



# The elite graduate school for leadership in the future. Results of a future workshop on excellent leadership education in 2030

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## Abstract

Elite higher education institutions are notable for developing a significant number of graduates who assume leadership positions. This highlights the importance of integrating the two fields of elite education and leadership education. This paper seeks to address the central questions of how leaders will be cultivated and what elite higher education institutions will look like in 2030. To explore these inquiries, a case study was conducted at a German graduate school using the future workshop methodology. The process involved four creative workshops and an online survey, employing both top-down and bottom-up approaches. Through this participatory process, an image of the future of an elite graduate school for leadership in 2030 was developed. This image can serve as a starting point for contemporary higher education institutions to prepare themselves for and actively contribute to shaping a promising future.

**Keywords** Elite education · Higher education · Leadership education · Future workshop

## 1 Introduction

In today's uncertain and volatile world, leaders play a crucial role in shaping positive developments for human communities (organizations, companies, research groups, parties, society, etc.) and nature, regardless of challenges. They must be able to act in complex and open situations. Adequate education for personality development is essential for this purpose and should thus be the primary focus of institutional higher education. Public perception generally associates classic elite institutions—e.g., Harvard University and Stanford University in the US, and Oxford University and Cambridge University in the UK—with the ideal of developing leaders and their personalities. These institutions stand out because a significant number of their graduates assume leadership positions in various aspects of human communities. This highlights the importance of connecting elite education with leadership education.

Beyond the US and UK, the pursuit of excellence and elite institutions is increasing worldwide (Ramirez and Tiplic 2014). In Germany, this is evident in the Excellence Initiative launched in 2005/2006 and its follow-up funding scheme, the Excellence Strategy (Blasczyk and Pasternack 2020). The Excellence Strategy of the German Federal Government and states aims to strengthen top-level university research and enable scientific excellence, enhance university profiles, and promote stronger networking and cooperation within the scientific system (BMBF 2022).

Funding for higher education institutions focuses primarily on research. Education in terms of curricula<sup>1</sup> is not a central point of emphasis. The Excellence Strategy, unlike its predecessor program, terminated funding for graduate schools in 2019 after the conclusion of transitional funding. However, these institutions are recognized as making significant contributions to the profiling and emergence of leading scientific, internationally competitive, and excellent locations in Germany (DFG 2020). Consequently, the institutions, often referred to as “schools” or “graduate schools” in the Anglo-American world, will need to explore alternatives to state funding to remain competitive and attain an excellent, elite status.

The specific characteristics of future educational institutions with elite status cannot currently be determined. It is

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<sup>1</sup> Curriculum is broadly understood here to mean an “academic plan” embedded within a sociocultural context shaped by various influencing factors. See further: Kisgen (2017); Lattuca and Stark (2009).

clear, however, that the future cannot simply be extrapolated from the present. Therefore, this paper wishes to address the following research question:

*What elements will constitute an elite graduate school for leadership in 2030, and how will such an institution be structured?*

This raises the following subordinate questions:

*What factors currently enable an elite status for higher education institutions?*

*What future conditions will impact higher education institutions?*

This paper explores these research questions with a case study-based practical report. The study was conducted at a private German graduate school, the School of International Business and Entrepreneurship (SIBE) of Steinbeis University. The paper discusses the approach and findings of this study.

## 2 The context: elite education and leadership education

### 2.1 Elite institutions of higher education

In this paper, the term “elite graduate school” is used to designate a particular type of educational institution. To explain this concept, the following section provides an overview of elite education and elite educational institutions, with special emphasis on the higher education sector.

Education systems, despite their occasional structural and content-related disparities, generally consist of distinct sectors such as primary or elementary education, secondary education, and higher or tertiary education (UNESCO 2012, 2015). Each sector encompasses various types of institutions, including a category referred to in the existing literature as the elite institution.

Historically, education was reserved for nobles, their retinue, and clergy (Kreckel 2018). Consequently, all educational institutions were considered to be elite.<sup>2</sup> With ongoing social change, education changed as well. Elite educational institutions no longer exclusively served and cultivated individuals from aristocratic backgrounds, but also extended their reach to include selected groups of privileged individuals. These groups mainly comprised military personnel, politicians, and individuals from the business sector (Wright Mills 2000). As a result of this

historical context, elite educational institutions have been associated with privileged segments of societies throughout the world.

The notion of education catering exclusively to the elites persisted until the twentieth century. After World War II, formerly exclusive educational institutions gradually opened their doors to individuals from broader social classes (Noftinger and Newbold 2007). This development led to weaker links between educational institutions and elite groups (Khan 2016). Nevertheless, various factors such as high tuition fees continued to impede access to elite higher education institutions (Prakhov 2016).

To date, the continuous expansion of higher education worldwide has led to the formation of different subsystems within higher education. As early as the mid-1970s, sociologist Martin Trow delineated three phases of educational expansion that would ultimately lead to the establishment of three such subsystems: elite education, mass education, and universal education (Trow 1974). Each subsystem is characterized by varying levels of accessibility for individuals. In a later work, Trow (2006) situates contemporary higher education in the transitional phase from mass to universal education. Accordingly, the elite status of an educational institution today is no longer related to its connections to social elites.<sup>3</sup> Instead, it is influenced by new factors. Van Zanten (2009) describes these developments by asserting that while in the past, elite educational institutions catered to an intellectual segment of the upper class, they now primarily prioritize research, scholarship, and teaching. Even though the social status of students and their families still holds significant weight (Kracke et al. 2018), the importance of meritocratic factors is increasing within the context of elite institutions of higher education (Khan 2011; Binder and Abel 2019).

The precise definition of elite education remains uncertain, as it is subject to two main interpretations: either as the perpetuation of social elites or as the provision of high-quality education (Deppe and Kastner 2014). Furthermore, elite education encompasses both the education of elite offspring and the education that fosters the development of current and future elites (Börjesson and Broady 2016). In contrast, Krüger et al. (2012) argue that elite education is a multidimensional concept lacking a fixed definition. They propose an ‘elite through excellence’ approach (Krüger et al. 2012), wherein an elite educational institution excels in teaching and research. Kreckel (2018) observes a trend

<sup>2</sup> The adjective ‘elite’ is understood here in terms of its French origin (élire = select).

<sup>3</sup> Various subcategories can be identified for the concept of social elites, e.g., the performance elite, the functional elite, the positional elite, the power elite, and the responsibility elite. For further details, see Bohlken (2011); Michels (1910); Mosca (1939); Pareto (1935); Wright Mills (2000), among others.

in which elite educational institutions focus exclusively on research. This shift signifies the transformation of institutions from exclusive national elite establishments to models of internationally renowned research institutions (Kreckel 2018). International comparisons of elite higher education institutions are discussed by Kenway et al. (2013), Maxwell and Aggleton (2015), Maroy and Van Zanten (2011).

