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# Integration of Learning and Practice as Part of the Educational System Development in Eritrea: „School Management“ – A Distance Learning Program by Technical University of Kaiserslautern

## Zusammenfassung

Das Distance Learning Program „School Management“ für Eritrea unterstützt die professionell Handelnden in den Schulen und die ministeriellen Entscheidungsträger bei der Gestaltung von Schule und Unterricht durch eine Kombination formaler und nichtformaler Lernprozesse auf verschiedenen Handlungsebenen. Es wird im Beitrag reflektiert, wie das Fernstudienangebot und eine Bildungssystementwicklung sich verschränken.

**Schlüsselworte:** *Fernstudium, Kompetenzentwicklung, formales Lernen, nicht-formales Lernen, Schulleitung*

## Abstract

The distance learning program „School Management“ supports decision makers at the school and ministerial levels in the shaping of formal and informal learning processes at different levels in schools and curricula in Eritrea. This paper examines how the distance learning program is interconnected to educational system development.

**Keywords:** *distance learning, skill development, formal learning, non-formal learning, school management*

## Situation of education in Eritrea: Need for a systemic-constructivist position of learning

*“The international expertise is very crucial for developing countries, as we do not have to reinvent the wheel.” (Estifanos 2011, p. 19).*

Eritrea has a population of 5.9 million inhabitants and is located at the Horn of Africa. The population is divided in nine ethnic and six administrative regions. Eritrea can be viewed as a relatively young nation, established after the end of a thirty year civil war in 1991. Its actual independence was established in 1993 with the assistance of a United Nation Resolution in combination with an observer mission. The daily school routine in Eritrea is characterized by poor working- and learning conditions attributed to the poor socioeconomic situation as well as some educational reforms that have negatively impacted the organization of the schools. The general situation and proposals to address the educational situation in Eritrea can be summarized as follows:

- Redefinition of policies of national educational policy, including curriculum, support structures and language

- Introduction of extensive teacher-training and recruiting programs,
- Increase the number of schools to meet the training requirement for the specific conditions of the rural population,
- Reconstruction of the existing educational infrastructure and creating new learning materials for schools (cf. Habte 2000, p. 23),
- Increase of pupils and students from 1991 to 2003 by about 163 %, i.e. an increase from 208,164 to 500,000,
- Curriculum reform in 1997 with government goal: “making basic education available to everybody” (GSE 1994, p. 39),
- Increase the number of schools from 293 to about 1,000 and the number of teachers of 5,286 to 10,000 (cf. Rena 2004, p. 6),
- Proportion of qualified teachers in 2005: 65 % (cf. MoE 2007, p. 23),
- Overcome instructional oriented teaching behavior by a “learner-centered approach” (MoE, 2003, p. 2)
- Illiteracy rate of the population is between 40 % to 70 % (cf. Library of Congress 2005, p. 7)
- 50 students make up a class size (cf. MoE 2007, p. 22)

In response to this situation, the Ministry of Education has initiated several upgrade projects. “Under the overall Education Sector Development Program (ESDP), an Education Sector Investment Project (ESIP) is being supported by IDA (International Development Association) credit (...) and has also been provided aid from the African Development Fund (ADF) (...)” (PUS 2007b, p. 3). The Eritrean Institute of Technology & College of Teacher Education plays an important role in the upgrade and certification of elementary school teachers and the training of supervisors and school directors in educational administration and supervision. In this context, the capacity building program “Postgraduate and Undergraduate Studies for the Ministry of Education Eritrea” is dedicated to upgrading the quality of supervisory, administrative, and support staff in order to improve the quality of education as a multi-level approach (government ministry, school administrators, headmasters, and teachers). The upgrading of qualifications for key staff is seen as one of the most important conditions for systemic change in the educational sector.

The objectives of the capacity building program apply to the following target groups (cf. PUS 2007a, p. 4):

- School directors, supervisors and educational managers, educational psychology experts, and guidance and counselling officers at undergrad and post graduate levels so that they will be able to improve their day-to-day job performance.
- Professional educators serving in management positions so that they are able to effectively manage the inputs necessary for improving the quality of educational programs.
- Members of the Ministry of Education (MoE) to strengthen the institutional resources.
- Educational managers to encourage self-initiative efforts for continuing professional development.

