

CURRICULUM VITAE, COMPETENCIES, ASSESSMENT & CERTIFICATE

Dr rer nat Ulrich Leinhos-Heinke (PhD)

(2019-09-28)

OVERVIEW

- Academic education in biology, psychology, linguistics and pedagogy
- Dr rer nat (PhD) in biophysics / neurophysiology
- Professional experience in biotechnology and as head of unit in a federal state school ministry
- Teacher at a technical vocational college for applied informatics, project management and communication
- Temporarily honorary university lecturer for Analytical Philosophy of Biology and Psychology and for School Pedagogy
- Competence manager of a software company

IN DETAIL

since **2019-09** Competence Manager of the company tfSemanticServices GmbH [Ltd] Mainz

1991-2019 Student teacher, Graduation for the teaching profession at vocational colleges, Teacher and Senior Teacher (Member and Senior Member of the Academic Council in civil service, Studienrat und Oberstudienrat), Trainer of teacher-students and teachers, etc. at Technical Vocational College 1, Mainz, Germany (details and certificate, translated: [see Annex 1](#); German original: [see Annex 3](#))

Parallel part-time work:

2013-2015 Part-time Honorary University Lecturer for School Pedagogy: Observing, reconstructing and initiating lessons (Department 02 of Johannes Gutenberg University Mainz)

2011-2012 Part-time Honorary University Lecturer for Analytical Philosophy of Biology and Psychology (Department 05 of Johannes Gutenberg University Mainz)

1993-2001 Part-time (50 %) Collaboration in / Head of the "Unit (Referat) for fundamental questions of mathematical-scientific-technical education, ecological formation and health at schools" in the Federal Ministry of Education and Science Rheinland-Pfalz (Rhineland Palatinate) (details and assessment: [see Annex 2](#); German original: [see Annex 3](#))

1988-1991 Research Associate: DECHEMA (German Society for Chemical Apparatus Engineering, Chemical Engineering and Biotechnology) and Goethe University Frankfurt am Main: Project "Safety in Biotechnology" of the Federal Ministry for Research and Technology

1984-1987 Doctoral studies and doctorate (Dr rer nat, PhD) with Prof. Dr.-Ing. W. v. Seelen, Neuroinformatics Group, Department of Biophysics (Chair Prof. Dr. C. v. Campenhausen), Department of Biology, and Prof. Dr. W. Fröhlich, Institute of Psychology, Johannes Gutenberg University Mainz

1975-1983 Studies and graduation in Biology (Animal Physiology / Biophysics), and German (Linguistics) for teaching profession at high schools, accompanying studies in philosophy, pedagogy etc., Johannes Gutenberg University Mainz, Germany

1972 Graduation

1953 Born in Wiesbaden, Hessen, Germany

Additional experiences and competencies

- Co-organizer of the conference "Gut und Böse (Good and Evil)" on the occasion of the first edition of the "International Journal for Philosophy and Psychosomatic Medicine - Internationale Zeitschrift für Philosophie und Psychosomatik IZPP" at the Johannes Gutenberg-Universität Mainz, 26 March 2010, and
- Member of the Scientific Advisory Board of the IZPP (since 2009)
- Authoring of a frequently updated digital lecture script for teaching IT basics (2013-2018)
- Authoring of a frequently updated digital lecture script for teaching basics of professional teamwork, communication and presentation (2003-2018)
- Publisher of the online journal "i-Journal for applied informatics and IT-system electronics (i-Journal für angewandte Fachinformatik und Systemelektronik - iJ@FS)", www.iJaFS.de, with articles (technical papers) by vocational students apprentices in the training professions IT specialist / IT-systems electronics (2009-2012)
- Member, lecturer and operator of the website of the interdisciplinary project "BIOS - Boundary Questions of Life" of the German Research Society (Deutsche Forschungs-Gemeinschaft DFG) with members of the Departments of Biology and of Philosophy of the Johannes Gutenberg-University Mainz (2006-2010) and Cooperation at the international BIOS conference "Life - Body - Person - Intercultural Aspects of an Intricate Relationship" at the Johannes Gutenberg-University Mainz, 25-27 April 2008
- Author of legal commentaries on school law in the fields of environment, ecology, sustainability and health (2002)
- German Delegate to the *Education* Working Committee of the European Federation of Biotechnology EFB (1989-1991)
- Postgraduate studies in journalism, focus on scientific journalism, Johannes Gutenberg University Mainz (1987)
- Multiple scientific translations of articles in neurobiology (*Scientific American*, English, to *Spektrum der Wissenschaft*, German) (1987-1988)
- Organization of the international scientific congress "Organization of Structure and Function in the Brain", Werner Reimers Foundation, Bad Homburg, Germany, 16-19 September 1986
- Member of the Study Reform Commission Biology at the Secretariat of the Permanent Conference of Ministers of Education and Cultural Affairs (1980-1985)

