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"Acting as a Moral Human Being - Neglecting Economic Studies." Situation, Concepts and Challenges of Economic Studies at German Primary Schools

Children are affected by poverty, unemployment and pollution; they are a target group for firms. Without doubt they have to deal with the problems of economic allocation, distribution and stabilisation. But children are also individuals with needs and purchasing power, who make economic decisions themselves and influence those of others. Children interpret and construct their own explanations for these phenomena and build their own problem-solving strategies. Do shops create goods themselves? Do banks produce money? Is the function of a bank the protection of money against theft? Does the government tell people which job to do? Can everybody choose what he or she wants? Is a car more expensive than a jumper because it is bigger or because it can be driven? If school is supposed to help children understand and act in the world they are living in, then even at primary school economic world can not be blanked out.

The main aim of this contribution is to analyse, if German curricula for primary schools as well as the main association of primary school attach importance to the economic phenomena in a child's world. As these concepts are not developed by experts of economic education but by experts of primary education, I want to contrast these aims with three concepts respectively aims of economic education at primary school developed by experts of economic education. So the extremes can be shown: Which importance could economic education get und which is currently attached. However, also the concepts and aims of constructors of concepts for economic education do not satisfy totally. Either they derive their aims directly from economics as a science or from economic situations children take part or should know about. They draw out what children should know about or what children could do to learn about, seldom is pointed out, what children should be able to understand and responsibly act. Therefore an understanding of children's construction of economic world is necessary. These constructs are analysed by economic psychologists. These results allow referring to the children's naive theories in order to help them understand and act in their economic world. As pure analysis does not satisfy by discovering lacks, I will discuss competences which should be related to the approach of experts of children's education as well as to experts of economic education, taking into account the results of economic psychologists. Finally, without winning the teacher children will not learn anything about economics at school, so I will finish with an approach to win the teachers.

Keywords:

Economic education, consumer education, labour education, primary school, standards, competences

1 Curricula and Concepts of Experts of Children's Education at German Primary Schools - An Analysis about Economic Studies

German students at primary schools (usually from 1st to 4th grade) are taught a subject called "Sachunterricht", which includes social and natural studies. The so-called "Sachunterricht" looks back on a history full of changes. In the early sixties children had to be taught about topics concerning their home town and region including a lot of fairy tales, legends and myths. In the seventies this way of teaching was replaced by pure science containing a lot of terms and models; students were supposed to learn, regardless of their ability to understand. The eighties changed the view on children's action and experience, whereas the nineties especially regarded the individual learner. This millenium seems to change the view from input and process of learning to output and results. Currently the curricula of each German state more or less want to enable children

- to orientate by a better perception according to mankind, things, relationship and events as phenomena of society and nature,
- to understand and explain connections which allow individual evaluation and judgement,
- to achieve a self-determined and responsible way of acting.

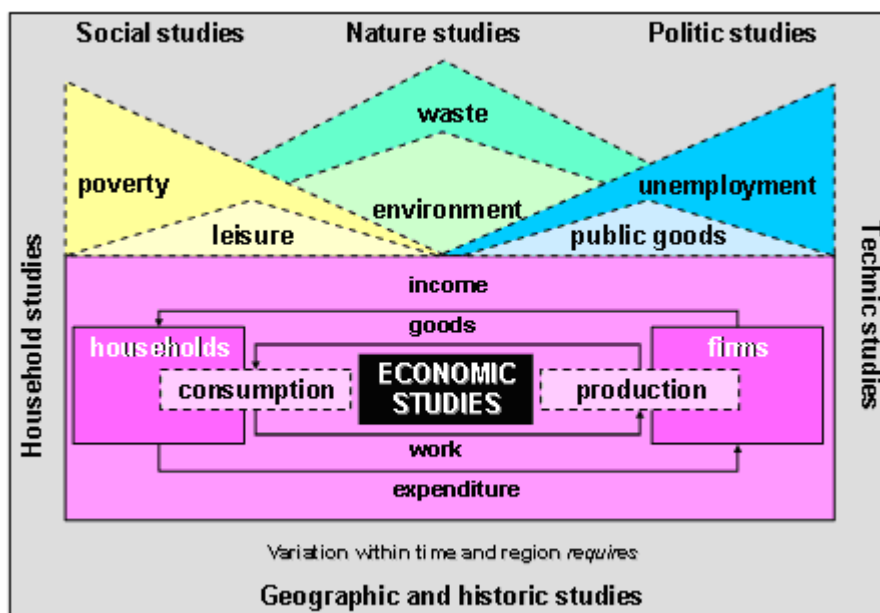
Although the curricula do not differ according to the fact that the learning area can not be split up into isolated perspectives of different disciplines, the subject is supposed to be oriented around science in order to protect correctness and to avoid childish simplification. Therefore students should first get used to a scientific access to reality in order to prove their assumptions, explanations and solutions, and find out if they can be generalized. Nevertheless, special subject oriented fields of experience within the curricula are mentioned, especially historical, geographical, natural and social phenomena, sometimes economic, technical, cultural, legal and political phenomena are regarded as well. There are five fields of experience within most curricula: (1) Individuals and Community, (2) Area and Era, (3) Nature and Environment, (4) Health and Traffic and (5) Labour and Technology.