The Ministry of Education and school headmasters have to make a commitment to the shaping of organizations and workflow management, especially, in a way that colleagues will also have to put an effort into ensuring proactive change happens as well as changes that are essential for all participants (cf. Arnold 2010, p. 92). This introduces the core question for the EU Postgraduate and undergraduate studies for the Ministry of Education Eritrea project: How can the structural deficits and limitations be overcome given the present framework conditions?

In the framework of a systemic approach, the distance learning program “School Management” assumes the following prerequisites apply to development:

- Self-reflection to recognize the new self-constructed reality
- A local network, and
- A semi-autonomous, open learning objective for the medium to long term (cf. Arnold 2009, p. 12).

These prerequisites express a systemic-constructivist position on learning, perceptions and patterns of action as well as strategies for communication and cooperation are analyzed, and educational system development and school development is enabled through the following related characteristics:

- Show interrelationships;
- Balance autonomy and control;
- Reevaluate internal and external system development needs;
- Consider multiple starting points for learning and problem solving;
- Consider the organizational identity of the school (cf. Mikula 2002, p. 245).

### Distance learning course “School Management”: The integration of learning and practice

The sociologist Arno Bammé from the University of Klagenfurt (2006, p. 190) described an ongoing change in science and society when he stated: The society becomes more scientific, meaning more reflective, while the science at the same time becomes more social, meaning more practical, a description directly applicable to the situation presented in this paper. In the framework of the “School Management” distance learning program, the development of target group competencies is supported by a twofold method that involves the ability to observe practice while rendering conscious reflection.

The School Management program provides working students the opportunity to understand relevant practical career relationships on the basis of the practical orientation of course

## Square of Competency Development as an Element of Educational System Development

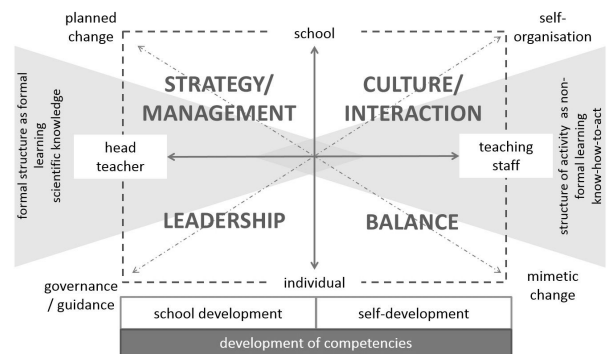


Fig. 1: Square of Competency Development as an Element of Educational System Development. Source: author's own representation.

content. In essence, the teaching is based on the application of a self-directed exploration of learning content, which opens up facts and solutions to important questions about school reality and career in a framework of school development founded on a combination of formal and informal learning.

The core idea follows a neo-institutional theory, in which the formal structure of the educational system and formal scientific learning, in the context of the distance learning training concept, is combined with the activity structure in local schools, to include their practical knowledge and cultures (cf. Schaefers 2008, p. 238).

In the context of the distance learning continuing education concept, the focus is on the development of skills in two dimensions:

1. **School development** as an educational system, as well as the development of the school as an organizational unit of activity (cf. Rolff 2007).
2. **Self-development** to empower the individual to act with the assumption of self-transformation as a prerequisite for system change (cf. Arnold 2011).

Formal and informal learning fields of action are created within this dual space which represents the tensions between the individual and school (organization) and between the school and the teaching staff.

The management of these tensions within the education concept is facilitated by a combination of skillful control using the basic assumptions of self-organization and the aspect of mimetic change by using the linked systemic dynamics.

This combination should result in the discussion of school development that on one hand “(...) follows the intentional and functional rationality tradition of management theory (...)” (Gröhllich 2008, p. 266) and on the other hand “(...) overcomes the neglect of habitual patterns of the actors and the unintentional dynamics of the social system (...)” (ibid).

### Organizational structure and degree components: The effect on school development

The “Postgraduate and undergraduate studies for the Ministry of Education, Eritrea” project funded by the EU, was assigned the task of developing a distance learning course, “School Ma-

agement” based on the distance learning programs offered by the Distance and Independent Studies Centers (TU Kaiserslautern). This course was expected to integrate the current state of relevant knowledge in Germany and other countries beyond Europe into an advanced learning concept. The Minister of Education was responsible for the project together with the Director General of the Department of Research and Human Resource Development (HRD). He was supported by the head of the in-service training division of HRD. There was also regular contact to the local institute in Asmara as the Distance Learning Resource Centre providing the training program. The project partners listed below functioned as the core support structure.

