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## Zmiana społeczna i promowanie rozwoju edukacji nauczyciela w Brandenburgii

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## **SOCIAL CHANGE AND FURTHER DEVELOPMENT OF THE TEACHER EDUCATION IN THE STATE OF BRANDENBURG**

### **ZMIANA SPOŁECZNA I PROMOWANIE ROZWOJU EDUKACJI NAUCZYCIELA W BRANDENBURGII**

#### **Einleitung**

Der Beitrag geht aus von Positionen der Zukunftsforschung und kennzeichnet Megatrends und Szenarien als typische Formen zukunftsorientierter Aussagen. Megatrends und ein Szenario zum Thema „Schule 2030“ werden kurz skizziert. Schließlich werden Folgerungen für eine zeitgemäße Lehrerbildung für eine Schule mit inklusiver Bildung abgeleitet und am Beispiel des Potsdamer Modells illustriert.

#### **Abstract**

In this article we intend to unpack a number of issues concerning future developments in teacher education with a focus on the State of Brandenburg. We will attempt to undertake our discussion from a point of view of megatrends and scenarios in a kind of futuristic projection. We will address some framework conditions for teacher education and subsequently we project this into a situational context of the State of Brandenburg generally and the Potsdam Model of teacher training especially.

### **Futures of the two worlds: the World of Work and the Economic World**

The worlds of work and the economic world are intrinsically interconnected. Today the world of work is significantly different than it was one decade ago and even more different since the impact of the Global Financial Crises (GFC). The latter is just one factor; there are others, more general ones, such as the impact of digital technology advances and perception of a new generation of workers, which Drucker (1950) and Toffler (1983) referred to as ‘the cognitariat’.

To be sure, cognitariat plays today a significant role in the production and dissemination of knowledge through its creation and indirectly to aspects of its coordination. In essence members of the cognitariat are part of the fabric of society that advances economic

development, because they are located at its center. The cognitariat has transformed the economic landscape and has become a new generation of ‘knowledge workers’, which has shifted the way the society sees production, collaboration, work and work place and thus the economic lives of individuals and groups.

However, there is another vital factor to be considered, namely the changing world. Where in previous decades the world of work and the economic world were stable to a large extent, since the GFC this is not the case. Unemployment is continually rising in a large number of developed countries, people look for different type of work in a changing economic environment, and all but few certainties remain. This raises the question of analyzing the future and with it *futures-researches* becoming obviously more meaningful. Here a cautionary note is in place. *Futures-research* must and cannot be seen as leading to exact prognoses, but analyses of designing and determining future options. To paraphrase Alan Kay the surest way to predict the future is to design it.

## **Designing the Future**

Typical forms of future oriented proclamations are formulated as *mega-trends* and *scenarios*. Let us turn to the concept called mega-trends. Being in danger of oversimplification, we suggest that megatrends are the knowledge that describes the probable future. Megatrends are statements and elucidation that define our present and future worlds, in our case the world of work and economy and the nexus between them. It could be argued that megatrends are important for each individual’s personal, economic and social wellbeing. This is one reason why ‘futures’ researchers (henceforth futurist) and others use megatrends when they develop and work with *scenarios*. Megatrends can be and are being used as a vantage point for analyzing our world.

Furthermore, megatrends describe basic universal variation processes, that emerge in all possible areas of life of the work world and economy world in a context of social life-worlds, including development and politics thereby showing a range of possible effects, such as impact on qualification, value change, lifestyle, consumption and others. Megatrend have fundamentally a global character, and the half – life value is long lasting often decades.

Although megatrends statements proclaim or elucidate what we already know about the future there are uncertainties how society, institutions, politics economics, interest groups, organizations and individuals will or may react to predictable megatrends. To put it differently, by articulating megatrends through future research it is not sufficient to focus on

probable future(s) only, because the future is never certain and any entity can affect and design the future.