As social and natural studies at elementary schools do not usually include economic studies, the curricula will be analysed to see if they attach importance to fields of economic education. With regard to the aims of "Sachunterricht" the orientation, comprehension and possibilities of arrangement according to elementary economic studies will be examined.

From an economic point of view children's economic world starts as a consumer in the family-household. Children consume actively, using goods and dealing with money. Elementary conditions are financial means and produced goods. In order to earn money and to produce goods, households have to sell working power to companies. Children are excluded from this field of experience, but they invent fabulous explanations about this field of production and create dreams about their future careers. The economic influence on the reality of children does not end with consumption and labour. The environment is used and polluted by economic processes. Besides private goods children also use public goods within their learning

and leisure time. They experience that some people are excluded from wealth through poverty and unemployment in near or distant areas or eras. Looking at economic studies this way allows a connection with other perspectives of the integrated subject "Sachunterricht" - with social and politic studies, with nature, household and technical studies and also with area and era studies.

Table 1. Economic Studies connecting with other perspectives in "Sachunterricht"



1.1 Economic Studies in the Current Curricula

All curricula describe fields of experience or fields of learning; they define special themes or topics within the fields. A certain importance of economic studies will be assumed in this article if there are fields of experience dedicated to consumption or labour. But the economic world of children does not seem to be taken seriously if only economic aspects or phenomena are mentioned within topics.

The following German Federal States seem to consider economic education within primary school as important, dedicating learning fields or themes to consumption as well as to labour: In Bavaria (2000) one of eight themes called "Wants and Needs" can be dedicated to the economic field of consumption; "Labour and Leisure" is one of seven fields of learning, which characterizes the way of learning even more than its meaning as a content. The economic perspective "Man at work" and "Machines help at work" are included within the theme "Living together". In Bremen (2002) economic phenomena are integrated into two of five fields of learning: "Children experience consumption, supply and disposal" and "Children meet labour,

production and technology". From five perspectives of learning in Hamburg (2003), an economic perspective can only be included in social and cultural related learning, but from eight fields of learning one is dedicated to "World of labour, economy and consumption". In North-Rhine-Westphalia (2003) economic knowledge is mentioned as one of six types of knowledge at primary schools. From five fields mentioned there is one regarding "Technology and world of labour". Within this field as well as in the field "Man and community" some economic themes are emphasized from 1st to 4th grade: "Occupation and place of work", "Labour and production", "Goods and Needs of consumption", "Behaviour of consumption and ecology". In the Rhineland-Palatinate (1984) three to four of fifteen fields of experience can be seen as economic ones. They are "Labour and production", "Consumption", "Services" and "Leisure". All of them should be a topic at each grade of primary school. Economic living conditions are especially important within the curricula in Schleswig-Holstein (1997). While children should develop ideas of economic relations, one of six learning fields is dedicated to "Technology, media, economy", one of fourteen main themes is called "Economic planning and arranging" from 1st to 4th grade.

There are a few German Federal States which only regard labour: Although the curricula of primary schools in Hesse (1995) advises experience with labour and consumption as one of ten fields of experience at elementary school, the twelve fields of learning of Sachunterricht include only the field "labour". None of the four learning fields of Lower Saxony (1982) includes an economic learning field, only three of 24 themes belong to the field of economic environment. They are called "People are working", "People change landscape by economic using" and "People needs supply and disposal", most of them are facultative. In Saxony-Anhalt (1993) none of the five learning fields is an economic one, only "Living together in a community" includes a theme "People are working". One of six learning fields in Thuringia (1999) is dedicated to "Understanding the working world - respecting labour".

