

Evaluation Framework of University based on Excellence Framework System

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Abstract

In recent years, the United Kingdom has made fruitful explorations in the external evaluation of universities, the most notable of which is the development of three outstanding series of university evaluation frameworks. In the process of the formulation, implementation, and evolution of these three excellence frameworks, we can not only discover many of its advantages but also observe some of the controversies it has caused and the thinking and efforts made to resolve disputes. These advantages or controversies are mostly similar to the previous ones. The problems in the external evaluation of universities mentioned are closely related. Therefore, this research will focus on the formation of this excellent framework system, compare the commonalities of each excellent framework, extract the basic characteristics of the excellent framework system, analyze its existing disputes and future development trends, and provide a reference for improving the external evaluation system of foreign universities.

Keywords: *Excellence framework system; External evaluation; UK; Administrative; Scientific research, Science; ranking*

1. Introduction

With the in-depth development of the knowledge economy and the popularization and popularization of higher education, universities will inevitably face more and more external evaluations. Scientific external evaluation can effectively supervise the development of universities and promote the continuous improvement of universities. It is an indispensable part of the modernization of university governance. Unreasonable external evaluation will kidnap the development of the university and affect the basic operation of the university. There are still some urgent problems in the external evaluation of universities in many countries: one is administrative, which shows that the administrative department occupies a dominant position in the external evaluation of universities, which squeezes the utility space of other evaluation subjects. The second is scientific research, including the quantitative advantages of external evaluations focusing on university scientific research performance, and the core position of scientific research indicators in comprehensive university external evaluations. The third is science, which is manifested in the fact that the external evaluation of universities tends to use databases with natural sciences as the main statistical object, ignoring the performance of universities in the field of humanities and social sciences. The

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fourth is ranking, which is manifested in more and more fields and institutions involved in university rankings, and the phenomenon of ranking for the sake of ranking is becoming more and more intense. To a certain extent, these problems limit the exertion of the external evaluation function of universities.

In recent years, the United Kingdom has made fruitful explorations in the external evaluation of universities. The most notable of these is the development of three outstanding series of university evaluation frameworks (hereinafter collectively referred to as the "Excellence Framework"), including those that were put into practice in 2014. The practical "Research Excellence Framework" (REF), the "Teaching Excellence Framework" (TEF) that opened a new stage of teaching quality evaluation in 2016, and the new method of judging university social service activities in 2020 "Knowledge Exchange Framework" (KEF), the three together constitute a complete university external evaluation system, which can be called the "Excellence Framework System". In the process of the formulation, implementation, and evolution of these three excellence frameworks, we can not only discover many of its advantages but also observe some of the controversies it has caused and the thinking and efforts made to resolve disputes. These advantages or controversies are mostly similar to the previous ones. The problems in the external evaluation of universities mentioned are closely related. Therefore, this research will focus on the formation of this excellent framework system, compare the commonalities of each excellent framework, extract the basic characteristics of the excellent framework system, analyze its existing disputes and future development trends, and provide a reference for improving the external evaluation system of foreign universities.

2. Formation of excellence framework system

REF, TEF, and KEF are all university external evaluation activities led by the British government, and they are also the latest policy plans of the British government in terms of university external evaluation. Although they took a shorter time, they all have an earlier source of development, which is the result of the long-term development and evolution of the external evaluation of British universities.

The predecessor of REF can be traced back to the scientific research evaluation activities implemented in the 1980s, and this is a temporary countermeasure taken by the British government under the drastically reduced scientific research funding. After the "Further and Higher Education Act 1992" regularized scientific research evaluation in 1992, the Higher Education Funding Council for England (HEFCE) began to organize and implement the "Research Evaluation Practice". Assessment Exercise (RAE), based on the development of four rounds of RAE, in 2014, HEFCE organized the first round of REF evaluation in collaboration with other institutions. After thirty years of evolution, the university research evaluation represented by REF has matured. The new round of REF, REF2021, is run by the newly established Research England (RE), and the evaluation work will start in 2021.

1997, the Quality Assurance Agency (QAA) has implemented various quality evaluation activities, but none of them can meet the government's desire to promote university competition. By 2012, after drastically reducing university teaching funding and raising the upper limit of student tuition to 9,000 pounds, the British government took advantage of the trend to build a new "student-centered" teaching external evaluation mechanism to promote students to promote university market competition through rational choices, TEF was born from this. TEF is currently run by the Office for Students (OfS), mainly for universities in England. It currently focuses on the quality of undergraduate teaching and will expand to the

postgraduate level in the future. Since 2016-2017, there have been three rounds of evaluation results released, and two rounds of professional evaluation have also been implemented. Although TEF is still in its early stages of development, it has begun to play a role in stimulating competition by guiding students to choose schools [1].