To conclude, future researchers always consider and articulate three types of future: (i) the predictable future(s); (ii) the possible future(s) and the preferred future(s). Notwithstanding these three types we need to be cognizant of the fact that every megatrend can be bracketed or set aside, or can be subject to sudden fundamentally and materially change of direction. Be this as it may, it could be said that megatrends describe or articulate at any given time probable futures, by expressing that what is known about the future with certain of confidence about the future, thus megatrends are certainties. Notwithstanding this claim of certainty, megatrends also include certain components and traces of uncertainties, and components of paradoxes and impacts of social, economic, political and other counter-forces. Nevertheless one can use megatrends as a methodology for developing strategies for the future, for example to use megatrends for articulating *scenarios*.

*Scenarios* are developed on basis of megatrends and emerging issues. They are also subject to the predictability and possibility of and preferred options emerging from megatrends. Scenarios are the tools for developing alternative futures from a base of different combinations of facts, megatrends and assumptions. The difference between megatrends and scenarios is that the former is the methodology and the latter the method. To be sure scenarios are 'scenes' of for a future situation. This means that in order to be effective scenarios need to be built on plausible megatrends, be consistent with the megatrends and project an understanding of the future. In conclusion, a scenario must be (i) plausible: it must be within constraints of what might conceivably eventuate; (ii) internally consistent: it must follow a logical pathway without any internal contradictions or ambiguities; (iii) a decision making tool: individual scenarios or a group or combination of scenarios must be an integral part of decision making process by which the future is potentially designed. In simple term scenario is derived from stage theatre design, which provides the thematic framework for the action (play). Having unpacked the two main issues, namely the methodology (i.e. megatrends) and method (i.e. scenarios), we can now turn to the topic proper.

## **Futures of World of Work and the Economic World**

As we noted above megatrends encompass variations of themes, possibilities, probabilities and preferred options. They are global, long-termed and far-reaching. As a point of departure it may be useful to refer to the work of Naisbitt (1982), who used the term 'megatrends' in the 1980s in which different and varied impulse in technology, organizations, the world of work

and the economic world were discussed. In his works he developed megatrends such as globalization, rise of the Asian economy, and addressed the dangers of Europe's 'mutually assured decline' in 2005.

Naisbitt (1982) identified megatrends that included shifts from

- Industrial society to information society
- Low technology to high technology
- National economies to world economy
- Short term to long-term conceptualization and views
- Centralization to de-centralization
- Institutionalized social services to self-reliance
- Representative to participatory democracy
- Hierarchies to solidarity, entwinement and mutual dependence
- North to South
- Either/or to multiple options.

Of course not all of megatrends identified by Naisbitt came to fruition; some did others did not, and others he did not identify or address. Even today there are a variety of proclamations by futurists with reference to contemporary megatrends. For example in Germany and Austria there is the *Zukunftsinstitut* (Futures Institute) under the leadership of Matthias Horx, in which has a permanent function to conduct futures research in diverse areas such as the private, occupational and work related, and public sphere.

Another highly respected futures research institution is the *Institut für Arbeitsmarkt und Berufsforschung* (Institute for Labour Market and Occupation Research) in Nuremberg that emphasized already in the 1990's seven Megatrends, that also valid today. The basic premise of the megatrends articulated by the Institute refers to basic structural change, that economy and the world of work (employers, organizations, business and others) must confront is marked by and hence needs to be viewed as a phenomena of

- Technological revolution
- Environmental impact on economics
- Internationalization
- Individualization of the world of work
- Aging of the income producing population
- Increased employment of female population
- International change flows (cf. Klaunder 1994).

Based on the above there were conclusions drawn for the education. For example the intensification of service industries and increased qualification requirements, new educational

concepts, especially in relation to key qualifications, which in turn requires and necessitates continuing educational and professional development and life-long learning.

This brings us back to the question of method, which we termed scenario building. To recap and put into a context of education we note that scenarios are future oriented articulations for human living conditions and thus are influenced by education and qualifications requirements. These articulations refer to either a determined point in time or can be open ended (cf. Tietz 1986). Within a framework of scenario building method the point of departure is the currently existing situation, which in turn provides that basis for articulating and projecting ways to futures visions.