The curricula of the following German states include only aspects of economic studies: The new curriculum in Baden-Wuerttemberg (2004) does not regard social and natural studies as a subject in its own right but constructs a combination of cultural, social and natural studies called "Mankind, nature and culture". Only by looking at it closer are there economic elements at the end of the 2nd grade concerning "Wants and needs, dealing with money" and at the end of 4th grade "Advertising, fashion, idols and music as transmitters of trends, wants, values and life styles are to be recognized and evaluated", important connections between labour and production should be recognized. While Berlin, Brandenburg and Mecklenburg-Western Pomerania (2003) develop a common curriculum, they do not relate any of the five perspectives to the economic world of children. Economic phenomena are only integrated in the learning field "Living together". Children should analyse needs of consumption and factors influencing behaviour of consumption and globalisation of production and their consequences. Consequently "Behaving as a consumer" is of special importance. In the Saarland (1992) there are no economic fields; experience of labour may be included in those fields dominated by technology. Although there is a new curriculum in Saxony (2004), none of the five learning fields is dedicated to the economic world.

There are only economic aspects mentioned like advertising and changes in working conditions. "A Product of the state" is just a voluntary theme.

The following table presents the total number of fields and themes in relation to the number of fields including economic education. German curricula at primary schools often include topics of consumption and the working world as economic phenomena, but only half of the German Federal States dedicate at least one of their five to twelve important fields to the world of economy. As a result of a brief analysis Bavaria, Bremen, Hamburg, North-Rhine-Westphalia, the Rhineland-Palatinate, Schleswig-Holstein and Thuringia give importance to the economic relations within the world of children including consumption as well as labour. But looking at economic education at primary school on the whole, it can almost be described as a 'white board' as Table 2 shows:

Table 2. Experience fields and themes at curricula of "Sachunterricht" including economic education

STATE	YEAR	FIELDS / THEMES / Aspects			
Baden-Wuerttemberg	2004	Fields (0/9)			
Bavaria	2000	Aspects: consumption, invention Labour and leisure (Fields 1/7) Wants and Needs (Themes 1/8)			
Bremen	2002	* consumption, supply and disposal * labour, production and technology (Fields 2/5)			
Berlin, Brandenburg, Mecklenburg-W	2003	Fields (0/7) Consumption (Themes 1/25)			
Hamburg	2003	world of labour, economy and consumption (Fields 1/8)			
Hesse	1995	Labour (Fields 1/12)			
Lower Saxony	1982	Fields (0/4) Places of Work (add. Shopping, Supply at a market) (Themes 3/24)			
North-Rhine-Westfalia	2003	technology and world of labour (Fields 1/5) Labour and Consumption (Themes 4/34)			
Rhineland-Palatinate	1984	Labour and production, consumption, services, leisure (Fields 4/15)			
Saarland	1992	Fields (0/6) Aspects: Production			
Saxony	2004	Fields (0/5) Aspects: Advertising products			
Saxony-Anhalt	1993	Fields (0/5) Man are Working (Themes 1/11)			
Schleswig-Holstein	1997	Technology, media, economy (Fields 1/6) Economic planning and arranging (Themes 1/14)			
Thuringia	1999	Labour (Fields 1/6)			
Curricula most time are structured by fields of learning, themes within this fields and finally aspects within the themes. Those different components can be distinguished to the importance they attach to economic studies.					
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:33%; text-align: center;">Economic Studies dominant in this field</td> <td style="width:33%; text-align: center;">Economic Studies integrated in this field</td> <td style="width:33%; text-align: center;">Economic Studies not foreseen in this field</td> </tr> </table>			Economic Studies dominant in this field	Economic Studies integrated in this field	Economic Studies not foreseen in this field
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Taking a closer look at the fields of consumption and production, shows the way children should be taught economic phenomena.

In the field of consumption, curricula want students to distinguish between their wants and needs to become critical of advertising and to be sensitive to the ecological consequences of consumption. Less important is the planning and carrying out of purchases, the comparing of prices and qualities regarding the limited means. There are quite less hints to customer's information, which could help to improve rational choices. While students do not have to recognize relations between labour and income on the one side and goods and consumption on the other side, surprisingly, they have to deal with the complex theme of globalisation. The main aim of education in the field of consumption at primary school nowadays is the development of the attitude: "Limit your wants to your needs" and "Beware of the temptations of advertising". It seems to be meaningless, that children understand and explain the economic relations as well that they improve reasonable economic decisions. The children do not get an idea where goods and income come from. Education at primary schools does not really aim at the self-determined customer.

