By Invitation

Apprenticeship Programs-Lessons from Germany & German Companies in India

Matthias Pilz & Dipl.-Kffr. Sarah Pierenkemper

This paper deals with the question: how the experience of other vocational education and training systems can India help overcome its competence gap. Comparative research has shown that it is possible for lessons to be learned from the reform initiatives of other countries without their mistakes being replicated. An increased involvement of the private sector should boost the quality of the current vocational education and training system. Involving the private sector in vocational training has been successful in many other countries, especially in Germany, where the strategy is seen as underpinning skills training for young people that reflects the needs of the market and helps integrate them successfully into employment.

Matthias Pilz (E-mail:matthias.pilz@uni-koeln.de) is Director of the Center of Modern Indian Studies at the University of Cologne/Germany, Director of the German Research Center for Comparative Vocational Education and Training. ***Dipl.-Kffr. Sarah Pierenkemper*** **(**E-mail: sarah.pierenkemper@uni-koeln.de) is Executive Director of the Center of Modern Indian Studies at the University of Cologne/Germany.

Bridging the Competence Gap

India's economic growth is being jeopardized by the shortage of skilled labor. Despite the large potential labor pool, many businesses find it difficult to recruit employees with the appropriate skills (Majumdar, 2008: 41f.). In a survey conducted by the Federation of Indian Chambers of Commerce and Industry (FICCI), 90% of the companies reported that they experienced problems of finding sufficient numbers of skilled workers and could not, therefore, exploit their full economic potential (FICCI, n.d.). Most of the new workers emerging from the training system have inadequate skills for the world of work, and a majority lack adequate vocational qualifications to be able to meet the demands of the labor market (Agrawal, 2012: 455). More than 60% of all those who have completed a course of vocational training have not found permanent employment three years after finishing their training (World Bank, 2008).

The Eleventh Five-year Plan drawn up by the Indian Government therefore places great emphasis on skills development. The government has, for example, set itself the goal of providing vocational skills training for 500 million people by 2022 (GoI, 2008), while plans significantly to boost the quality of vocational training are intended to ensure that the private sector is increasingly involved in training.

Involving the private sector in vocational training has for decades been a successful part of the training systems of many other countries, especially in Germany, where the strategy is seen as underpinning skills training for young people that reflects the needs of the market and helps integrate them successfully into employment (Kupka, 2005).

The question arising from the findings set out below is whether – and if so, how – India can learn from the experiences of other countries. International comparative research into vocational education and training has shown in this context that it is possible for lessons to be learned from the reform initiatives of other countries without their mistakes being replicated. However, blanket transfer is not appropriate, of course, so any learning process requires very precise analysis of the country-specific features in the 'learning' country (Pilz, 2012). The scope for learning from other vocational training systems will therefore be discussed against the backdrop of the 'dual' training system that is widespread and very successful in Germany. The first section of this contribution will outline the German system and review its strengths. The scope for transferring German experiences to India will then be discussed in the context of a research study focusing on the training practices of German companies in India. The final section will discuss the findings.

The German System

We shall provide here a brief overview of the initial vocational education and training in Germany. For the sake of simplicity, this will be equated with the country's 'dual' vocational training system, although it should be borne in mind that the 'dual' system (which combines periods of on-the-job training in a company with periods in the classroom in a vocational school) is just one part of the wider provision of initial and continuing vocational training within Germany's VET system. Our decision to focus solely on the 'dual' system is, however, justified because it is the most important subsystem within Germany's VET system in both qualitative and quantitative terms (it provides around two thirds of all vocational training places) (BIBB, 2013:9).

The key feature of the dual system is the cooperation that it involves between two learning sites, the vocational school and the training company.