### **Megatrends and Strategies in a New Key: Authors' Perspective on Education**

Staying with the focus on education, the authors are, in cooperation with the TU Berlin, Chair for Arbeitslehre, in the process of preparing an international conference focusing on potentially positive scenarios for the theme *School 2030*. Selective positions are described below.

- Schools are becoming increasingly self-responsive and latitude to determine their own futures. Schools are a central (living and learning) space for youth. Teachers play a key role in personal and character development of pupils and experience a high esteem.
- Deficit orientation of pupil attainments is to a large extent overcome; pupils and children have well advance possibilities to build their basic socialisation experiences. Successful education is based on increasing different experiences especially from individual perspectives of the learner (life world orientation). Change of learning place will be an educational principle, whilst different life worlds will demand diverse learning locations.
- Heterogeneity including migration will increase.
- Schooling certification will be standardised, there will be a number of different possibilities to attain school completion certification and educational connective further development will be increasingly used. Success orientation of the learner will – through certification of competency standards -become increasingly prominent.
- The system called 'school' will provide increasingly space for value appreciating dialogue communication and the acknowledgement of individuality of learners; the

fostering of individuals will increasingly and improvingly take into account the differences amongst learners i.e. diversity management.

- Teacher – learner relationship will be deepened and are characterised by mutual trustworthiness and esteem. Children and pupils will be taken seriously especially in relation to their personal and educational strengths, their ideas as well as the questions they pose and the fears they express.
- Learners are becoming increasingly more successful in self-managed learning, gaining of experiences and that what has been learned to transfer into and make relevant to their life-world. Independence and participation will be purposely fostered.
- School based learning processes will be focussing on natural child characteristics learning; learning will correspond with natural needs and development potential as well as personality and learning formation desire of children and pupils.
- Vocational/occupational orientation is at the intersection between school, life planning (personal, family, occupational, social, cultural, etc.). Education landscapes in external to school partnerships will be enhanced and cultivated, and cooperative networks will be accumulated.

### **Further development for Teacher Education in the State of Brandenburg**

In order to bring about the above megatrends there is a need to align and improve pre-service and in-service teacher education and continuing professional development of teachers. University of Potsdam is addressing this challenge, with a special focus on inclusive education. To be sure, inclusive education is perceived as a concept and as praxis, which provides all individuals with the opportunity to have access to, participate in and attain high quality education. This should enable individuals to develop their full potential, independent of specific learning needs, gender, social, economic or other disadvantages, circumstances or barriers.

With the ratification of the UN- Human Rights Convention for persons with disabilities in 2009, is the in Article 24 enshrined right of an individual with disabilities to participate in standard education and attend regular schools in Germany given. The EU has ratified this UN Convention in December 2010, and thus it is binding on all EU member states as well. With the introduction of new study and examination regulations, the third stage of corresponding teacher development became necessary throughout the State of Brandenburg. The University of Potsdam has taken on the challenge of the *Third Stage* of these developments. However for a better understanding we will briefly address the first two stages.

*The First Stage* took place in the beginning of the 1990's and was in aid of aligning teacher education at Pädagogischen Hochschule Potsdam with the framework requirements in the German Federal Republic (henceforth BRD). This was the catalyst for the development of the Potsdam Teacher Education Model (henceforth PTEM), whereby it was necessary to include innovations without counteracting existing BRD framework conditions.

The BRD framework conditions are:

- Teacher education shall consist of two phases: Tertiary level study and a pedagogical-practical training, also known as preparatory service (*Vorbereitungsdienst*).
- Teacher education shall consist of a minimum of two teaching majors.
- The studies for teacher education shall include pedagogical and major discipline specific 'fachdidaktische' components.
- Entry requirement for studies in teacher education is the matriculation (high school graduation examination), which is attained after 12 or 13 years schooling.
- Teaching positions are organised according to school type and forms: Elementary schools and intermediate schools, secondary schools (Realschulen, Gymnasien and Gesamtschulen), vocational/professional schools and special schools. In addition many States have specific school forms. An organisation of schools according to school levels is not excluded.

