Establishment of an advanced blended-learning study programme
Evidenzbasierte Logopädie

Authors' Handout

for writing the study material
by scientific experts of the study programme
under the research project
„nursing and health science" (PuG)

Hochschule für Gesundheit
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Imprint

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Contents

Before you start

With this authors' handout, we wish to provide assistance to the scientific expert in the preparation of study materials. This information should enable them to write the study texts in a way - word them linguistically, to structure them, illustrate and to give examples - which will allow participants to achieve optimal learning growth.

The courses are based on a blended-learning approach. This combines best practices and approaches of classroom with learning concepts that were developed during the course of the new media which have since been introduced (online-supported self-study, online learning with mentoring support, project learning by means of learning management systems).

Study materials constitute an important building block in this concept because – as experience with distance learning programs has shown - the success of participants depends very much on the quality of the study materials.

At the same time, they form a part of the quality assurance system that covers the following areas:

- **Suitability of materials**
  for self-directed learning. Assessment of the didactic concept, its integration into the overall (Internet-based) learning design and its acceptance by the participants
- **Quality of the management system**
  Mentoring by the administration, scientific experts and mentors during the different phases of a module and during the entire course of study being developed
- **Professionalism of the study organization**
  Professionalism in the planning, distribution, organization and implementation of advanced training courses being developed
- **Market value of a scientific academic degree**
  Acceptance of a course being developed, its academic qualification and the employment opportunities offered to its graduates

Study materials cannot replace communication and interaction in the classical sense of the classroom seminar. But an attempt is made to develop a most interactive medium that is integrated into the design of Internet-based learning program, through the didactic-methodological design of the study materials.

1. Conceptual information

1.1. Characteristics of the Masters level programme »Evidenzbasierte Logopädie« being developed

The structure of the programme with the Master degree in “Evidenzbasierte Logopädie” (MSc) focuses on

- **A vocational qualification oriented according to demand and future needs**
  The MSc programme being developed, prepares participants for new complex tasks and problem solving in the field of speech therapy by focussing on the teaching of the application of evidence-based practice (EBP) in clinical specialisation and the acquisition of research expertise for the integration and application of best evidence-based practice in their own field of activities as Speech and Language Therapists. In addition to that the elective modules deal with the range of topics “dysphagia” to qualify for a specialisation in this subject area.
- **A course of study aimed at the working professional**
  The design of the curriculum alongside working as an advanced course of study training, as well as its wider ranging cooperation and involvement in national and international networks, is only realistically to be implemented if the possibilities of information technologies which are available today and the new media are used for teaching the curricula.
- **A cross-university co-operation**
  As part of the MSc programme, participants will follow modules developed by scientific experts and academically educated practitioners from the field of speech and language therapy, who teach at various academic institutes, both throughout the entire country and/or internationally, shall be made available.
- **A focus on institutional and optimized study design**
  The curriculum is application and project-oriented, so that new learning outcomes can be applied in conjunction with professional practice. The MSc programme being developed consists of interprofessional, compulsory and elective modules. While the interprofessional and compulsory modules include a deepening of methodological competencies to the principles of EBP and research methods, the elective modules provide a deeper understanding of the technical competencies in the subject area “dysphagia”.

1.2. The target group of the advanced study programme »Evidenzbasierte Logopädie« being developed

The advanced MSc programme in »Evidenzbasierte Logopädie« is primarily aimed at academic Speech and Language Therapists and persons from adjacent disciplines with at least one year’s professional experience after the completion of the course of study, who are able to demonstrate their status as experts in the speech and language therapy field. The advanced MSc programme in »Evidenzbasierte Logopädie« being developed will thus appeal to those who wish to continue working professionally in parallel to attending a course of advanced study, such as

- Academic speech and language therapists (Logopäde*in) and persons from adjacent specialist subject areas, who operate within the field of action of speech and language therapy for different institutes,
- Academic speech and language therapists (Logopäde*in) and persons from adjacent specialist subject areas, who work in education, further education, higher education and research institutes.

Unlike undergraduate students, who start studying directly after school, the target groups mentioned here have had practical experience. In this way, the **specific speech and language therapy competencies acquired in professional practice can be assumed**, upon which the content of the study materials should be established and continued, if possible.

On the other hand, practitioner to be often lack the distance between their professional and personal everyday lives, such as the systematic development of new competencies, as a result of changing requirements. Besides the current and future needs for a wide range of in speech and language therapy processes in health care, access **to abstractions, models, and theoretical considerations must therefore be made** which will help learners to put their experiences in an overall analytical framework and to look at them critically.

In addition to their professional activities, part-time participants only have a very limited amount of time available. The study organization foresees a **weekly load of 5-6 hours (5 CP), or 8 hours (7 CP), or 9-10 hours (8 CP)** depending on the module (see curriculum). We thereby prepare participants for one working day (possibly via a reduction of the work week) and in addition, periods of study schedule on weekends and evenings.

For you as an author, it is important to design study materials based on the time contingent of the participants. Overall, the participants have available a time period of **approximately 6 weeks to process the materials. Reference values** from distance learning programs can be taken as time orientation aids:

- *Approx. 4 pages of text* can be covered *per learning hour* depending on the degree of difficulty (without exercises and additional texts);
- *A lesson unit* (one chapter) within a module should be covered in about 2 hours (this corresponds to an extent of 8 pages), in order to maintain the internal structure of the unit.