While relatively specific definitions of elite educational institutions exist in France, the UK, and the US, the German educational landscape lacks a clear-cut definition and distinct labeling of institutions as ‘elite’ (Deppe et al. 2015). Consequently, Deppe and Kastner (2014) proposed a new model of elite education for both public and private sectors in Germany. The authors argue that an educational institution attains an ‘elite’ status based on its achievements and subsequent recognition by society. These achievements encompass academic excellence in research, outstanding performance in sports, arts, or music, as well as the development of leaders in business, law, and politics (Deppe and Kastner 2014).

These characteristics highlight various sub-aspects of elite education and elite educational institutions examined in academic literature, primarily from a sociological perspective concerning educational expansion and the formation of education subsystems. The scholarly discourse focuses on topics such as social inequalities, individual transitions, and systemic. Helsper et al. (2012) and Sackmann (2019) outline a broad theoretical foundation for the field of elite education which they call ‘the mechanisms of elite education’. From an educational perspective, elite education is mainly discussed in relation to the concept of excellence and political initiatives that promote excellence (Bröckling and Peter 2017; Peter 2019). However, political funding mechanisms, e.g., the Excellence Strategy mentioned in the introduction, are criticized in the literature. One of these criticisms is that they seek to convert the university from an institution of teaching and research, vis-à-vis knowledge and truth, into an organization that prioritizes the acquisition of funds as a criterion for the quality and significance of work (Gruschka 2015). Moreover, German initiatives focus primarily on monetary support for excellence in research (Kosmützky 2012). Teaching often receives only secondary attention. An exception in Germany is the Bavarian Elite Network’s elite study programs. This initiative claims the ‘elite’ label based on its commitment to high-quality teaching through various measures, including supervision, internationalization, and interdisciplinary approaches (Elitenetzwerk Bayern 2021).

The pedagogical concept of elite education, as previously discussed, revolves around the notion of achievement and the pursuit of excellence. Bohlken (2011) adds another dimension to the definition of the elite status, asserting that individuals, groups, and institutions have a moral responsibility

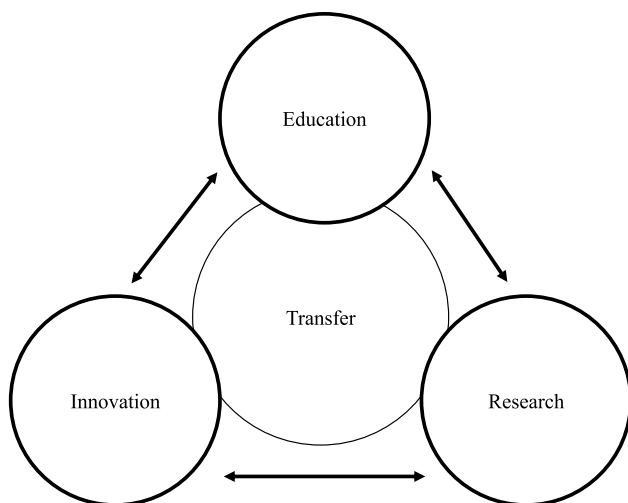
towards society. This aligns with an argument presented by Markl (1990) two decades earlier, which emphasized that true elite status can only be claimed when the success of an elite entity contributes to the long-term success of the community from which it emerges. Accordingly, elite educational institutions are those that have the most positive impact on the human communities in which they operate. Thus, they occupy the highest position in a hierarchy of responsibility, where responsibility is understood as generating positive outcomes.<sup>4</sup> This definition of elite education is relevant to this research as it enables an exploration of the term ‘elite’—commonly associated with inequality—from a pedagogical perspective rooted in humanistic and democratic values. It addresses a critique raised by Helsper and Krüger (2021) regarding the combination of the terms ‘elite’ and ‘education’.

At the operational level, the positive impact of higher education institutions can be expressed, for example, with the help of the elements described by Deppe and Kastner (2014). For an in-depth consideration of the impact of higher education institutions on communities and society, further aspects from the scientific literature on the central tasks of the institutions can be consulted. In this regard, Lange (2023) presents a comprehensive conceptualization:

Throughout history, institutions of higher education have performed two fundamental tasks: education and research. However, the past few decades have witnessed educational expansion, leading society from the industrial era to a knowledge-based society and, eventually, to an entrepreneurial society (Audretsch 2014). Consequently, the role and central tasks of higher education institutions have also changed. Today, institutions are expected to deliver a positive impact by making specific contributions (Stolze and Sailer 2021). This has given rise to the so-called ‘third mission’ of higher education institutions. In addition to teaching and research, i.e., developing qualified graduates and new knowledge, institutions are tasked with developing solutions to address societal challenges (Cloete et al. 2018). Etzkowitz (2014) refers to this as the innovative mission of institutions.

Lange (2023) considers these remarks and conceptualizes the tasks of higher education institutions and their resulting positive impact on society in terms of three concepts: education, research, and innovation. In summary, besides education and research, innovation can be regarded as a central task of higher education institutions. Within this framework, Windisch et al. (2021) also emphasize the creation, application, and dissemination of knowledge beyond the academic sphere. This additional factor, situated within the nexus of higher education institutions’

<sup>4</sup> Bohlken (2011) describes the responsibility of elites in form of the German term “*Gemeinwohl*” (common good).



**Fig. 1** Central tasks of higher education institutions in society (own illustration)

tasks, can be labeled as the fourth task (Wissenschaftsrat 2016): transfer.

Transfer is a complex phenomenon and subject to varying definitions depending on the discipline in which it is utilized. This paper focuses on the pedagogical understanding of transfer. The related literature often discusses the concept of knowledge transfer (Fischer et al. 2005; Reinmann and Brase 2022). Knowledge transfer represents the bridge between knowledge generation and utilization. It involves various instruments of communication, e.g., publications, presentations, concepts, or programs that facilitate the dissemination and application of new knowledge (Schemme 2017). On the other hand, the broader concept ‘transfer’ encompasses all activities undertaken by individuals or organizations that lead to the application of knowledge, including the outcomes of such application. This goes beyond instruments of communication and emphasizes action. The intention of knowledge transfer as well as transfer in general is to generate a positive impact at individual, organizational, regional, and global levels (Schemme 2017).