Comprehensive IT application competencies (since 1981):

- Augmented Office and agile project management (MS Teams, MS Azure DevOps)
- Microsoft Office (especially MS Excel), including MS Project, MS Visio, etc.
- MindManager and other managing applications
- Autonomous operating of several own websites (since 1996) and maintenance of several external websites (WordPress, NOF) (e.g. Website of BIOS project, see above, 2008-2010)
- Questions of Data/Privacy Protection and IT Security (Data Protection Supervisor at Technical Vocational College 1, Mainz, see above, 2007-2016)

Family status

Married with Sabine Heinke, Teacher

Two daughters (1990, 1997)

Publications

- Leinhos-Heinke U (2014): Teacher Training School [Ausbildungsschule],
- Leinhos-Heinke U (2014): Data/Privacy Protection [Datenschutz],
Both in: Michael Kläger, Peter Krawietz, Georg Sternal und Katja Zimmermann (Hrsg.): 250 Jahre gewerblich-technische Berufsbildung [250 Years of Vocational Education in Trade and Technology]. Nünnerich-Asmus Verlag Mainz, Germany
- Leinhos-Heinke U (2012): Menschen denken, Tiere denken. Kritik am Hauptartikel "Tierphilosophie" von Markus Wild [Humans think, animals think. Criticism of the main article "Animal Philosophy" by Markus Wild]. EWE (Erwägen - Wissen - Ethik) 23 (2012) Heft 1: 69
- Leinhos-Heinke U (2010): Bewusstsein und Personalität bei Tieren vor dem Hintergrund verhaltensbiologischer Beobachtungen [Awareness and personality in Animals against the background of behavioral biological observations]. Journal Philosophie der Psychologie [Journal for Philosophy of Psychology], No. 14, July 2010
- Leinhos-Heinke U (2009): „Gut und Böse“ - darwinisch gedacht? (Warum die Biologie nicht zur Klärung moralischer Kategorien beitragen kann) ["Good and evil" - in a Darwinian thought? (Why biology cannot contribute to the clarification of moral categories)]. Internationale Zeitschrift für Philosophie und Psychosomatik [International Journal of Philosophy and Psychosomatics], IZPP 1/2009
- Leinhos-Heinke U (2009): Jenseits von Wissenschaft und Ratio. Warum wir ohne gute Argumente die schlechteren Bücher verfassen: Eine kritische Rezension zu: Michael Schmidt-Salomon. Jenseits von Gut und Böse - Warum wir ohne Moral die besseren Menschen sind (2009) [Beyond science and reason. Why we write worse books without good arguments. A critical review to: Michael Schmidt-Salomon: Beyond good and evil - Why we are the better people without morality (2009)]. Internationale Zeitschrift für Philosophie und Psychosomatik [Journal of Philosophy and Psychosomatics], IZPP 1/2009
- Leinhos-Heinke U (2002): Gesundheit. Nachhaltigkeit. Umwelt [Health. Sustainability. Environment; 3 keyword articles]. In: SchulLink Luchterhand Rheinland-Pfalz [Digital legal commentary], Kronach, München, Bonn, Potsdam: Carl Link / Deutscher Kommunal-Verlag Verlag 2002
- Leinhos-Heinke U (1999): Ecological Formation and Environmental Education as a Contribution to School Development. In: SchulVerwaltung [School Administration] RPSL 3/99
- Leinhos-Heinke UM, Pfitzner-Göbel M (1998): Deutsch für die berufliche Praxis. Übungsbuch für Arzt- und Zahnarzhelferinnen [German for professional practice. Exercise book for medical and dental assistants]. Cornelsen Verlag Berlin 1988
- Leinhos-Schütz UM (1992): Hinweise zur praktischen Durchführung [Notes on practical implementation],
- Leinhos-Schütz UM (1992): Glossar [Glossary],
Both in: Dittmer K, Gail L, Lehmann J, Sittig W, Storhas W, Wallhäußer KH: Sicherheit in der Biotechnologie. Technische Grundlagen. [Safety in biotechnology. Technical basics] Unter wissenschaftlicher Mitarbeit von U. M. Leinhos-Schütz. Hüthig Buch Verlag Heidelberg 1992
- Leinhos-Schütz U M, Appelhans B, Driesel AJ (1991): Einführung in die begrifflichen Grundlagen [Introduction to the conceptual basics],
- Driesel J, Leinhos-Schütz UM, Appelhans B (1991): Ziele und Aufbau [Goals and structure],
- Leinhos-Schütz UM: Sicherheitsunterweisung für das Praktikum der Kursstufe I [Safety instruction for the practical course at course level I],