The key feature of the dual system is the cooperation that it involves between two learning sites, the vocational school and the training company. Between them, these two sites provide vocational training, typically of between two and three

and a half years, in around 350 recognized training occupations (Kupka, 2005). The aim of the *Berufsprinzip/vocationalism* (Ryan, 2003) – the principle that underpins Germany's legislation on vocational training – is that "on completion of a period of vocational training conducted over a period of several years in line with principles applying across the country, young people are equipped to carry out many different specific vocational activities" (BT-Drucksache 15/4752 of 26.1.2005, authors' translation). Trainees usually spend three or four days each week in their training company, which provides a practical introduction to their chosen occupation. The remaining one or two days are spent in vocational schools, where they receive general and occupation-specific instruction. Teachers in vocational schools generally have a university degree; the instructors in their training companies are not required to have any specific academic qualifications, but a mandatory trainer aptitude test ensures that they have the necessary subject and teaching skills (Hoeckel/Schwartz ,2010:10).

Training regulations govern mandatory provision for training and assessment at national level, but the curricula for vocational schools are devised at federal state level. The private sector is represented by employers' associations and trade unions in framing proposals for the creation of new regulations and training occupations or for updating existing provision. The fact that the 'dual' system forms such an integral part of the institutional framework is seen as one of the main factors underpinning its success: in particular, the involvement of companies ensures that the skills trainees acquire are in line with the needs of the market and that the system remains flexible (Hoeckel/ Schwartz 2010: 12f.). Training is funded by a combination of the companies themselves and government. While the federal states take responsibility for funding the upkeep of vocational schools and the cost of employing the teaching staff, companies meet the cost of in-company training and the salaries of the instructors.

Although the regulations do not make it obligatory for would-be trainees to have any specific secondary school qualifications to access training in the 'dual' system (BIBB, 2011), 31% of all those taking up a course of training have successfully completed nine years' secondary education (*Hauptschulabschluss*), 42% have completed ten years (*Realschulabschluss*), and 23% hold the qualification (*Abitur*) that would entitle them to move on to tertiary education (BIBB, 2013: 169). The proportion of trainees with the latter qualification has, in fact, risen steadily over recent years (BIBB, 2013: 170). Indeed, for these young people, vocational training in the 'dual' system is frequently a springboard to higher education: for example, 17% of all those embarking on a degree in the autumn of 2011 had already successfully completed such a course of vocational training (BIBB, 2013: 180).

The key guiding principle of vocational training in Germany is to develop practical skills, defined by the country's ministers of education as "the ability and willingness of individuals to act appropriately, reflectively and in a socially responsible way and in accordance with

existing knowledge in all employment, social and private situations" (KMK, 2011:15, authors' translation). As a result of being placed within companies, trainees get an early experience of integration into everyday working life, boosting the likelihood that they will be viewed favorably in the labor market once they have completed their training. In 2011, 66% of all trainees who successfully completed their training were taken in by the companies that had trained them (BIBB, 2013: 224). However, 28.9% of all trainees were unemployed immediately after completing their training course (BIBB, Datenreport 2013: 286), although such job-seekers actually spend very little time out of work in Germany compared with other countries. This is because the breadth of the vocational skills that trainees have acquired enhances their mobility and enables them to find employment in a wide range of occupational fields (Berger & Pilz, 2009: 17).

The breadth of the vocational skills that trainees have acquired enhances their mobility and enables them to find employment in a wide range of occupational fields.

Transferability of Germany's System

The issue of the transferability of approaches to vocational education and training is not a new one and has been the subject of lively and intensive debate for many years, including in the context of development cooperation and of comparative international research into VET (Lauterbach, 2003; Münk, 2004). One major question that arises is whether Germany's system can be transferred to another country wholesale or requires adaptation – that is, whether a national government can effectively impose a top-down transfer. Empirical research findings suggest that such a top-down approach poses a number of problems. For example, Schippers (2009) found a range of problems with implementation at the practical level in a study of cooperation between Germany and Egypt on vocational education and training.

In the study presented here, however, we have taken a rather different perspective, focusing on the existing training practices of German companies operating in India. The main driver for the research was the assumption that German companies are satisfied with the German training system and are carrying it over when they expand within India. Perlmutter & Heenan (1979) characterize this approach to management cultures and HR development strategies as an ethnocentric, or "country of origin", effect.

