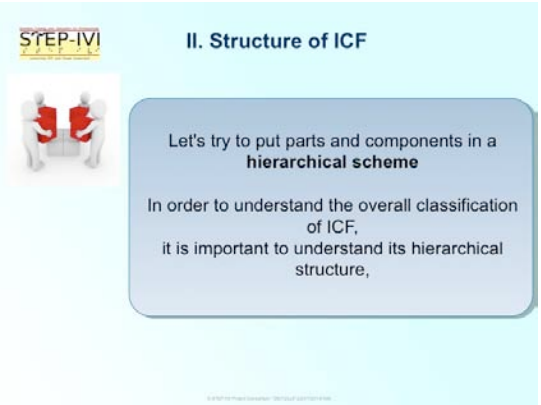
Standard Training and Education for Professionals concerning ICF and Visual Impairment

TUTORIAL 3

"MODULE 3 – ICF ADVANCED 1"



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2 Module 3

3 ICF Advanced 1

3.1 Structure of this module:

I. Memo of what I have learned in module 2
II. Structure of ICF
III. Model of functionning and disability
IV. How to use this model - case study

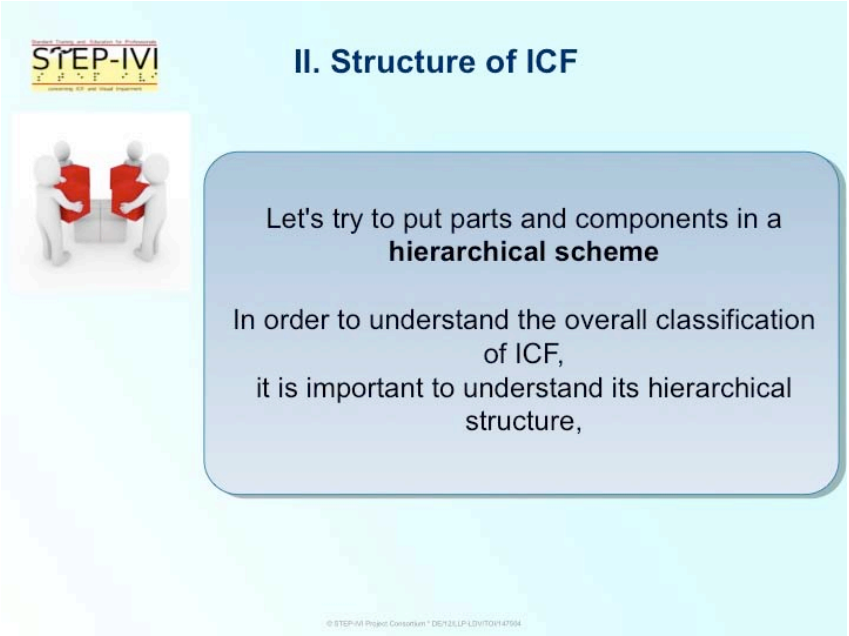
3.2 I. Remember the essential information from Module 2

3.2.1 Essential information in the previous module

In the previous module, you got many informations and definitions, about parts and components of the ICF
1.Functonning
2.Disability
3.Body structures
4.Body Functions
5.Activities
6.Participation
7.Environmental Factors
8.Personal Factors

3.3 II. Structure of ICF

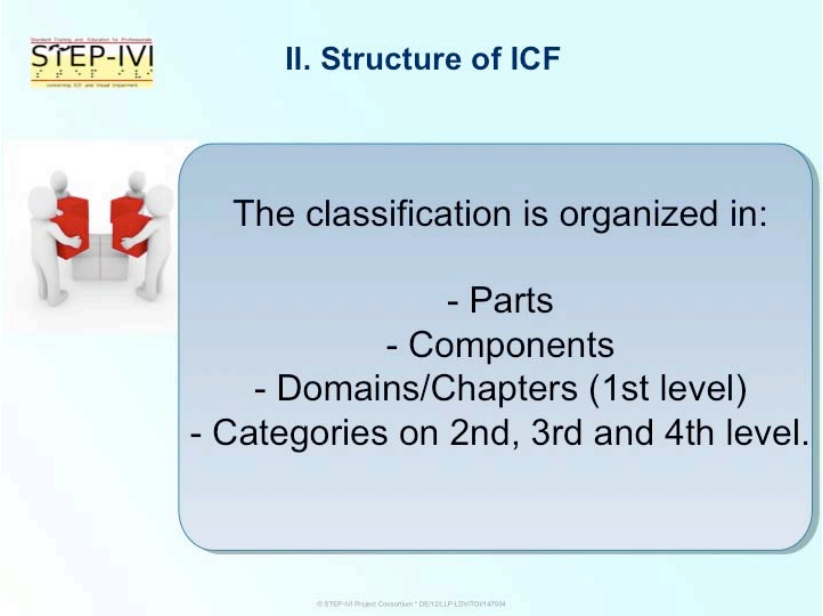
Let's try to put parts and components in a hierarchical scheme. In order to understand the overall classification of ICF, it is important to understand its hierarchical structure



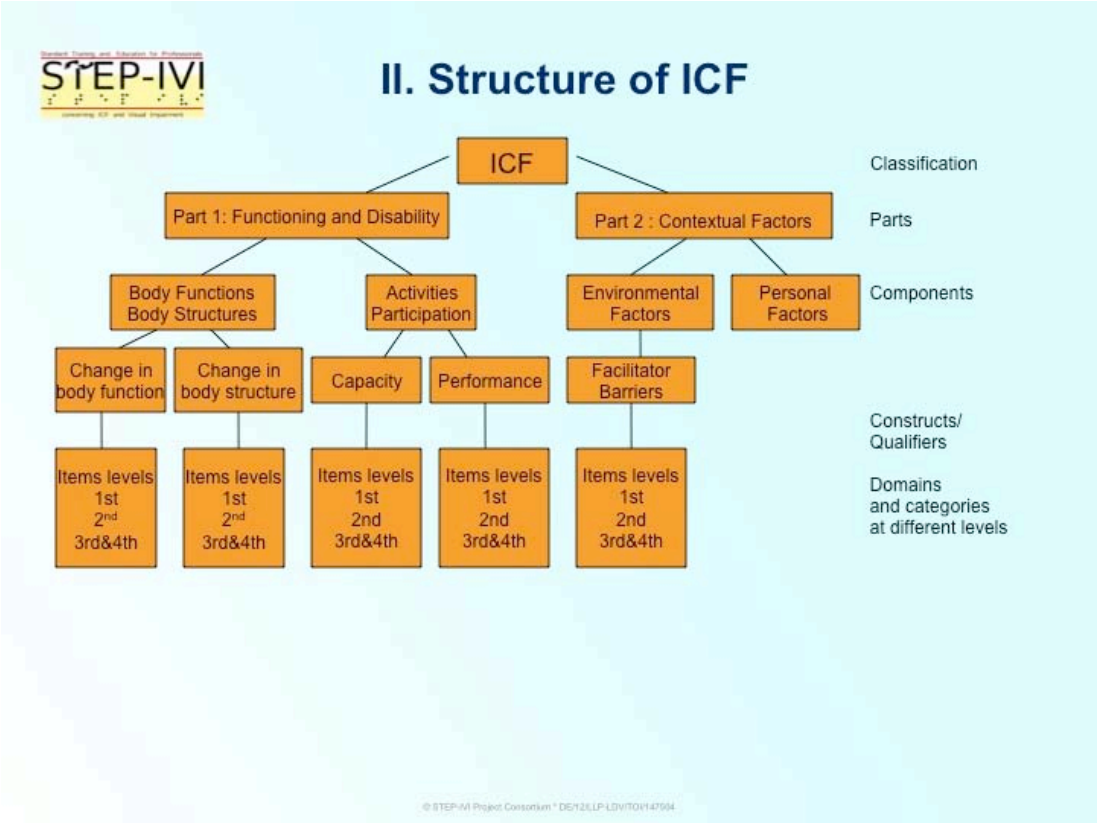
3.3.1 ICF hierarchy

The classification is organized in

- Parts
- Components
- Domains/Chapters (1st level)
- Categories on 2nd, 3rd and 4th level



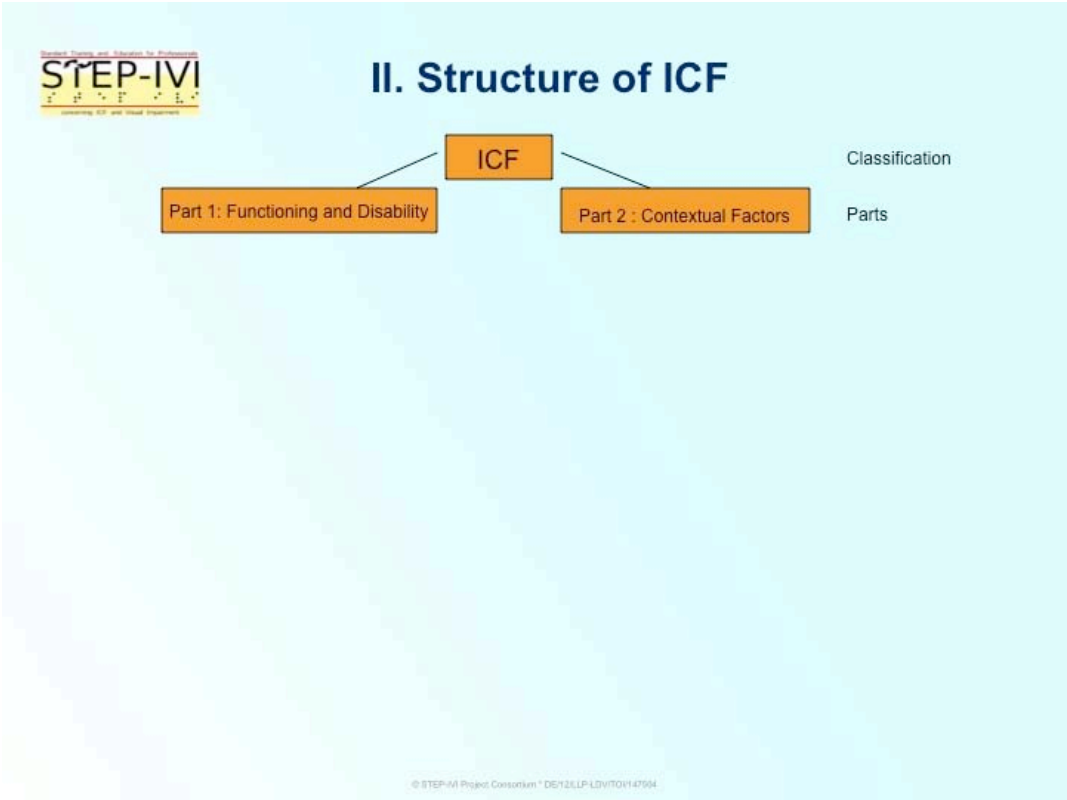
3.3.2 ICF Stucture overview



3.3.3 ICF Parts

ICF separates in two parts:

1. Functioning and disability
2. Contextual factors



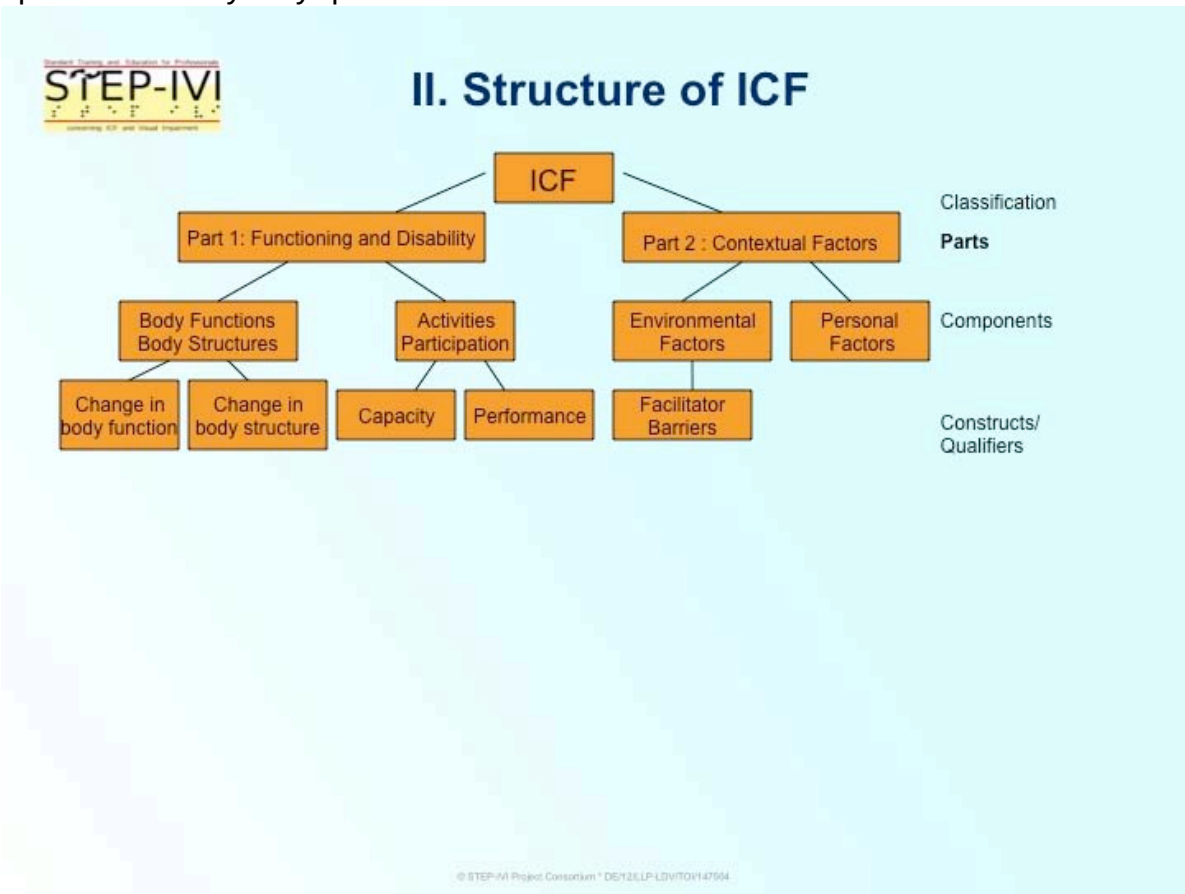
3.3.4 ICF Components and constructs

The next hierarchical level below the two parts is called component.