In the field of labour and production curricula want children to realize the importance and value of labour for the individual and the community, how to produce a simple good by labour division, to explore places of work, to recognize different occupations and to discover changes within the world of labour. Especially they shall regard the use of machines and compare industrial and handicraft production. Some states want children to know about different occupations, others especially look at the places of work. Very few give importance to complex phenomena such as working division, unemployment and globalization. The learning field "Labour and production" is dominated by the handicraft dimension of work without regards to the findings. Seldom criteria for interviews and explorations of places of work or occupations are mentioned. It does not seem to be important, how people get their jobs, earning wages by work is seldom mentioned. The path of a product way from idea to market is rarely mentioned and the question of costs is neglected.

Besides consumption and labour there are other experience fields requiring some kind of economic comprehension, such as the protection of environment, international relationships and public institutions:

- Curricula of primary schools attach special importance to the environment in order to show pollution and to create responsibility. Avoidance of waste, saving water and energy as well as careful dealing with nature are important educational aims at primary schools. From an economic point of view such situations treating common goods afford cooperative behaviour, whereas curricula at primary school lay the burden on the individual. Just as traffic education only aims at road safety, environmental education at primary school only focuses on a natural perspective. It shows the advantages and meaning of natural resources, their endangering by human behaviour, technical ways of disposal and possibilities of individual engagement. The conflicts between economic and ecological behaviour and the necessity to choose between goods of different quality are rarely shown.
- Globalization and international relationships are other important fields.

Some curricula regard economic relations by trade and tourism, others value the knowledge of and the enrichment by other cultures, some compare living conditions in other countries including hunger and poverty. Comparison of living, working and consumption patterns at different times and in different regions can include an important didactic effect. They excite, raise doubts and stimulate interest in finding out more about matters which seem to be so natural.

- Moreover, the curricula require the orientation of important public institutions as well as an orientation within the village, the town and the federal state. Most of all they require an orientation within the area, but the economic function of a government with regard to care for welfare should also be dealt with.

1.2 Economic Studies Viewed by the German Grundschulverband

Currently the German Grundschulverband (2002), an association to support theoretical and practical approaches to elementary schools, has developed standards for up-to-date education at elementary school. Even if the current discussion about standards can not be directly compared to curricula - the first try to define the outcome, the second define the input - it gives us hints about the pursued competences including the main categories of a subject. They also show - even within a subject with a lot of perspectives - if some perspectives are dominant and others are neglected. The association points out two aspects of knowledge children should construct about the arrangement of relations of mankind to vivid and inanimated nature and to social and political relationships. While they define social and cultural studies, historical, geographical, nature and technical studies as fields of experience, they do not define a totality without disciplinary approaches. Concerning these fields they have developed 27 standards. Trying to find advice to help children understand their economic world of living, economic relations are explicitly involved only in the following three standards. Using examples the children should be able to explain:

- the plurality of ways of living in their class, school, community and state and different behaviour as a consequence of different origin, different socio-economic chances and beliefs,
- interdependences and intertwinements of economic, political and ecological interest and ethical and political beliefs,
- differences between economic and ecological interest.

Aiming at some other standards economic relations also can not be ignored. So children should be able to know about the conditions of living in highly developed countries compared to the developing countries and the scarcity and limited renewal of resources. Labour, as a part of the standards, is only treated within technical relations, so that children are able to understand relationship and explain the technical relation between labour and production, transport and traffic, supply and disposal, construction and living, information and communication. Labour may be worthwhile when children have to deal with different interests, thoughts

and plans of the future of boys and girls, of women and men.

According to these standards the economic world is assigned an influencing impact creating problems. Most of all it is a conflict area. While the world of economics is scarcely mentioned, other kinds of knowledge are explicitly expressed. So children should be able to have an idea of democracy, law and human rights. The standards want them to know geographical and historical facts about their area and community as well as about Germany, Europe and the rest of the world. They are supposed to find out about the cycle of nature, the function of the body and elementary physical, chemical and biological laws of nature and technical inventions. According to these so called up-to-date-standards it does not seem to be necessary that children know anything about the origin, conditions and restrictions of private and public goods and services or about labour, income and money. It is still an unanswered question how children shall be educated to act self-confidently and self-determined in their current economic role as consumers by such an "up-to-date-standard". We can resume that understanding of economic phenomena within the children's world is not intended.

1.3 Underestimation but No Absence - Moral Action but No Understanding

Neither in curricula nor in the papers of the "Grundschulverband" is there any justification for the dominance of the mentioned perspectives and the neglect of others. Reasons may be found in the simple fact, that some disciplines take care about primary education and others do not. In the consequence the main themes of "Sachunterricht" traditionally belong to geography and biology, which is not related to children's development or needs.