This gave rise to the two central research questions:

- To what extent do German companies adopt the German model of skills training when they operate outside Germany? More particularly, which of the structures and processes that characterize Germany's 'dual' system of initial training are transferred to other countries and which host country or international or regional approaches are retained?

- Which influences from the host country underpin the skills training activities undertaken?

Research Approach

The semi-structured exploratory interview methodology was used to inform the research design and to tackle these questions. This kind of interview with experts is particularly well suited to a study of this kind in a new area of knowledge where outcomes are difficult to predict.

On the basis of theoretical considerations set out above, the semi-structured questions were divided into three thematic blocks. For reasons of space, it is not possible to provide a detailed description here, but we would like to draw attention to the following key aspects. Central to the question design was the concern to record divergences with the German VET model in as structured a way as possible. To this end, on the basis of relevant theoretical concepts (Blossfeld, 1993; Clement, 1999; Ryan, 2003; Hellwig, 2008), the following meta-categories were adopted and refined in individual questions (see also above, in relation to the details of the 'dual' training system): the learning site' the emphasis in curricula and teaching; participants/ target group; professionalization of the staff delivering vocational training; allocation of costs between the various actors involved; recruitment costs/significance of certificates and accreditation; and the relationship between initial and continuing training.

The focus of the first block of questions was on fundamental assumptions and strategies. For example, interviewees were asked about the existing range of training provision and the indicators of the basic strategies for internationalizing HR management and development functions set out above in the theoretical section (such as, for example, the role of the parent company in managing training provision or the involvement of different groups of employees in training measures). The focus of the second thematic block was the extent to which the German training model was reflected in India, mapping criteria derived from the *Berufsprinzip/ vocationalism* (see above) on to the training activities of the foreign subsidiary in the national context. The third and final thematic block was more open-ended and designed to explore real-life experiences, current issues, and future challenges, such as demographic or economic trends. Interviewees were given free scope at this point to speak freely about the aspects they considered relevant.

The main study was conducted in 2011 and 2012 on the basis of a pilot study. All German companies within the chosen region (the southern Indian state of Tamil Nadu) were contacted; to ensure economy of scale in the research, the region was chosen because it had a high density of German companies, while the companies themselves had to employ at least 100 people locally, so that there was potential for a genuine training program. In relation to the selection of sectors, we were unable to stratify our findings meaningfully because only a relatively small proportion of the potential interviewees were actually willing to take part. The evaluation of the interviews did not, however, point to any clear

distinction between sectors in terms of training practices.

A total of 20 interviews were conducted with businesses. A number of beacon projects involving major German companies were excluded from the study because of their specialized nature: these included, for example, the training in mechatronics provided by Volkswagen in Pune and the AHK training course in three major Indian cities (AHK, n.d.).

The interviews with the training experts were conducted locally. 'Experts' were defined as individuals who, on the basis of their substantial experience, fulfilled a specialized role in a specialized technical area (Mieg & Näf 2005: 7). We therefore selected as our interview partners decision-makers in the area of initial and continuing training in the relevant home country (for example, HR or training managers). The nationality of these individuals was immaterial, as the research approach attached no importance to that variable.

Interviews varied in length between about 60 minutes and 80 minutes. With the agreement of the experts, we recorded and partially transcribed all the interviews conducted.

Findings

Training provision varied across the companies surveyed and it enjoyed a high status in company policy. Company 15 was typical of the respondent companies: "Wherever there is a new system or strategy, a new machine, a new product, a new process, change, there is a training need." In most of the companies surveyed, the role or influence of the German parent company was limited to the provision of product information and technical support. In management, HR selection and the design of both initial and further training, these India-based companies act almost entirely autonomously and in line with local needs.

India-based companies act almost entirely autonomously and in line with local needs.