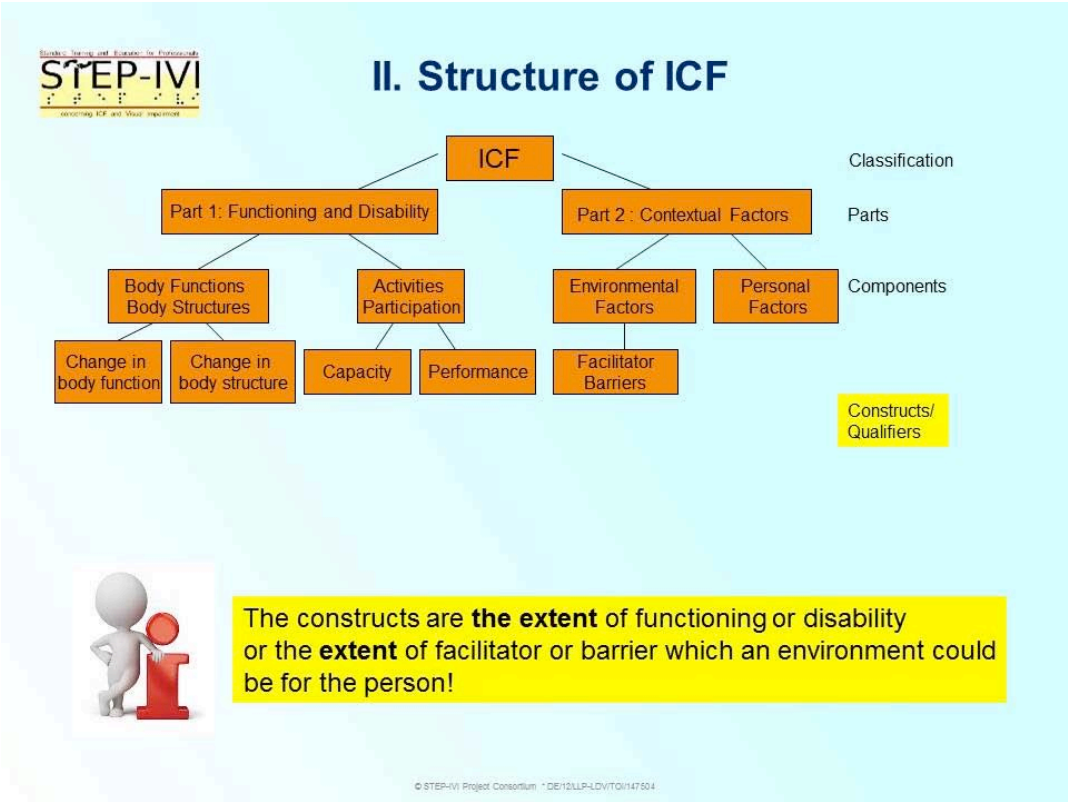
1. In the part "Functioning and disability" ICF contains:
   a) Body functions and body structures
   b) Activities and participation
2. In the part "Contextual factors" ICF contains:
   a) Environmental factors
   b) Personal factors

Those components are specified by **"constructs"** and qualifiers which describe the consequences according to functioning and disability. The components are specified by four
separate but interrelated constructs. Body functions and body structures are in this methodology interpreted by "**changes**" in the physiological systems or in the anatomical structure. For the Activities and
Participation component, two constructs are available: **"capacity**" and **"performance"**. For envronmental and personal factors, ICF identifies "**facilitators**" and "**barriers**" as construct.

Those constructs are essential for the efficiency of the classification, because the utilization of "qualifiers" tries to operationalize those constructs and give a rating about the degree of functioning and disability. In comparison to the other components, "personal factors" will be not operationalized yet by qualifiers.

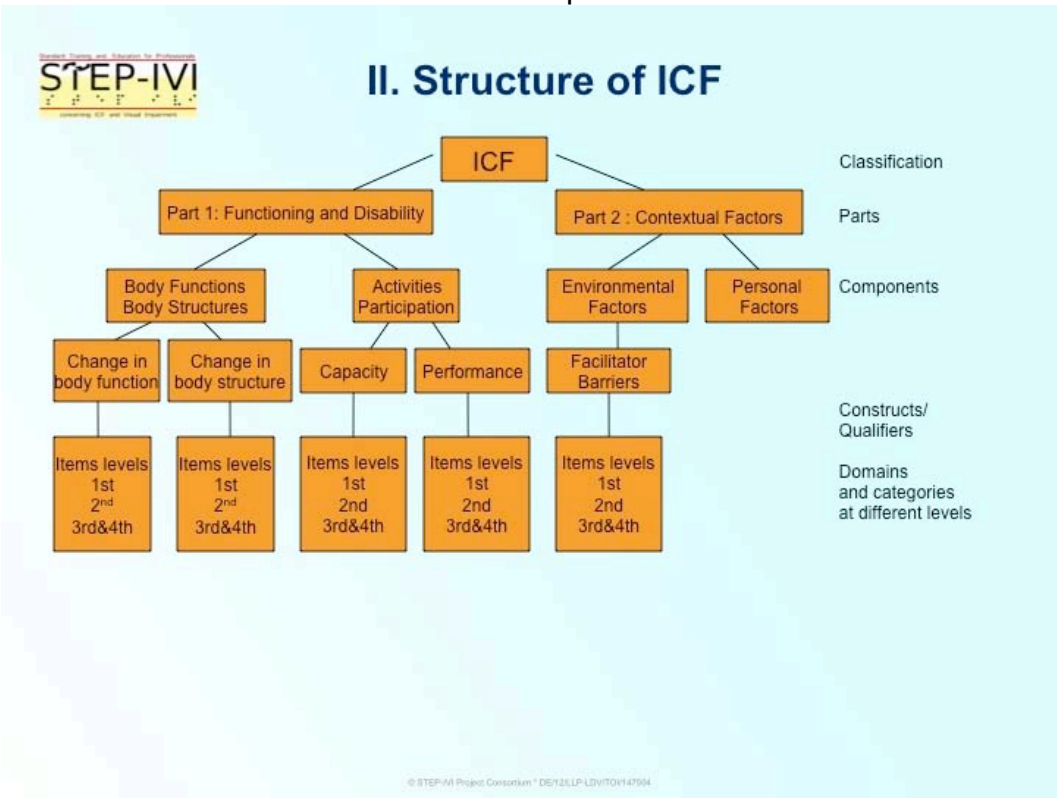


The **constructs are the extent of functioning or disability** or the extent of facilitator or barrier which an environment could be for the person!



3.3.5 ICF Domains

Below the constructs you'll find domains which are structured in various levels. On this level, the ICF user will find all items in different specifications.

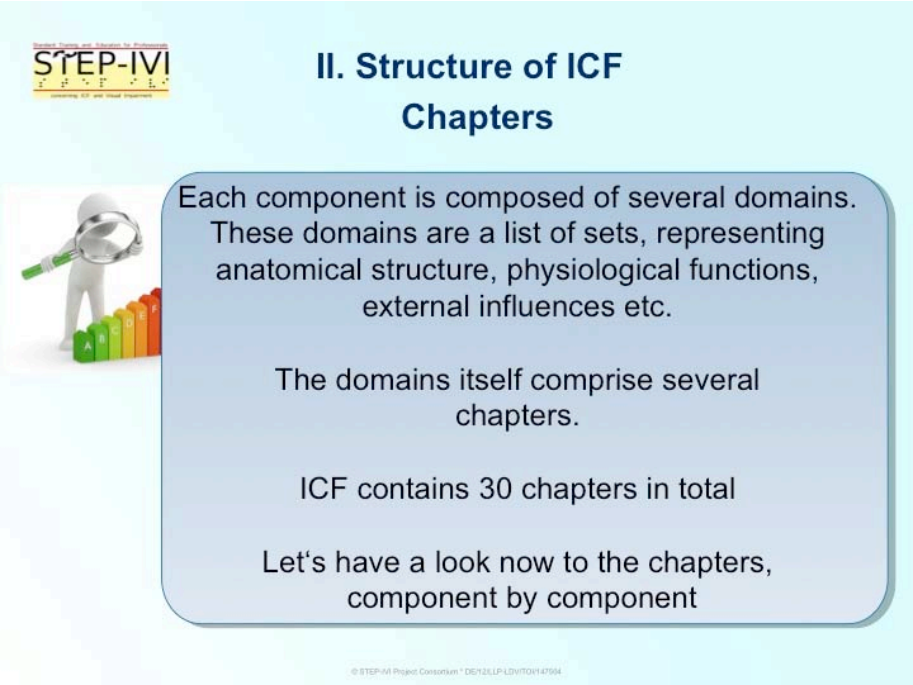


3.3.6 The structure below the ICF components - domains and chapters

Each component is composed of **several domains**. These domains are a list of sets, representing anatomical structure, physiological functions, external influences etc. According to the WHO a domain is defined as:

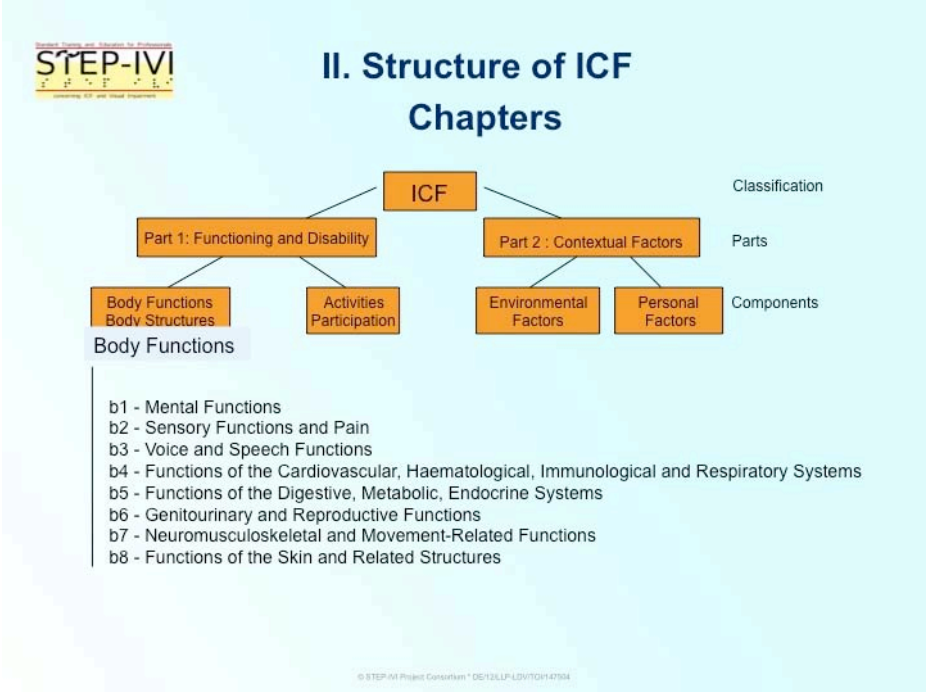
"A domain is a practical and meaningful set of related physiological functions, anatomical structures, actions, tasks, or areas of life." (**World Health Organisation**, I*nternational Classification of Functioning, Disability and Health,* Geneva 2001, p. 3)

ICF contains an overall of **30 chapters**. Each chapter contains several items.
Let‘s have a look now to the chapters, component by component