Nevertheless, genuine economic fields like consumption and labour are underestimated at primary schools, but they exist as obligatory fields in a lot of curricula. With targets like reflecting one's needs and immunity against advertising, the curricula express most of all moral claims against the temptation of a world of consumption, while economic decision-making with one's own means or with spare resources of households is meaningless. Orientation within the world of labour is dedicated to the importance of labour and its changes by technical development, which students have to find out themselves by production and exploration. Besides consumption and labour there are other fields also requiring economic understanding, such as

- public institutions, their function and possibilities to care for wealth,
- the economic structures and the development of a town and a region and pollution by production and consumption,
- trade relations with other countries and cultures,
- living, consumption and working patterns in other countries and at other times.

Comparing the requests of natural and social studies there appears to be a

gap:

- Whereas circulation plays an important role within natural studies with respect to blood, water and electricity, it seems to be ignored in social studies.
- Whereas students are supposed to discover general relations and connections within nature studies, the connections between work, income and consumption are not regarded.
- Whereas students are taught to recognize different interests, the different interests are neglected within the harmonized social world of primary school.

Natural and social studies as part of "Sachunterricht" are supposed to enable students to orient, explain and arrange the world they are living in. One of the basic principles of learning is the discovering learning method. Regarding economic learning there are only activities stimulated, but affirmative beliefs and attentions are expected, whereas systematic relations between thinking and acting are rarely suggested. The claim of totality, regarding phenomena from children's perspective and not by disciplines or subjects is not followed by embedding important topics of children's life. The curricula do not meet their claims.

2 Approaches of Experts of Economic Education for Primary Schools

If there is an agreement that social and natural studies at elementary school should prepare children to orient one's own, to understand and to arrange (with others) the world they are living in at an elementary level, the economic world can not be blanked out. Following I want to show three different approaches to enhance economic education at primary schools, developed by experts of economic education.

2.1 Economic Situation in Children's World

Dietmar Ochs (1980) characterizes the following situations in a child's world, which can not be dispensed with:

- purchasing of goods especially regarding merchandizing strategies,
 - arranging leisure time to support an independent behaviour,
 - saving money,
 - making decisions for careers,
 - exploring work places at companies and factories,
 - formation of wages according to consumption, leisure and savings.
- Dependent on children's interests he regards consequences of

unemployment and inflation as possible contents as well as income, growth and the comparison of areas and systems. His concept includes as well a method of thinking to create competences and to support emancipation. To create competences children should recognise contents, actors, aims, and frames of relevant decision-making processes. They should develop individual consciousness of their aims and chances and they should recognise chances to put through their interests considering the influence. To support emancipation children should recognize obstructions and dangers, causes and chances to overcome and develop an awareness of problems.

2.2 Economic Socialisation and Human Education

Considering economic education at primary school Hanna Kiper and Annegret Paul (1995) start with the economic socialization of children and their economic world. In their opinion economic learning has to include the management of a family, community or a town, which should be compared in a social-geographic and a historical perspective. Another important field is the ecological consequence of production. Economic acting also has to be evaluated by moral and ethical criteria. Kiper and Paul want children to reflect different ideas of happiness as well as ideas of an ideal society.

2.3. Economic Definitions and Relations

The American National Council of Economic Education (NCEE) lists a lot of standards children at primary schools should reach. Analysing the standards for fourth class shows that the NCEE mainly expects definitions, but also understanding of relations and developing explanations about economic phenomena:

- children shall be able to define wants, goods, services, costs, benefits, incentives (rewards, penalties), specialization, division of labour, exchange, barter, price, market, competition, producer, consumer, banks, entrepreneurs, governments, costs, price, money, opportunity costs, productive resources: natural resources, human resources, capital goods, inflation and unemployment.
- children shall find out, that restrictions requires choices regarding opportunity costs, that most choices do not require all-or-nothing-decisions, that peoples purchases determine the use of resources, that incentives have different consequences to individuals according to their values.
- children shall explain advantages und disadvantages of money, different types of distribution as well as causes for exchange, income, public goods and services, human capital, productivity and also consequences of specialization, division of labour, competition, low and high prices to

consumer and producer.