KEF conducts external evaluations for university knowledge exchange activities. Compared with the forced nature of REF when it started and the natural conditions when TEF was established, KEF is more of a plan deliberately carried out by the British government to form an excellent framework system for university evaluation. The so-called knowledge exchange refers to "the process of gathering academic personnel, users of scientific research results, and a wide range of groups and associations to exchange ideas, evidence information, and expert knowledge", which corresponds to the university's social service mission [2]. After taking office, the Blair government clarified the concept of knowledge exchange and increased its investment in university knowledge exchange activities. In 1999, the "Higher Education Business & Community Interaction" survey, referred to as the opening of the UK's evaluation of university knowledge exchange activities, has been widely recognized after years of development [3]. The British government aims to further optimize knowledge. The exchange of evaluations and their use is more important to build an excellent framework system for university evaluation with a unified concept. Therefore, the development of KEF was proposed at the end of 2017. KEF is also implemented by RE and is currently only targeted at universities in England. It will be implemented in 2020. Implement the first round of evaluation.

Jo Johnson, then the Minister of Education of the University pointed out: "We need our universities to become more competitive in terms of production, dissemination, development, and application of knowledge." REF and TEF can respectively evaluate the effectiveness of universities in knowledge production and dissemination. The addition of KEF "will make our university performance evaluation system cover all three dimensions and become complete" [4]. The British government built KEF as another excellent series of evaluation frameworks after REF and TEF. With the implementation of KEF, an excellent framework system for external evaluation of British universities has been formally formed, which constitutes a comprehensive inspection of the three missions of university teaching, scientific research, and social services.

2. The basic characteristics of the excellence framework system

The three excellence frameworks are designed based on a common concept, aiming to improve the rationality of their choices by providing stakeholders with more information related to university activities, and then promote university competition. Therefore, REF, TEF, and KEF maintain many commonalities. These commonalities have become the basic characteristics of the entire excellence framework system and also represent the typical attributes of the external evaluation of universities organized by the government in the UK.

2.1. Government agencies and stakeholders repeatedly run-in

In the process of formulating the Excellence Framework program, the government administrative agency and its subordinate quasi-government agencies act as organizers and stakeholders, and after repeated adjustments with other stakeholders, the program is as reasonable and effective as possible. First, solicit opinions. The Excellence Framework project team under the relevant government agencies will first release the draft when constructing the plan, and then invite all parties to conduct online and offline discussions,

hold symposiums, and finally conduct a special analysis of the feedback results and disclose the conclusions. RE released the relevant draft of REF2021 in July 2018 and received a total of 294 official responses from all parties. At the beginning of 2019, RE released the final plan and announced the results of the opinion consultation analysis [5]. TEF and KEF without a reference standard both went through two rounds of negotiation before forming the final plan. Second, experiment. Before the formal implementation, the project team should conduct small-scale experiments and work with stakeholders to find potential problems in practice. TEF regards 2016-17 as the trial year. After the REF2021 final plan was released, the project team invited some universities to participate in the system test to complete the final revision. When the KEF project team released the draft, it also began to invite and select more than a dozen universities of various types to participate in the experiment. The feedback results of the experiment played an important role in shaping the final draft of the plan. Third, legislation. The part of the Excellence Framework program that involves changes in the funding methods of universities needs to be made through legislation, and this is also an important opportunity for stakeholders to negotiate and play games. In 1992, the government passed legislation to make scientific research evaluation a routine means of allocating scientific research funds. In 2017, the government hoped to link the TEF evaluation results with the increase in tuition fees. In the end, the parties reached a compromise after more than a month of gambling in the parliament and postponed the proposal to another vote in 2020-21 [6]. In the future, the government will also need to go through legislative procedures to promote the linkage of KEF evaluation results with the funding of knowledge exchange projects. Fourth, review and summarize. The retrospective summary can provide all parties with an opportunity to run in again. Generally, the project team entrusts an independent organization to conduct investigation and research. For example, the TEF project team entrusts a well-known research institute to review and summarize the implementation of the previous two years. The institute collected and analyzed the opinions of all parties on the implementation methods and effects of TEF. The recommendations put forward in the research report often become the basis for the next round of program reforms. For example, the reforms of the REF2021 program are mostly the implementation of the recommendations of the Stern Review.

2.2. Close integration of quantitative techniques and qualitative methods

To increase the richness and interpretability of the evaluation results of the Excellence Framework, the Excellence Framework not only strengthens the application of quantitative techniques but also closely integrates the use of qualitative methods. This is specifically reflected in the combination of data and text in the use of evidence and the classification of grades. Combine quantitative calculations with qualitative judgments.

In terms of the use of evidence materials, each excellent framework uses a combination of quantitative data and narrative text. Among them, REF and KEF introduce text in specific dimensions that are not easy to quantify as the basis for evaluation, and TEF uses textual materials as auxiliary materials for a detailed description of each evaluation dimension. [Table 1] lists the evaluation dimensions of each excellence framework and the required evidence materials, in which italics are text materials.