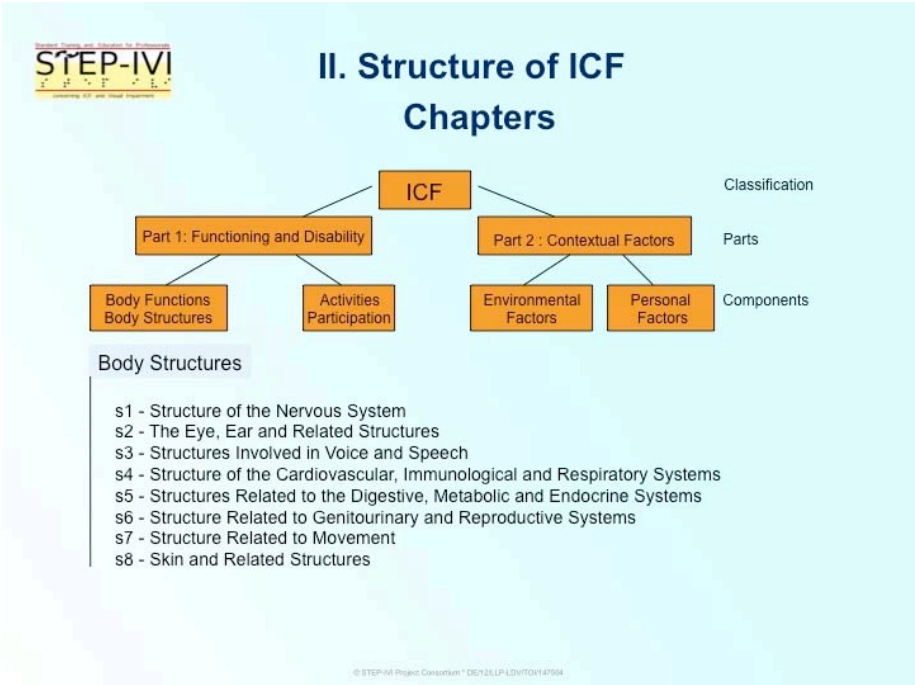
3.3.6.1 Chapters of the component "body functions"

b1 - Mental Functions
b2 - Sensory Functions and Pain
b3 - Voice and Speech Functions
b4 - Functions of the Cardiovascular, Haematological, Immunological and Respiratory Systems
b5 - Functions of the Digestive, Metabolic, Endocrine Systems
b6 - Genitourinary and Reproductive Functions
b7 - Neuromusculoskeletal and Movement-Related Functions
b8 - Functions of the Skin and Related Structures



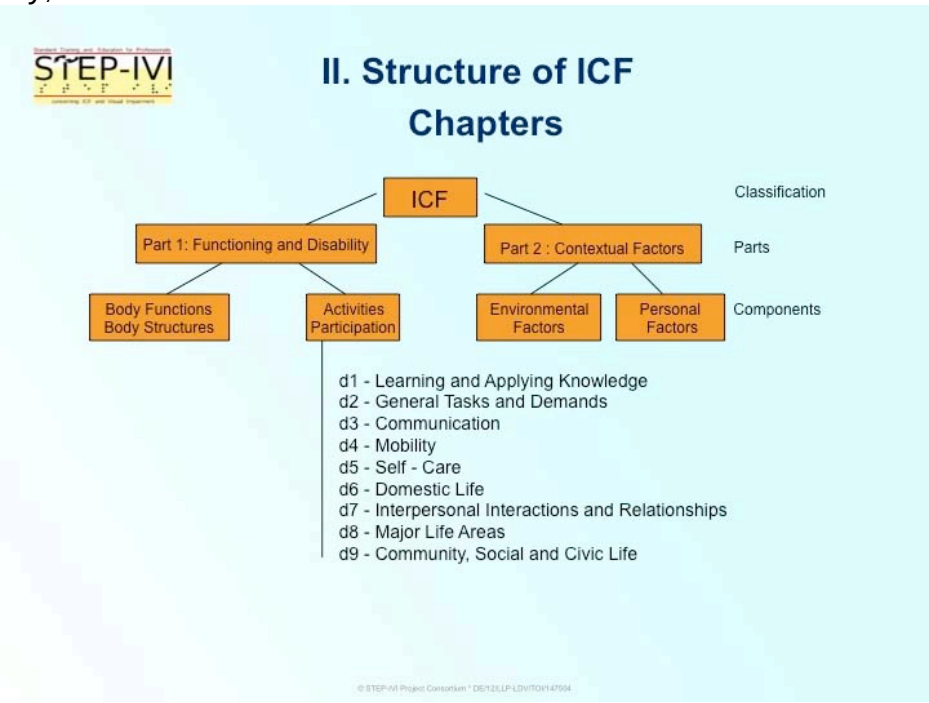
3.3.6.2 Chapters of the component "body structures"

s1 - Structure of the Nervous System
s2 - The Eye, Ear and Related Structures
s3 - Structures Involved in Voice and Speech
s4 - Structure of the Cardiovascular, Immunological and Respiratory Systems
s5 - Structures Related to the Digestive, Metabolic and Endocrine Systems
s6 - Structure Related to Genitourinary and Reproductive Systems
s7 - Structure Related to Movement
s8 - Skin and Related Structure



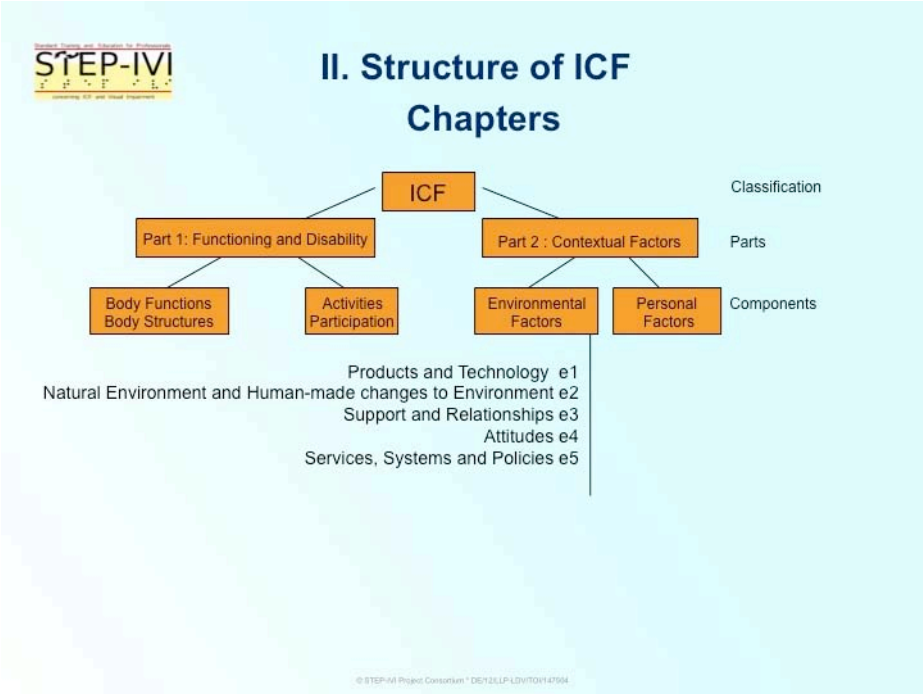
3.3.6.3 Chapters of the component "activities and participation"

d1 - Learning and Applying Knowledge
d2 - General Tasks and Demands
d3 – Communication
d4 – Mobility
d5 - Self – Care
d6 - Domestic Life
d7 - Interpersonal Interactions and Relationships
d8 - Major Life Areas
d9 - Community, Social and Civic Life



3.3.6.4 Chapters of the component "environmental factors"

e1 Products and Technology
e2 Natural Environment and Human-made changes to Environment
e3 Support and Relationships
e4 Attitudes
e5 Services, Systems and Policies

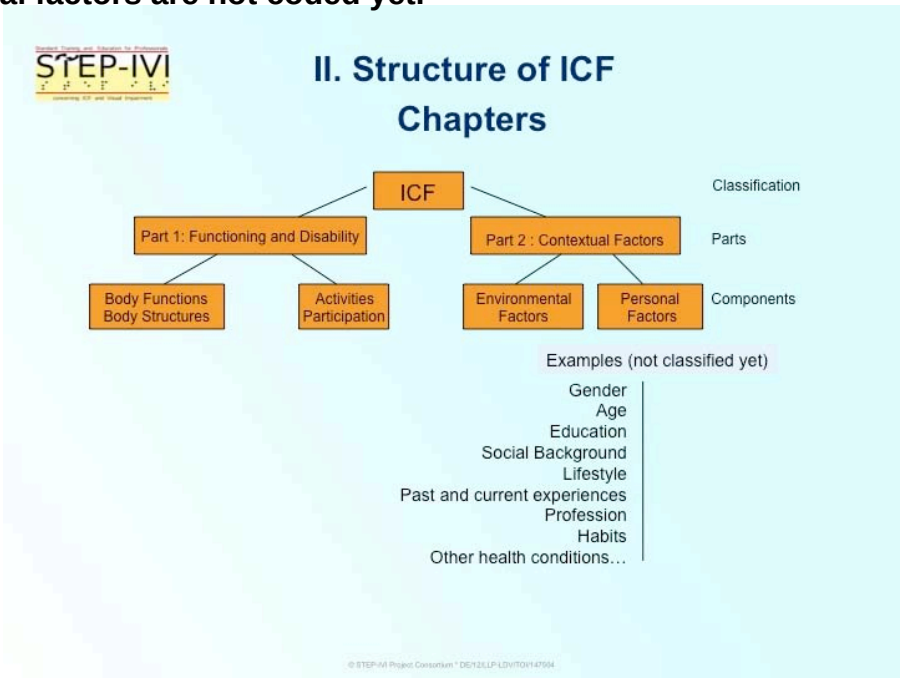


3.3.6.5 Chapters of the component "personal factors"

In the component of personal factors there **are no domains and chapters explicitly defined yet**. This component considers all personal aspects which might influence the functional health of a person.
Such aspects might be:

- Gender
- Age
- Education
- Social Background
- Lifestyle
- Past and current experiences
- Profession
- Habits

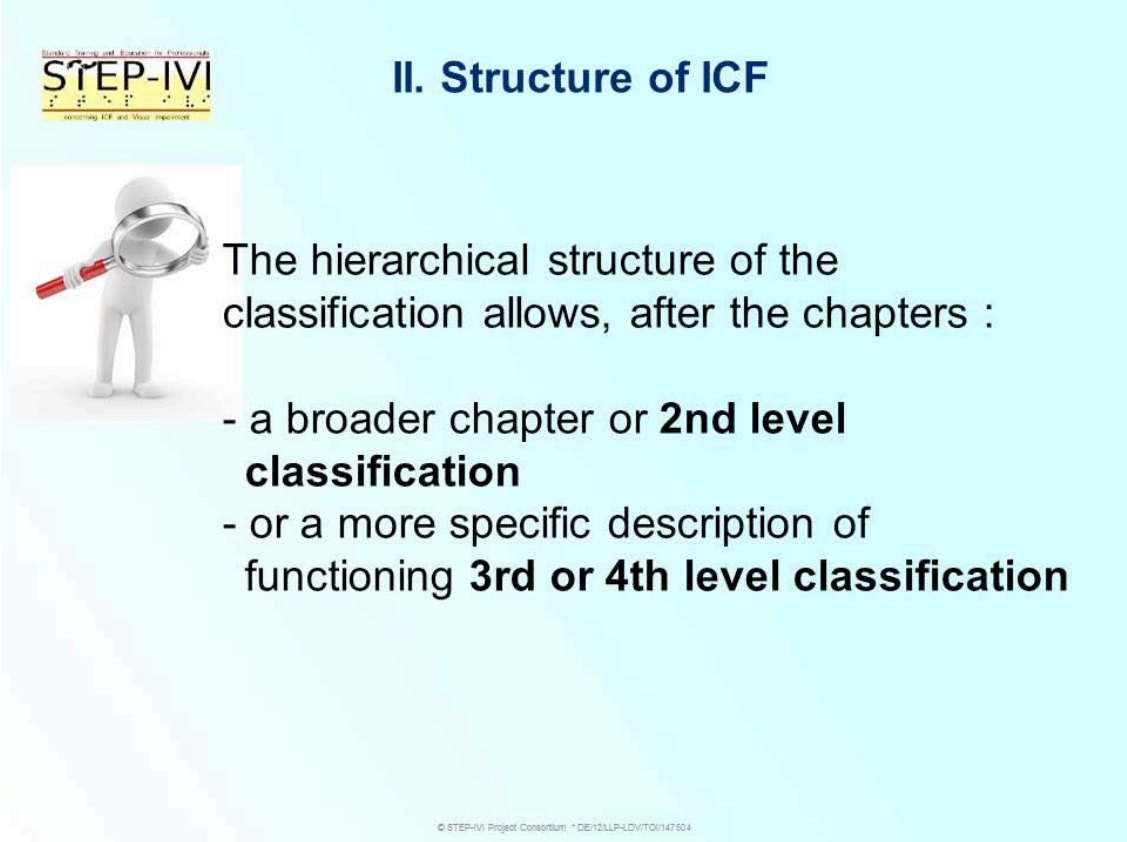
The personal factors are not coded yet.



3.3.6.6 ICF Structure beyond the chapters

The hierarchical structure of the classification allows, after the chapters :

- a broader chapter or 2d level classification
- or a more specific description of functioning (3d or 4th level classification)
-



3.3.7 General principle of coding

The ICF provides an **alphanumeric** coding scheme for functioning. This coding helps to simplify information.