The most common perception of initial education and training (IET) is that of the induction training given to new employees. This training is intended to familiarize new recruits with the company and its products and with their place of work. In most companies (ten of those surveyed), induction training took about a week. "In the moment the person walks in, they are fresh. They will be put in our training program. It is more focusing on the company policies, procedure, practices, ethos, culture and all those things. …..It is mandatory for anyone, who will enter the organization." (Company 1)

In response to questions about the existence of possible introduction in India of a 'dual' vocational education and training system of the kind offered in Germany, characterized by cooperation between the state and businesses in line with the *Berufsprinzip/vocationalism* respondents stressed that no such system currently existed in India and that it would take time to adapt the current ar-

rangements. Reasons cited included both the institutional framework within India and the level of social acceptance of the vocational training situation. Company 13 summed up the current situation as follows: "There is huge demand for vocational[ly] trained people in India. (…) But the ITIs are attracting some school drops out, but they are not affordable. (…) In fact admission to ITIs has reduced. But admissions to polytechnics and engineering have increased. At one point of time we are not getting the vocational[ly] trained people for the lower level jobs."

In specific terms, and in line with traditional perceptions, the ideal post-school vocational trajectory for privileged young people is academic training followed by entry into the employment system. It should be noted here that a number of different occupational profiles for which Germany's training occupations prepare young trainees are offered in a similar form as academic programs within colleges and universities in India: "[The] Indian way of education is different. The focus is more on technical and career base. (…) First we do the education and then search career. (…) Vocational [training] is available in India, but when you do vocational it looks like a blue collar not as a white collar" (Company 9).

A minority of the companies surveyed (two companies) offer what is known as 'apprenticeship training' either after the basic theoretical training provided by ITIs or after trainees have completed their vocational secondary education. This apprenticeship training involves a year's practical training within a company. This training is not governed by a fixed curriculum but takes the form of on-the-job training (OJT) provided by the heads of specialized departments who have, however, received no special instruction in providing it. The state subsidizes the trainees' wages and the cost to the companies of providing this training. There is no final examination or assessment once the practical training is complete. Companies also offer special work experience-based training to what are known in India as 'fresh [new] graduates' on the basis of the jobs they will go on to do. After a theoretical induction into the training company, these new graduates do several months' OJT, which is subject to various kinds of monitoring and assessment. This training runs for between six and twelve months, depending on the complexity of the job, and is largely informal. Company 5, for examples, runs it as follows: "The first week they will be in technical training department. We used to give all the technical information. (…) It will be an OJT and every month they will undergo a soft skill program. There is a schedule[d] program for the first year. Every month after the completion [in] the department they have to do a presentation. (…) The main idea is to find out who is what and how their performance is." (Company 5)

A few companies – only seven, however – also offer vocational training courses for university students whose degree courses require them to spend between 45 and 60 days on a summer project.

Continuing training measures are dependent on the current demands and essential skills profile of specific jobs. In-service training is designed to close the knowledge gap between the job profile and an employee's actual level of skill and to give the employee the optimal level of training for his or her post and responsibilities.

In-service training is designed to close the knowledge gap between the job profile and an employee's actual level of skill.

The provision of further training in companies can be divided primarily into technical training, training in what are known as the 'soft skills', and 'behavioral training'. Many respondents, particularly those in the sales area, emphasized the importance of improving English language skills, which were frequently felt to be inadequate.

Initial &Continuing Training

The following broad trends in the design of initial and continuing training in the companies surveyed emerged from the findings. Most employers expected employees already to have specialized theoretical knowledge by the time they joined the company; the training provided by the companies focused more on linking company- and/or product-specific knowledge with the performance of employees' future jobs. In-house training provision is formal and structured and is supported by learning materials, although in the vast majority of cases, these materials relate overwhelmingly to the individual company (for example, product presentations) and are not intended to provide knowledge beyond that limited scope.