- GFA Consulting Group (efficient management and support structure for the project)
- Technical University of Kaiserslautern with Department of Education (team leader for design, student management and quality assurance of distance learning courses)
- Institut für Bildungstransfer (Implementation/roll out for distance learning courses, planning of assignments for the national and international tutors)

The key factor for success was the implementation of an effective support structure. This was achieved “(...) through the integration of lecturers from University of Kaiserslautern, by establishing a professional study center led by local experts in Asmara, through the development of a local support structure in Eritrea, by integrating existing Pedagogic Resource Centers (PRC) and by additional tutored seminars (by local academic tutors) in all Zobas (...)” (PUS 2007c, p. 5). The educational staffing concept was centered on the team lead by the Technical University of Kaiserslautern. The team was both supported by international assistant course administrators, learning material advisors, tutors, lecturers, and national training coordinators, tutors, lecturers, assistant course administrators. In addition to these key experts, a pool of national and international experts was mobilized to support the conduct of the distance learning program.

The structure of the project and the study program was designed to help schools overcome the reduced theory-practice-understanding approach of organizational and management theory (cf. Arnold/Griese 2004, p. 174). The distance learning program School Management references the German model and is based on a scientific concept which combines elements of a process-oriented organizational development with various fields of action for school managers.

Master theses related to the topics and content of the distance learning program indicate a need for school development at the level of single schools in Eritrea of a kind that will change the role of school managers in the future. The increasing importance of self-responsible creation of school reality on the basis of a role model and the participation of the faculty and, with respect to the legal framework, for example the “Guidelines of Learner Centered and Interactive Pedagogy” (MoE 2003), is already reflected in the developed curricula and in the didactic concept of distance learning. The didactic concept connects theoretical questions with specific practice-oriented examples and problem solving strategies. One headmaster and student in the distance learning program pointed out the underlying be-

nefit for the school managers in one of the assignments he submitted:

*“Before I started the distance learning program of School Management, I had to make my own mistakes in a process of trial-and-error. I hadn’t understood the big WHY or very often, it was too late. Today, I feel more comfortable and confident, because my actions are not a “blind flight” anymore. It is easier for me to appraise the consequences and impacts of my own behavior.”*

The study materials, as a formal part of the university course; support this understanding of the fundamental relationships of social interaction and organizational realities. The learning materials reflect international trends in school development, in which current trends in school and education policies, with content such as governance, quality management, external evaluation, and school audits, are being linked with specific models of organization, staff and team development. A key element here is the assurance of teaching quality as a core product of academic activity. The focus is on the appropriate combination of specific measures and procedures of goal agreement, communication skills, and conflict management as well as communication and collaboration techniques in the context of team development processes.

The distance learning program has a curriculum that divides the learning process into four semesters within nine modules. The program had two parts, which are separated in basic studies and specialized studies. “The basic studies consist of different subjects in the broad field of School Management, which includes relevant topics and subjects in various fields of the personal, institutional and systemic level of the educational system (...). The specialized studies, starting at the third semester, let learners could choose among several specializations, such as “Curriculum Studies”, “Educational Planning & Administration” and “Educational Supervision/Accreditation.” (Wieckenberg 2011, pp. 9).

#### Degrees available/4-semester adaption of programs

- a. Master Level
- b. First Degree Level Equivalent
- c. Diploma Level Equivalent

#### Content of the Distance Learning Program School Management

1. Learning and the Modification of Learning Culture
2. Leadership and Change Management
3. Quality of Teaching
4. Team Building and Communication
5. Human Resource Development
6. School Development
7. Quality Management
8. Research in Education
9. Education Policy and Legislation

Fig. 2: Educational achievements and content of distance learning program.  
Source: Author’s own representation.