1.3. Modules within the Master programme being developed

According to BLK requirements, the development of a study form organised in modules presumes an idea or definition of competencies and overall qualifications, which should be acquired as part of the study course. This results in the partial qualifications, which are to be acquired based on the individual modules[1]. The goal is “to design a meaningful sequence of modules and still create a system of convertible and flexibly accumulative study units”[2]. A module in this system is

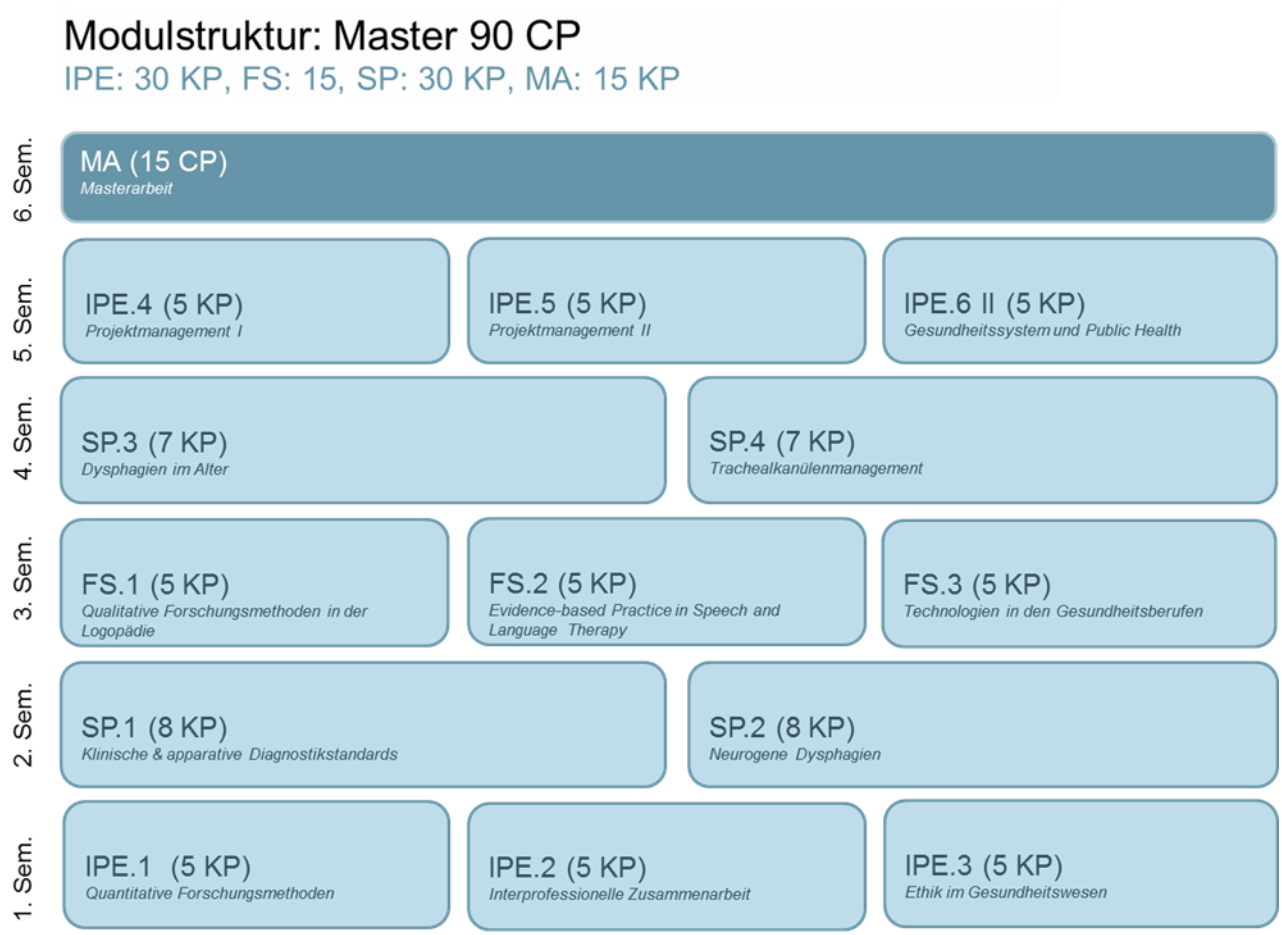
1 Federal State Commission: Modularization in Universities, Issue 101, p. 6ff, April 2002 .

2 ebd., p. 8

" ….. a teaching and training unit, which is complete from its content and time requirement, which can be made of different teaching courses. It is qualitatively (content) and quantitatively (credits) descriptive and it must be evaluable (examination)."[3]

The standard period of study is 6 semesters. Participants can take approximately 2-3 modules per semester.

In order to prepare your own module for classification, to delineate from and refer to other modules, the current planning status of all compulsory and elective modules is listed in the following.



IPE = interprofessional modules, FS = conpulsory modules, SP = elective modules, MA = master thesis

1.4. Didactic instructions for the author

[3] ebd., p. 4

In particular, study materials have the function of bringing participants to a technical level, which is as homogeneous as possible and prepare them for the internet-supported, mentored theory-practice transfer (TPT) phase of the respective study module being developed.

Self-study material follows a slightly different approach than is usual for textbooks and lecture transcripts. The study material is used by participants for independent induction in the basic principles of the scientific subject area, for which they will be allowed up to approximately **six weeks**.