2.4 Economic Education without Children's Needs and Concepts

While the NCEE-standards are mainly attached to a view of economics as a science in an elementary way, they do not seem to be concerned about the needs of children within their economic world. Most of all, the NCEE-attempt tries to prepare children to follow up economic education at higher grades trying to define the elements children could learn and do. Problems, chances and dangers of real economic situations are not regarded and standards to recognize connections are less. On the contrary, the approach of Ochs tries to define the important economic situations that are embedded in children's lives and shows a way to treat them to support competence and emancipation. In order to connect economic education within primary education and to start by a child's economic socialisation the approach of Kiper and Paul develops a lot of first signs, but it seems to be more a coloured catalogue of opportunities than necessities. Even so, they are the only ones who take the results of research on children's constructions into consideration. Nevertheless the approaches of Ochs, Kiper and Paul take into account more respect for the economic world of children. But if Ochs' concept would be worked out, it seems to be a curriculum by its own, whereas Kiper/Paul's elements just remain as opportunities. Nevertheless, an approach to define competences and contents can not be made up by situation and science alone, it also has to regard the way children construct their reality by themselves.

3 Children's Understanding of the Economic World - The Results of Economic Psychologists

The curricula of German primary schools are supposed to help children to orient oneself within nature and within their social world. Requiring understanding and explanation in general guidelines, the fields of curriculum dedicated to social fields are mostly restricted to moral values. Whereas a common German phrase as a principle of learning is: "Pick up children where they are", apart from psychologists nobody else cares where they actually are. The phrase is popular and trivial at the same time. Curricula constructors have not taken into account the results of psychologists about the development of economic thinking. Generally, these results can not be transferred directly, but they help to understand how children create their reality and which kind of prejudices, judgements and explanations children construct about their world. The results can not be related to specific development stages, because intercultural studies (Roland-Lévy 1990) prove the dependence of understanding on formal and informal learning processes, while sociological studies (Dickinson, Emler

1996) show that economic knowledge depends on social class as well. But the results allow teachers to experience explanation, which seems to be obvious to children. So they know better how 'to pick up children where they are', instead of an education dominated by the teacher's prejudices about children's abilities. From an economic educational point of view the results of children's explanations of the economic world are interesting because understanding a child's economic world is no straight forward matter.

3.1 Consumption

Wanting children to differ between wants and needs results from different tasks. Firstly children should become aware of the gap between available means and acquired goods, secondly there is the moral attempt to avoid luxury, criticizing an affluent society. The second claim overwhelms children with teacher's ideology; the first claim comes across like a guiding rule of economic thinking, neglecting social and immaterial chances to satisfy needs. Nevertheless, an understanding of the role of a consumer requires awareness of scarcity of income according to needs and wants. In this case there has to be an understanding of the value of money. As consumers children want and use goods and services, they or their relatives have to pay the money and they have to decide if they want to save money in order to allow later purchases. These relations require a comprehension, which is not natural to children, as psychologists have discovered.

Berti and Bombi (1988), Claar (1990) and Weber, Heuel and Wanasek (2002) found out, that children of younger ages relate the price to the characteristics of a good and later to its usefulness. To young children size and materials of goods appear as the determining factors of prices, later the function and benefit of a good seem to be the influencing factors. Regarding different prices of one and the same product children explain with a seller's arbitrariness. They rarely see the costs of labour or the rarity of a product (Burris 1983; Claar 1990, Weber, Heuel, Wanasek 2002). Burris (1983) asked children, which goods could be sold and bought. He found out that a lot of children answered the questions influenced by social or moral criteria, for example a baby could not be sold because it is against the law or a school could not be bought, because it is used by other people.

There are results of research of children's understanding of the institution bank (Berti, Bombi 1988; Claar 1990; Jahoda 1981; Ng 1983). To children a bank is a place to get money in case it is needed. Up to the age of nine children often believe, that a bank protects money from theft or protects from one's own wants. Therefore it is not astonishing, that a lot of children think that people have to pay the bank instead of getting interest for lending money to the bank. If they understand a bank only as a helping institution to the public, they can not become conscious of different interests. Becoming aware of interest rate must astonish them, regarding a bank as a helping institution instead of a profit-making enterprise, considering lending and borrowing from friends without paying or getting money or considering the ban of usury in Islamic countries.