The regularly scheduled attendance phases and locally responsive tutors support the highly practical orientation of the course and reinforce the integration of informal learning process in formal settings within an advanced learning concept. This can be viewed as an additional pillar, because the different modules of the dis-

### Structure of Organization and Components of Learning

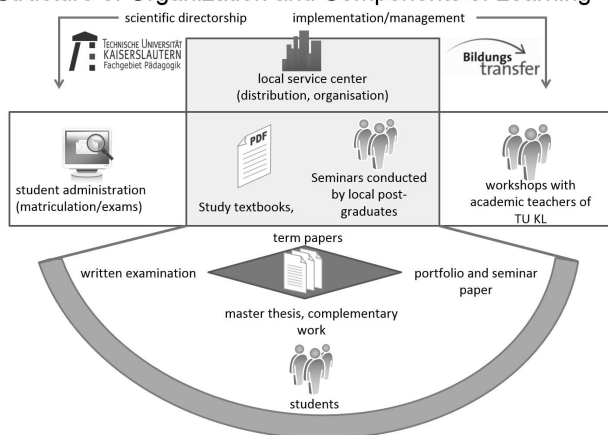


Fig. 3: Structure of Organization and Components of Learning. Source: Author's own representation following Arnold/Wieckenberg 2009, p. 6.

tance learning program are flanked by a peer-based step-by-step process facilitation (cf. Rolff 2011, p. 12). On one hand, the process includes execution of one workshop per semester with international university lecturers to prepare the exams and to reflect to content of the study material with a view to the everyday school practice. On the other hand, four to six seminars per semester were conducted by local postgraduates, which were prepared through a train-the-trainer concept for tutors.

Besides the scientific debate, the main focus is the cooperative forms of working as well as the immediate action leading training scenarios, method training, case-related tasks and diagnoses, as well as psychological communication and leadership elements of training (cf. Gajewski/Griese 2004, p. 206). Technologically innovative forms of education such as blended and e-learning, could not be implemented due to the poor or lacking infrastructure in the area of communication. Under these circumstances, the traditional use of print media proved to be not only a timely, but also a very effective substitute.

A central pillar of reflective learning and coordinated school development are the portfolio and term papers, especially, the master thesis with topics selected and advanced as they refer to the current state of international research on the topics and ideas of practical relevance for projects in the social and professional environment of students of Eritrea. The faculty advisors

of master degree candidates assure the development of valuable skills since the thesis itself is not defined as the final product. Students should be animated to combine the content of literature and study material with their practical situation in terms of reflection and practice-oriented transfer (cf. DISC 2011, p. 3). It is the scientific research and writing process, viewed as a methodological problem solving process that is the real product. The following examples illustrate some sample topics:

- The Implementation of Learner Centered & Interactive Pedagogy (LCIP) in Middle Schools Of Central Region, Eritrea (Abraham Russom Almedom)
- Contextualization of National Curriculum for the Different Ethnic Groups in Eritrea. A Case Study of Tigrigna and Tigre Curricula (Ghebrezghi Dimam Okbaldet)
- Classroom Management as part of Quality Teaching: A study in four sample Elementary Schools in Maekel Region, Eritrea (Hailu Asfaha Foto)

In the process, students acquired a sense of self-learning which inspires them to systematically seize the opportunity to optimize their own learning and research strategies, to practice the necessary skills, gain knowledge to self-direct the acquisition and implementation of the things (cf. Arnold et al. 2002, pp. 76), that relevant in the context of organizational analysis and school development.

As a result, practical research has emerged that will change the reality of school. The concept of school development as presented here is to be understood as an addition to the management process of a planned and self-organized transformation through the interdependent changes to individual and organizational realities through reflexivity and mimesis (cf. Göhlich 2008, p. 274). Meanwhile, a network of professional educators was made possible, in which top-down and bottom-up processes are linked.

An impact on the education system can be observed at the macro level: "Some aspects mentioned frequently by the students were the change in leadership style, the shift from control to support, and the need for a participatory approach at all levels. There was a strong agreement that the study program will have a positive effect on the educational system due to the fact DGs [Director general] and senior MOE officials were participating in the program." (PUS 2011, p. 13).