Considering the four tasks of higher education institutions, an example can illustrate the underlying idea. Research generates new knowledge, while education develops individuals who either engage in research or apply acquired knowledge in various social spheres, such as economics or politics. The application of knowledge occurs through individual actions and the creation of innovations within higher education institutions. According to Faix et al. (2014), these innovations always benefit society. Figure 1 provides a heuristic representation of the central tasks of higher education institutions and their interaction.

These tasks should be understood within the context of a pedagogical understanding of elite higher education institutions. Within this framework, institutions attain elite status when they have the greatest positive impact on society compared to other institutions of the same kind. This influence is achieved through the tasks shown in Fig. 1. The quality with which they fulfill these tasks determines their elite status.

## 2.2 Leadership education

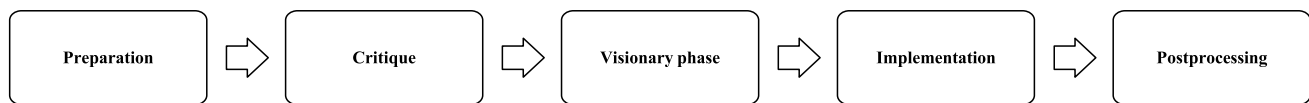
Khan (2010) asserts that elite educational institutions prioritize the development of their students’ character. Zymek (2014) supports this claim, emphasizing that character and personality growth are fundamental aspects of elite institutions’ educational philosophy. Consequently, these institutions aim to provide education that prepares students to assume leadership roles across various sectors of society (Zymek 2014). Therefore, the term leadership education is closely associated with elite education and elite higher education institutions.

In the realm of formal education programs, leadership education primarily exists within higher education (Tippelt and Lindemann 2018). Its formal incorporation dates back to the introduction of the Master of Business Administration program at Harvard University in 1903 (Kaplan 2014). Research on leadership education builds upon the existing discourse surrounding the concept of leadership, which has been widely debated in the literature. While some authors focus on the term ‘leadership’ itself (Stogdill 1974; Kotter 1995; Northouse 2016), others explore the similarities and differences between leadership, management, and entrepreneurship, because these three terms share common characteristics (Huynh 2007; Kisgen 2017; Thrane et al. 2016). Based on these and other perspectives, Faix et al. (2020) define leadership as follows:

“Leadership means to lead oneself and human communities with personality – reasonably, responsibly, and ethically into an innovative and creative future in open and complex situations under unclearly defined and dynamic conditions, while always considering the framework conditions and collective rationality”.

This definition is supported by other scholars who describe leadership as the process of shaping a creative and innovative future within complex and open circumstances. In this context, an individual assumes the role of a leader by actively creating and striving to shape an innovative future in complex situations (A. Faix 2020; Mergenthaler 2017).

The fundamental purpose of leadership education is to empower individuals to assume positions of leadership and responsibility. Scholars in this field examine different aspects of ‘leadership education’. First, they explore the



**Fig. 2** Phases of a future workshop according to Jungk (1995) (own illustration)

components that are currently taught and those that should be included (Clapp-Smith et al. 2019). Furthermore, they analyze these components in isolation (Jenkins and Andenoro 2016). Secondly, researchers investigate the design of formal and informal frameworks for *leadership education*, such as academic programs, on an international scale (Clapp-Smith et al. 2019). Kisgen (2017) specifically examines leadership education with a focus on business leaders and develops a holistic model encompassing components from the areas noted above (Kisgen 2017). Kisgen's model is rooted in a humanistic perspective of education that views education as the holistic development of personality in interaction with the environment (Humboldt 1903/1968). Thus, in connection with the previously mentioned definition of leadership, leadership education can be understood as the institutionalization of a humanistic approach to education that fosters the growth of individuals to becoming creative personalities who eventually become leaders.

### 3 The method: future workshop

This case study was conducted at the School of International Business and Entrepreneurship (SIBE), an institution within the German higher education sector. To address the research questions of this study, the future workshop method was selected. The future workshop was originally developed by Müllert and Jungk (1987) as a participatory decision-making tool in politics. The two developers view the method not as a final product, but as a democratization instrument that continues to evolve through constant experimentation (Jungk 1995). In a narrower sense, this democratization tool should be regarded not as a research method per se, but as a creativity and moderation technique (Popp 2012a). Nevertheless, the method's increasing relevance is emphasized, particularly due to its participatory nature (Apel 2004).

In the current literature, the future workshop method falls within the field of participatory futures research (Müllert 2012). Futures research encompasses the scientific investigation of possible, desirable, and probable developments in the future, as well as their design and connection to past and present manifestations (Kreibisch et al. 2011). Within the context of futures research as a scientific discipline, the term “future” does not refer to the everyday understanding of the future as a future present. Rather, it is understood as

people's current constructions of the future, also known as futures (Grunwald 2012).

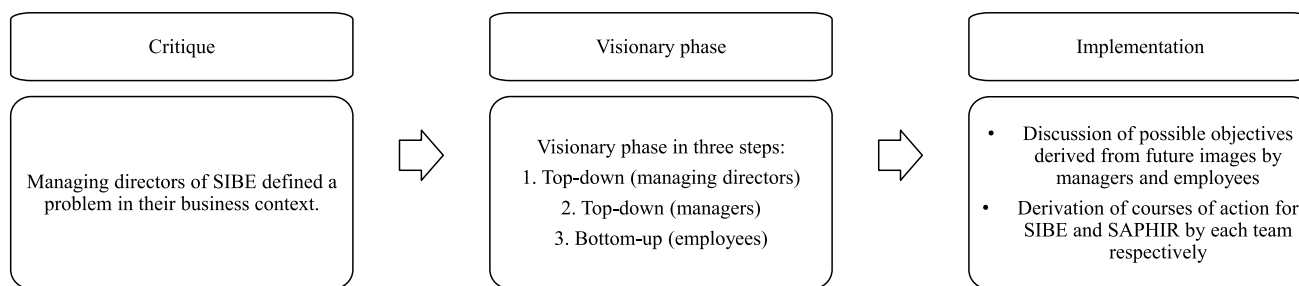
As a subfield of futures research, participatory futures research can be seen as a subsystem of practical social science research that specifically focuses on a future and participation-oriented form of explorative case studies (Popp 2012b). Building on Jungk's (1995) ideas, the main objective of future workshops is to involve interested citizens in political decision-making processes they would not typically participate in. Thus, future workshops serve as a tool for democratically shaping the future (Müllert 2009). According to Popp (2012b), research utilizing future workshops follows the principles of case studies.