Study material must be prepared in such a way that independent self-study can succeed in this period of time. Authors, therefore, face the task to write a textbook, the learners step by step from a new learning content to the next.

At the same time, the author also meets the role of the teacher, classical elements of tuition, such as to:

- motivate the learner
- provide instructions how to proceed
- give practical exercises
- enable learning controls
- provide notes on search strategies.

This means that the material must be prepared in such a way that the learner gets the impression, not just to have a book in front of him in the classical sense, but rather an instrument – which is integrated in a specific, didactic and methodological framework - more like a **workbook** prepared for the subsequent module phase, which actively supports the learning process beyond simply mediating the necessary scientific content.

Thus, the above should above all increase the intrinsic motivation of participants by integrating them **actively** in the processing of the study material. This can, for example, be achieved by using exercises about specific topics or questions in order to obtain additional supplementary information independently (essays, press releases, interviews with colleagues etc.) or to reflect on their own activities.

For the **didactic implementation,** this means that:

- The content of the study materials as a functional unit with a view to the curriculum is to be clearly defined at an early stage. The content structure for participants must be comprehensible.
- The contents are to be designed and set up using teaching methodology: in addition to processing the syllabus, well-structured study materials serve also as a “pool of ideas” for project topics and tasks in the classroom phase.
- Promoting and encouraging active learning and self-responsibility for the learning process when creating the study material.

Support:

- Where it makes sense, exercises should be interspersed, which guide the attention of the participants to the specific learning subject

- Examples could be added, in which the work experience of participants is linked (creation of expandable knowledge base)
- A targeted alienation allows a change of perspective (for example, how can the facts be shown from a different perspective?)
- Do not forget to use humour. Enrichment of specific content using cartoons, anecdotes, etc. enhance - almost like a mnemonic device - the development and ability to recall certain contents.

- Remarks on giving instructions for search strategies:
  - Literature and links to important complementary or lightening up content shows participants a way to obtain additional information. If the list of links is major, it can be helpful to place the list on the learning platform and use a reference in the study material.

In many cases, questions or problems cannot be addressed separately at all levels. But authors/authors should be aware of the wording which addresses specific skills to be learned.

1.5. Planned time and study structure of a module

In the following tabular overview of the various phases of a planned module in the MSc programme in »Evidenzbasierte Logopädie« being developed, the true importance of study materials is highlighted. They form the foundation and a prerequisite for a similar or equivalent entry-level of knowledge of participants for the continued course of study.

Phases	Learning Environment	Workload		
		8 CP	7 CP	5 CP
1) Introduction (one week) All module participants introduce themselves. An introduction is given to the content and organisation of each module. Training offers can be plugged into.	* Whole group * Distance Teaching	7 h	7 h	7 h
2) Getting started (approx. six weeks) Students will receive study materials and cover these by learning on their own. Online exercises are available for reviewing the learning success of the student. The mentors give individual feedback on the results obtained without giving grades. The process of using online exercises is not a part of the examination procedure.	* Individually * Distance Teaching	60 h (30 h Script, 30 h online)	50 h (25 h Script, 25 h online)	33 h (16 h Script, 17 h online)
3) Development (approx. two days) Introduction to the subject, organisation of sub-groups, formulation of practical project tasks	* Whole group * Classroom	12 h	12 h	12 h
4) Theory-practice transfer (TPT) (approx. ten to twelve weeks) Processing practically relevant issues in sub-groups, design of documents for presentation of results, support of sub-groups by the mentors and experts	* Individually/Small group * Distance Teaching	120 h	110 h	66 h
5) Evaluation and Reflection (approx. two days) Presentation of the results of the online processing from theory-practice transfer by group members (possibly oral examination). Hands-on analysis and reflection	* Whole group and small group * Classroom	12 h	12 h	12 h
6) Flexible Building Block (approx. four weeks) Preparation of a documentation about the theory-practice transfer with identifiable individual performance. In modules with oral examination the additional hours are distributed onto the phases of distance teaching.	* Individually * Distance Teaching	29 h	19 h	20 h

1.6. Role of scientific Experts in the Master programme being developed

From the preceding overview of the individual planned module phases, it is implicitly shown which other functions the authors of the study materials assume as »Experts« of the respective module contents if they become active as lecturers.

Besides the development and updating of study material besides, they are responsible

- for the preparation of specific contents, objectives, and a list of tasks
- for issuing specific evaluation requirements
- (as lecturers) for defining the content of classroom phases
- for the development of sufficient subjects for the approx. 12-week TPT-phase
- for supporting individual performance (homework) and evaluating the overall assessment
- (as experts in the background) for supporting mentors, who are meant to look after participants during the TPT-phase
- (as experts available for consultation at certain times, »consultation hours«)
- for the mentoring of participants in the chat room or discussion forum for questions, which require expert knowledge in order to be answered
- (as an examiner) for assessing the final project and the Master's thesis.

2. Guidelines for preparing study materials

2.1. Formal Notes

It is urgently recommended for several reasons, to use a document template when writing manuscripts, which has the same print spacing (margins etc.) as that which is to be used later in the final layout version:

- This allows the actual extent of the manuscript to be better assessed later on
- A better estimate can be obtained to determine which maximum dimensions are needed for tables and graphics, if they are to fit on one page later on (if not otherwise possible or useful in exceptional cases (!), a graph or table can also extend over the margin of the page).

Using the recommended print spacing, a font size of 12pt and single spaced lines, the manuscript should be **approx. 100 pages** include, excluding annexes (glossary, list of key words, bibliography, etc.).

