Knowledge Transfer at the DIE

This paper explains the concept of transfer, as understood by the German Institute for Adult Education – Leibniz Centre for Lifelong Learning (DIE). It serves as a point of reference regarding transfer tasks across the entire institute, as a basis for transfer strategies and as a guiding concept for the Knowledge Transfer department (WIS).

It is of fundamental importance for Leibniz Institutes that research-driven knowledge has a wider social reach (Leibniz Gemeinschaft, 2019). Indeed, research organisations cite the transfer of knowledge as a cornerstone of their work, on a par with research and education. This manifestation of a development in scientific policy is currently being mirrored in transfer papers, guidelines and strategies in numerous research organisations, as well as in funding programmes.

For the DIE, where knowledge transfer is consistently at the forefront, such an outlook is nothing new and is evident as far back as the institute's early days as the Institute for Didactics for Adult Education (PAS). Examples of knowledge transfer past and present include: Lectures by DIE researchers at continuing education conferences; delegate advisal in formats such as "Leibniz in Parliament" (Bundestag or Landtag); DIE analyses in the national education report; the annual DIE forum or the DIE magazine for adult education, referred to today as "weiter bilden", which bring together research, practice and politics; the scientifically developed and now widely implemented "ProfilPASS" and "wb-web" as a platform for part-time skills acquisition.

Thus, for DIE, knowledge transfer is inseparable from research work. Under the guiding principle of application-oriented basic research, (see Schrader & Goeze, 2011) DIE researchers tackle questions aimed at generating knowledge relevant for the improved, evidence-based management of education systems and successful educational practice. Transfer subsequently ensures that research results are conveyed to where they are needed. As a result, transfer is closely linked to the institutional aims, in particular the socially and educationally relevant task of processing adult learning and education academically and thus ensuring its successful development.

According to the Leibniz definition (Leibniz Gemeinschaft, 2019, p.1) the DIE defines transfer as follows:

DIE knowledge transfer refers to the exchange of information between the fields of adult education research, practice and politics. The DIE considers knowledge transfer to be the quality-assured transmission of scientific results, concepts and technologies into usable, intelligible information and instruments, appropriate to the target group, as well as transmission in the other direction – the conversion of practical and political experiences, expectations and issues into research questions and infrastructural offerings. It thus acts as a multi-directional interface. Transfer links the knowledge needs of partners in the field with the DIE research agenda, while simultaneously enabling the practical use of research results by actors in the field. The DIE designs the interfaces via its own transfer channels, using internal and external knowledge. Furthermore, DIE knowledge holders also employ third-party transfer channels.[1]

[1] Translated by author

1. Transfer Partners and Targets

DIE knowledge transfer is aimed at enabling an information exchange between research, practice and politics in adult- and continuing education (including informal forms of adult learning). Its target audience, referred to here as transfer partners, is made up of participants from the sectors of adult- and continuing education practice and policymaking[2]:

- management, planning and arranging personnel in continuing education institutions or providers of digital learning opportunities
- vocational training professionals
- full and part-time teachers
- professionals concerned with continuing education at sites of associated education
- professionals in local and regional educational associations and networks, and continuing education advisory offices
- management and operative staff in adult- and continuing education associations
- those responsible for political and administrative adult- and continuing education issues in ministries, parties and committees[3]
- media professionals in relevant fields

The aims of knowledge transfer at DIE:

- to ensure transfer partners have access to knowledge relevant to their professional dealings, thus opening up their work to new interpretation, aiding analysis of their frameworks, extending their horizons and enabling decisions to be made, based on up-to-date specialist discourse and evidence
- to provide support, particularly in practice, to the individual professional development of continuing education personnel
- ensuring that scientific knowledge conveyed by DIE transfer is appropriate for the target group and relevant to developmental challenges and questions being raised in the field
- to enable as broad and unlimited an use of knowledge as possible, by way of open access strategies (Open Access, Open Educational Resources, Open Source)
- to test research-based developments in the field (instruments, processes, models, digital technologies and tools) for practicality, appropriateness, efficacy, thus enabling them, if beneficial, to be implemented as innovation by transfer partners[4]
- to strengthen adult- and continuing education as a standalone sphere of education by providing cross-sector concepts and innovation across a broad network of transfer partners, in which participants from practice and politics can meet and share knowledge, concepts and processes, thus paving the way for a *collective professionalisation* of the practical sector. Opportunities, however, should not be overestimated, with political steps remaining the responsibility of other actors, e.g. associations and employees, as well as social partners

[2] Learners (including the wider public with an interest in education) are generally addressed via professionals in the field.