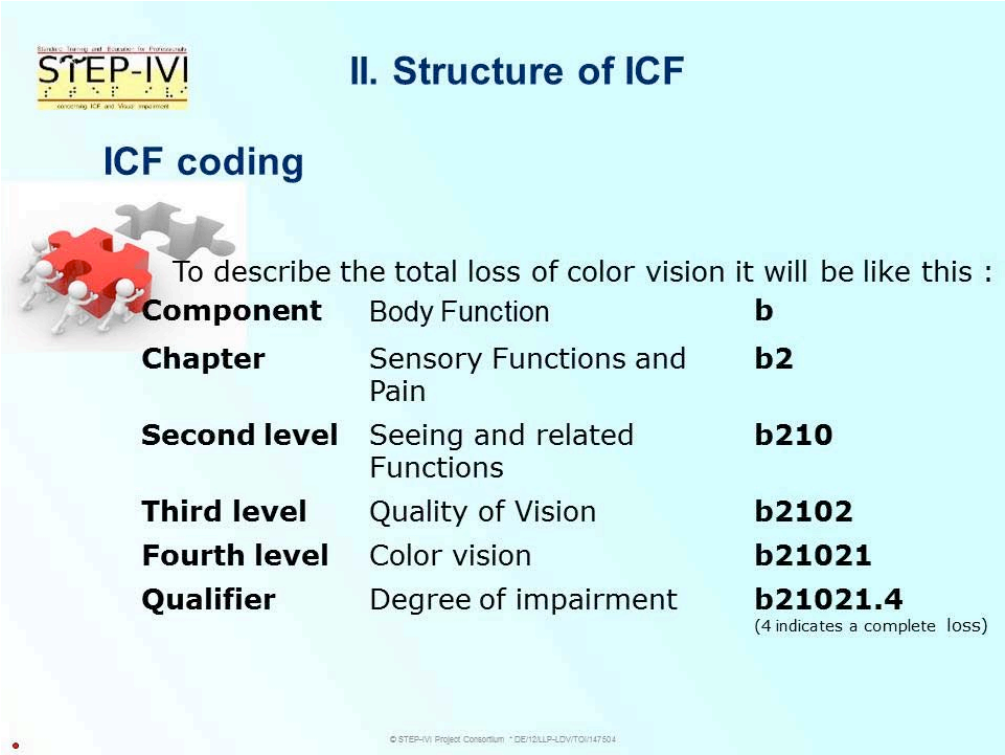
You have letters codes for components and figures for chapters, and categories, depending on the specific situation.

Having some limitation in walking = d450.2
Hyper sensitivity to artificial light = b21020. 4

3.3.7.1 The levels of coding

To describe the total loss of color vision it will be like this :

Component	Body Function	b
Chapter	Sensory Functions and Pain	b2
Second level	Seeing and related Functions	b210
Third level	Quality of Vision	b2102
Fourth level	Color vision	b21021
Qualifier	Degree of impairment	b21021.4 (4 indicates a complete loss)

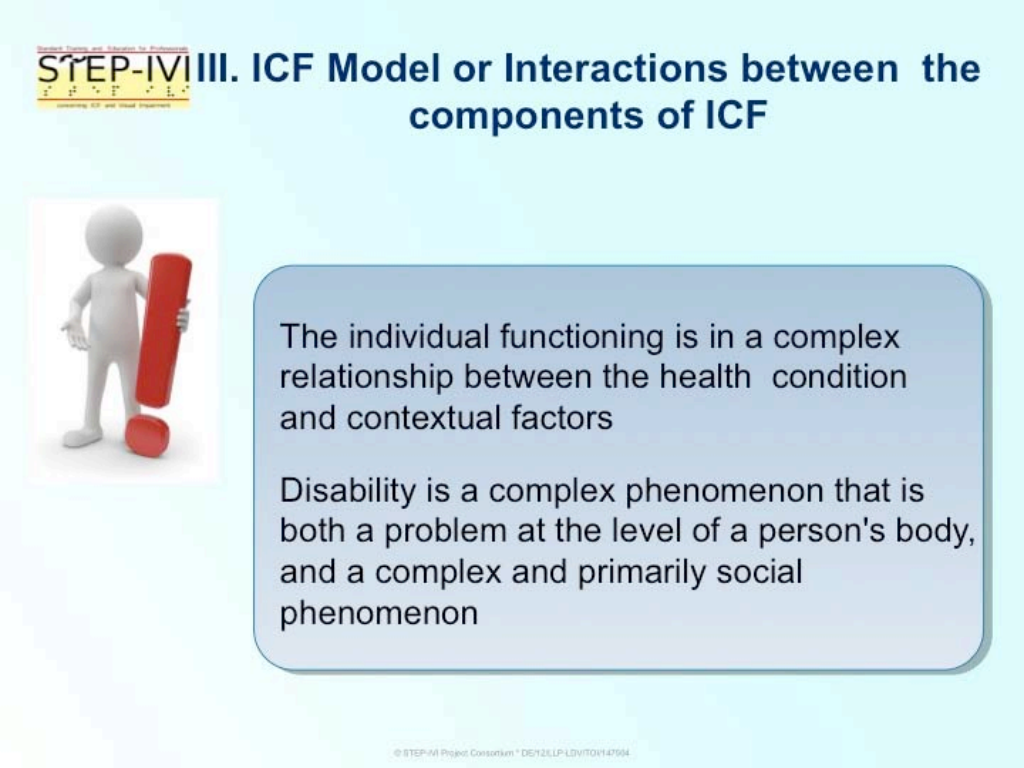


3.4 III. Model of functioning and disability

3.4.1 Model and interaction between components of the ICF

The individual functioning is in a **complex relationship** between the **health condition** and contextual **factors.**

Disability is a complex phenomenon that is **both a problem** at the level of a person's **body**, and a complex and primarily **social phenomenon.**

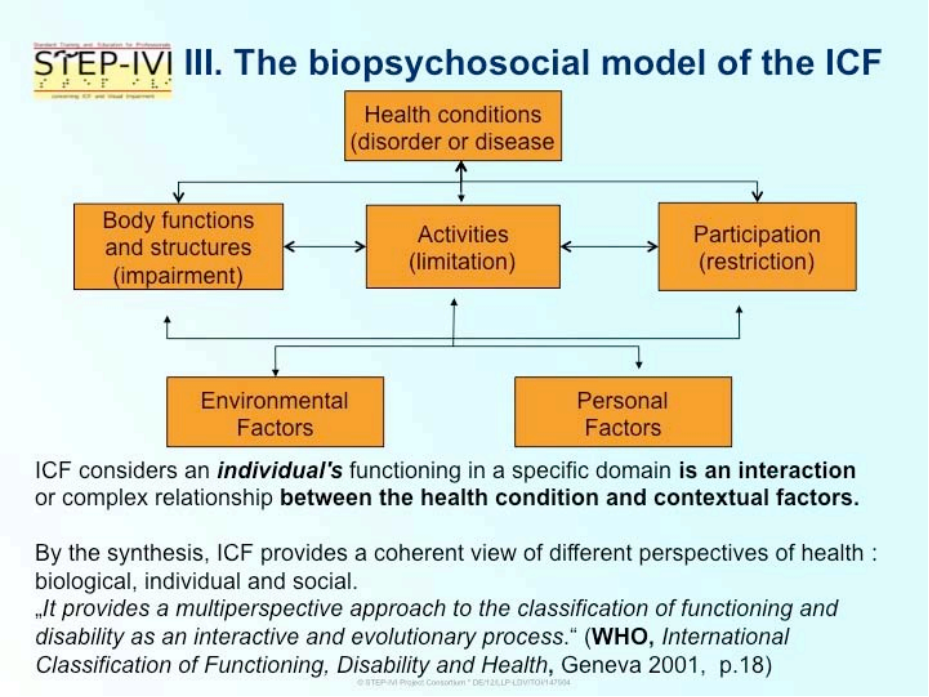


3.4.2 The multiperspective and holistic approach

The ICF considers an individual's functioning in a specific domain is an interaction or complex relationship between the health condition and contextual factors.
By the synthesis, ICF provides a coherent view of **different perspectives of health** : biological, individual and social.

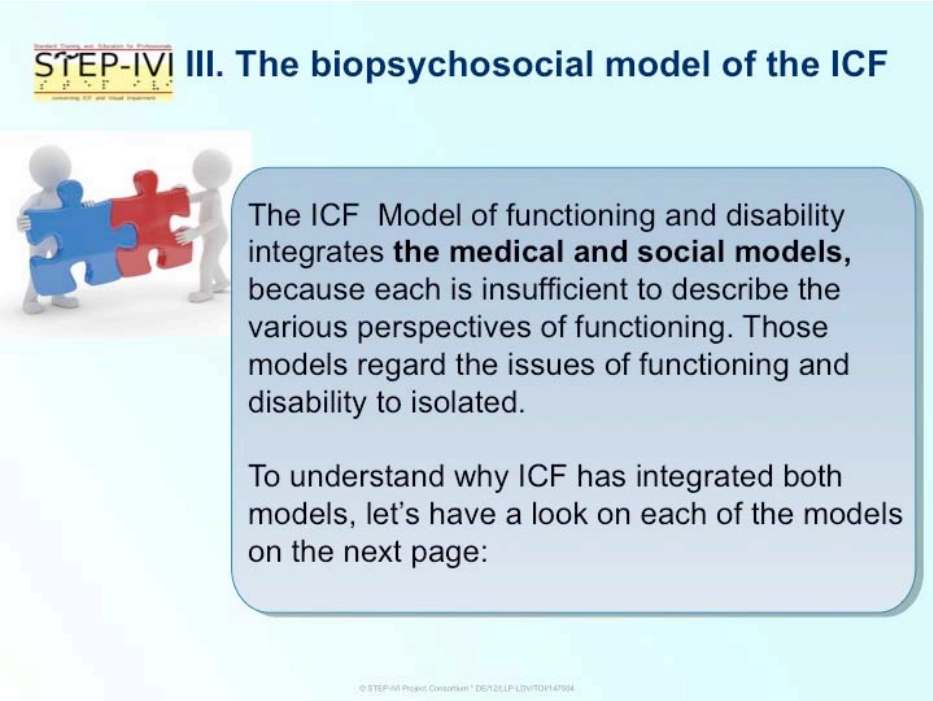
„It provides a multiperspective approach to the classification of functioning and disability as an interactive and evolutionary process.“ (**WHO**, *International Classification of Functioning, Disability and Health*, Geneva 2001, p.18)

The ICF Model of functioning and disability integrates the medical and social models, because each is insufficient to describe the various perspectives of functioning. Those models regard the issues of functioning and disability to isolated.
To understand why ICF has integrated both models, let’s have a look on each of the models on the next page:



3.4.3 The dialectic of medical versus social model

The ICF Model of functioning and disability ***integrates*** **the medical and social models**, because each is insufficient to describe the various perspectives of functioning. Those models regard the issues of functioning and disability to isolated.
To understand why ICF has integrated both models, let’s have a look on each of the models on the next page.

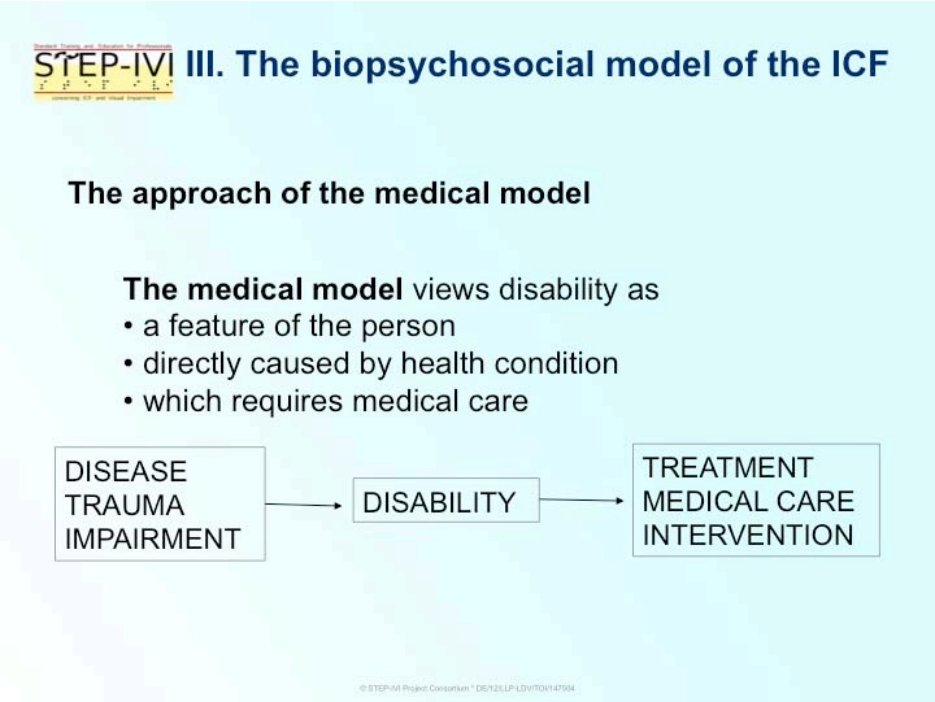


3.4.4 The approach of the medical model

The medical model views disability as

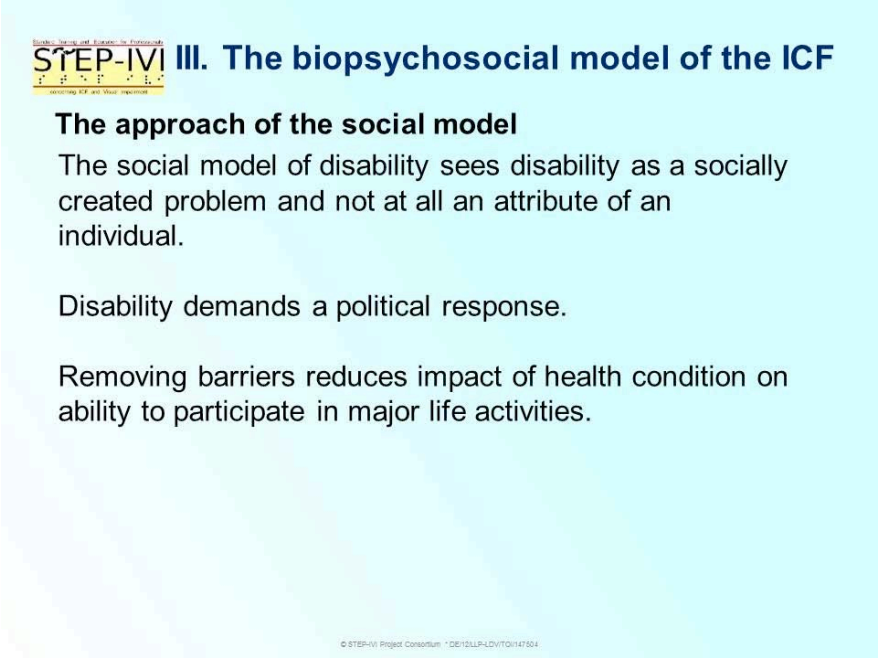
- a feature of the person
- directly caused by health condition
- which requires medical care

Principle of perspective in this model:
Disease, Trauma, Impairment leads to assessment of a disability. These results require treatment, medical care, intervention.