So that the layout of the manuscript does not create any unnecessary difficulties, the following points shall be taken into account:

- A maximum of three hierarchical levels
- Font size 12pt, font »Calibri« in single spaced lines
- Text alignment on full justification
- Automatic hyphenation
- No manual pagination, with the exception of meaningful pagination e.g. after indices, first page of a chapter with the described learning outcomes and chapter endings as well as other meaningful sections (e.g. after the introduction)
- Margins: Left: 4 cm, Upper: 3.5 cm, Right: 2.5cm, Below: 2.5-3.75cm
- Header/Footer: 1.25 cm from above/below
- Paragraphs are to be created by blank lines
- Enumerations should be indented to the left hand side (ca. 0.63cm)
- Chapter headings: font »Calibri«, font size 16pt, bold

  Subchapter headings of the second outline level: font »Calibri«, font size 12pt, bold and italic

  Subchapter headings of the third outline level: font »Calibri«, font size 12pt, bold
- At subchapter headings of the second outline level an increased spacing should be made: 24pt space to preceding text, 12pt space to following text
- At subchapter headings of the third outline level an increased spacing should be made: 10pt space to preceding text, 6pt space to following text. A line spacing of 1.13 should be additionally used.

- Headings of learning objectives, exercises, etc., should be highlighted using »Calibri«, font size 14pt, bold and ought to have a 6pt space to following text.
- Table contents and graph labels must be editable (exception: scanned images)
- Tables and graphs ought to be centred.
- Spacing between tables/graphs and following text has to be created by blank lines; no spacing between labelling and tables/graphs
- Labelling of graphs and tables has to be made in »Calibri«, font size 12pt, left-justified; graphs have to be labelled below, tables have to be labelled above; labelling of graphs has to be formatted with an spacing of 10pt or a blank line to the following text
- Keywords at the end of each chapter have to be formatted »italic«
- Literature references are formatted using spacing of 10pt to the next reference; from the second line of the reference, the reference can be indented using special indents (1.27 cm , hanging)
- Introducing elements as well as the lists of tables and graphs have to be placed in front, labelled through capital letters starting with an A (e.g. A Author's profile, B List of tables, etc.)
- Learning objectives have to be placed with number and heading of the concerned chapter in front of the running text
- Learning objectives, exercises, summaries etc. should be highlighted (using a grey background)
- The appendix has to be structured using Roman numerals (I, II, III, etc.)
- Keywords and terms of the glossary have to be placed within a table in the appendix.

Note: A style sheet, that can be used, is available.

2.2. Notes on bibliographical references (APA 6th)

- **Generic:** Author. (Year). Title (Subsidiary Author, Trans.). In Secondary Author (Ed.), (Eds.), *Secondary Title* (Edition ed., Vol. Volume, pp. Pages). Place Published: Publisher. (`Reprinted from: Reprint Edition).
- **Audiovisual Material**: Author. (Year). Title. *Series Title* [Type]. Place Published: Publisher.
- **Blog**: Author. (Year, Last Update Date). Title of Entry [Description]. Type of Medi um Retrieved from URL
- **Book**: Author. (Year). *Title* (Translator, Trans. Editor Ed. Eds. Edition ed. Vol. Volume). Place Published: Publisher.
- **Book Section**: Author. (Year). Title (Translator, Trans.). In Editor (Ed.), (Eds.), *Book Title* (Edition ed., Vol. Volume, pp. Pages). Place Published: Publisher. (`Reprinted from: Reprint Edition).

- **Conference Paper**: Author. (Year). *Title*. Paper presented at the Conference Name, Conference Location. Type retrieved from URL
- **Conference Proceedings**: Author. (Year of Conference, Date). *Title.* Paper presented at the Conference Name, Conference Location.
- **Dataset**: Investigators. (Year). *Title* [Data Type]. Dataset(s). Retrieved from: URL
- **Dictionary**: Author. (Ed.) (Eds.). (Year) Dictionary Title [Translated Title] (Edition ed., Vols. Volume). Place Published: Publisher.
- **Edited Book**: Editor (Ed.) (Eds.). (Year). *Title* (Edition ed. Vol. Volume). Place Published: Publisher.
- **Electronic Article**: Author. (Year). Title. [Reviewed Item]. *Periodical Title, Volume* (Issue), Pages. Retrieved from Website Title website: URL doi: DOI
- **Electronic Book**: Author. (Year). *Title*. In Series Editor (Series Ed.) Eds.), Series Title, Vol. Volume. Editor (Ed.) (Eds.), *Secondary Title* (pp. Number of Pages). Retrieved from Name of Database database Retrieved from URL doi: DOI
- **Electronic Book Section**: Author. (Year). Title (Translator, Trans.). In Editor (Ed.), (Eds.), Book Title. In Series Editor (Series Ed.) Eds.), Series Title (Edition ed., Vol. Volume, pp. Pages). Place Published: Publisher. (Reprinted from: Reprint Edition). Retrieved from URL (Original Publication). doi: DOI
- **Film or Broadcast**: Director (Writer) (Writers) & Series Director (Director) (Directors). (Year Released). Title [Medium]. In Producer (Producer), *Series Title*. Place Published: Distributor.
- **Government Document**: Author. (Year). *Title*. (Report Number). Place Published: Publisher Retrieved from URL.
- **Hearing**: *Title*, Legislative Body, Session Sess. Pages (Year) (History).
- **Interview**: Interviewee. (Year, Date) *Title/ Interviewer: Interviewer*. Program (Vol Number), Publisher, Place Published.
- **Journal Article**: Author. (Year). Title. [Translated Title]. [Reviewed Item]. *Journal, Volume* (Issue), Pages. doi:DOI
- **Legal Rule or Regulation**: Title, Rule Number C.F.R. § Section Number (Year), History.
- **Magazine Article**: Author. (Year, Date). Title. *Magazine, Volume,* Pages.
- **Manuscript**: Author. (Year, Date). *Title*. Type of Work. [Description of Material]. Collection Title, Retrieved from Name of Database database (Manuscript Number, Volume/Storage Container, Folio Number). Library/Archive, Place Published.

