grading and reporting of results

Being considered as broad LSP exams, the language-related assessment criteria are essential.

- Keeping in mind that this is essentially a language exam, the exam developers need to agree on criteria related to the students' capacity of understanding and producing oral and written text, of engaging in interaction related to TLU.
- The level of vocabulary involved in the exam has a moderate degree of specialisation, similar to the knowledge a native speaker would have before starting the medical school (e.g., the names for the main parts of the body and for the main diseases; the medical domains, the words and structures a doctor normally uses for giving indications during consultation, the basic instruments and machines used during consultation and some treatments, etc.) even if these vocabulary elements might be part of the general language vocabulary at levels B1-B2, they should become the focus in a specialised language exam/ course; the more specialised vocabulary will be part of the content taught as part of the learning process in the medical school and will be learnt by the foreign as well as the native speakers of the language.
- Lists of vocabulary were designed, which will help for the exam development, but also for assessment; they will constitute also a good instrument for the students preparing for the exam.
- All the possible variants in the exam key will be discussed among the raters, for an objective and homogeneous assessment of the answers in all the groups of students taking the exam.
- Even if constant collaboration with content experts is not possible, we will keep trying to obtain a content expert opinion on the rating criteria.
- The scales will be illustrated with student performances, agreed upon, if possible, together with the content expert.