- Leinhos-Schütz UM (1991): Versuchsauswertungen [Evaluations of experiments],
All in: Pühler A, Rehm HJ, Schaal KP: Sicherheit in der Biotechnologie. Biologische Grundlagen. [Safety in biotechnology. Biological basics]. Unter wissenschaftlicher Mitarbeit von B. Appelhans und U. M. Leinhos-Schütz. Hüthig Buch Verlag Heidelberg 1991
- Leinhos UM, von Seelen W (1988): An Introduction to Theoretical Neuroscience as Portrayed in this Book. In: Organization of Neural Networks. Structures and Models. Edited by W. von Seelen, G. Shaw, U. M. Leinhos. VCH Verlagsgesellschaft Weinheim, 1988

[Additions for translations in square brackets]

**Work Certificate [translated]
of Dr Ulrich Leinhos-Heinke, OStR (PhD)
at the Vocational College Technology Mainz 1
[Berufsbildende Schule 1 Mainz Technik, BBS 1]
[1991 - 2018]**

Dr rer. nat. Ulrich Leinhos-Heinke, Senior Teacher in civil service [Oberstudienrat, OStR], born on 14 October 1953 in Wiesbaden, Germany, began his service as a student teacher at the BBS 1 at the beginning of the 1991 school year. After passing the second state examination and graduation for the teaching profession at vocational colleges at the BBS 1 on 16 September 1993, Dr Leinhos-Heinke was assigned to a permanent position at the BBS 1, where he taught since then and until today first as a Teacher, since 1999 as a Senior Teacher.

From 1993 to 2001 he was seconded to the Ministry of Education and Science of Rheinland-Pfalz (Rhineland-Palatinate), where he finally held the position of Head of the "Unit (Referat) for fundamental issues of mathematical, scientific and technical education, ecological education and health at schools (see separate Certificate by the Ministry dated 29 June 2001).

From 2013 to 2015, Dr Leinhos-Heinke also held a lectureship at the Institute of Educational Sciences in Department 02 of the Johannes Gutenberg University within the framework of cooperation between the Johannes Gutenberg University Mainz and the BBS 1 Mainz.

Since 1991, Dr Leinhos-Heinke has worked in the following school types / classes:

Elective schools:

- Vocational High School
- Secondary Vocational School
- Higher [Secondary] Vocational School for IT Systems (also class leader)
- Pre-vocational Year
- Telekolleg Südwest (media-supported acquisition of admission to universities of applied sciences for employed persons)

Vocational school [German dual vocational training system]:

- IT specialist (fields: application development, system integration)
- IT systems electronics technician
- Industrial engineering (industry)
- Devices and systems (industry)
- Automation technology (industry)
- Information and telecommunications technology (crafts)
- Energy and building services engineering (crafts)

Additional teaching in the vocational fields:

- Media/Printing technology

- Food technology
- Automotive technology

Dr Leinhos-Heinke taught in the following Subjects / "Learning Fields [Lernfelder]" / "Learning Areas [Lernbereiche]":

- Biology
- Psychology
- German - German/Communication
- Communication/Presentation
- Basic work and team techniques (Learning Field 3 of IT occupations)
- Basics of the application of IT systems (Learning Area 3 of Higher Vocational School IT Systems)
- Introduction to IT systems (Learning Fields 4, 7, 12 of electronics technician)
- Data/Privacy Protection, IT Security, Copyright, Ergonomics and
- Basics of project management (Higher Vocational School IT-Systems, Electronics Technician)

In addition to his lessons, Dr Leinhos-Heinke also fulfilled the following functions at the BBS 1:

- Mentor (Supervision of Teacher Students, 1994-2016)
- Liaison Teacher [Verbindungslehrer] (1996-1999)
- School Supervisor for Data/Privacy Protection (2007-2016)
- Development of the concept for the Supervision of Teacher Students at the BBS 1 in the Orientation Internships I and II (together with colleague K. Zimmermann) (2007/2008)
- Supervisor for the Teacher Students at the BBS 1 (Orientation Internships I and II, 2007-2016)
- Project on Quality Management in the IT Training Classes QuaMIT (2013-2016)
- Programming [coding] of a digital grade recording and calculation application in the IT training classes (2013-2016)
- Co-administration of the school class and grade management system Atlantis (2012-2014)
- Publication of the articles "Teacher Training School [Ausbildungsschule]" and "Data/Privacy Protection [Datenschutz]" in the publication "*250 Years of Vocational Education in Trade and Technology [250 Jahre gewerblich-technische Berufsausbildung]*" (Nünnerich-Asmus Publisher Mainz, Germany, 2014)
- Development concept, coordination and public presentation of the Higher Vocational School IT Systems (since 2014)
- Member of the Steering Committee (school development) (2014-2016)
- Publisher of the online journal with articles (technical papers) by apprentices in the training professions IT specialist / IT systems electronics technician "*i-Journal for applied informatics and IT-system electronics [i-Journal für angewandte Fachinformatik und Systemelektronik - iJ@FS]*", www.iJaFS.de, (2009-2012)

Additionally performed tasks [on behalf of the Federal Ministry of Education, Science, Youth and Culture of Rheinland-Pfalz, Rhineland-Palatinate]:

- Member of the Curriculum Commission for German at Vocational High Schools [Lehrplankommission Deutsch an beruflichen Gymnasien] (2002)

- Member of the Curriculum Commission for Biology at Vocational High Schools [Lehrplankommission Biologie an beruflichen Gymnasien] (2003)
- Specialist contact for the development of educational standards (2008)

Furthermore, Dr Leinhos-Heinke was an elected member of the Local Staff Council of BBS from 2005 to 2009 and from 2016 to 2017 and Deputy Chairman since November 2016.

Dr Leinhos-Heinke completed among others the following recognized advanced training courses:

- Didactics for Adults
- Internship Supervising Teachers 1-4
- Curriculum German in Learning Modules
- Education for Sustainable Development
- IT Project Work

Dr Leinhos-Heinke is expected to end his active service after reaching retirement age at the end of the 2018/19 school year.

[Signed by Wolfgang Schneider, School Director]

[Translation: U. Leinhos-Heinke, 2019-01-18, additions in square brackets]

ANNEX 2

Federal Ministry of Education, Women and Youth
Rheinland-Pfalz [Rhineland-Palatinate]
2001-06-29

**Assessment [translated]
[of Dr Ulrich Leinhos-Heinke, OStR
for his work in the Ministry of Education and Science of Rheinland-Pfalz]
[1993 - 2001]**

Mr Dr Leinhos-Heinke, Senior Teacher in civil service [Oberstudienrat], born on 14 October 1953, since September 1993 employed at the Vocational College for Craft and Technology Mainz 1 [Berufsbildende Schule 1 Mainz Gewerbe und Technik], was seconded from September 1993 to July 1994 to the former Ministry of Education and Culture, Dept. 4 A: General School Matters and Coordination of School Types, where he coded and supervised personnel databases for several personnel units [Referate]. From August 1994 to July 1995, at his own request, he worked in the Unit [Referat] 1541 A of the Ministry in the project "Prevention of Extremism and Violence" (MR' [Ministerialrätin, Undersecretary] Lipowsky) without any discharge or remuneration.

From August 1995, Dr Leinhos-Heinke took over the working area "School Environmental Education and Ecological Formation" in Unit 15412 A of Dept. 4 A under the direction of Mr MR [Ministerialrat, Undersecretary] Hosseus, initially with five and later six credit hours. After the retirement of MR Hosseus, he was in charge of this unit from August 1997 to January 1998 on a temporary basis with eight hours of entitlement.

Since February 1, 1998, Dr Leinhos-Heinke has headed this unit on his own responsibility (since May 21, 2001, unit 932 2 at the Federal Ministry of Education, Women and Youth, Dept. 3). At his own request, he does not do this with transfer [to the Ministry], but with a half secondment to the Ministry.

The unit is currently made up of two administrators and two teachers with half and a quarter of their deputats respectively. In addition, nine Consultants for Environmental Education in Schools work directly on behalf of the unit.