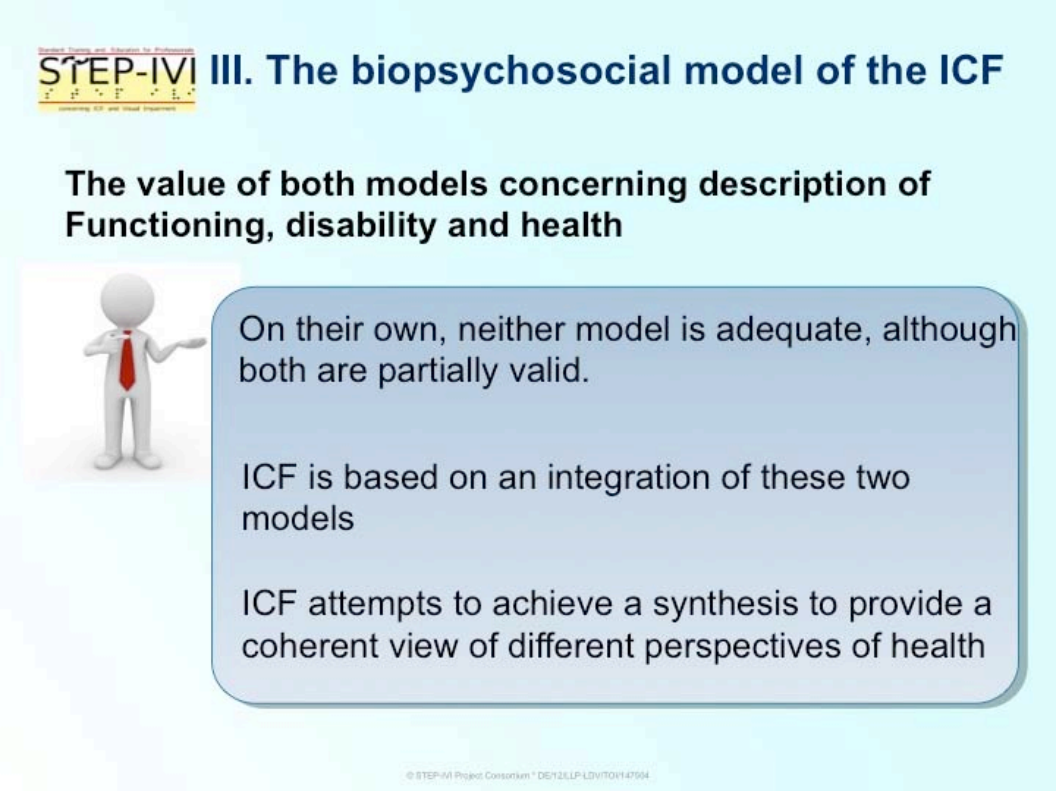
3.4.5 The approach of the social model

The social model of disability sees disability as a socially created problem and not at all an attribute of an individual. Disability demands a political response.



3.4.6 Conclusion

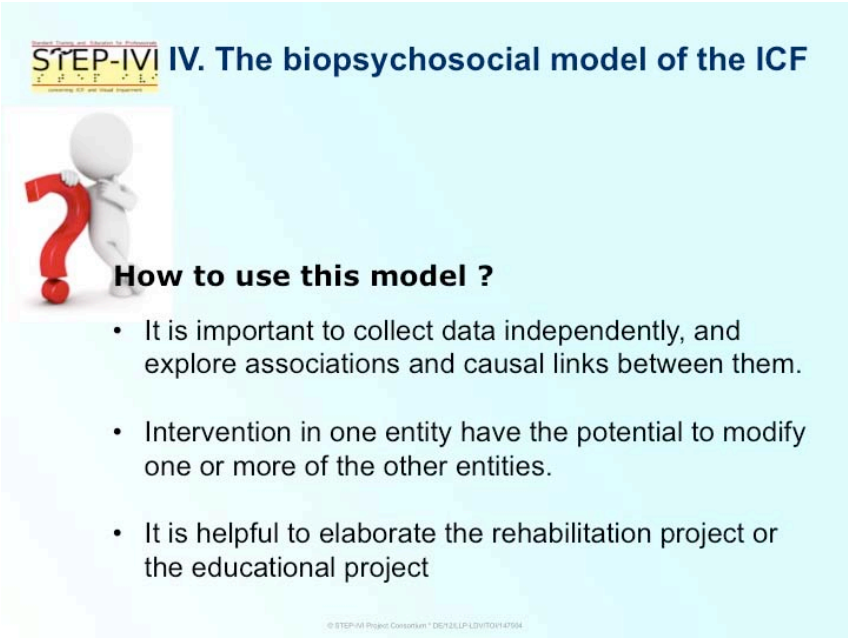
On their own, neither model is adequate, although both are partially valid. ICF is based on an integration of these two models ICF attempts to achieve a synthesis to provide a coherent view of different perspectives of health.



3.5 IV. The practical use of this model

3.5.1 How to use this model?

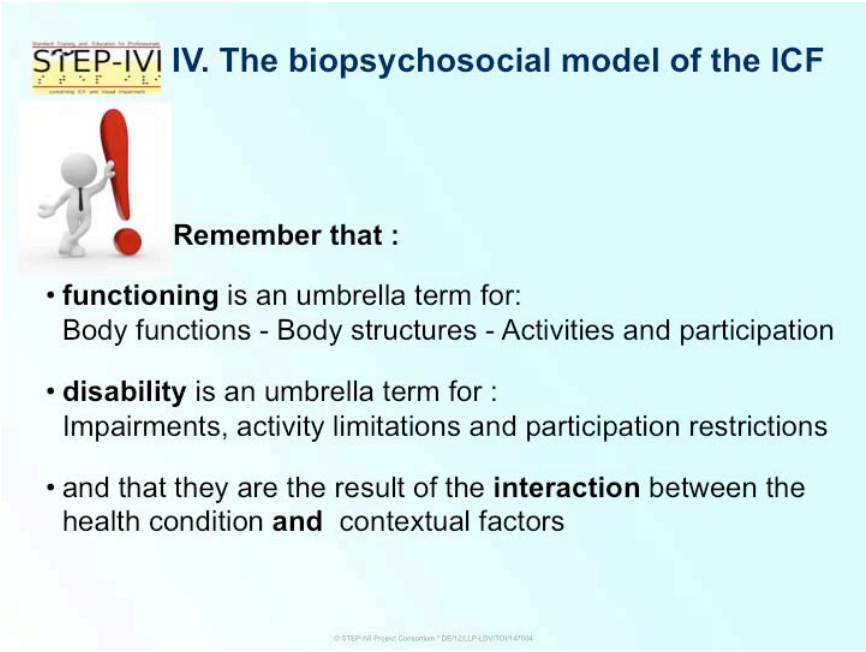
- It is important to collect data independently, and explore associations and causal links between them.
- Intervention in one entity have the potential to modify one or more of the other entities.
- It is helpful to elaborate the rehabilitation project or the educational project



Remember that :

- functioning is an umbrella term for:
  body functions - Body structures - Activities and participation
- disability is an umbrella term for :
  Impairments, activity limitations and participation restrictions

and that they are the result of the interaction between the health condition and contextual factors



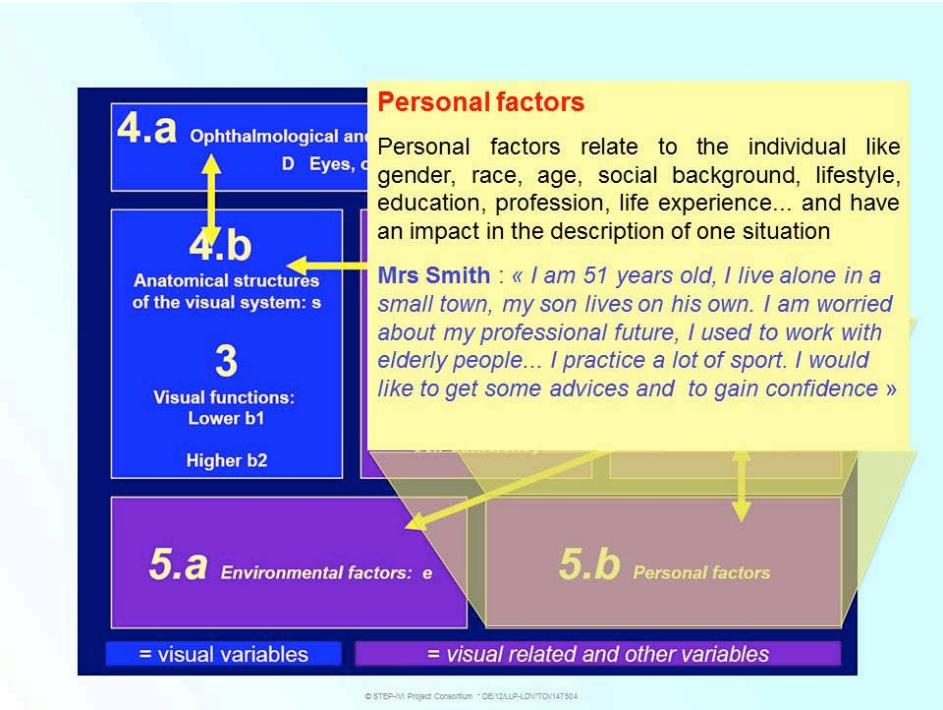
3.5.2 IV. Case study: Mrs. Smith

Let's use the model through the example of Mrs Smith. We will explore again the definitions according to this example.
A **health condition** is an umbrella term for disease, disorder, injury, trauma.It can be coded according to the ICD-10.

3.5.2.1 Personal factors

Like gender, race, age, social background, lifestyle, education, profession, life experience... and have an impact in the description of one situation

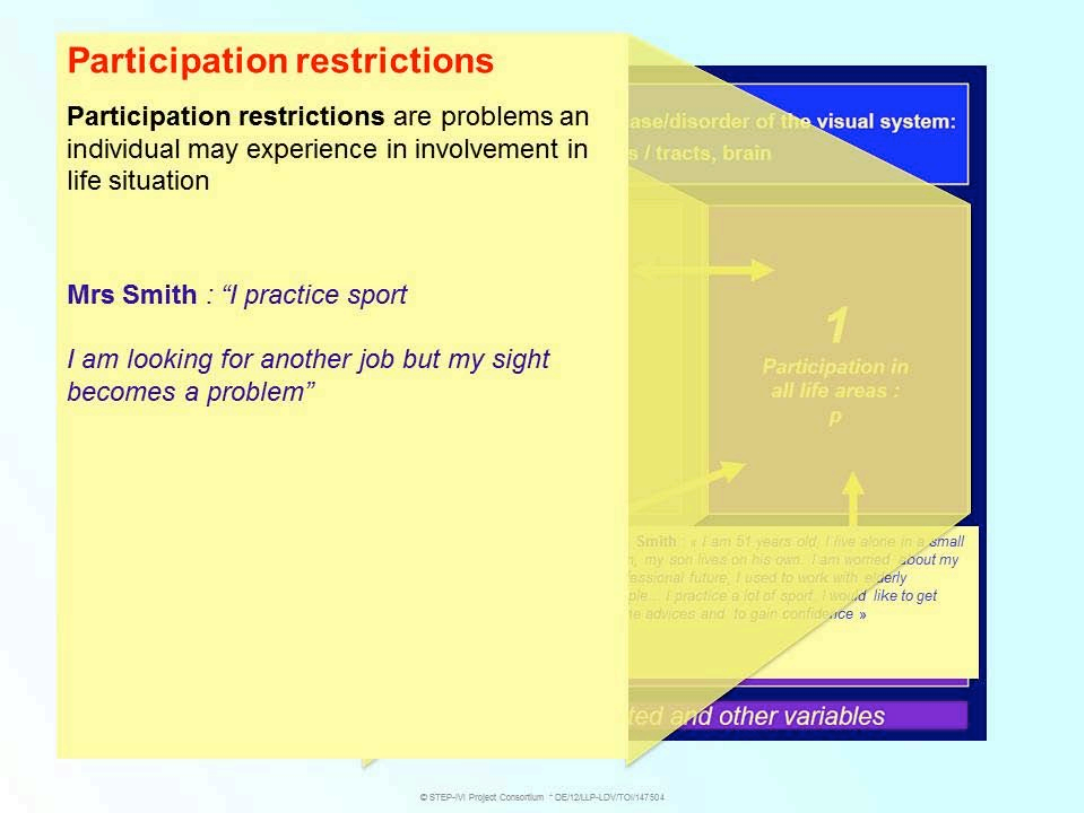
Mrs Smith : *"I am 51 years old, I live alone in a small town, my son lives on his own. I am worried about my professional future, I used to work with elderly people... I practice a lot of sport. I would like to get some advices and to gain confidence"*