According to the PTEM studies shall include from the beginning on a close nexus between theory and praxis. The praxis component shall include an encompassing professional and study organizational functions.

The whole structure of the PTEM should be modular. The regulation states: Students shall-pursuant to the regulations and rulings concerning individual exam-based subjects and within the law governing teacher certification - plan and undertake their studies based on modules in self-responsible manner. The module distribution is:

- (a) ESW-Modules consisting of educational studies (pedagogy), psychology, and sociology (minimum 30 semester week hours)
- (b) Discipline specific Modules (Fach-Module) discipline/subject and didactics specific modules in at least two disciplines (sciences, humanities, arts, technology, etc.), (minimum 50 semester week hours).

Teacher education has been modularised according to the above components: pedagogy, psychology, and social sciences.

*The Second Stage* was characterized by the 'European' ideology. This included the Bologna Process in which the federal government, State governments, universities in Germany experienced the single largest higher education reforms for decades. The aim of the



in 1999 agreed processes for higher education by ministers of higher education in the university city of Bologna was to develop and adhere to internationally acceptable qualifications, to improve quality of delivery and to promote better employability of graduates.

The Bologna declaration and the subsequent communiqué of the standing committee of the education ministers in BRD specified the following:

- Introduction of a system of commonly understandable and comparable qualifications (Bachelor and Master degrees);
- Introduction of a staged study structure;
- Transparency of study content using credit point and diploma/degree supplement;
- Recognition of qualifications and subjects/modules that have been successfully completed;
- Improvement in mobility of students and academics;
- Quality assurance at national and European levels;
- Fostering life-long learning.

It may be noteworthy to mention that not only the EU member countries, but also others have adopted the Bologna Process and others have become 'observer countries'.

In line with the Bologna Process, University of Potsdam introduced, implemented and changed its studies accordingly. In doing so it was decided that main elements of the PTEM should be retained and developed further. In summary these are:

- Study programs should focus on two school levels or forms
  - Studies leading to teaching qualification for lower secondary and primary education at general school level;
  - Studies leading to teaching qualification for upper secondary (gymnasium) level.
- Studies are consequently modular. Modules are self-contained examinable units, encompassing thematic and time-bound knowledge specific content. Usually a module includes the content of one semester or an academic year. Under special circumstances a module may be structured over more than two semesters. A module value is usually six to eight credit points, whereas one credit point requires a study work load of about 30 hours.
- Education program consist of two levels: Bachelor and Master degree studies for elementary schools and intermediate schools. The Bachelor degree program has a duration of six semesters and carries a requirement of 180 credit points the Masters degree program for has a duration of three semesters and has a credit point

requirement of 90 points for elementary and intermediate schools; and for upper secondary (gymnasium) level four semesters and 120 credit points, including preparation of master thesis (cf. Meier and Jakupec 2012).

*The Third Stage* has at its focusing on Inclusive Education (henceforth IE). The cornerstones of IE at Potsdam University teacher education programs are characterized by:

- With the beginning of the Winter Semester (henceforth WS) all teachers' education programs are of 10 semester's duration with 300 credit points.
- Teacher education study programs are being restructured so as to have school level based differentiation:
  - Primary education teacher training for school years 1-6;
  - Secondary education teacher training for lower secondary (Sekundarstufe I) and upper secondary (Sekundarstufe II) schools;

Both programs and teaching qualifications maybe studied from different profiles. Primary education teacher training maybe studied with inclusive education component, whereas secondary education teacher training may focus on lower secondary (Sekundarstufe I) or upper secondary (Sekundarstufe II). Inclusive education is a subject area, which must be studied in all teacher education programs.
- The requirement to study two major discipline / subject areas remains and they have the same value and workload.
- The primary education workload is for the two different major discipline / subject areas and for specialisation in IE 57 credit points in addition to the primary education requirements being 99 credit points or 99 credit points for IE pedagogy.
- For all subjects of lower secondary (Sekundarstufe I) or upper secondary (Sekundarstufe II) the majors' subject specific content and responding didactics components must have a minimum of 90 credit points, of which at least 18 credit points must be covered by responding didactics. For upper secondary (Sekundarstufe II) school level teaching is developed during the Master program.
- In the Masters program for all teacher training there is a requirement of successful completion of a praxis semester in schools accounting for 30 credit points.

