

## Interaction Schools, Pupils, Museums

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In this article, I describe a module, *The School, The Pupil and The Museum*, at the Danish teacher education program at UCC, University College Copenhagen. The focus is on the findings that the student make. Different agendas make the cooperation complicated, with a lack of continuity from school to museum and back to school again. It also seems that compromises between school and museum agendas make the learning situation complicated for the involved pupils. In the article, I have developed different models in order to describe the cooperation and I use a row of competencies from the ENVIL framework as a tool for my students' assessment on the different museums' learning opportunities.

### THE MODULE

In the module (which has 10 etc) the students focus on the cooperation between a school and a museum. The students work in groups and they find museum partners themselves. Their work takes form of an investigation following the questions below. Consequently, they deliver a lot of comparable information for me and my colleagues in the team dealing with museum cooperation. In their work, the students should set three different angles,

1. Which are the aims and goals of the museum, and of the museum teacher?
2. How does the teacher create connections between the curriculum and her specific plans and the agenda of the museum?
3. Which opportunities for learning do the pupils have and how do they describe what they have learnt?

In the Danish School Reform from 2014, it is mandatory for all schools to open towards the surrounding society, for instance museums, sport clubs or voluntary art and music schools. Some museums have a well-developed strategy and they define a role for the students as observers, while others are happy to get feedback from the students, or they even ask the students for help to develop tutorials.

### THE COOPERATION MODEL

	Random preparation	Elaborated standard program	Got an Email appointment	Appointment by telephone	Joint Preparation
MUSEUMTEACHER	Sticks to the program	Gets attention from pupils with suspense and surprise	Targeting the visit	Refers to preparation or appropriate knowledge	Mental surplus for dialogue and interruptions
PUPILS	Unrest	Listening	Mental surplus for dialogue within the agreed framework	Taking part in a dialogue	Reflection
TEACHER	Passive	In control of the pupils	Has prepared the visit and knows how to use it afterwards	Refers to preparation and to the planned usage at school	Develops her own knowledge and grabs the opportunity to observe her pupils in new situations

In the Model above (Arvedsen et al 2018) we analyze the relation between the attitudes of the involved agents, it is an experiential model meant for discussions. In the top row, you can see a continuum from a minimal degree of cooperation to an extended degree of collaboration. In the columns, I show a connection

between the attitudes of the agents, the more collaborative teachers and museum teachers, the higher expectations to the reflexivity of the pupils. My students use this model to describe the cooperation, filling in the scheme with examples.

### Methods and Types of knowledge

The module has students from all faculties of knowledge, Religion or History, Visual Art and Craft and Design, or Biology and Math. My experience is that the science students expect a more solid and exact knowledge than those from Visual Art, who accepts knowledge as reflective and subjective. The students use the model below to reflect which approaches are in use in the specific museum. The methods can overlap the types of knowledge, but they also describe a pedagogical approach. Sociological fantasy means

		Types of knowledge		
		Subjective knowledge	Empathy and sociological fantasy	Consensual knowledge
Methods	Understand the exhibition on the background of your own experiences			
	Historical view: -The Past -Today - The Future			
	Understand the use and transfer of systematized knowledge			

that you can see the relation between knowledge on a subjective and a societal level. I write *consensual knowledge* instead of objective knowledge to underline that also in the science field knowledge is provisional.

### THE KNOWLEDGE GOAL MODEL

In the module spring 2018, the students observed four different museums. It was clear that the museums had quite different goals for the intended learning content and they used different means to reach the goals.

- The zoological museum taught *evolution* concretized by different mammal's number of teeth.
- The museum in the woods worked with *ecology* and taught how to measure areal and volume with mathematical tools.
- The design museum worked with *sustainability* concretized in micro design projects and
- The police museum wanted to inform about *the work of the police* through concepts of evilness.