The future workshop unfolds as a sequential process aimed at democratically shaping the future. Figure 2 illustrates the structure of a future workshop, which consists of five phases:

This method consists of the critical, visionary, and implementation phases, preceded by a preparation phase and followed by a post-processing phase (Jungk 1995). There are no specific time or space constraints for the successive progression of the phases (Jungk 1995).

The preparation phase involves setting up the workshop and defining the topic to be addressed. In the critique phase, the focus is on collecting and categorizing criticism related to this topic. The subsequent visionary phase emphasizes creative thinking<sup>5</sup> by all workshop participants. Techniques such as brainstorming are employed to generate solutions for the challenges and problems identified during the critique phase. These ideas are then documented as utopian designs. The implementation phase encompasses critical discussions of the utopian designs, the development of ideas to be implemented, and steps towards their specific realization. Finally, the follow-up phase entails documenting the workshop results, disseminating them, and exploring the potential for further work on the chosen topic. In the post-processing phase, ideas are collected for this purpose, and the feasibility and desirability of initiating a permanent workshop are examined (Jungk 1995).

<sup>5</sup> For a conceptualization of the term “creative thinking” see further: DiYanni (2015).



**Fig. 3** Design of the future workshop at SIBE based on the phases according to Jungk (1995)

#### 4 The elite graduate school for leadership in the year 2030: a case study

The institution at the center of this case study is SIBE. It was established in 1993 as the “Steinbeis Academy for Corporate Management” and has operated since 1998 as part of the private, state-recognized Steinbeis University under the Steinbeis Foundation for Economic Development (Faix et al. 2018). Within Steinbeis University, SIBE is the graduate school in the faculty of leadership and management and therefore belongs to Germany’s private higher education sector.

In contrast to Jungk (1995), the future workshop in this case study was utilized for managerial decision-making rather than for political decision-making. Thus, the future workshop was adapted to suit this new context as depicted in Fig. 3, which illustrates the structure of the future workshop in the SIBE case study.

Jungk’s (1995) concept of the future workshop originally referred to a physical workshop event. However, in contemporary times, a wide range of tools and platforms, including digital ones, are now employed to conduct such workshops. Especially during the pandemic, during which this study was conducted,<sup>6</sup> these digital tools<sup>7</sup> were of particular importance.

##### 4.1 Critique phase

The adaptation of the future workshop was initiated during the critique phase, as shown in Fig. 3. Defining problems in the business context differs from Jungk’s (1995)

<sup>6</sup> The preparation of the future workshop began in October 2019. The execution of the method, as described in this chapter, spanned 2020 and part of 2021. This period was characterized by extensive digitization of business and scientific processes due to the Covid pandemic. Physical implementation of the future workshop was not justifiable for legal and ethical reasons. Digital communication channels were used as an alternative.

<sup>7</sup> The following software was used in the case study: Exchange platform: Microsoft Teams; Collaboration platform: Miro.

approach, which focused primarily on social problems. In this case study, however, an institutional business problem was defined. The implications of this approach did not focus on society in general, but rather on higher education institutions as a whole. The problem identified for the SIBE future workshop arose from the competitive landscape in the higher education sector, as explained in the introduction. This competitive framework serves as the primary motivation for private institutions to act. Based on this situation, the managing directors of SIBE defined the problem for the future workshop from the perspective of long-term corporate management and educational research.

Considering the increasing competition in the higher education sector and the emphasis on research funding, smaller and private institutions need to position themselves robustly to ensure long-term competitiveness. The pursuit of excellence is central in this regard. Markl (1990) suggests that excellence and elite status for educational institutions derive from their societal benefits, i.e. measured by the value they bring to society. This raises the question of the future value and benefits that elite higher education institutions will contribute to society. The question in terms of the future robustness of institutions is: what value and benefits will elite higher education institutions contribute to society? Defining the problem in this manner allowed the research questions of this paper to be derived and the future workshop to be initiated.

##### 4.2 Visionary phase

The visionary phase of the future workshop at SIBE consisted of three stages and employed a top-down/bottom-up approach.<sup>8</sup>

<sup>8</sup> For a description and explanation of the terms ‘top-down’ and ‘bottom-up’ see Hoopes (2003).

#### 4.2.1 Stage 1: visionary phase of the managing directors

During the first stage, a creative workshop was conducted with the managing directors of SIBE and the managing director of Saphir Germany, a personnel consultancy that recruits and selects applicants for SIBE's partner companies. Two analyses were conducted to prepare for this workshop and subsequent stages.

The first analysis provided an overview of “elite education” within the university context and explored developments and trends that would influence the (higher) education sector in the medium to long term. Various practical, political, and scientific future studies on different sub-sectors of education were condensed into 16 publications, ten of which took a non-scientific approach and six of which took a scientific one. These studies focused on the four megatrends of digitalization, globalization, individualization, and demographic change.

Based on this foundation, the first creative workshop was held in May 2020, utilizing the brainstorming method. Participants expressed their thoughts, ideas, and approaches without engaging in discussion. These ideas and approaches were subsequently introduced in a guided discussion that shed more light on various sub-aspects. The result of the first creative workshop was an initial future image of the elite graduate school for leadership in 2030, consisting of eight dimensions: objective, selection and applicants, network, funding, lecturers, coherence, reputation, and value-added.

According to the future image developed by the workshop participants, the objective of an elite school for leadership in 2030 is to develop individuals who drive and implement innovations in society. Personal development, as highlighted by Faix (2015, p. 123), is seen as an individual and lifelong endeavor. Consequently, the role of elite institutions is not to develop personality *per se*, but rather to empower students to further develop their own personalities. The selection process at such institutions will prioritize applicants' performance, viewing themselves as a station in their potential students' educational journeys. To cultivate leaders, applicants will be expected to have already created additional value for society through their past educational history and extracurricular activities, such as social or political engagement. This emphasis on additionally socially relevant value is not only inherent in the selection process, but also reflects the core identity of the elite graduate school for leadership in 2030. The institution views its mission as creating diverse benefits for society, the economy, and the communities associated with its students (through their education).

During the creative workshop, the participants recognized the significance of an institution's reputation and network for generating benefits. Looking ahead, the network of an elite graduate school will encompass close collaboration

with companies from various sectors on both the national and international levels, as well as strong research networks at regional, national and international scales. An institution's reputation will stem from effective communication both internally and externally, along with a strong sense of belonging among stakeholders within the institution and its networks. This sense of belonging will arise from stakeholder participation in the institution's further development and alignment with a common mission statement. Lecturers will also be aligned with this shared mission statement. The selection of lecturers for the elite school in 2030 will follow the guiding principle of ‘leaders generate leaders’. For instance, tandem models can ensure that leading scientists and entrepreneurs provide students with practical and theoretical insights. Institutional financing will come from various sources, including high tuition fees as well as investments from within diverse networks.