In order to achieve these aims and required content based and structural changes, the federal ministry has allocated funding for a professorship in IE at Potsdam University.

We can now present as an example the program structure for secondary level teacher training.

**Lower Secondary School Teacher Training (Sekundarstufe I)**

Subjects/Study Component	Credit Points (CP)		
	Bachelor	Master	Total
Major 1	69 CP	21 CP	90 CP
Major 2	69 CP	21 CP	90 CP
Educational Sciences	30 CP	21 - 18 CP	69 CP
Studies PLUS	3 CP	-	3 CP
School Practicum (incl. psycho-diagnostic practicum)	-	21 CP	21 CP
Bachelor and Master <i>Abschlussarbeiten</i> (major paper/mini—thesis)	9 CP	18 CP	27 CP
TOTAL	180 CP	120 CP	300 CP

**Upper Secondary School Teacher Training (Sekundarstufe II)**

Subjects/Study Component	Credit Points (CP)		
	Bachelor	Master	Total
Major 1	69 CP	21 + 9 CP	99 CP
Major 2	69 CP	21 + 9 CP	99 CP
Educational Sciences	30 CP	21 CP	51 CP
Studies PLUS	3 CP	-	3 CP
School Practicum (incl. psycho-diagnostic practicum)	-	21 CP	21 CP
Bachelor and Master <i>Abschlussarbeiten</i> (major paper/mini—thesis)	9 CP	18 CP	27 CP
TOTAL	180 CP	120 CP	300 CP

Following this structural presentation of teacher training program at University of Potsdam, we can now turn to selective program content. With this we can focus on the introduction of the problematic social and cultural changes.

Study content for educational sciences (*Bildungswissenschaften*) are in line with the German Standing Conference of Ministers of Culture (*Kultus Minister Konferenz*) recommendations for *Bildungswissenschaften 2004*. For a better understanding below are the curriculum-oriented foci. That is, a teacher-training curriculum needs to be based on the following consideration and include the following cognitive development processes.

- **Education:** Justification and reflexion of education and its institutional processes.
- **Occupation and the role of the teacher:** Teacher professionalization, teaching as occupational learning task, conducting occupation related conflict situations and situational decision-making.

- **Didactics and teaching-learning methods:** Development, design and delivery of teaching – learning processes and design, development and implementation of the learning environment.
- **Learning and the development of socialisation:** Learning processes of children and pupils within and outside the school.
- **Achievement and learning motivation:** Motivational principles for achievement and development of competencies.
- **Integration and support:** Heterogeneity and differentiation and a condition in schools and teaching-learning environment.
- **Diagnostics, evaluation and advising (mentoring):** Diagnosis for fostering individualised learning, achievement mentoring, appraisal and evaluation.
- **Communication:** Communication, interaction and conflict resolution as a basis of teaching-learning activity.
- **Educational media development:** Usage of educational media with frameworks of conceptual, didactic (teaching-learning methods) and practical aspects.
- **School system development:** Structures and history of the education system, structure and development of the education system, and development of different schools types.
- **Educational research:** Aims, objectives and methods of educational research, and interpretation and application of educational research findings.