Here, one may ask how measuring areal points towards ecology and how terms of evilness tells us what we need to know about the police. There are at least two concerns that interfere; one is that the latest curriculum for the Danish public school contains a considerable and detailed list of knowledge/skills goals

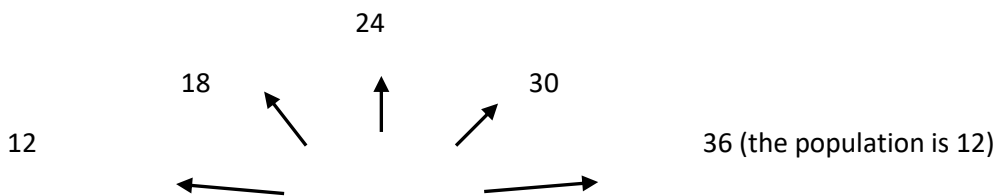
that the museum try to meet, the other is that a dramatic and bloodcurdling message might catch the attention of an unengaged audience.

The model is a tentative one, describing different discourses and approaches. I suggest it as a discussion draft, in order to reflect on different active discourses.

	Contextual knowledge	Specific knowledge	Spoken knowledge (MT)	Experiential knowledge	Collaborative knowledge
ZOOlogical Museum	Evolution	Teeth	Museum teacher (MT) explains	Pupils counting	Comparing results
Museum in the Woods	Ecology	Measure of areal and volume	MT explains	Pupils measuring	MT asks for knowledge Help and discuss
Design museum	Sustainable Design	Make a sustainable construction	About sustainability	Trying to refer to previous knowledge	Lack of knowledge
Police Museum	Order	Evil	Gruesome cases	Ethical dilemmas	Reflection and dilemmas

### HOW DOES THE MUSEUM FACILITATE DIFFERENT ASPECTS OF LEARNING

I asked the students in the above-mentioned class how the museums potentially facilitate learning, and for whom? I have collected the answers in the same table as the one that the students filled in. They could choose between + not so much, ++ medium, +++ very much. I then counted the points and presented them like the arrow in a watch. The sum 12 is 9 o'clock, 24 is 12 and 36 is 3 o'clock.



In which degree does the museum potentially facilitate learning, and for whom	Museum teacher	Schoolteacher	Pupil	Teacher Students	The common public
Civic Engagement	24 ↑	21 ↘	24 ↑	27 ↗	23 ↘
Social Cohesion	23 ↑	22 ↘	25 ↑	23 ↑	21 ↘
Personal Unfolding	23 ↑	19 ↘	29 ↗	29 ↗	19 ↘

Employability	27 ↗	20 ↘	21 ↘	27 ↗	19 ↘
Self – competencies	25 ↗	20 ↘	24 ↑	27 ↗	25 ↗
Methodological competencies	25 ↗	21 ↘	28 ↗	25 ↗	16 ↖
Social competencies	25 ↗	22 ↘	30 ↗	27 ↗	18 ↘
Produce and Respond to images and objects	30 ↗	16 ↖	19 ↘	22 ↘	18 ↘
Reflect on production and Response	26 ↗	20 ↘	30 ↗	26 ↗	25 ↗
How does the museum or the visitor relate to everyday SITUATIONS	28 ↗	21 ↘	27 ↗	29 ↗	22 ↘
How is visual literacy related to transversal competences	25 ↗	20 ↘	24 ↑	30 ↗	18 ↘
Does the museum encourage metacognition	19 ↖	20 ↘	20 ↘	25 ↗	20 ↘

The students saw that in more situations, the adjoining schoolteachers were too passive and unprepared. In the table, you can see a resemblance between the common public and the teachers. This is a snapshot, showing the students opinion after an observation of four museums cooperation with schools. Focusing on broad competencies in the CFLR model I find it particular interesting to look at the “bildung” elements like Civic Engagement, Social Cohesion and Personal Unfolding, as most museums share these purposes. I think it is surprising that the Bildung elements do not score higher in a museum context, the highest score is for learners, the pupils and the students, while the museum staff have a medium score and the teachers score low.

With these models, I hope to facilitate discussions about different aspects of the cooperation between teachers, pupils and museum teachers.

Arvedsen, Karsten and Mathiesen, Frants 2018: Billedkunstdidaktik (Visual Art Pedagogy)

Mathiesen, Frants and Seligmann, Tine 2004: Mødesteder (Meeting Places)

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