3.2 Production and Labour

Nowadays production as well as labour is not directly accessible to children's experiences. Making the world of labour an experience field the origin of goods and income can be shown to the children. Besides, children dream about careers. So the question arises, what they think about the origin and production of goods, what do they do know about costs and gains and what are their ideas are about the ways to careers and different income. Berti and Bombi (1988) investigated the comprehension of children's understanding about the origin of goods. Before they go to school most children believe that goods exist forever. So there is no need to explain the way of production and its means. Because they do not know about production processes, they make up fabulous explanations about the production process later. So it is not astonishing that they do not regard costs which exist for producing as well as for selling products. They often believe that sales revenue is the same as what a seller earns. Being aware of the costs of labour requires the child to know how employees are paid. Because income is often not talked about in families and in public children sometimes believe that the government is responsible for employment as well as for income. On the other hand, children often link work with money, but most link it to visible payment: so shop-keepers are paid, but teachers are not (Hutchings 2002, 93). Children also develop ideas about labour relations. Looking at a factory children suppose that there are hierarchical structures, little autonomy and boring jobs, but if they imagine their future work as adults, they see it as an autonomous and fulfilling activity. Also household tasks may be seen as a chance to take on responsibilities like adults as Hutchings (2002) has discovered. For example, a boss in the eyes of children is the one - most of the time a male person - who tells the worker what to do. Astonishing to adults is that younger children do not seem to see authority as a problem (Weber, Heuel, Wanasek 2002), they do not wonder about legitimacy, if they are accustomed to traditional hierarchy especially in their own life.

3.3 Unemployment, Poverty, Wealth and the Role of Government

Social problems are not covert in children's world. Children get to know about unemployment and poverty, they assume different incomes. They have ideas about the role of government in offering public goods and in solving social problems, but they also believe that the government rules a lot of economic activities and has a duty to solve social problems. Nevertheless, they can not see how governments are allowed to do this. Berti and Bombi (1988) asked children from the age of four to eleven about the meaning of wealth and poverty, the reasons and chances to change social conditions. Children describe the experience of poverty and wealth with concrete and outward characteristics and with goods that people can or can not afford. At younger ages they relate poverty and wealth to money and expensive goods in respect to their absence. As they do not imagine money as restricted, they assume a chance for anybody to become rich.

Later they include appearance and behaviour of a person. Some stages further they explain poverty with characteristics of the individual or the society. As causes of poverty children often mention natural catastrophes or war, at later stages they experience that training, labour and productivity influence the material situation of individuals.

3.4 Children's Construction of the Economic World

Considering the psychological results of constructing economic phenomena, there are a lot of economic relations, with which students at primary school have to deal with and which do not seem to be familiar to them. However, while psychologists have discovered children's representations at special ages, without a didactic approach it can not be confirmed, whether children are able to recognize special economic relations only at special ages or if it depends on the learning process. As far as it depends on the learning process it seems to be necessary that teachers become aware of students' constructions of economic phenomena. As children use a lot of abstract terms like money, work and poverty, teachers might believe that children know their meaning. Children construct their own meaning of the words and associate them with a specialized sense or within a specific situation and change it as soon as the situation affords it. They use the relationships between circulation of money and goods as they need it. As children are naive economists, their explanations can still not result from a general system of economic relationships, which are hidden from direct observation. Children are also active interpreters as they invent and transfer rules from other well-known fields to new phenomena. If they do not differentiate between interests, they can not believe that motives of others differ from their own.

4 Improving Children's Understanding and Acting in Their Economic World

Following I want to define competences of economic education at primary schools in order to discuss them with others. This area of competences is not be mixed up with important economic contents at primary school, especially with consumption and labour, their relation to the social and ecological world and international and historical relations. These contents have to be included in the competences. The following chapter tries to work out those competences, related to the fields of competence the German association of economic education has worked out.

4.1 Children are Able to Make Reasonable Economic Decisions

Children are not aware of the limits satisfying their wants. In order to make reasonable economic decisions they should be able to define their needs, list different possibilities to satisfy them and make a priority list. Comparing prices and qualities of goods and services of every-days-use allows growing independence against promises of merchandizing and calculating with scarce income i.e. pocket-money. Instead of glorifying savings children should be able to consider present and future needs. Relating necessary expenses to available means they can experience by planning and realizing the production of a good by working division and calculating costs as well as by planning and realizing the buying and selling.

4.2 Children Analyze Incentives and Restrictions of Economic Decisions

A lack of knowledge concerning income, money and goods leads children to fabulous explanations about their origin and their quantity. Less awareness about jobs make them belief that government advices jobs or it depends on own wishes regardless the competences are needed or possibilities of the labour market. Analyzing restrictions seems to be like losing paradise for them, but growing awareness about the possibilities is necessary for them to make own decisions instead of being ruled by others. So children find out some general explanations about limited means and the chances to exceed limits. They should be able to describe the origin of goods and income and get aware of the expenses of living and production. They can also describe how people get their jobs.

4.3 Children Understand Economic Relation in an Elementary Way

Children will stay in 'wonderland' if they do not know, that households earn money by exchanging their productive resources, that government can not provide public goods, if they are not paid by taxes, and that enterprises can not survive, if they sell their products at prices nobody wants to pay or at prices which do not meet the breakeven. Children have to realize those relations as arbitrary and do not understand why companies fire workers, why the government does not pay for a new playground and why their parents are not willing to spend more time with them. In simulation games children can discover the relations between economic actors and they can become aware of their functions. Regarding different professions and production of goods they can discover the division of labour and intertwinements.