#### 4.2.2 Stage 2: visionary phase of the management team

The second stage of the visionary phase consisted of two separate creative workshops. The first workshop, held in July 2020, involved the management circle of SIBE and SAPHIR Germany, excluding the managing directors. At the beginning of the workshop, the participants were presented with the results of the initial analyses, similar to the first creative workshop. This served as an initial impetus to explore the world of elite educational institutions and their future. Subsequently, participants engaged in free brainstorming, shared ideas within the group, and then engaged in guided discussions to construct a new future image.

The new image retained and reflected all dimensions from the previous image. However, the revised future image incorporated two complementary dimensions: the aspiration of an elite educational institution and the content that is the focus of study, research, and communication. The aspiration of an elite school for leadership in 2030 should be to achieve excellence in adding social value through science, personal development, and practical application. Such an institution should focus on content related to leadership itself as well as socially relevant topics. In the course of the workshop, additional elements were integrated into the other dimensions. The significance of governmental and private research projects, for example, was emphasized within the context of obtaining funding. In a similar context, there was discussion concerning additional services that an elite school can provide to acquire monies. The institution's network was expanded to include social and political organizations as well as investors and start-ups. Its reputation, within this expanded future image, arises via societal perception of the institution as a driver of global future issues,

exclusivity, selectivity, and highly visible and impactful research. Research and a global focus on future issues and socially relevant problems were viewed as complementary elements contributing to the value added by an elite school for leadership in 2030. Regarding research objectives, the participants emphasized the responsibility of the institution to conduct socially relevant research and effectively communicate its results to promote social acceptance and understanding.

In addition to this image of the future, various other thematic elements emerged during brainstorming and group discussions. However, the participants agreed that these elements would only develop after 2030, based on their assumption that the education sector would continue its gradual evolution. Consequently, an alternative, supplementary future image of the elite graduate school for leadership, with a focus on the period after 2030, was designed.

This alternative future image deviates from the previous two by questioning the future existence of the current organizational model of educational institutions. Such institutions are tending to shift from the traditional linear educational path and towards the trend to lifelong learning. Their focus is thus on individuals who engage in institutional education, when necessary, often referred to as “institution jumpers”. Consequently, the role of educational institutions encompasses not only education itself but also mediating potential students to partner institutions that foster subject-relevant competencies and associated knowledge tailored to the students’ needs. Another dimension emerging in this alternative image is geography. The focus of this dimension is the relevance of an educational institution’s location in regions characterized by innovation and disruptive thinking.

Following the second creative workshop, a third workshop was conducted in August 2020. Once again, all managers from SIBE and SAPHIR Germany participated, including the managing directors. The third creative workshop focused on in-depth discussions of the future images developed thus far, followed by consolidation of the future images from the first two workshops.

During the discussion, various additions were made to the content and structure. Some dimensions from the alternative image were integrated into the image for 2030. One example is the inclusion of the separate approach to the organizational model. In this context, the concept of an intermediary institution was replaced with that of a network institution, highlighting the cooperation between different elite institutions rather than mere intermediation. Additionally, a distinction was made between objectives and measures within the value-added dimension, elucidating who would benefit from value creation and through which actions. The dimension of “geography” included an institution’s offerings, which are designed to be location-independent in the

**Table 1** General survey conditions

Period	10/08/2020–10/19/2020
Type of survey	Qualitative online survey
Instrument	SurveyMonkey
Response rate	44.7 percent
Absolute number of participants	21 persons

future as a result of leveraging digital technologies. In terms of coherence, the participants introduced “regional culture” as a factor, demonstrating the strong integration of the elite school for leadership in 2030 within such a culture.

#### 4.2.3 Stage 3: visionary phase of the employees

The third stage of the creative phase was initiated based on the results of the previous stages. This involved the creative participation of all employees of SIBE and SAPHIR Germany. Due to the study setup and the previously detailed images of the future, a three-step process was organized and applied in this stage.

During the first step, the interim results of the three creative workshops were communicated in an internal meeting using the top-down approach. First, the results of the fundamental analyses on elite educational institutions and the future of education were presented. Second, all employees were asked to take part in a qualitative online survey (Ehlers 2017) about the elite graduate school for leadership in 2030 and the integrated image of the future from the previous creative workshops (Table 1).

The aim of the survey was to gather further insights into the integrated future image developed in the previous workshops. Participants were also asked to rank the dimensions of an elite graduate school for leadership in 2030 based on their relevance, providing valuable indications for managerial decision-making.

According to the survey results, the three dimensions deemed most relevant were recognition and attractiveness, vision and aspiration, and the contents of teaching and research. The survey also yielded additional contributions to the integrated future image. Within this context, overarching aspects were elaborated upon, as they were mentioned across multiple dimensions by numerous participants. These aspects ended up as the foundation for the fourth creative workshop of the creative phase held in November 2020.

During this workshop, the focus was on brainstorming and discussing ideas and approaches to refine five key aspects: social engagement, excellence in teaching and research, exclusivity, flexibility, and internationality. The discussions, held virtually using Miro software, resulted in the documentation of ideas and concepts on a whiteboard. They illustrated, for example, that social engagement must



be an essential component of the elite graduate school for leadership in 2030, meaning that it will be required for applicants. Additionally, institutions will promote social projects and integrate these into the curriculum in a structured manner. Excellent teaching and recognized research were emphasized as a requirement at both the level of individual research as well as institutional and cross-institutional levels.

Exclusivity will be achieved through various factors, including excellent teaching, highly selective recruitment processes, an exclusive network, and significant societal impact through impactful research and the transfer of innovations to society. Regarding flexibility, the discussions primarily centered around enabling and fostering flexibility for students. However, there was also a recognition that institutions should exhibit flexibility, and both enable and promote flexibility vis-à-vis students. Elite graduate schools for leadership can demonstrate their internationality in various manners, e.g., promoting internationality through exchange programs for students, lecturers, and staff, as well as through international branches. Admission requirements can also prioritize interculturality and globality to emphasize internationality.

In addition to the previously described future images, the findings on the overarching aspects also emerged from the creative phase. They should serve as the basis for developing institutional target images, which, in turn, will form the foundation for deriving solutions for the problem identified at the beginning of the future workshop.

### 4.3 Implementation phase

The third phase of the future workshop at SIBE focused on discussing and implementing specific measures derived from the future images. To begin, the elements of the future images were structured based on the central tasks of higher education institutions outlined in Chapter “[Elite institutions of higher education](#)”. Elements that did not fit within these tasks were separately organized as complementary institutional characteristics.

