MOOC Concept development

In April 2018, Visio organized an interactive e-learning about concept development. In four blocks of one week each Visio published its own knowledge and material online in a protected environment. Participants could also share their own documents, movies, photos, vlogs and blogs on this topic and discuss them with other participants. This created a wealth of information.

Below you can read a summary of the proceeds for every group (in general, young children, primary school children and youngsters).

Summary level 1: Concept development in general

Concept development is obtaining information about what an object is, about its properties, what it is used for and where it is located in space. It applies not only to physical objects but also to animals, abstract concepts such as " weather " and social customs. It is important to understand a concept well, because over time we build more complex concepts with the basic concepts we have learned. The (partial) lack of visual information makes it more difficult to fully understand a concept.

- Concept development starts with a lot of experience in different contexts, from concrete to more abstract.
- If you cannot experience an object directly, you use your language to explain the concept. Because visual feedback is not available to correct any misunderstanding of a concept, communication, feedback and information from others are very important to form a correct understanding of a concept.
- Describe concepts in a objective way, describe the characteristics, not how you experience it or what your opinion is about it.
- Ask a child, during this continuing process of learning, how it thinks this concept is now. Check if the child has understood everything correctly.
- People from the child system could involve the child in everything, so they gain as much experience as possible. For example, together take the cup from the cupboard together, take the milk from the refrigerator together and pour a cup of milk together. This gives a child much more information than when he suddenly gets a glass of milk in front of him.
- It is important to children to ask them in an active way about their knowledge of concepts. Ask where they have heard about a concept / where they have become acquainted with a concept, so that you can build on that experience. It's hard to correct an misunderstood concept afterwards.
- Professionals are looking for explicit steps to explain concepts and test whether children understand them well. There is also a question about how language can best be used when explaining concepts.

Explain and collaborate

Exchanging knowledge about concept development with parents and other people from the child system is important because they spend a lot of time explaining concepts to the child. Let them become acquainted with concepts in a blindfold, so they experience how difficult it is to interpret a concept correctly in one go. It can also be useful for parents to share experiences with each other. Talk regularly with parents about your role as a professional and their role as parents and how you can work together to support the child.

Impact misunderstanding concepts

Most participants in the MOOC think the impact of the misunderstanding of concepts differ per person. The impact can be social, psychological and emotional. For example, people can emotionally withdraw from social situations if they feel they don't understand or fail. They can give up "trying to understand it anyway" and that can cause isolation. On the other hand people are able to function in a proper way without the full understanding of concepts.

Summary level 2: Concept development with young children

In the first six years of their lives, children learn about concepts from using their body and from their own experience. This is mainly done by examining objects/concepts themselves and by people from the child system telling them about concepts. In the latter case, the following is important:

- Talk, tell a lot, describe all actions that you perform, describe the items that you use and what you use them for. Avoid an information overkill. Make a selection of information relevant to the child's level of development, to give a correct view of the world.
- Encourage children to explore and discover for themselves. Also give the child time to discover, do not start talking and naming immediately, but let the child process what he or she feels, experiences and hears. Even if you see a child struggle and looking for help. Make parents aware not to help the child too much
- Involve everyone in the child system: parents, other caregivers, people who visit you often, (preschool)teachers etc. Continue to communicate with them about the concepts that are important at that time and how to explain them to the child.
- Describe concepts with tactile language: it feels smooth and cold (instead of it is made of glass), and with language describing positions (in front of, behind, next to, etc.).
- First describe from the perspective of the child's body; this applies to both body awareness and where objects are located and relative to the child's body.

- If you use sample material (for example with different animals) make sure that all materials have the same scale ratio (a cow is larger than a sheep is), have no weird protrusions (circles with Lego and Duplo) and that a distinction can be made between the different parts of the object (eye feels different than legs do).
- Let children fantasize about a concept: what would you be able to do with it, how would it feel, etc. This way you can often find out to what extent the child already understands the concept.
- Offer an object/concept in multiple situations and in multiple forms, so a child really learns to generalize well (the chair in the kitchen is different from the one in grandma's living room. A chair can have one leg or four legs, can be soft or hard, big or small).

Summary level 3: Concept development with primary school

Children from 6-12 years old start going to participate more active in the world. They visit the playground, go to school (independently), go out for shopping. Children of this age also interact with each other in a different way; social interaction and relationships are becoming increasingly important. It helps children when they know how the world works, how to relate to others and how to behave in social situations. This can be practiced in a role-play.

For example when it comes to shopping: how is the store structured, what do you need to go shopping, where do you meet other people to contact, what situations can you expect, how to ask for help, how do you chit-chat, how do you use your voice and which other non-verbal communication is important?

3D 2D
The concept of a 2D representation of a 3D object is very complex to learn for children. Children do need this insight to be able to understand tactile drawings in textbooks. It is important that children learn 3D concepts from different positions and that you teach them the right words we use to name parts of these objects. So you talk about a cube using the word: edge, angle, surface, etc. If children do not understand this, they cannot take the step to understanding 2D representations.

Colour
The concept of colour is often used in communication between sighted people. It is important to children with visual impairments to know that everything has a certain colour but at the same time also can have different colours. And that colours can change over time or in different use like the colour of apple in an apple pie.

Sexuality

It's important to talk about sex and sexuality and you can use objects to talk about the human body but beside that it's also important to talk about the social aspect of sex and sexuality. Talk about what is appropriate and what is inappropriate behaviour, what sexual abuse is, talk about trust etc.

Summary level 4: Concept development for youngsters

Young people, aged 12-18 are increasingly getting more independent in society. Adults are no longer present all the time as social backup or to clarify concepts. Issues such as: who am I and who do I want to be? How do I live my life, how to relate to others, how do to relate in friendships and romantic relationships, how do I join a group as independent as possible, how can I start to live my own live apart from my parents etc. Building confidence is important.

Important concepts in this phase of life are those concepts that belong to orientation and mobility, to sexuality, science classes and behaviour in social context. What makes this phase in life complicated is struggling with the same issues as many other youngsters do. The urge to not always share every thought with your parents anymore and not asking them for help but do things by yourself. Which is also complicated for parents: finding a new balance between helping your child versus letting it go. More tips and hints for parents with children this age, can be found in the more extensive appendix.

Finally

Visio thanks all participants in the MOOC for their enthusiastic participation and valuable input. Without them, the e-learning would not have been possible.

If you still have questions after reading the summary or would like to share something with us, send an email to kennenenkunnen@visio.org.