[3] Transfer at DIE thus includes aspects of policy advising.

[4] In cases where the necessary and available knowledge involves processes, methods and technologies, (Know-how), the DIE also carries out technology transfer. As this term is used overwhelmingly in the context of science and technology in non-university research and the term „knowledge transfer“ also includes procedural knowledge, the term „technology transfer“ will no longer be used in this paper.

- to initiate dialogue between research, practice and politics, enabling the research sector to acquire knowledge of practice and politics and thus generate relevant research questions and findings.

2. Opportunities and limitations

The establishment of adult education as a scientific discipline combines modernisation expectations of and for educational practice and policy (see Schrader, 2011, p17ff). The academic professionalisation of further education personnel was intended to improve practice. Practice and application-oriented expectations of research have been renewed through the evidence-based educational reform programme (see Bromme et al., 2014). There is widespread scepticism whether the promise of modernisation can deliver successful transfer. However, there are specific conditions, under which the likelihood of this can be increased and these are taken into account and are the subject of further research by DIE knowledge transfer.

Of initial note is the fact that there are varying conditions and interests in terms of how scientific knowledge is received within and between participants in practice and politics. This is demonstrated in studies on the knowledge-relevant starting points in the field – i.e. on information behaviour, knowledge, and infrastructure needs, (Müller, 2007; Müller, 2019; Lorenz, 2014; Brandt et al., 2015; Kühn et al., 2015; Schöb et al., 2015; Scheidig, 2016; wbmonitor, 2019) or on the qualifications, knowledge and competencies of continuing education personnel (Autorengruppe Personalmonitor, 2016; Hof, 2001; Marx et al., 2014; Rohs et al., 2017). Recently, a majority of managers (64 %) in continuing education institutions said they required scientific concepts or research results, in particular those of an education science background. (Christ et al. 2019, p. 15). At the same time, almost every second provider (46%) complained that research bears too little relevance to the issues of interest to the institutions (ibid).

Scientific knowledge, “be it expertise, orientational, interpretative, explanatory or justificatory […], can fulfil many purposes, both content- and process-related, at various points in time[5]” (Scheidig, 2016, p. 77f.). Through transformation it becomes both the basis and a component of professional knowledge (Bromme, 1992) of participants in the field – or, to put it in professional andragogical terms: ”Professionality means […] possessing the ability to appropriately use wide-ranging, detailed scientific and as such varied abstract knowledge in concrete situations” (Tietgens, 1988, p. 37). There is extensive empirical evidence that this can succeed, i.e. that a case-relevant link can be established between scientific knowledge and vocational experience (see e.g. Digel et al., 2010; Goeze, 2016). The question as to how promisingly scientifically-proven innovation can be used in the education system is the subject of implementation research (see Schrader et al., 2020). The successful interrelation of theory and practice requires effort on both sides: Research must strive for comprehensibility, without compromising linguistic precision, and must acquire knowledge of and closeness to the field, while practice must accept that knowledge resulting from research will not always be immediately practicable, but must be made thus.

3. Functions and service provision

The spectrum of services offered by DIE knowledge transfer is shaped by transfer traditions (introduced and acknowledged in the field), the sector’s thematic agenda, the DIE’s research schedule, media- and communication-related change and competencies of transfer staff. Products include:

[5] Translated by author

- publications, lectures, seminars and interviews on research results and theoretical knowledge;
- handouts, advisory and further education concepts;
- development and operation of in-house transfer channels as information infrastructures, e.g. publication organs, portals, social media channels;
- moderation and maintenance of counselling settings and networks;
- in-house or cooperative events, and products produced in collaboration with transfer partners.