Education encompasses objectives, selection and applicants, as well as the curriculum, including lecturers and educational content. Research includes institutional excellence and factors related to research at the individual, institutional, and collaborative levels. Innovation incorporates the institution’s objectives, its region, and its reputation. These three overarching areas involve three types of transfer. First, there is knowledge transfer, where knowledge flows from research to education and innovation. Second, there is innovation transfer, which involves introducing innovations into the education and research clusters, such as innovative curricula. The third type is

the transfer of people, meaning the creation of capable individuals who positively impact education and research. Importantly, all three types of transfer extend beyond the institution and are directed towards society.

Following the clustering of the results, they were shared with all SIBE employees in October 2021. These findings are meant to serve as the foundation for defining specific target images for the institution. The implementation of these target images, i.e., deriving measures to achieve them, is defined as a long-term project. Each institutional area within SIBE has been assigned the task of developing its own strategies for contributing to the achievement of the new long-term goals. The post-processing phase of the future workshop will mark the provisional conclusion of the project. In this phase, the implementation of measures will be reviewed, and the future workshop will be permanently integrated as a participatory decision-making instrument aligned with the company’s objectives and strategy.

## 5 Conclusion

This paper presents an overview of the case study titled “Elite Graduate School for Leadership in 2030” conducted at the School of International Business and Entrepreneurship of Steinbeis University. The study highlights the fact that elite educational institutions currently achieve their status through their positive impact on society (Markl 1990). This is done, for example, by educating individuals who hold leadership positions across various societal levels (Zymek 2014). Such leadership education empowers individuals to develop their personalities and is not simply a matter of mere knowledge transfer (Kisgen 2017). Leadership is understood in this context as a process of influence that shapes open and complex situations with the aim of enabling an innovative future (Faix et al. 2020).

Based on a modified future workshop method (Jungk 1995), the future of an elite graduate school for leadership was creatively envisioned and critically discussed. The creative phase of the modified future workshop has been completed, resulting in a future image of the elite graduate school for leadership in 2030. This image reflects the current conceptions of a future-oriented elite educational institution as perceived by the staff of a German graduate school. The paper presents the design of various dimensions of such an institution, including the ongoing importance of creating added social value, the focus on personality development, but also the significance of transdisciplinary networks and potential changes in the organizational model of higher education institutions. These elements of the future image can be classified within the three central tasks of higher education institutions (Lange 2023), with continuous transfer occurring among these areas and between the educational

institution and society. Consequently, transfer is identified as the fourth central task of higher education institutions.

The integrated, clustered image of the future at the beginning of the implementation phase can provide SIBE and other institutions in the higher education sector with a basis for shaping their own visions of the future. It should be noted that the ideas presented in this study do not represent an ideal type and are not universally applicable. Instead, they aim to illustrate the multifaceted nature of thinking about the future of higher education institutions. Each institution can select relevant aspects and formulate related objectives based on these ideas. Long-term strategies can thus be derived, and institutions can prepare for the future. In the case of SIBE, the study's findings were utilized as a preliminary step to define complementary goals at the institutional, departmental, team, and individual levels.

It is important to acknowledge the limitations of this paper. The theoretical foundation relies on heuristic conceptualizations, which results in a marginal level of detail. The research design of this case study is qualitative, making the findings non-representative and unsuitable for guiding normative actions. Instead, the results offer an exploratory perspective on current perceptions of potential future developments. The intention of this study is to raise awareness, inform educational practice and policy, and encourage proactive engagement with the possible futures of higher education, including elite education and leadership education.

Further research could explore the general perspectives of educators and personnel from various graduate schools and institutions of higher education regarding the future. The concept of "responsibility elite" could also be investigated as a neutral framework for integrating the phenomena of elite and education. Additionally, exploring the interactions and interdependencies among the central tasks of higher education institutions could yield valuable insights for educational research. Considering future research directions, the utilization of the future workshop as a creative method could be expanded to initiate participatory reflection processes that inform educational leadership.

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## References

- Apel H (2004) The Future Workshop. Deutsches Institut für Erwachsenenbildung. <http://www.die-bonn.de/id/1001>. Accessed 27 Mar 2023
- Audretsch DB (2014) From the entrepreneurial university to the university for the entrepreneurial society. *J Technol Transf* 39(3):313–321. <https://doi.org/10.1007/s10961-012-9288-1>
- Binder AJ, Abel AR (2019) Symbolically maintained inequality: An American case of elite higher education boundary-making. In: Helsper W, Krüger H-H, Lüdemann J (eds) *Zeitschrift für Pädagogik, Beiheft: Vol. 65. Exklusive Bildung und neue Ungleichheit Ergebnisse der DFG-Forschergruppe, Mechanismen der Elitebildung im deutschen Bildungssystem*, 1st edn. Beltz Juventa, pp 210–231. <https://doi.org/10.25656/01:24178>
- Blasczyk SA, Pasternack P (2020) Exzellenzstrategie und die Universitäten in den ostdeutschen Flächenländern: Input- und Leistungsdaten – Schlussfolgerungen. *HoF-Handreichungen 11. die hochschule*, Beiheft
- BMBF (2022) Die Exzellenzstrategie. <https://www.bmbf.de/de/die-exzellenzstrategie-3021.html>. Accessed 20 Mar 2023
- Bohlken E (2011) Die Verantwortung der Eliten. Eine Theorie der Gemeinwohlpflichten. Campus Verlag
- Börjesson M, Broady D (2016) Elite Strategies in a unified system of higher education. The case of Sweden. *L'année Sociologique* 66(1):115–146. <https://doi.org/10.1016/j.poetic.2016.02.004>
- Clapp-Smith R, Hammond MM, Vogelgesang Lester G, Palanski M (2019) Promoting identity development in leadership education: a multidomain approach to developing the whole leader. *J Manag Educ* 43(1):10–34. <https://doi.org/10.1177/1052562918813190>
- Deppe U, Kastner H (2014) Exklusive Bildungseinrichtungen in Deutschland. *Entwicklungstendenzen und Differenzierungshürden. Zeitschrift Für Erziehungswissenschaften* 17(Supplement):263–283. <https://doi.org/10.1007/s11618-014-0532-3>
- Deppe U, Helsper W, Kreckel R, Krüger H-H, Stock M (2015) Germany's hesitant approach to elite education. Stratification processes in German secondary and higher education. In: Van Zanten A, Ball SJ, Darchy-Koechlin B (eds) *World Yearbook of Education 2015*. Routledge, Elites, Privilege and Excellence: The National and global definition of Educational Advantage, pp 82–95
- DFG (2020) *Graduiertenschulen (2005–2017/2019)*. <https://www.dfg.de/foerderung/programme/exzellenzinitiative/graduiertenschulen/index.html>. Accessed 14 Feb 2023
- DiYanni R (2015) *Critical and creative thinking: a brief guide for teachers*. John Wiley & Sons Inc