- **Map**: Cartographer (Cartographer). (Year). Title [Type]. Retrieved from URL
- **Newspaper Article**: Reporter. (Year, Issue Date). Title, Type of Article. *Newspaper,* p. pp. Pages. Retrieved from URL
- **Online Database**: Author. (Year). Title (Type of Work) (`Publication no. DOI). Available from Database Provider Name of Database. (Report Number). Retrieved Date Accessed, from Publisher URL
- **Online Multimedia**: Created By (Producer). (Year, Date Accessed). Title. *Series Title*. [Type of Work] Retrieved from URL
- **Patent**: Inventor. (Year). Country Patent No. Patent Number. Published Source: Issuing Organization. Personal Communication: Author (Year, Date). [Title]. Folio Number.
- **Podcast**: Producer (Producer). (Year, Date). *Title of Podcast* [Type]. Retrieved from URL
- **Press Release**: Author. (Year). Title [Press release]. Retrieved from URL
- **Report**: Author. (Year). *Title* (Report Number). Retrieved from Place Published: URL
- **Serial**: Author. (Year) Title. In Series Editor (Series Ed.) & Volume Editor (Vol. Ed.), *Series Title: Vol. Volume. Secondary Title* (Edition ed., pp. Pages). Place Published: Publisher.
- **Statute**: Name of Act, Code Number, Volume, Source, Pub. L. No. Public Law Number § Sections, Statute Number Stat. Pages (Publisher Year Date Enacted).
- **Thesis**: Author. (Year). *Title.* (Degree Thesis Type), University, Place Published. Retrieved from URL Available from Database Provider Name of Database database. (Document Number)
- **Unpublished Work**: Author. (Year). *Title of Work*. Series Title. Type of Work. Department. Institution. Place Published. Retrieved from URL
- **Web Page**: Author. (Year, Last Update Date). Title. *Series Title.* Edition. Retrieved from URL

Current documents, newspaper articles etc. will be available to participants in the online phase.

2.3. Copyright

Before submitting the manuscript, the rights to your texts and/or figures should be clarified and, if applicable, be obtained. This also applies to such materials which you have published elsewhere. Quotations, text extracts and foreign illustrations must be provided with the sources (author, year, page). If own diagrams are used, the notification “own diagram/graph” should be placed. If using selfmade diagrams/graphs, which refer to an original, the notification “ based on“ in combination with the reference should be used.

Citation method inspired by APA (American Psychological Association)

Verbatim quotes are always cited using a reference (Author, Date of publication, page number). In general the following information (author, Date of publication) fulfils when using paraphrasing or reproduction of content in own words (=indirect citation). But if a defined statement of one person is reproduced (as e.g. decleration of percentage or definition), the description of the page number is necessary for reasons of transparency.

2.4. Gender-sensitive language

Within the study materials care must be taken to use gender-sensitive language to meet the variety of gender or rather consider these. For the purpose of good readability and practibility different approaches can be used:

- The use of genderneutral personal description using plural (the students, the teachers, the participants, etc.)
- The use of genderneutral personal description using singular and plural (the member, the human, the person, the nurse, etc.)

2.5 Structure of the study materials

In principle, the study materials should have the same structure. The following structure could serve as an example:

- **Information about the author:** Work areas, academic background and activities outside the university, E-Mail, Photo

- **Introduction to the overall module**: (3-5 pages)
  - Refer to the subject for current social or professional discussion,
  - Structure and brief description of the content of the chapter,
  - Description of the learning objectives of the overall module,
  - Place emphasis in the process, possibly make cross-reference to other planned modules.

- **Structure of a chapter**
  - **Learning objectives of each chapter**: the teaching and learning objectives describe the expectations placed on the participants.
  - **Basic text** with graphs, tables, and, if applicable, strategic and practical examples, which clearly illustrates the basic relationships and facilitates understanding.
  - **Keywords** at the end of the chapter/sub-section are meant to explain links within the contents.
  - **Exercises as learning control checks** should be used at the end of the chapter to test whether participants have understood the text and its contents.
  - **Exercises with respect to professional activities** have the function to allow participants to think about their professional experience in the context of the topic in question. They should make reference to the learning material and thus allow a critical debate of the issue.
  - **Cited Literature**
  - **Literature for consolidation** at the end of the chapter. This can be:
    - **Literature:** textbooks and essays, which are recommended.
    - **Essays,** which can be **in the internet**.
    - **Internet research**

- **ANNEX**
  - **Bibliography**: List of references cited and further literature
  - **Literature for consolidation:** These include internet addresses: Details are desirable when there are suitable articles available in the internet about specialised subjects, which are appropriate to provide greater depth to the subject for solving project exercises.
  - **List of keywords**: Chapters are listed in which the keyword appears. With that content-related references make oneself clear.
  - **Glossary**: Short explanation of terms according to the specific context