The DIE maintains networks with participants from research, practice and politics in order to create interlinking perspectives, shape discourse, promote knowledge requirements and support research. These networks enable innovations to be trialled, their effects to be measured, suitable methods, instruments or applications to be implemented and success factors to be conveyed. In this context, DIE considers its transfer and transformation processes as objects of research in their own right.

Through its provision of knowledge transfer and skills acquisition, the DIE is also active in sectors used by higher education institutions (degree programmes) and associations as well as continuing education providers. In order to prevent competitive circumstances, the DIE is committed to the development of scientifically substantiated prototypes, which can be used, adapted and disseminated by others, as well as complementary part-time offers and cooperative implementation.

Transfer is of importance to the entire DIE. As a result, transfer-related performance indicators have also been formulated for academic staff. Nevertheless, Knowledge Transfer (WIS) also describes a standalone department being part of the institute's Management Council.

The functions of the WIS department include:

- technical operation of information infrastructures; preparation and dissemination of research findings;
- correlating perspectives, planning discourse;
- collation of knowledge requirements, stimulating research;
- arranging and maintaining collaborations;
- evaluating and implementing innovation;
- establishing effects and success factors.

These tasks are split into three sections – publications, portals and practitioners networks – each of which has a differing emphasis and format. DIE transfer is geared towards the quality criteria, such as reliability, up-to-dateness, accessibility, targeting of individuals, multimediality, appropriateness, diversity, usability.

Transfer work requires specific competencies and skills, including:

- comprehensible verbal and (audio)visual preparation and presentation of scientific content
- conception and operation of information infrastructures
- orchestration of perspectives in research, practice and politics
- moderation of group processes and establishment of networks
- comprehensive subject knowledge.

Research departments and WIS work closely together in terms of products and projects and provide mutual support in questions of research and transfer.

4. Success and Indicators

The Leibniz Association does not have a unified system of measuring success. Rather, success is measured according to institutional objectives. Transfer research distinguishes between *completed* knowledge transfer – when contents have merely been technically transferred to their recipient – and that which is particularly *successful* – including an aspect of appropriation – i.e. the knowledge passed on is of particular use and will be integrated into practice. (see e.g. Weber, 2004, p. 21f.).

The DIE operationalises target planning and performance measurement according to a model made up of performance (offer/supply/tender), use (completed transfer) and impact (successful transfer).[6] Key performance- and user-related indicators are systematically documented and effective dimensions exemplarily researched. The following table shows typical indicators:

Activity	**Service**	**Usage = completed transfer**	**Effect = successful transfer (selective examples)**
DIE research	Lectures and articles in non-academic discourse	User frequency, Scope as measured by no. of downloads and participants	Use of data, models, arguments, agenda setting, consultancy requests/reviews
Information infrastructures (book series, magazines, portals)	Number of new publications, portal content elements	User frequency, scope, as measured by no. of downloads, page views, visitors, subscriptions	Proven learning success / skills increase
Innovations and implementation (GRETA, ProfilPASS)	Number of consultations, lectures, seminars, new developments	Number of cooperative partners, application numbers for validations and certifications. Instrument user frequency, number of downloads,	Validation-prompted training activities; inclusion in QM-standards;
Social Media	Number of posts	Followers and fans	Likes, Retweets
Survey	***systematic***	***systematic***	***exemplary***

[6] See structurally analogous offer-usage-effect relationships in learning models (Helmke 2007; Seidel 2014).

5. Future Prospects

Areas of development for DIE Knowledge Transfer are:

- Systematic clarification of which research should be transferred when, and with which aim,
- further development of policy advice formats,
- systematic internationalisation of transfer,
- intensification of transfer involvement in job descriptions and career paths,
- intensification of participation in research on transfer (model design, effectiveness research, implementation research).

The transfer expertise developed over recent years at the DIE can thus have wide-reaching effect throughout the Leibniz community.

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