4.4 Children Identify Collective Problems in a Changeable Economic System

Children become aware of collective problems like absence of participation, pollution, unemployment and poverty, problems which can not be solved by individual action alone. Education at elementary school often requires children's action in order to enhance social competence. In this way it forwards responsibility only to the individual: children should minimize pollution and help poor people. Children recognize those problems in their own way; they make up their own explanation and provide their own solutions. In a first step children can identify the consequences of collective problems for example of pollution, unemployment and poverty of individuals and of communities. In a second step they should be taught to explain different reasons in order to avoid onesided explanations. In a third step they should be able to suggest what they can do to avoid or reduce the problem and suggest what governments can do, too. Finally they should be taught to reflect the consequences of those measures to individuals. Comparing past problems in their own country and current problems in other countries can help to understand changes as a result of cooperative action.

4.5 Children Judge with Ethical Criteria Regarding Different Perspectives

Children have to carry a lot of moral responsibility through current elementary education. Powered by the authority of teachers children are taught to treat nature carefully, restrict the promises of advertising and world of consumption or to help poor children etc. There is no doubt, that these are important educational aims. But the question arises, if children reach these aims by moral burden or by reasonable insight. Taking different perspectives, judging with different criteria children should be able to make their own decisions. They can consider purchase decisions by economic, social and ecological criteria. They can discover the consequences of advertisement from the view of a seller or a buyer. They can take the view of a polluter and the perspective of an affected person. So they can identify different interests of economic actors and evaluate the problems on account of their own reflection.

5 No Way Out without Winning the Teachers

In a subject, which includes a lot of different perspectives and approaches from natural and social sciences, which wants to support a lot of different competences, learning about economic world is not natural. A political answer could be to enlarge or improve the curricula, but advice by curricula at primary schools is often quite rough with a lot of possibilities and quite less compulsory objects. Attempts to make something compulsory are followed by generalizing and simplification and without research about

education processes it could overstrain children. But even if curricula would be improved, without teachers' awareness of the different approaches to children's world and different kinds of necessities, children will not learn anything about economics at school. Without this new awareness the revision of curricula will hardly succeed, too. But at present teacher students study either a science of nature or a social science and have in addition some general lectures about the comprehensive school subject, while at school they will have to teach the subject as a whole. One reasonable consequence should be the division of the subject at school into studies of society and nature.

Even if consumer economics and education as well as labour and production are included as special experience fields or topics, future and current teachers do not attach importance to these fields, an experience which has been made in other European countries as well (Hutchings, Fülöp, Van den dries 2002, 6ff). There are different hypotheses explaining the fact:

- teachers were not taught in these subjects and take their own education as a model,
- teachers are reluctant because they attach the duty of consumery education to parents,
- teachers lack of experience and knowledge about economics and business relations,
- teachers do not have models for economic education with children.

It seems as if elementary teachers have a preference for that kind of economics which is characterized by handicraft and agriculture and are sceptical towards the capitalist system characterized by modern industry and mass consumption, which seem to have a negative impact on the development of children. Future teachers should have at least one lecture about children within their economic world. With a scientific approach awareness is to be supported by investigating children's economic world and their economic conceptions, explaining economic relations as well as planning and evaluating of economic education in primary school. Students should investigate children's constructions of economic phenomena, summarize the economic basis of the subject they asked the children about and create sketches of economic education in order to enhance children's experiences. Experience with such an approach has shown, that students often stressed that they have to improve their questions and often noticed that they could not answer their questions by themselves. Frequently they realize indicate that the subject is important for primary school, too, and not only for secondary school, as they believed before starting. Mostly they admit that they did not know anything about the subject before, but they regard it as interesting to learn more about, although it had been easy getting lost in a flood of information, where the task is a brief analysis about a complex subject, which is seldomly summarized in an understandable way.

As a short conclusion: It is possible to win the teacher. But if the economic world in childhood should be taken seriously and if this should not remain a single or accidental approach, then the science of economic education has to care more for economic learning in childhood, for awareness and models of economic education at primary school. It would be interesting to

examine and to compare approaches of economic education at primary schools in other European countries in order to see if there are better institutional and curricular ways as well.

Notations

(1) Curricula of Lower Saxony, Rhineland-Palatinate, Saxony-Anhalt and Saarland are currently at revise.

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