2.6. Design of a learning unit/a chapter

Teaching/learning objectives of the unit/chapter

- Specifically describe the expectations placed on the participants: standard formulations can be used such as:
  - »After completing this chapter, you should be able to ...«
  - Verbs such as »know, understand, become familiar with, develop interest for« express behaviour which should be acquired in the learning process. They indicate the direction in which competence should develop. They are not suitable for providing teaching-learning objectives which are to be tested!
  - Verbs such as »describe, name, compare, calculate, allocate, separate, identify, create etc.« are well suited for control tests

For the wording of the learning/teaching objectives it can be helpful to use the steps of taxonomy by bloom (https://paeda-logics.ch/wp-content/uploads/2014/10/Taxonomiestufen_Bloom.pdf)

Basic text

- Division into meaningful sections is necessary, the arrangement of contents must be comprehensible to participants (structure)
- Compatible knowledge should be mediated (using »biographical training anchor points«)
- References to practical examples should be made as often as possible
- Alternative access points should be possible by integrating intermediate exercises, for example
  - Suggestions to remind participants about their own experiences (»Think back«)
  - Requests to prepare notes
  - Requests to survey colleagues

Didactical additional texts

- *Introduction:* Introductions have the function of acquainting the reader with the subject. In this respect, it is useful to provide:
  - Examples
  - Current references from the media
  - Press releases
  - Controversial positions as a headline,
  - Quotes, etc.
- *Summaries:*
  - As an overview, they provide an introduction to the central terms and statements of a longer section.

- In retrospect, they bundle the central terms and statements of longer section. In this way, they promote reductive processing and the formation of an intellectual macro-structure.
- *Mnemonics* are also short summarising statements, which have a more mnemonic function. They are intellectual corner posts to imprint knowledge.
- *Digressions* are not meant to demonstrate the literacy of the authors/writers, but should have the effect of providing deeper understanding to participants by creating new and unexpected relationships to other sources of knowledge.
- *Examples* have differing functions - all examples are intended in particular to build upon prior knowledge or experience and thus promote the elaborative process. The use of examples must be well thought out.
- *Graph*, *tables and formulae* should first also be verbalized. Their special function is to seen as a supportive illustration.
- *References* to documents in the appendix, additional literature sources, internet sites, etc. are extremely important for learning the independent handling of new sources of information and furthermore encourage new information to be obtained.

Keywords

Keywords at the end of the chapter/sub-section are meant to explain links within the contents. Choose terms which are central to the understanding of the learning unit. All keywords are summarised as an index in the appendix of the study material.

Exercises for control testing (examples in the appendix)

This type of exercise at the end of a chapter is meant to give participants the opportunity to check whether they have understood the text and assimilated its contents.

Exercises with reference to professional activities (examples in the appendix)

Exercises with respect to professional activities have the function to allow participants to think about their professional experience in the context of the topic in question. They should make reference to the learning material and thus allow a critical debate of the issue.

For both types of exercise, there will be no examination by the lecturer or mentor.

Literature for deeper knowledge

Advice will be given at the end of the chapter how to gain a deeper understanding of the contents. These include:

- Literature: textbooks and articles, which are recommended.
- Articles found in the internet.
- Internet research

The specified sources are only meant to provide additional reading material. The basic text is the sole foundation for understanding the study material and for successfully passing the entire module.

2.7. Online exercises

In the context of the planned module, different forms of assessing the learning result are used. In addition to those mentioned exercises ("exercises for control testing" and "exercises with respect to professional activities"), there are also **online assignments** that are provided about the learning environment and are to be carried out. Examples of the wording used for the online exercises can be found in the appendix.

The online exercises are intended to be used by participants to verify that they have covered all the information provided in the study materials. Participants will receive feedback on the online exercises from the mentor. The exercises are not graded, but it is mandatory to go through them.

The requirements placed on online exercises are:

- ✓ They are open questions
- ✓ The answers typically require no further articles or research besides the study materials
- ✓ They are to be answered by participants on a max. one-half DIN A4 page
- ✓ They are required to chronologically cover the materials (participants should read them within six weeks and in addition answer the exercises in blocks.) Please indicate for each exercise the chapter which it refers to.
- ✓ They are not integrated into the study material, but via the web-based learning environment. Therefor the exercises will be listet in an additional document.

In addition to the online exercises, please summarise "solution hints", which offer the mentors support in their task to give participants a feedback about their answers, and/or can be used as a "guideline". These are, for example, central terms which in eyes of the participants should be mentioned as far as possible in their answers.

2.8. Linguistic and stylistic design[4]

Study materials have to be self-explanatory. This assumes that the contents are carefully and didactically prepared, in particular for texts, these should be enriched with explanatory elements.

Criteria for making language understandable from a communicative and psycho-linguistic point of view are explained in their main effects. The most important guidelines are listed below in the following: [5]

- Foreign words should only be used if they refer to specialist terms or there is no appropriate German term.
- Specialist terms are to be defined using familiar words.
- Common abbreviations should also be written out when first used.
- The syntax must remain clear, i.e. convoluted sentences; ensure that the readability is maintained. However, the juxtaposition of short main sentences is also difficult to understand, as they require additional processes for providing a link.
- The conversion of verbs, adjectives and adverbs into nouns (nominalisation) should be avoided, as they lead to abstract and unclear sentences. Instead, more sentences should be enriched using expressive verbs.
- The references to contents between the sentences must be clear in order to avoid misunderstandings or time-consuming conclusions. This requires an unique use of pronouns and the explicit use of conjunctions between clauses.