3.5.2.2 ICF relevant information concerning participation

Participation restrictions are problems an individual may experience in involvement in life situation

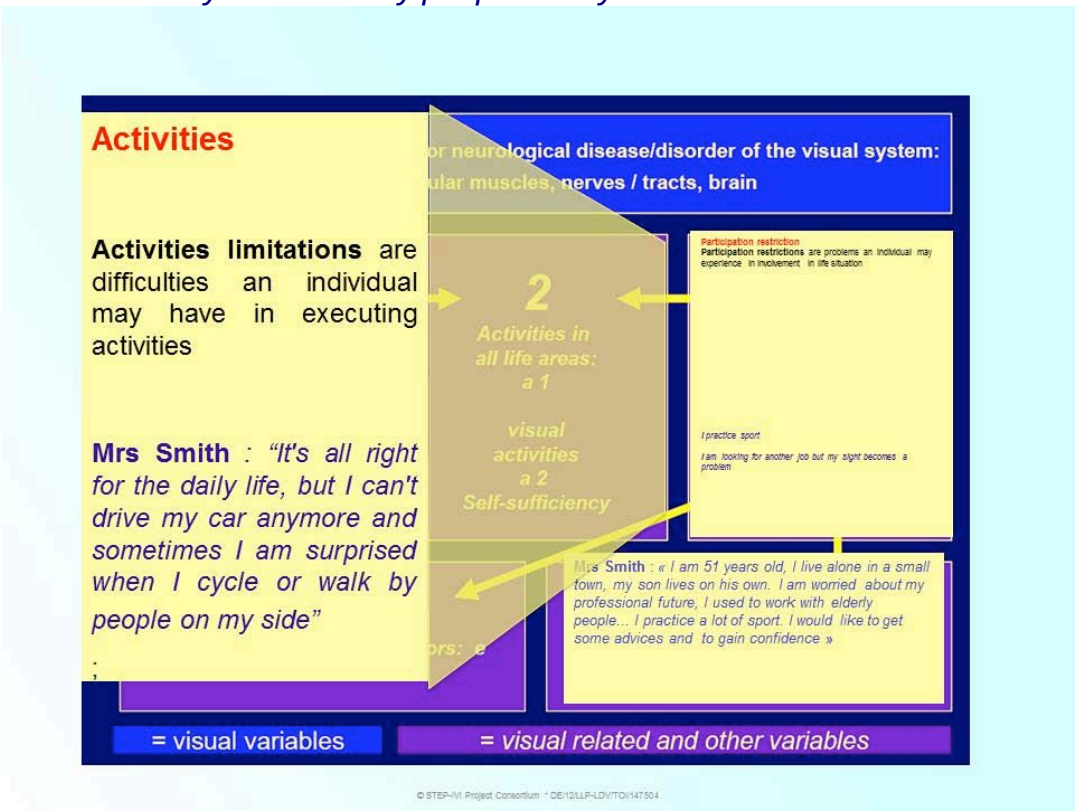
Mrs Smith : *“I practice sport I am looking for another job but my sight becomes a problem”*



3.5.2.3 Case Study information concerning activities

Activities limitations are difficulties an individual may have in executing activities

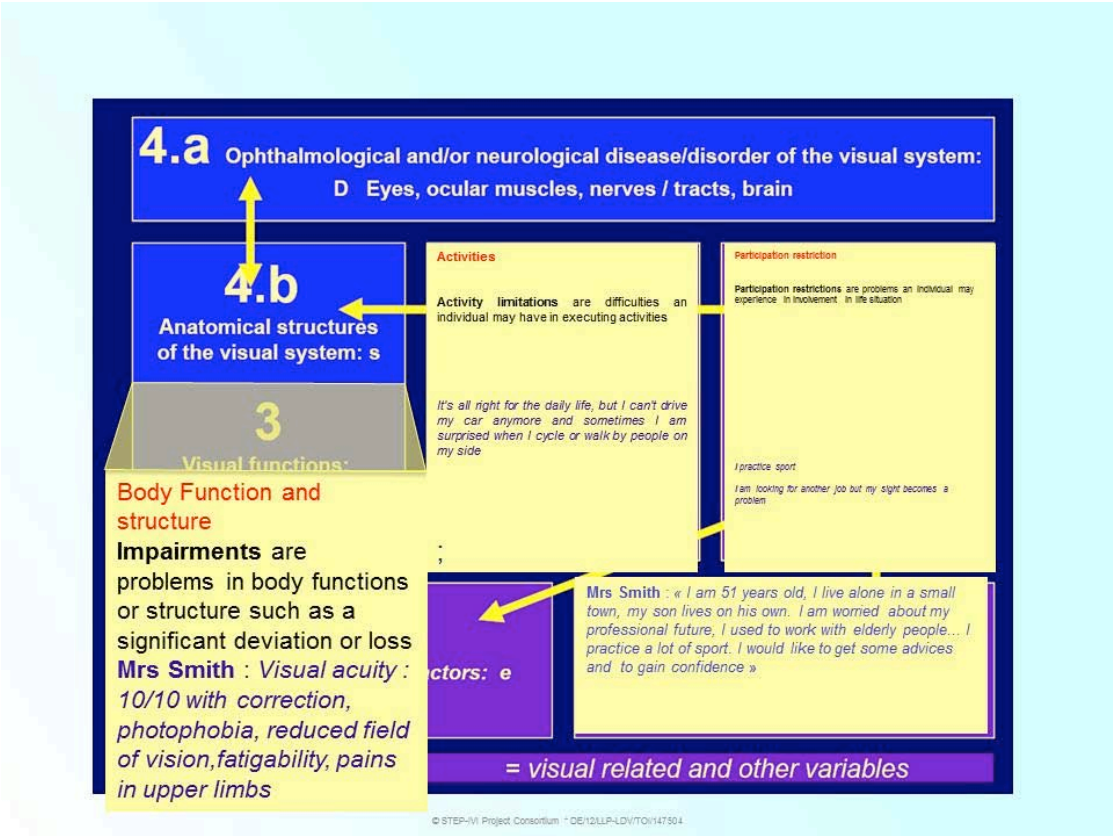
Mrs Smith: *“It's all right for the daily life, but I can't drive my car anymore and sometimes I am surprised when I cycle or walk by people on my side”*



3.5.2.4 Body structure and body functions

Impairments are problems in **body functions or structure** such as a significant deviation or loss

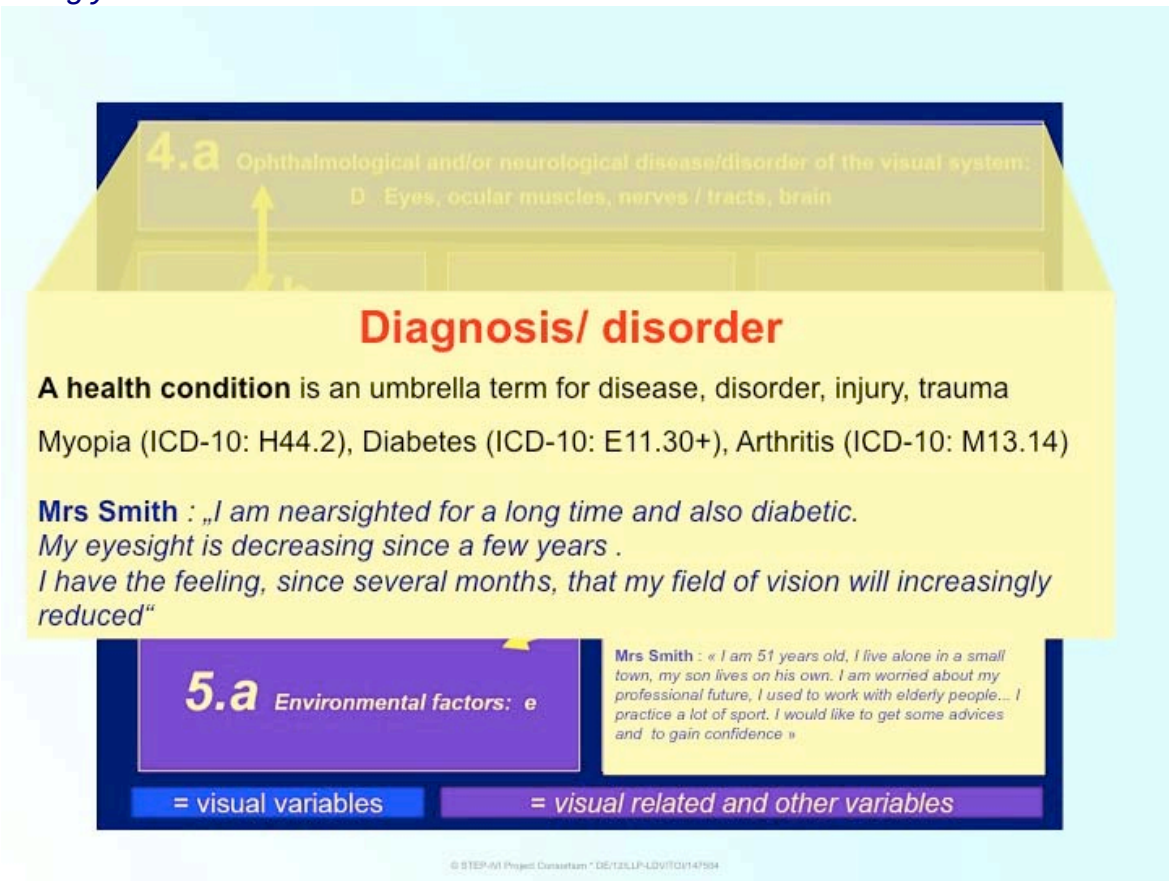
Mrs Smith: *Visual acuity : 10/10 with correction, photophobia, reduced field of vision,fatigability, pains in upper limbs*



3.5.2.5 Disease or disorder

A health condition is an umbrella term for disease, disorder, injury, trauma Myopia, Diabete, arthritis,

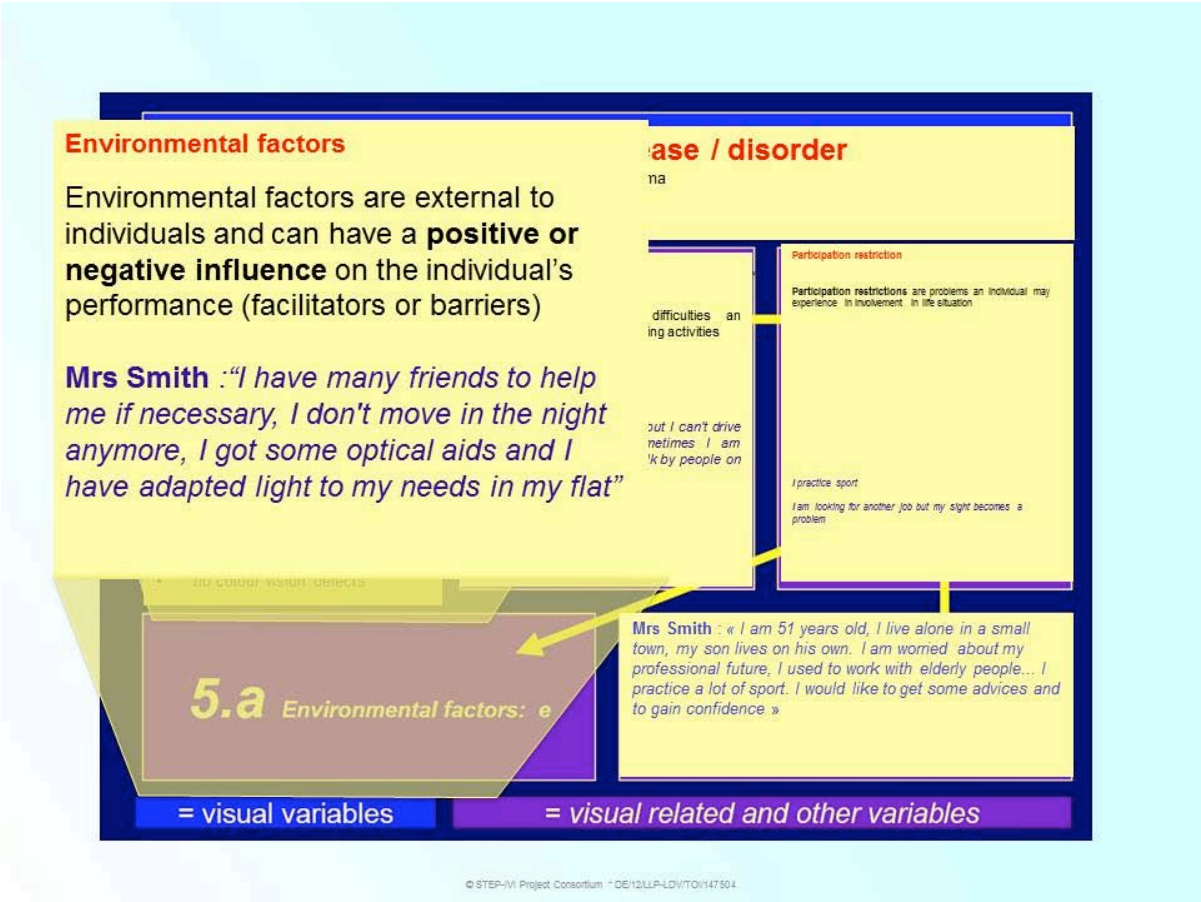
Mrs Smith: *„I am nearsighted for a long time and also diabetic. My eyesight is decreasing since a few years. I have the feeling, since several months, that my field of vision will increasingly reduced“*