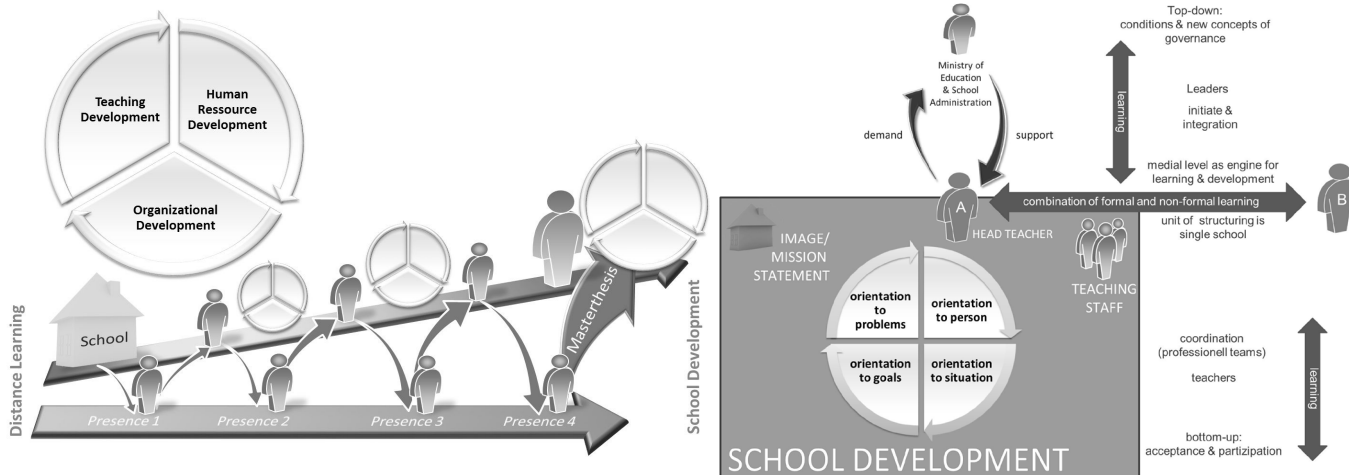


Fig. 4: Impact of the Distance Learning Program on School Development. Source: Author's own representation.

As a result, of the 171 participants that started the distance learning program, only 22 participants failed. In sum, a wide diversification of the key staff, i.e. curriculum developers, quality assurance staff, accreditation and evaluation staff, assessment and national examination staff, was achieved. Several staff categories have gotten the opportunity to upgrade their educational degrees. This was accomplished through the provision of good quality courses and reference materials in a timely fashion, which considers the work experience and specific needs of the participants. An adequate tutorial service for each student could be ensured with experienced and well trained instructors and national as well as international coordinators in accordance with the standards set out by the qualification/accreditation body of the concerned institute (cf. PUS 2007a, p. 8). The Technical University ensured one essential aspect of the distance education program with a concept of quality assurance based on:

- Assessment of all study texts by TUK lecturers,
- Systematic feedback on students assignments,
- Internal evaluation of workshops and tutorial sessions,
- Early warning system in case of learners missing deadlines,
- Training of national tutors,
- Individual coaching of participants (PUS 2011, p. 10)