2.9. Criteria for improving the allowability of the modules

Modularisation of higher education studies is a key element of the bologna-process. Study modules and with that the ECTS creditpoints shall be accumulated throughout the course of study and be charged e.g. in case of shifting a study programme. Within a scope of study, abroad students shall obtain the opportunity to pass modules, which count towards their study programme as they return.

In the meantime moreover the possibility exists to complete certain modules without matriculation in that particular study programm. These modules are sepretaly certified to the participants and can be charged by a subsequent enrolment into a study programm.

To make a possible counting of ECTS of your designed module into another study programm easier for students, please consider the following design notes:

Compatibility / Modularisation

4 The following explanations are taken from the handouts of the DIFF.

5 DIFF, p. 87ff

Due to modularisation and counting there is a possibility for students with heterogeneous previous knowledge and competencies to attend your study programme. If your study material persists any dependency in content to different modules, i.e. previous knowledge is required, hints for lateral entrants, students studying abroad or certification students should be given, how possible prerequisite of knowledge can be compensated. Hereto it can be referred to e.g. suitable literature or online sources.

The grade of a module

By the credit of modules onto other study programmes, learning outcomes get usually evaluated by content and grade. Many study programmes define minimum requirements of the grade of a creditable module. In order to allow an extensive credit of your module onto other study programmes, you should aim for the highest grade of imparting of competencies for your module.

An instrument for the determination of the grade of modules, which is used in the context of credit procedures, is the Module Level Indicator (MLI), which was developed by the University of Oldenburg as part of the ANKOM-Project "Oualifikationsverbund Nord-West". The definition of grades follows the European Qualifications Framework (EQF).

The grade of a learning unit is determined by the MLI using 9 scales (wideness and acuality of the knowledge, critical understanding, problemsolving, practical relevance, independence, consideration of social and ethical questions, interdisziplinary, innovation and creativity as well as communication skills). The markedness of some of these scales can be influenced by the composition of your study materials. It is a matter of following areas:

- The scale "wideness and actuality of knowledge", which constitute the wideness, depth and acualitiy of the provided knowledge
- The scale "critical understanding", which evaluates, in which way the provided theories, models, and/or methods within the module were critical reflected by the teacher
- The scale "interdisziplinary", which describes, to what extent a module shows reference towards other occupations or disziplines and provides the learners, to become active in interdisziplinary contexts, as well as
- The scale "practical relevance", which constitutes, whether and to what extent the study material refers to real practical requirements and -problems.

Following leadquestions may help you to shape your study material to reach a high grade of competence imparting by an appraisal of your module as part of an imputation system and with that resulting in an easier imputation:

Wideness and Actuality of the knowledge

- Does the study material contain the most important facts, principles, procedures and general terms of the subject area?

- Do the constituted stocks of knowledge correspond with the current state of research within the area of expertise?
- Does the study material contain at least some actual aspects, which usually are not included within textbooks of the topic, e.g. newest understanding of the work and learning space?
- Are the most important theories, models, and methods of the area of expertise covered?

Critical understanding

- Is it displayed within the study material, how the provided theories or models emerged and were developed? Is it described on what oberservations or research results the study material is based?
- Are research papers discussed which are dealing with the empirical validation of statements of theories and models?
- Are different, contradictory rudiments or theories of a subject area described and discussed?
- Does the study material also contain references on which subject area the described theories and models should not be used?
- Does the study material provide a critical understanding of theories and principles of the area of expertise?

Interdisziplinarity

- Does the study material contain references to other disciplines or professional fields?
- Are issues discussed within the study material, whose reply relies on knowledge of different specialist fields?
- Are possible different meanings of terms in different disziplines or contexts pointed out within the study material?

Practical relevance

- Are described theories and models displayed using practical situations within the study material?
- Are knowledge and attainments conveyed by the study material, which are immediately applicable into the practice?
- Does the study material contain references to cope real professional practical problems?

Appendix

Examples

Examples for wording with didactic structure
(in the context of the introduction)

The module has the following didactic structure:

- The **learning objectives** are to be put first in each chapter or section. They describe the knowledge and skills you will have acquired after working through the respective chapter.
- The presentation of the subject is made in a **basic text** using graphics, tables and **practical examples**, which clearly demonstrate the strategic and basic relationships and facilitate understanding.
- **Keywords** at the end of each chapter are listed in the appendix by using a reference to the corresponding chapter.
- **Relevant Terms** can be found after the text in the glossary at the end of the module, as these would otherwise disturb the reading flow within the text. You should work through these technical terms of the texts, as they are used differently from everyday language. The same terms can have a different meaning in different contexts/scientific disciplines. Knowledge of both linguistic styles (specialist and everyday language) avoids confusion and provides security.
- **Questions and exercises for self-testing** at the end of each content section will help you to check whether you have understood and learned what you have read.
- **Exercises with reference to your own professional career** have once again the function to review your professional experience in the context of the subject in question. They should provide a reference to that which has been learned and allow you to debate this issue critically in a practical way.
- **Cited Literature.** Listing of the quoted literature of a chapter at the end of each chapter.
- **Literature for deeper knowledge**. This is, for example:

→ Literature (textbooks), which you may purchase or lend from the university library,

→ References to articles that deal with more specific issues and aspects,

→ Internet research.