The curriculum in its modular has been developed as follows

#### Module Structure for Secondary Teacher Training

Bachelor	Master
S1 Didactics and teaching-learning methods (9 CP)	S6 Education, schooling and school development (6 CP)
S2 Learning and development und (6 CP)	S7 Diagnostics, evaluation and advising (mentoring) (6 CP)
S3 Differentiation and inclusion (6 CP)	S8 School, education and communication (9 CP)
S4 Educational research (6 CP)	<b>School level specific Master (only lower secondary i. e. Sekundarstufe I)</b>
S5 Didactics, Didactics and teaching-learning methods and educational media (3 CP)	S9 Inclusive education for lower secondary i. e. Sekundarstufe I) –Bridging module 1 (9 CP)
	S10 Heterogeneity and inclusion – Advanced module (9 CP)

In these two teachers education programs the Potsdam University Teacher Training Model has maintained and further strengthened the nexus between theory and praxis, whereas the latter is included and organised as a continuing activity. This is, the practicum is implemented as follows:

- Students studying secondary education teacher training programs are required to undertake within the education sciences component a mentored and monitored **orientation practicum** during university's non-attendance period. The practicum is based on a preparatory seminar and the practicum and seminar are considered as an integrated unit.
- Students studying primary education teacher training programs are required to undertake within the education sciences component an integrated **introductory practicum** with pre – and post practicum activities, as well as weekly 'work shadowing' in teacher training schools, attendance at seminars at the University.
- **Subject/discipline specific didacticsday practicum** (teaching-learning methods praxis) is a mentored and supervised activity throughout a semester. This day practicum is undertaken in every major subject area and includes pre – and post practicum activities. This practicum integrates group work shadowing and teaching-learning approaches.
- Following the orientation practicum or introductory practicum all teacher-training students have to successfully complete during their Bachelor degree studies a **practicum in pedagogical-psychological** field of activity. The aim of this practicum is to enable students to gain an understanding of different socialization processes and activities for children and youth. For this practicum, students may use institutions like public youth help organizations that are external to the school or observe relevant education research projects. Throughout this practicum students will focus on an educational question dealing with and responding to **pedagogical-psychological** field of activity such as socialization.
- There is a requirement for a one-week long **psycho-diagnostic practicum**, which takes place in schools during the university's non-attendance period, and is supported by an introductory seminar. The focus of this practicum is to analyse examples of selective characteristics of psycho-diagnostic methods in terms of pupils' cognitive, motivational and social behaviour.
- Students are required to undertake a **praxis semester**. This praxis semester is time bound and characterized by location change away from the university with duration of 14 weeks. The aim is to enable students to gain in-depth experiences and in-sights into

complexity of school based professional work as a teacher. Through the combination of theoretical studies at the university and practical experiences in the 'training' students develop further their scientific and occupational-practical competencies.

## **Conclusion**

There are a number of issues that need to be addressed. For example it is too early to say how far these above described and discussed teacher education reforms, especially with its roots firmly embedded in inclusive education will advance the current approaches and contribute to the development of a more educationally and socially sensitive teaching profession. Much of that what has been introduced in this paper and at the University of Potsdam is very promising, and may even find recognition in the quality assurance offensive for teacher education. On the other hand, the University of Potsdam with its teacher education model has taken a singular special route within the agenda of the States within parameters of cultural federalism in BRD.

Within the BRD context, it could be said that the strength of the federalism' it is that States may and will find and enact different solutions based on their perception of current challenges. If, however the variety of the solutions itself becomes the problem, it may be time to induce an extensive change of basic structural questions regarding teacher education otherwise teacher training may be prevented from addressing vital changes that can be brought to the fore through megatrends and scenario building.

We started with a discussion about megatrends and scenarios and ventured to inclusive education and subsequently described the new University of Potsdam Teacher education model. The issue for teacher education in light of megatrends, scenarios and inclusive education seems to be how to take account of the multiple influence, that shape teacher education today for the tomorrow. There is no simple answer. There are multiple answers. Teacher education institutions, politicians, scholars and practitioners need to be aware of current debates and megatrends and must have the political and academic will build scenarios as solid foundations for advancement in teacher education. The challenge remains, viz. to bring together and interlock theory and praxis of teacher education, megatrends in teacher education, and teacher training realities, which include inclusive education. The jury is still out on this issue thus the success or otherwise of the University of Potsdam teacher education model is to be seen.

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