## References

- Arnold, R. (2009):** Education and Development. Internal unpublished report.
- Arnold, R. (2010):** Schulleitung als Personalentwickler. In: Rolff, H.-G. (Ed.): Führung, Steuerung, Management. Seelze: Klettverlag, pp. 81–91.
- Arnold, R. (2011) (Ed.):** Veränderung durch Selbstveränderung. Baltmannsweiler: Schneider Verlag, Hohengehren.
- Arnold, R./Gomez Tutor, C./Kammerer, J. (2002):** Selbstgesteuertes Lernen braucht Selbstlernkompetenzen. In: Kraft, S. (Ed.): Selbstgesteuertes Lernen in der Weiterbildung. Baltmannsweiler: Schneider Verlag, Hohengehren, pp. 76–89.
- Arnold, R./Griese, C. (2004):** Schulmanagement als Fernstudium. In: Koch, S./Fisch, R. (Ed.): Schule für die Zukunft. Neue Steuerung im Bildungswesen. Baltmannsweiler: Schneider Verlag, Hohengehren, pp. 173–182.
- Arnold, R./Wieckenberg, U. (2009):** International Master Programm. Internal unpublished report, TU Kaiserslautern, Fachbereich Sozialwissenschaft.
- Bammé, A. (2006):** Fremd-Bestimmung selbst gestalten. Postmoderne Ambivalenzen entgrenzten Lernens und Arbeitens. In: Wiesner, G./Zeuner, C./Forneck, H.J. (Ed.): Teilhabe an der Erwachsenenbildung und gesellschaftliche Modernisierung. Dokumentation der Jahrestagung 2005 der Sektion Erwachsenenbildung der DGfE. Baltmannsweiler: Schneider Verlag, Hohengehren, pp. 186–201.
- DISC (2011):** Master-Fernstudiengang Schulmanagement Portfolioarbeit im 2. Semester. Informationen und Hinweise. Unpublished working document of the Distance and Independent Studies Center.
- Estifanos, G. (2011):** A Soldier Hits the Books Again. In: Wieckenberg, U. (Ed.): Founders of Eritrea's Education System. Educational Biographies. Landau: Bildungstransfer Verlag, pp. 17–20.
- Gajewski, M./Griese C. (2004):** Zwischen traditionellem Fernstudium und Online-Lernen – Fernstudiengang „Schulmanagement“ an der Universität Kaiserslautern. In: Wissinger, J./Huber, S. G. (Ed.): Schulleitung – Forschung und Qualifizierung. Opladen: Leske + Budrich, pp. 201–214.
- Göhlich, M. (2008):** Schulentwicklung als Machbarkeitsvision. Eine Re-Vision im Horizont professioneller Ungewissheit. In: Helsper, W./Busse, S./Hummrich, M./Kramer, R.-T. (Ed.): Pädagogische Professionalität in Organisationen. Wiesbaden: VS-Verlag, pp. 263–275.
- GSE – Government of the State Eritrea. (1994):** Macro Policy Document, Asmara.
- Habte, A. (2000):** The Process of Curriculum Reform in Eritrea within the Context of Education Transformation. Dissertation of Institute of Education University of London.
- Library of Congress (2005):** Country Profile Eritrea. Washington.
- Mikula, R. (2002):** Das komplexe Netzwerk pädagogischer Welten-Bildung. Integration von Konstruktivismus und Systemtheorien in die modernen Erziehungswissenschaften und in die Theorien der Schule. Innsbruck: Studien-Verlag.
- MoE – Ministry of Education (2003):** Guidelines of Learner Centered and Interactive Pedagogy. Asamara.
- MoE – Ministry of Education Eritrea (2007):** Education Brief. Asmara 2007.
- MoE – Ministry of Education (2009):** National Curriculum Framework: Eritrea. Asamara.
- PUS (2011):** A Distance Study Program for Eritrea. (available at: [http://www.gfa-group.de/571510/Eritrea\\_Project-Report\\_2011\\_mail.pdf](http://www.gfa-group.de/571510/Eritrea_Project-Report_2011_mail.pdf), [28.06.2013]).
- PUS (2007a):** Terms of Reference for Undergraduate und Post Graduate Studies (PUS) for the Ministry of Education. Lot 1, Annex II. In: Service Contract EU funded Project “Post and Undergraduate Studies for the Ministry of Education, ERITREA, unpublished.
- PUS (2007b):** Terms of Reference for Undergraduate und Post Graduate Studies (PUS) for the Ministry of Education. Lot 2, Annex II. In: Service Contract EU funded Project “Post and Undergraduate Studies for the Ministry of Education, ERITREA, unpublished.
- PUS (2007c):** Organization and Methodology. Lot 1, Annex III. In: Service Contract EU funded Project “Post and Undergraduate Studies for the Ministry of Education, ERITREA, unpublished.
- Rena, R. (2004):** Eritrean Education – Retrospect and Prospect. (available at: [http://mpra.ub.uni-muenchen.de/10313/1/MPRA\\_paper\\_10313.pdf](http://mpra.ub.uni-muenchen.de/10313/1/MPRA_paper_10313.pdf), [14.08.2011]).
- Rolff, H.-G. (2011):** Das System UQM im Überblick. In: Rolff, H.-G. (Hg.): Qualität mit System. Eine Praxisanleitung zum unterrichtsbezogenen Qualitätsmanagement. Köln: Carl Link, pp. 1–16.
- Rolff, H.-G. (2007):** Studien zu einer Theorie der Schulentwicklung. Hemsbach: Beltz.
- Schaeffers, C. (2008):** Steigerungsemantiken im Organisationsentwicklungsdiskurs. Neo-institutionalistische Perspektiven auf Konsequenzen für Schule und Lehrerprofessionalität. In: Helsper, W./Busse, S./Hummrich, M./Kramer, R.-T. (Ed.): Pädagogische Professionalität in Organisationen. Wiesbaden: VS-Verlag, pp. 225–243.
- Wieckenberg, U. (2011):** Context of the Educational Biographies. In: Wieckenberg, U. (Ed.): Founders of Eritrea's Education System. Educational Biographies. Landau: Bildungstransfer Verlag, pp. 9–12.

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