These larger companies also have their own training centers, such as the 'Application Centre' cited by company 1, or special sector-level training schools (company 2): "The intention is in practice more creative. The idea is what you gain has to be retained and what you are reading has to be applied. (…) The Application Centre is a venue where the trainee can touch, feel and see. They can do it by themselves. We have classroom training, on-the-job-training and then on the side training." (Company 1)

Trainers have received no formal instruction in teaching or training; in most cases, they are product managers with many years of professional experience, and their familiarization with teaching and training practice is likely to be limited to 'train the trainer' instruction. Companies also send two or three representatives of the Indian subsidiary to Germany so that they can receive specific company- or product-based training. On their return, they then pass this knowledge on to the trainees the Indian company has taken on.

It is unusual for companies to provide certification of employees' participation in training. Since the vast majority of provision is organized and carried out in-house, the companies see no need for certification. Where training courses are conducted outside the company, participants receive a certificate of attendance.

When they have completed their OJT, some "fresh graduates" are required to pass a test in order to obtain a contract of employment: "Employment itself is a certification." (Company 10)

In all the companies surveyed, the company itself meets the full cost of training in the knowledge that the costs will bring benefits.

In all the companies surveyed, the company itself meets the full cost of training in the knowledge that the costs will bring benefits. Training for new graduates in particular is expensive, so certain measures are taken to retain these trainees after their OJT and to boost their productivity by funding their further training and promotion. Company 6 manages this as follows: "We introduced a scheme that we will employ them on a normal listing. At least some amount is deducted every month. We said you will get this – this is a loyalty bonus. You will become eligible for this only after two years of service. If you are leaving you don't get that. It is not [for] the purpose of making any money. But they are trained and when somebody is leaving, I will lose this money." (Company 6)

In summary, the challenges faced by the companies surveyed in providing training are the insufficient employability focus of university courses, their failure to reflect the practical requirements of the labor market, and a high staff turnover rate, as illustrated by one company's comments: "Training is also a key factor to keep the people. Because number one problem that most companies in India face is that the attrition rate is high – the turnover of people. So, for them it is part of an attractive package to join the company. They expect training." (Company 12)

In relation to VET, company respondents stressed that if it is to be accepted and valued, society's perception of it needs to change and it needs also to be reflected in pay and ongoing staff development: "The remuneration and the return of VET are very little. (…) The payoff is not good. (…) It's a continuous work, to train them emotionally to understand that you get lesser paid for the time when you start and as you go on it is a better quality of life that you will get." (Company 1)

Drawing on the work of Pudelko & Harzing (2007), it is possible to see a localization effect at work in the fundamental approach taken by German subsidiaries in southern India; they argue that localization takes place when cultural and institutional characteristics in the host country prevent the transfer of HR methods from the parent country. The companies surveyed are almost all autonomous businesses whose links with their German parent are generally limited to shared products and technical know-how.

Discussion

A further-reaching interpretation of these findings in the context of the sociocultural framework (see the research questions set out above) requires awareness of the limitations on the study. The education and employment system in In-

dia must be seen in its own cultural context: the marked focus on regional characteristics in companies' training practices is a local response to the fact that Indian school education is highly theoretical and has virtually no relevance to the world of work (Krisanthan & Pilz, 2014). Parents' overriding aim is to get their children into university, where of course their education will also be strongly theoretical. Young people in India who are unable to go on to higher education, either because they lack the qualifications or because their family cannot afford it, usually move straight on to the labour market. Vocational training, as an intermediate competence level, is therefore assigned niche status and is often viewed negatively or stigmatized. India does not, therefore, yet have a vocational education system that enjoys a good social reputation, has all the necessary structures, and is supported by high-quality organizations – it is still developing one, and much of the existing vocational training is currently conducted in full-time school mode with only very restricted relevance to practice (Agrawal, 2012).

Against this background, it is understandable that German companies adapt to the local regional conditions and make the best possible use of the status quo or adapt it where they can, especially when the resources are lacking to establish an independent training structure that is completely independent of local factors. A further factor in the Indian context is that the highly flexible local labor market and the risk of staff turnover often prompts employers to consider it uneconomic to invest in developing their employees' skills (see above).