Dr Leinhos-Heinke is responsible for the following areas of work in accordance with the schedule of responsibilities [of the Ministry]:

- Fundamental questions of mathematics, natural sciences, computer science, technology, ecology in all types of schools;
- Curricula for Secondary Level I in this field;
- the cross-cutting pedagogical topics Environmental Education, Sustainability / Agenda
- 21, Health Education (including addiction prevention) of all types of schools and stages;
- Health care (including prevention) for teachers and students of all types of schools;
- cross-school issues of career guidance.

In addition, Dr Leinhos-Heinke represents the Department in all cross-school committees and projects of the Ministry in the field of School Development and Quality Management in the School System (e.g. internal and external working group QM of the Ministry, Project Advisory Board QuiSs, MARKUS / Quality Management in Mathematics and Natural Sciences Education).

Mr Dr Leinhos-Heinke is responsible for managing the federal state funds for the environment and for health education of about 230,000 DM p.a.

In 1998, Mr Dr Leinhos-Heinke independently applied for the participation of the Federal State of Rheinland-Pfalz [Rhineland-Palatinate] in the funding program "Agenda 21 Education for a Sustainable Development" of the Federal-States-Commission for Educational Planning and

Research Support and since then has been responsible for the management of the federal state part of the program with a funding volume of 200,000 DM p.a.

Dr Leinhos-Heinke had resp has been responsible for numerous symposia, further training events, internal and external working groups and publications. In 1999 he worked on the main part in response to the Major Question [Große Anfrage] of the SPD parliamentary group in the Federal State Parliament "Environmental Formation and Education in Rhineland-Palatinate". He represents the ministry at the unit level in several interministerial working groups at the level of the Federal State and the Federal Republic of Germany regularly at public events.

In detail, Dr Leinhos-Heinke is leader or supervisor of the following projects: Network of Ecologically Profiled Schools (NökoSch), Network of School-related Environmental Education Institutions (SchUR), nationwide team of cross-school Environmental Education Consultants, energy saving in schools, Commission for Environmental and Sustainability Education in Schools, annual Day of the Environmental Partnership Rhineland-Palatinate, Federal State concept for health promotion in schools Alliance for Healthy Learning, network Schools for Health 21 (OPUS et al.), Program Primary Prevention (PROPP), support program of the Federal Government/State Commission for Research Support and Education Planning "21 Education for Sustainable Development" (Agenda 21 at schools), cross-school regular offer Practice of Integrated Natural Science Basic Education (PING), concept for support and further development of mathematical-scientific-technical education in all types of schools (MNTU) and for the Recruitment of Junior Staff in the Natural and Engineering Sciences (NANI) , school-crossing and interlevel coordination of the curricula Mathematics / Natural Sciences / Technology), pilot project Quality Management Through Regional Cooperation of Different Types of Schools (QuarKS).

Dr. Leinhos-Heinke was particularly successful during his term of office in integrating the cross-cutting pedagogical topics of environment, health and sustainability into a comprehensive program for school support, school development and School profile creation for all types of schools and developed a federal state-wide infrastructure for this purpose and logistics.

His working style is the result of his diverse professional experience as well as his above-average commitment and is characterized by high intellectuality, professional project management and the ability to think in a highly networked way while at the same time taking a pragmatic approach and acting efficiently in administration.

Dr Leinhos-Heinke continuously optimizes the work processes in his area of responsibility through the consistent use of modern information and communication techniques, independently publishes a website of his unit and stands within the department at all times for ICT questions with high expert knowledge are at disposal.

In dealing with schools, other subordinate agencies and external partners, he successfully practices an open and unbureaucratic administrative style.

He regularly demonstrates above-average leadership competence in teamwork, but also high integration capability. His behaviour towards superiors, colleagues and staff is always correct, friendly and helpful.

Dr Leinhos-Heinke has repeatedly been offered the opportunity to join the ministry, but because of his interest in direct school pedagogical work, he always refused. He was physically and psychologically adequate to the resulting considerable double burden in every way.

Dr. Leinhos-Heinke proved himself in all phases of his work in the ministry and especially in his function as head of his unit exceptionally.

Mr OStR Dr Leinhos-Heinke **fulfilled** the requirements imposed on him as head of unit **extraordinarily**.

Dr Leinhos-Heinke is leaving his unit at his own request on 31 July 2001, because he wants to completely focus on his school work. For his future career we wish him all the best and much success.

[signed:]

Mr Holtmeier, Head of Department 4 A

Mr Held, Head of Department 3

[Translation: U. Leinhos-Heinke, 2019-01-18, additions in square brackets]