3.5.2.6 Environmental factors

Environmental factors are **external** to individuals and can have a positive or negative influence on the individual’s performance (***facilitators or barriers***)

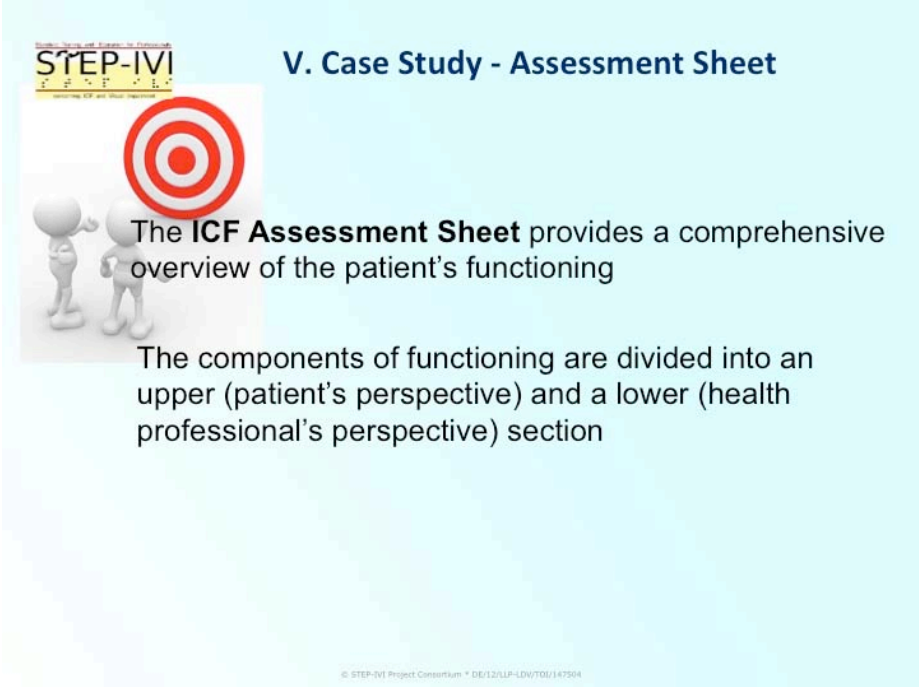
***Mrs Smith**:“I have many friends to help me if necessary, I don't move in the night anymore, I got some optical aids and I have adapted light to my needs in my flat”*



3.6 IV. Case Study - Assessment sheet

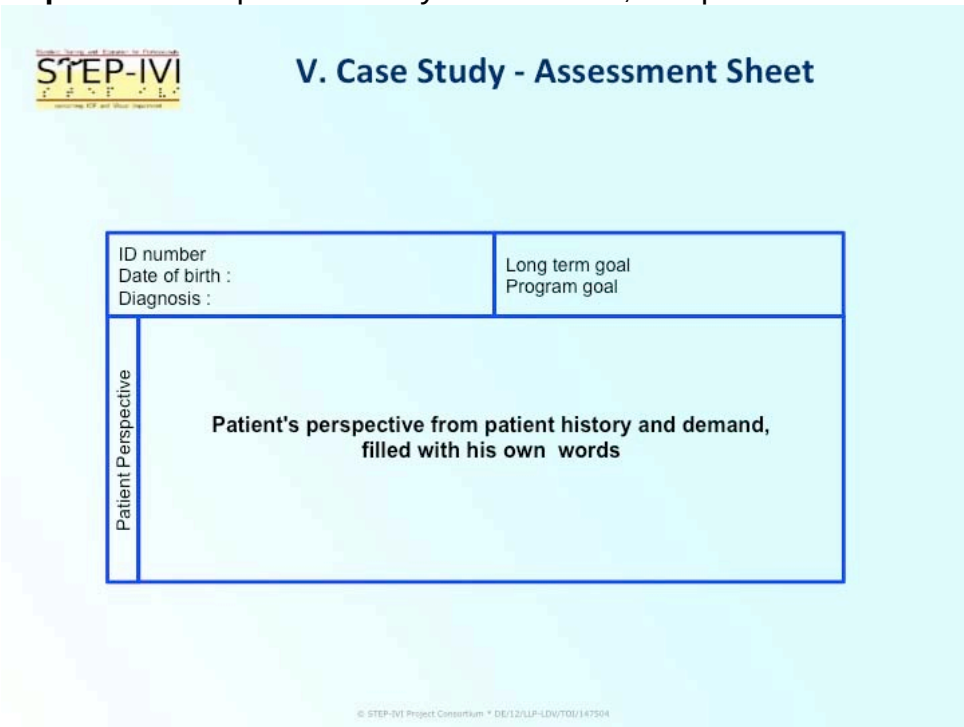
3.6.1 Purpose of the assessment sheet

The ICF Assessment Sheet provides a **comprehensive overview** of the patient’s functioning.
The components of functioning are divided into an upper (patient’s perspective) and a lower (health professional’s perspective) section.



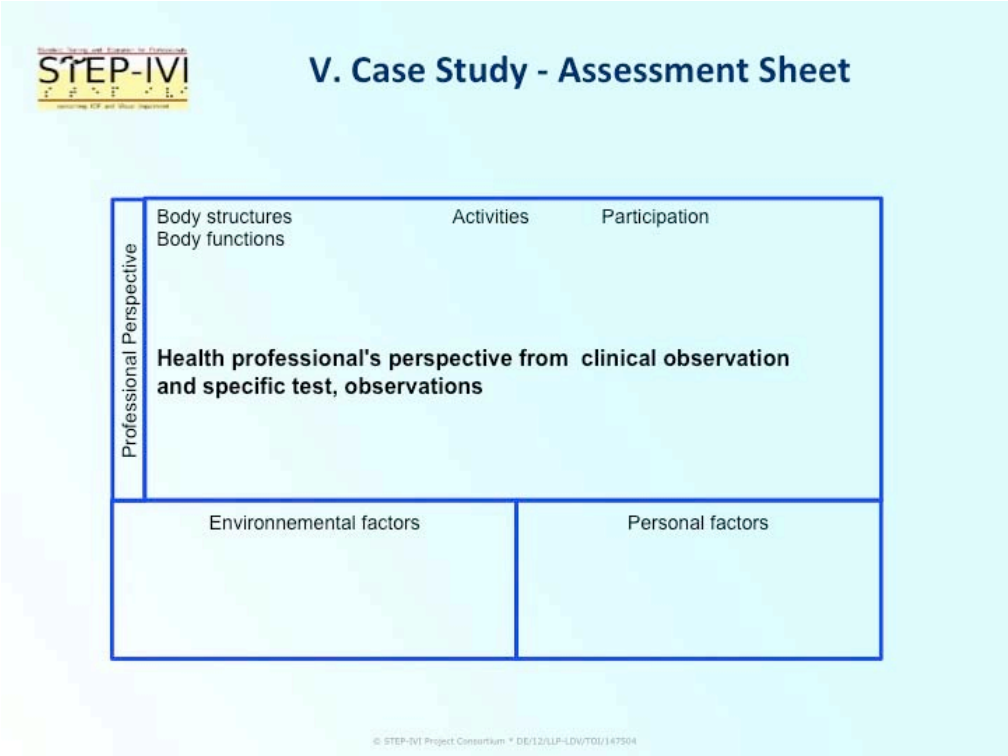
3.6.2 Section Patient's Perspective

Patient's perspective from patient history and demand, completed in his own words.



3.6.3 Section Professional perspective

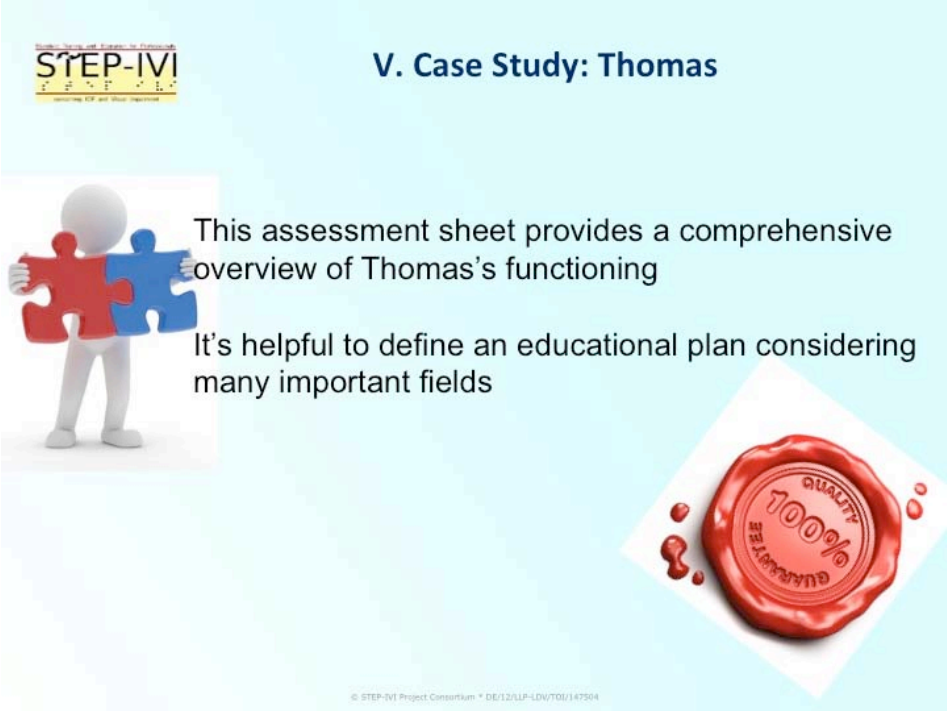
Health professional's perspective from clinical observation and specific test, observations.



3.7 IV. Case Study - The case Thomas

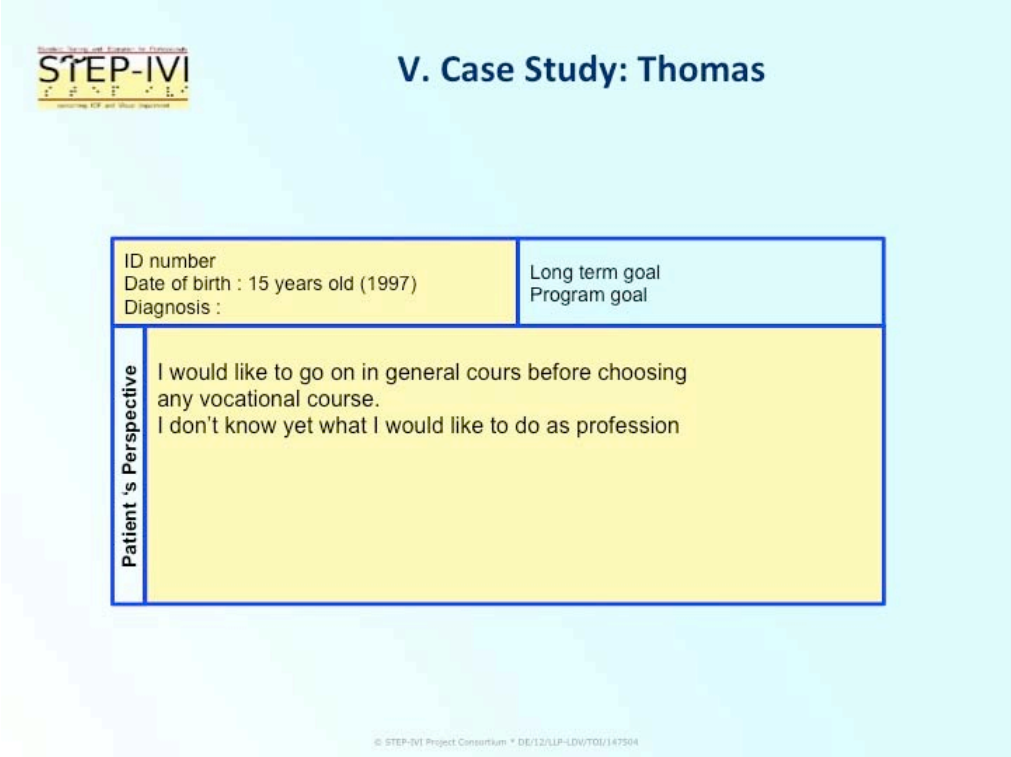
3.7.1 Preface

This assessment sheet provides a comprehensive overview of Thomas’s functioning. It is helpful to define an educational plan considering
many important fields.