The highly flexible local labor market and the risk of staff turnover often prompts employers to consider it uneconomic to invest in developing their employees' skills.

The findings of this research also show clearly, however, that German companies in India have a high level of need for practically trained young people at an intermediate level of skill and that this need is forecast to increase (Ernst & Young, 2012). At least in the medium term, a polycentric training strategy will remain the paradigm: greater orientation to the German training system requires companies that wish, and can afford to, to emerge from insular practice to develop joint activities with collective training institutions run by German companies (see, for example, AHK, n.d.) or to involve high-performing state vocational schools.

Here, we reiterate the statements made in the introduction in relation to the transferability of Germany's experience to the prospective reform of vocational education and training in India. A key ingredient in transferability is a high-quality training program with a marked practice orientation that interlinks theory and practice. It is also essential that the state sets up a network of vocational schools with the necessary funding and that research into vocational training and the academic training of vocational school teachers in both technical and pedagogi-

cal areas is stepped up. A major first step would be to set up vocational training institutes within leading state universities and to require teachers at ITIs to have qualifications at least at bachelor's degree level. A supporting measure would be to develop up to date, competency-based curricula and monitor their implementation.

A major first step would be to set up vocational training institutes within leading state universities and to require teachers at ITIs is to have qualifications at least at bachelor's degree level

Initial measures to improve quality suggest that in the longer term, the Indian labor market and, indeed, society more generally will recognize vocational skills and qualifications. This is essential if the Indian economy is to succeed in closing the skills gap in the medium term, create rewarding employment for the younger generation and be competitive in marketing high-quality and technically advanced products on the global market.

Acknowledgements

This study was funded by the program: "New Passage to India" –German Academic Exchange Service/ Federal Ministry of Education and Research. Special thanks to M.A. Christine Wilbertz, who did the fieldwork in India together with our partners at the Vellore Institute of Technology (VIT).

References

Agrawal, T. (2012), "Vocational Education and Training in India: Challenges, Status and Labor Market Outcomes", *Journal of Vocational Education & Training*, 64(4), S. 454-74.

AHK (O.J.), Post Graduate Program in Business Administration Based on the German Dual System of Training, Mumbai, Chennai. Bengalore: Indo-German Training Center.

Berger, S.& Pilz, M. (2009), Benefits of VET. In: Bundesinstitut für Berufsbildung (BIBB) (Hrsg.): VET Research Report 2009 (ReferNet-Research Report), S. 6–49, URL: http://www.bibb.de/dokumente/pdf/ResearchReport-en-09%282%29.pdf#page=7.

Blossfeld, H.-P. (1993), Die berufliche Erstausbildung Jugendlicher im internationalen Vergleich. In P. Diepold & A. Kell (Hrsg.), Entwicklungen in der Berufsausbildung (Zeitschrift für Berufs- und Wirtschaftspädagogik, Beiheft 11, S. 23-40). New York: Jove.

Bundesinstitut für berufliche Bildung (BIBB) (2013), Datenreport zum Berufsbildungsbericht 2013, URL: http://datenreport.bibb.de/media2013/BIBB_DAtenreport_2013.pdf.

Bundesinstitut für berufliche Bildung (BIBB) (2011), Vocational Training Regulations and the Process Behind Them, BIBB, Bonn.

Clement, U. (1999), Die transnationale Kommunizierbarkeit des Berufes – Verständigungsprobleme im globalen Dorf. Zeitschrift für Pädagogik, 40. Beiheft, 219-31.

Ernst & Young (2012), Learner First, Knowledge Paper on Skill Development in India. (http://www.ey.com/Publication/vwLUAssets FICCI_skill_repor t_2012_ finalversion/$FILE/FICCI_skill_report_2012_finalversion_low_resolution.pdf),

Federation of Indian Chambers of Commerce and Industry (FICCI) (O.J.), Labor Survey,

URL: http://www.ficci.com/Sedodocument/20165/FICCI_Labour_Survey.pdf.