- Ehlers U-D (2017) Qualitative Onlinebefragungen. In: Mikos L, Wegener C (eds) *Qualitative medienforschung: Ein Handbuch*, 2nd edn. UVK Verlag, pp 327–339
- Elitenetzwerk Bayern (2021) Elitestudiengänge. <https://www.elitenetzwerk.bayern.de/start/foerderangebote/elitestudiengaenge>. Accessed 16 Feb 2023
- Faix A-V (2020) Innovating leadership education: how business schools and universities need to innovate sustainable strategies in leadership education. In: Sengupta E, Blessinger P, Yamin TS (eds) *Innovations in higher education teaching and learning: Introduction to sustainable development leadership and strategies in higher education*, vol 22. Emerald Publishing Limited, pp 39–53
- Faix WG, Kising S, Mergenthaler J (2018) *Leadership. Persönlichkeit. Innovation. Bildung und Forschung an der SIBE*. Steinbeis-Edition
- Faix WG, Windisch L, Kising S, Paradowski L, Unger F, Bergmann W, Tippelt R (2020) A new model for state-of-the-art leadership education with performance as a driving factor for future viability. *Leadership Educ Personal Interdiscip J* 2:59–74. <https://doi.org/10.1365/s42681-020-00011-4>
- Fischer F, Waibel M, Wecker C (2005) Nutzenorientierte Grundlagenforschung im Bildungsbereich: Argumente einer internationalen Diskussion. *Z Erzieh* 8(3):427–442. <https://doi.org/10.1007/s11618-005-0149-7>
- Grunwald A (2012) Wovon ist Zukunftsforschung eine Wissenschaft? In: Popp R, Schüll E (eds) *Zukunftsforschung und Zukunftsgestaltung: Beiträge aus Wissenschaft und Praxis, Zukunft und Forschung, Band 1*. Springer Verlag, Berlin, pp 25–36
- Gruschka A (2015) Exzellenzcluster in Exzellenzinitiativen. In: Rademacher S, Wernet A (eds) *Bildungsqualen*. Springer Fachmedien, pp 167–184
- Helsper W, Krüger H-H (2021) Mechanismen der Elitebildung im deutschen Bildungssystem. Zentralprojekt. Abschlussbericht. Werkstatthefte des ZSB, 33. Martin-Luther-Universität Halle-Wittenberg
- Hoopes J (2003) False prophets: the gurus who created modern management and why their ideas are bad for business today. Perseus Publishing
- Huynh L (2007) A New Paradigm of Entrepreneurial Leadership: the mediating role of influence, vision and context. Honours Thesis. The University of Sydney
- Jenkins DM, Andenoro AC (2016) Developing critical thinking through leadership education. *N Dir High Educ* 174:57–67. <https://doi.org/10.1002/he.20189>
- Jungk R (1995) Zukunftswerkstätten mit Phantasie gegen Routine und Resignation. Heyne
- Kaplan A (2014) European management and European business schools: insights from the history of business schools. *Eur Manag J* 32:529–534. <https://doi.org/10.1016/j.emj.2014.03.006>
- Kenway J, Fahey J, Koh A (2013) The libidinal economy of the globalising elite school market. In: Maxwell C, Aggleton P (eds) *Privilege, agency and affect. Understanding the production and effects of action*. Palgrave MacMillan/Springer Nature
- Khan SR (2011) *Privilege: the making of an adolescent elite at St. Paul's school*. Princeton University Press
- Khan SR (2016) The education of elites in the United States. *L'année Sociologique* 66(1):171–192. <https://doi.org/10.3917/anso.161.017>
- Kising S (2017) *The Future of Business Leadership Education in Tertiary Education for Graduates*. Steinbeis Edition
- Kosmützky A (2012) Motive, Auswirkungen und erste Bilanzen zeitgenössischer Hochschulreformen – Persistenz und Wandel. *Soziologie Revue* 35:285–293. <https://doi.org/10.1524/srsr.2012.0033>
- Kracke N, Buck D, Middendorff E (2018) Beteiligung an Hochschulbildung: Chancen(un)gleichheit in Deutschland. *DZHW Brief* 3:1–8. [https://doi.org/10.34878/2018.03.dzhw\\_brief](https://doi.org/10.34878/2018.03.dzhw_brief)
- Kreckel R (2018) On Academic Freedom and Elite Education in Historical Perspective. *Medieval Christian Universities and Islamic Madrasas, Ottoman Palace Schools, French Grandes Écoles and “Modern World Class Research Universities”*. Der Hallesche Graureiher 2018-1. Martin-Luther-Universität Halle-Wittenberg
- Kreibisch R, Oertel B, Wölk M (2011) *Futures Studies and Future-oriented Technology Analysis: Principles, Methodology and Research Questions*. Paper prepared for the 1st Berlin Symposium on Internet and Society, Oct. 2011, pp. 25–27. <https://www.hiig.de/wp-content/uploads/2012/04/Foresight-Paper.pdf>. Accessed 20 Jan 2023
- Krüger H-H, Helsper W, Sackmann R, Breidenstein G, Bröckling U, Kreckel R, Mierendorff J, Stock M (2012) Mechanismen der Elitebildung im deutschen Bildungssystem. Ausgangslage, Theoriediskurse, Forschungsstand. *Zeitschrift Für Erziehungswissenschaften* 15(2):327–343. <https://doi.org/10.1007/s11618-012-0271-2>
- Lange N (2023) *Future Perspectives for Higher Education: A Delphi-based Scenario Study with Special Regard to Elite Higher Education Institutions and Leadership Education*. Springer VS. <https://doi.org/10.1007/978-3-658-40712-4>
- Markl H (1990) *Wissenschaft im Widerstreit. Zwischen Erkenntnisstreben und Verwertungspraxis*. VGH Verlagsgesellschaft mbH
- Maroy C, Van Zanten A (2011) Steuerung und Wettbewerb zwischen Schulen in sechs europäischen Regionen. In: Altrichter H, Heinrich M, Soukup-Altrichter M (eds) *Schulentwicklung durch Schulprofilierung?* VS Verlag für Sozialwissenschaften, pp 195–213
- Maxwell C, Aggleton P (eds) (2015) *Elite education: international perspectives*. Routledge
- Mergenthaler J (2017) *Leadership Education - ein abduktiver Entwurf*. Steinbeis-Edition
- Michels R (1910) *Zur Soziologie des Parteiwesens in der modernen Demokratie*. Verlag von Dr Werner Klinkhardt
- Mosca G (1939) *The ruling class (Elementi di Scienza Politica)*. McGraw-Hill Book Company Inc
- Müllert NR (2009) Zukunftswerkstätten: Über Chancen demokratischer Zukunftsgestaltung. In: Popp R, Schüll E (eds) *Zukunftsforschung und Zukunftsgestaltung: Beiträge aus Wissenschaft und Praxis, Zukunft und Forschung, Band 1 (SEITEN)*. Springer-Verlag, Berlin
- Müllert NR, Jungk R (1987) *Future workshops: how to create desirable future*. Institute for Social Inventions
- Noftinger JB Jr, Newbold KF Jr (2007) Historical underpinnings of access to american higher education. *N Dir High Educ* 138:3–18
- Northouse PG (2016) *Leadership. Theory and practice*, 7th edn. SAGE Publications Inc
- Pareto V (1935) *The Mind and Society (Trattato di Sociologia generale)*. Harcourt, Brace and Company
- Popp R (2012a) *Zukunftsforschung auf dem Prüfstand*. In: Popp R (ed) *Zukunft und Wissenschaft: Wege und Irrwege der Zukunftsforschung*. Zukunft und Forschung, Band 2. Springer Verlag Berlin, pp 1–24. [https://doi.org/10.1007/978-3-642-28954-5\\_1](https://doi.org/10.1007/978-3-642-28954-5_1)
- Popp R (2012b) *Partizipative Zukunftsforschung in der Praxisfalle? Zukünfte wissenschaftlich erforschen – Zukunft partizipativ gestalten*. In: Popp R, Schüll E (eds) *Zukunftsforschung und Zukunftsgestaltung, Zukunft und Forschung*. Springer Verlag Berlin, pp 131–143. [https://doi.org/10.1007/978-3-540-78564-4\\_10](https://doi.org/10.1007/978-3-540-78564-4_10)
- Prakhov I (2016) The barriers of access to selective universities in Russia. *High Educ Q* 70(2):170–199. <https://doi.org/10.1111/hequ.12087>
- Ramirez FO, Tiplic D (2014) In pursuit of excellence? Discursive patterns in European higher education research. *High Educ* 67(4):439–455