- **List of quoted literature references**. In the appendix of the module, you will find a complete index of the references used. You should be able to refer back to the sources quoted there if you wish to deepen your knowledge about certain aspects or issues that have been raised in the basic text by yourself.
- **Online exercises**. In the learning environment you will find online exercises to check what has been learned. The exercises are designed to help you identify any remaining gaps in knowledge as well as uncertainties and to provide orientation to your further learning. You will receive feedback to your answers from the mentor.

Examples for the wording of learning objectives

From the study materials to the module, "Quantitative research methods in health care services":

After this chapter, you should be in a position to

- explain the aim of research in a sophisticated way using examples and concrete issues.
- define the terms of population, sample, characteristic and characteristic attributes and describe their relevance for research methodology.
- give reasons for the necessarity of a good scientific professional practice and define essential quality criteria of research.
- describe reasons for ethical actions in research and instruments for the protection of ethical research.

From the study materials to the module, " Technologies in health care services":

After this chapter, you should be in a position to

- evaluate chances and risks of digital interventions in terms of empowerment and discuss opportunities and borders.
- capture the concept of "patient empowerment" and have the ability to apply as well as reasonably explicate using examples.

Examples of online exercises

From the study module "Clinical and instrument-based diagnosis standards"

- *Define the term "dysphagia" and describe what sequelae relate to dysphagia. Are clinical or instrument-based diagnosis standards necessary or do they restrict our actions? Explain your existimation using a few sentences.*
- *Create a chart and enter all symptoms which could be a patients´ safety issue into the first column and all symptoms concerning a problem with efficacy into the second column.*
- *Please discuss on forum, which screening processes are recommended within the guideline "neurogenic dysphagia" of the DGN concerning the group of patients "acute stroke". Do you recognise advantages or disadvantages regarding the mentioned screening process? If so, which one?*
- *You´ll find a little quiz at this point using sentences, that could or could not be used as part of the documentation of a KSU. Please think about reasons while doing the quiz, why the stated sentence should or should not be documented in that way.*

- *Watch the FEES-Video. Which abnormalities do you recognise? Evaluate the swallowing using the PAS.*
- *In the study materials you find an image of anatomical landmarks. Please watch the provided VFS-Videos now and orientate yourself in the images/videos.*

  Try to use the PAS while watching the videos.

Checklist

☐ **Max. 100 pages of text in the given format (excl. the appendix)**

ELEMENTS OF THE STUDY MATRIALS

☐ **Profile of the author(s) (approx. 1 page)**

☐ **p.r.n. lists of tables and graphs**

☐ **Introduction (without a chapter number), 3 to 5 pages**

☐ **Chapter**

- ☐ Learning objectives
- ☐ Basic text with rules of thumb, definitions, examples, digressions, summaries, graphs, tables, diagrams (as respective extra files), exercises to reflect upon in the text
- ☐ Keywords at the end of the (sub-)chapter
- ☐ Exercises/tests to check learning success
- ☐ Exercises with reference to professional activities
- ☐ Literature for a deeper knowledge of the subject
- ☐ References to internet pages

Appendix:

☐ **Bibliography**

☐ **Internet references**

☐ **Index of keywords with chapter references**

☐ **Glossary**

FORMATTING (IF NO TEMPLATE IS USED)

☐ Comply with the given print space
DIN A4, upright format
Margin: Top: 3.5 cm, bottom: 2.5 cm-3.75cm, left: 4 cm, right: 2.5 cm
Back margin: 0 cm

☐ Font size 12pt

☐ Font »Calibri«

☐ Line spacing: single

☐ Max. three hierarchical levels

☐ Text alignment: on full justification

☐ Automatic hyphenation

- ☐ No manual pagination
- ☐ Paragraphs are made using blank lines
- ☐ Enumerations should be indented to the left hand side (0.63 cm)
- ☐ Chapter headings: font »Calibri«, font size 16pt, bold

  Subchapter headings of the second outline level: font »Calibri«, font size 12pt, bold and italic

  Subchapter headings of the third outline level: font »Calibri«, font size 12pt, bold
- ☐ At subchapter headings of the second and third outline level an increased spacing to preceding and following text has been used
- ☐ Headings of learning objectives, exercises, etc. have been highlighted by using font »Calibri«, font size 14pt, bold and have been formatted using a 6pt space to following text
- ☐ Table contents and graph labels must be editable (exception: scanned images)
- ☐ Graphics are created using a suitable program
- ☐ Graphics that are not created with the program Word will in addition be submitted as original files
- ☐ Tables and graphs have been inserted centred
- ☐ Labelling of tables(above) and graphs (below) has been made in font »Calibri«, font size 12pt, left-justified
- ☐ No spacing between labelling and tables/graphs
- ☐ Spacing between tables/graphs and following text has been created by using a blank line or spacing of 10pt.
- ☐ Keywords, that have been formatted italic, have been listed at the end of each chapter
- ☐ Literature references have been listed at the end of each chapter and in the bibliography and have been formatted using spacing of 10 pt to the following reference (where appropiate: using indentation after second line)
- ☐ Introduction, lists of tables and graphs, Author's profile etc. have been placed in front using capital letters
- ☐ Learing objectives, exercises, summaries, etc. have been highlighted
- ☐ The appendix has been structured by using Roman numerals

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