Goverment of India (GoI) (2008), Eleventh Five Year Plan: 2007-2012, Vol. I, New Delhi, Planning Commission of India, Government of India.

Heenan, D. A. & Perlmutter, H. V. (1979), Multinational Organization Development. (Addison Wesley Series on Organization Development), Reading, Massachusetts: Addison-Wesley.

Hellwig, S. (2008), Zur Vereinbarkeit von Competency- Based Training (CBT) und Berufsprinzip: Konzepte der Berufsbildung im Vergleich. Wiesbaden: VS Verlag für Sozialwissenschaften.

Hoeckel, K.& Schwartz, R. (2010), Learning for Jobs – OECD Reviews of Vocational Education and Training: Germany, OECD, URL: http://www.oecd.org/germany/45668296.pdf.

Kultusministerkonfernez (KMK) (2011), Handreichung für die Erarbeitung von Rahmenlehrplänen der Kultus minister konferenz für den berufsbezogenen Unterricht in der Berufsschule und ihre Abstimmung mit Ausbildungsordnungen des Bundes für anerkannte Ausbildungsberufe, URL: http://www.kmk.org/fileadmin/veroeffentlichungen_beschluesse /2011/2011_09_23_GEP-Handreichung.pdf.

Krisanthan, B.& Pilz, M. (2014), Vorberufliche Bildung in Indien - Eine Analyse der curricularen Verankerung und der schulischen Praxis. Accepted: Tertium Comparationis.

Kupka, P. (2005), Berufskonzept und Berufsforschung – soziologische Perspektiven. In Jacob Marita & Kupka, Peter (Hrsg.), Perspektiven des Berufskonzeptes – Die Bedeutung des Berufs für Ausbildung und Arbeitsmarkt, S. 17-38, Nürnberg, IAB.

Lauterbach, U. (2003), Exportschlager duale Ausbildung? Erfahrungen aus dem Internationalen Fachkräfteaustausch (IFKA) der Carl Duisberg Gesellschaft und des Bundesministeriums für Bildung und Forschung. In G. Cramer (Hrsg.), Jahrbuch Ausbildungspraxis 2003. Erfolgreiches Ausbildungsmanagement (S. 54-57). Köln: Fachverlag Deutscher Wirtschaftsdienst.

Majumdar, S. (2008), Workforce Development in India: Policies and Practices, The Asian Development Bank Institute (ADBI), URL: http://www.adbi.org/files/2008.11.18.book.workforce.development.india.pdf.

Mieg, H. A. & Näf, M. (2005), Experteninter views. Institut für Mensch-Umwelt-Systeme (HES). Zürich: ETH Zürich.

Münck, D. (Hrsg.) (2004). Perspektiven der beruflichen Bildung und der Berufsbildungspolitik im europäischen und internationalen Kontext (13. Hochschultage Berufliche Bildung 2004). Bielefeld: Bertelsmann Stiftung.

Pilz, M. (2012), "International Comparative Research into Vocational Training Methods and Approaches"in: Pilz, Matthias (Hrsg.): The Future of Vocational Education and Training in a Changing World, Springer, Wiesbaden.

Pudelko, M. & Harzing, A.-W. (2007), Country-Of-Origin, Localization, or Dominance Effect? An Empirical Inverstigation of HRM Practices in Foreign Subsidiaries. *Human Resource Management, 46(4)*: 535-559.

Ryan, P. (2003), "Evaluating Vocationalism", *European Journal of Education,* 38(2): 147-62.

Schippers, S. (2009), Systemberatung zwischen Anspruch und Wirklichkeit. Marburg: Tectum.

World Bank (2008), Skill Development in India - The Vocational Education and Training System. Document of The World Bank 2008 Report No.22. URL: (http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2008/02/05/000020953_20080205092505/Rendered/PDF/423150India 0VET0no 02201 PUBLIC1.pdf).