- Reinmann G, Brase AK (2022) Forschungsimmanenter Wissenstransfer in der Hochschullehre mit Design-Based Research: Die Rolle von Wissenspartnerschaften. *Bildungsforschung* 2:1–14. <https://doi.org/10.25656/01:25465>
- Sackmann R (2019) Mechanismen der Elitebildung: Theoretisches Konzept und empirische Trends im deutschen Bildungssystem und im internationalen Vergleich. In: Helsper W, Krüger H-H, Lüdemann J (eds) *Exklusive Bildung und neue Ungleichheit Ergebnisse der DFG-Forschergruppe „Mechanismen der Elitebildung im deutschen Bildungssystem“*. Beltz Juventa, pp 41–60
- Schemme D (2017) Wissenstransfer als mehrseitiger responsiver Prozess jenseits der Linearität. In: Schemme D, Novak H, Garcia-Wülfing I (eds) *Transfer von Bildungsinnovationen – Beiträge aus der Forschung*. Bundesinstitut für Berufsbildung (BIBB), pp 13–40
- Stogdill RM (1974) *Handbook of leadership: a survey of theory and research*. Free Press
- Stolze A, Sailer K (2021) Advancing HEIs' third-mission through dynamic capabilities: the role of leadership and agreement on vision and goals. *J Technol Transfer Adv Online Publ*. <https://doi.org/10.1007/s10961-021-09850-9>
- Thrane C, Blenker P, Korsgaard S, Neergaard H (2016) The promise of entrepreneurship education: reconceptualizing the individual-opportunity nexus as a conceptual framework for entrepreneurship education. *Int Small Bus J* 34(7):905–924. <https://doi.org/10.1177/0266242616638422>
- Tippelt R, Lindemann B (2018) Institutionenforschung in der Erwachsenenbildung/Weiterbildung. In: Tippelt R, von Hippel A (eds) *Handbuch Erwachsenenbildung/Weiterbildung*, 6th edn. Springer VS, pp 521–542
- Trow M (1974) “Elite higher education”: an endangered species? In: Trow M (ed) *Problems in the transition from elite to mass higher education: policies for higher education: general report on the conference on future structures of post-secondary education*. OECD, pp 355–376
- Trow M (2006) Reflections on the transition from elite to mass to universal access: forms and phases of higher education in modern societies since WWII. In: Forest JJF, Altbach PG (eds) *Springer International Handbooks of Education: International Handbook of Higher Education*, vol 18. Springer, pp 243–280
- UNESCO (2012) *International standard classification of education: ISCED 2011*. UNESCO/UNESCO Institute for Statistics. <http://uis.unesco.org/sites/default/files/documents/international-standard-classification-of-education-isced-2011-en.pdf>. Accessed 15 Jan 2023
- UNESCO (2015) *International standard classification of education: fields of education and training 2013: Detailed field descriptions*. UNESCO/UNESCO Institute for Statistics. <https://circabc.europa.eu/sd/a/286ebac6-aa7c-4ada-a42b-ff2cf3a442bf/ISCED-F%202013%20-%20Detailed%20field%20descriptions.pdf>. Accessed 15 Jan 2023
- Van Zanten A (2009) The sociology of elite education. In: Apple MW, Ball SJ, Gandin LA (eds) *The Routledge International Handbook of the Sociology of Education*. Routledge, pp 329–339
- Wissenschaftsrat (2016) *Wissens- und Technologietransfer als Gegenstand institutioneller Strategien*. Positionspapier. [https://www.wissenschaftsrat.de/download/archiv/5665-16.pdf?\\_\\_blob=publicationFile&v=1](https://www.wissenschaftsrat.de/download/archiv/5665-16.pdf?__blob=publicationFile&v=1)
- Wright Mills C (2000) *The Power Elite*. New. Oxford University Press
- Zymek B (2014) Ausleseverfahren und Institutionen der nationalen Elitebildung und ihre internationalen Herausforderungen Eine historisch-vergleichende Skizze zu Frankreich, England und Deutschland. *Zeitschrift Für Erziehungswissenschaften* 17(Supplement):59–79. <https://doi.org/10.1007/s11618-014-0522-5>