3.7.2 Patient's perspective

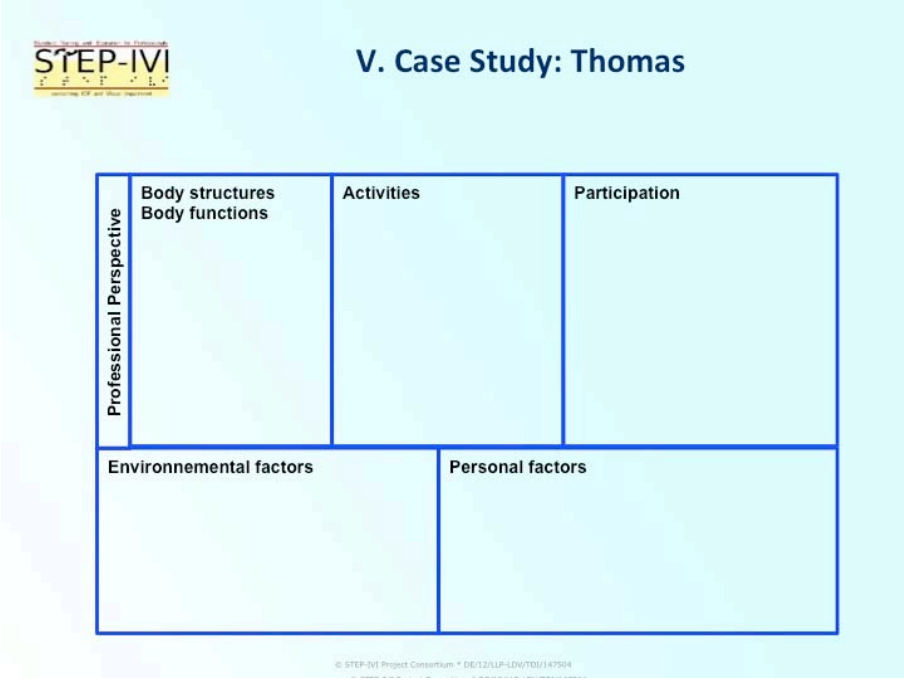
Thomas: *"I would like to go on in general cours before choosing any vocational course. I don’t know yet what I would like to do as profession."*



3.7.3 Professional Perspective - Overview about the scheme

Professional Perspectives contain the components

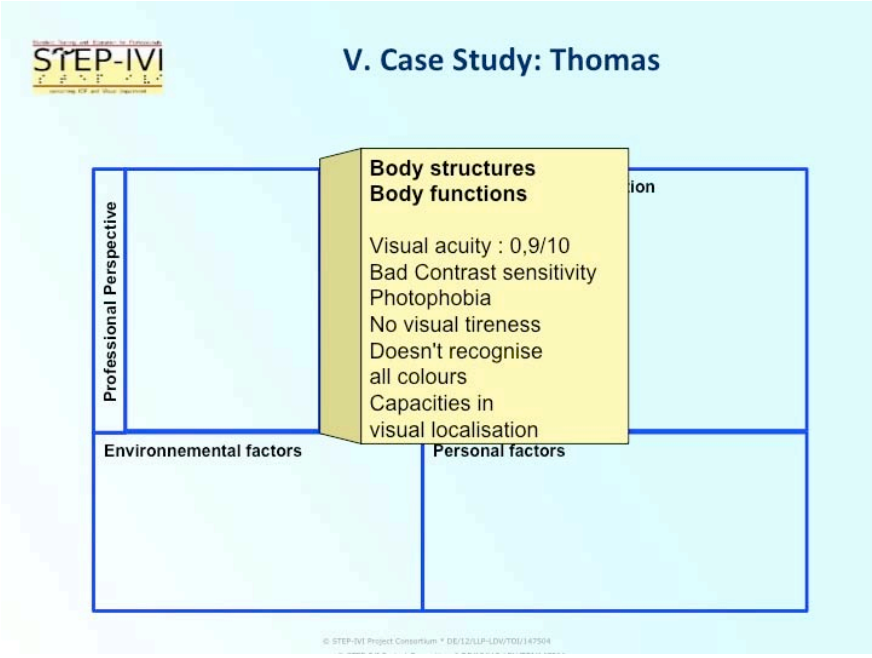
- Body structure
- Body function
- Activities
- Participation



3.7.4 Body structure and body function

Thomas details according the components **body structure and -function**

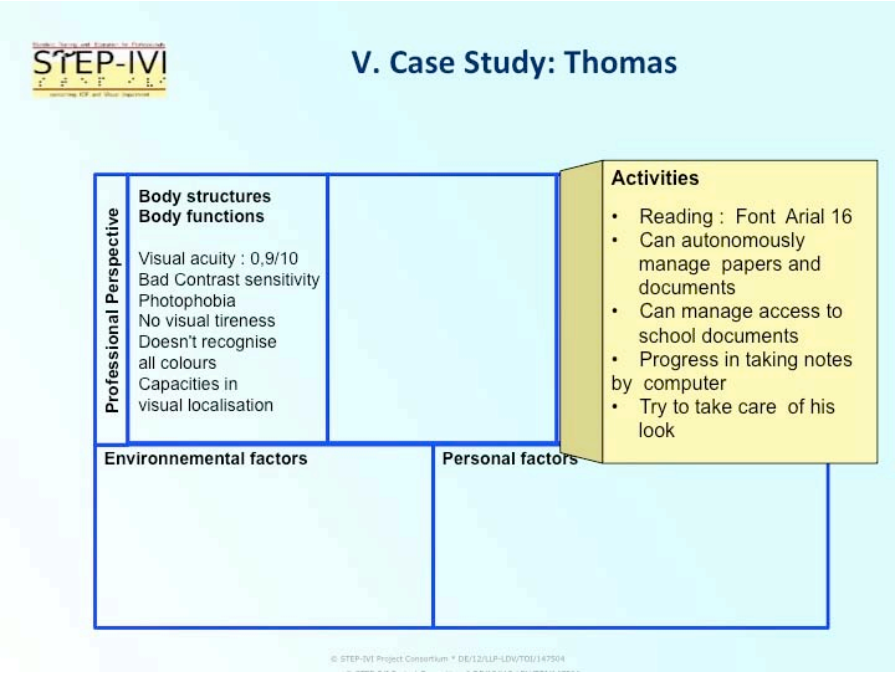
- Visual acuity : 0,9/10
- Bad Contrast sensitivity
- Photophobia
- No visual tireness
- Doesn't recognise all colours capacities in visual localisation



3.7.5 Activities

Thomas details according **Activities**

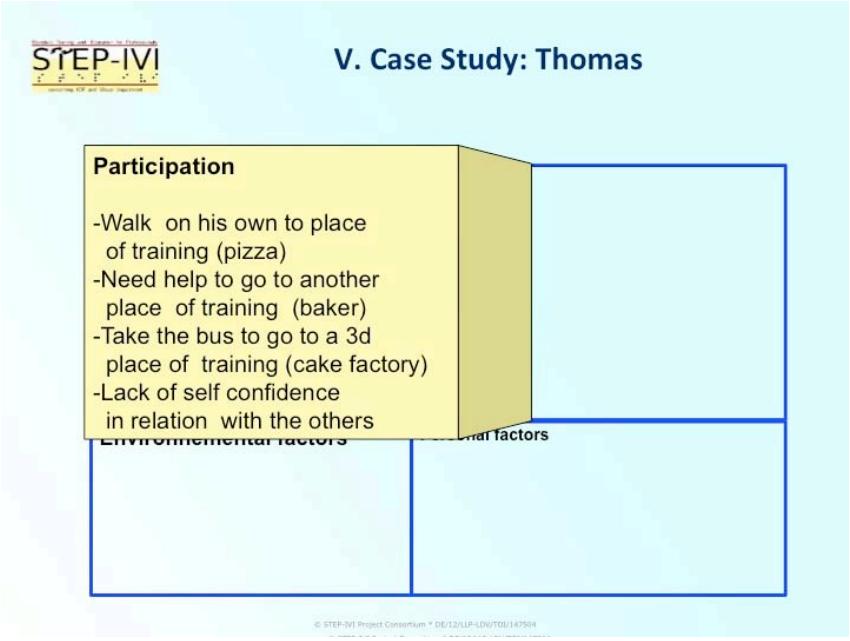
- Reading : Font Arial 16
- Can autonomously manage papers and documents
- Can manage access to school documents
- Progress in taking note with a computer
- Try to take care of his appearance



3.7.6 Participation

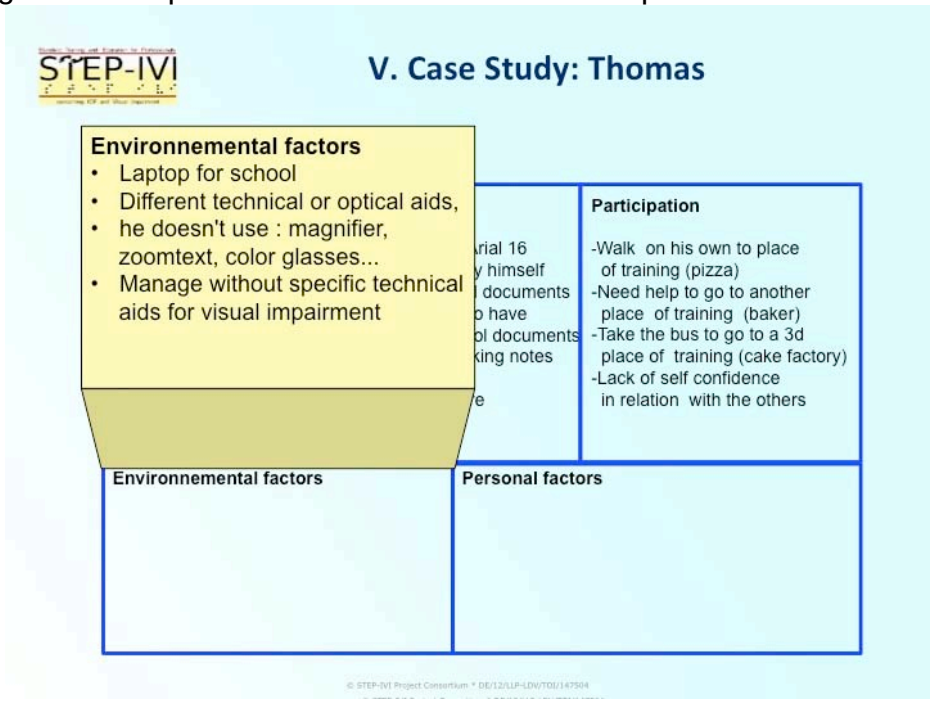
Thomas details according **Particiation**

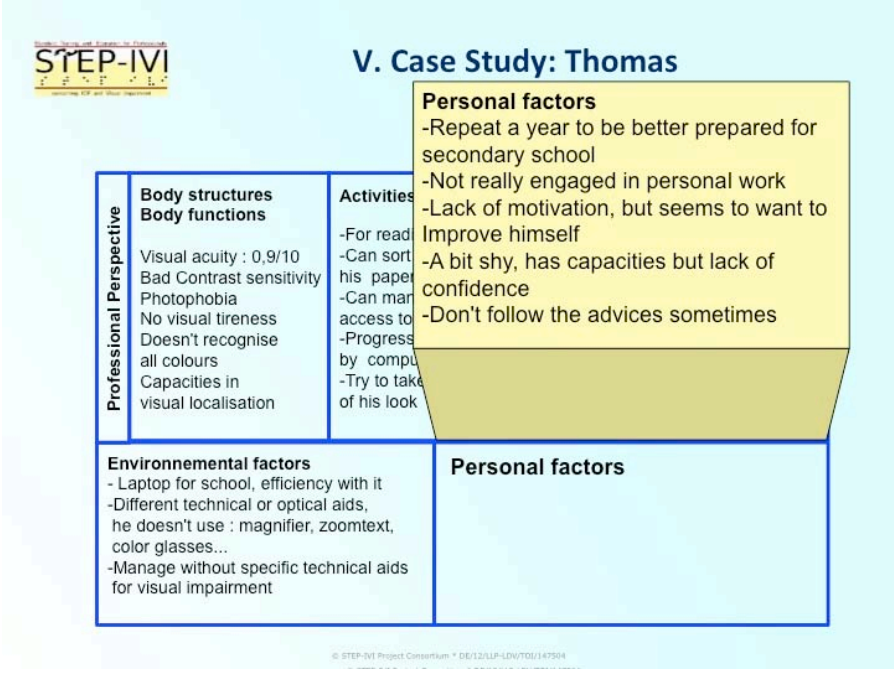
- Walk on his own to place of training (pizza)
- Need help to go to another place of training (baker)
- Take the bus to go to a 3d place of training (cake factory)
- Lack of self confidence in relation with the others



3.7.7 Environmental factors

- Laptop for school
- Different technical or optical aids,
- he doesn't use: magnifier, zoomtext, color glasses...
- Manage without specific technical aids for visual impairment



3.7.8 Personal factors

- Repeat a year to be better prepared for secondary school
- Not really engaged in personal work
- Lack of motivation, but seems to want to
- Improve himself
- A bit shy, has capacities but lack of self-confidence
- Don't follow the advices sometimes