Table 1. Evaluation dimensions of each excellence framework and the required evidence materials

| Excellence Framework | Evaluation dimension | Evidence | |
|------------------------------------|---|--|---------------------------|
| REF | Research results | Basic information data of representative research results | |
| | Research impact | Impact case | |
| | | Number of doctoral degrees awarded | |
| | Research environment | Research income | |
| | | School-level research environment statement | |
| | The narrative of the scientific research environment at the subject level | | |
| TEF | Teaching quality children | Classroom teaching satisfaction | |
| | | Evaluation and feedback satisfaction | |
| | Learning environment | Satisfaction with learning support | Other auxiliary materials |
| | | Dropout rate | |
| | Student learning results | Employment rate | |
| High-skilled employment rate | | | |
| KEF | Cooperative research | Non-academic sector investment in collaborative research | |
| | | Non-academic partners as co-authors | |
| | | British Innovation Agency capital investment | |
| | Working with companies | Income from corporate contract research | |
| | | Income from corporate consulting and equipment income | |
| | Work with the public and the third sector | Public and third sector contract research income | |
| | | Public and third sector consulting and equipment income | |
| | | Income from continuing professional development and continuing education | |
| | Skills, business, and entrepreneurship training | Number of days engaged in the above educational activities | |
| | | Entrepreneurship ratio of equivalent full-time students | |
| | Regional growth and reconstruction | Reconstruction and development income from various channels | |
| | | Additional explanatory materials | |
| | | Estimated average turnover of derivative companies | |
| | Intellectual Property and Commercialization | The average external investment received by derivative companies | |
| | Patent and other intellectual property income as a percentage of scientific research income | | |
| Public and community participation | Number of self-ratings based on certain indicators | | |
| | Additional explanatory materials | | |

In the classification, REF proposed five levels of unqualified, 1*, 2*, 3*, 4*, TEF awarded the participating schools gold, silver, or bronze medals, and KEF quantified the university's knowledge exchange performance in various fields as 1- 10 points. Using quantitative calculation methods to divide the levels can reduce the workload and increase the objectivity of the evaluation results. However, due to the complexity of university evaluation, it is still necessary to rely on the expert knowledge of the evaluators to make comprehensive judgments. Therefore, each framework combines quantitative calculations with qualitative judgments in different ways to make more reasonable evaluations. REF's evaluation of research results mainly relies on quantitative techniques such as bibliometrics and citation analysis. The evaluation of research impact mainly relies on qualitative analysis of the text to determine the grade distribution of the cases submitted by the participating disciplines. The

evaluation of the research environment is determined by comprehensive data and text. The final evaluation result of the participating disciplines is obtained by the weighted summation of the numerical values of each dimension [7]. TEF uses quantitative calculations and then qualitative corrections to obtain the evaluation results. The evaluator first calculates the scores of the participating schools on each of the quantitative indicators, compares them with the benchmark values, and makes a preliminary conclusion about the grades based on the comparison results. Finally, combined with the description of the auxiliary materials, refer to the qualitative standard description to determine the final level. The quantitative calculation of KEF is embodied in the standardization of the quantitative data of participating schools, the addition of equal weights to obtain the value of each dimension, and the percentage position of the school in the same class to obtain the score of each dimension. For text materials, KEF currently presents those completely in the evaluation results, which are left to the independent judgment of all parties, and related qualitative evaluations may be introduced in the future [8].

2.3. Integration of evaluation integrity and object diversity

Whether it is university scientific research, teaching, or social service activities, they are complex and diverse. To this end, each excellence framework has taken certain measures to try to reflect the diversity of its evaluation objects based on the consistency of the overall evaluation.

REF aims to reflect the diversity of disciplines and scientific research activities. REF divides all disciplines into 34 Units of Assessment (UOA), with 34 sub-evaluation groups and 4 main evaluation groups. REF sets common standards while allowing each main evaluation group and its sub-evaluation groups to set up supplementary standards to ensure that the evaluation standards fit the characteristics of each discipline. REF also pays attention to the diversity of scientific research activities, especially interdisciplinary and collaborative research. To support interdisciplinary research evaluation, the project team appointed an interdisciplinary research advisory group to obtain professional advice and arranged an interdisciplinary research evaluation consultant in each main evaluation group and sub-evaluation group. At the same time, universities are encouraged to explain how they support interdisciplinary research in scientific research environment materials. To encourage cooperative research, REF allows multiple universities to participate in the evaluation and encourages the results of the joint signature to appear in different participating materials. It is also hoped that the university will list its measures to promote cooperative research.

TEF aims to reflect the diversity of learning among different student groups. The essence of teaching lies in the learning gains of students, and the composition of students is complex and diverse. The evaluation of teaching quality should not only care about the effect of teaching on students as a whole but also on the effect of teaching on various student groups. Since the 21st century, a major focus of the British higher education policy has been to ensure the participation of various disadvantaged student groups. Therefore, TEF has determined from the beginning to consider the learning outcomes of different student groups, especially the learning experience of disadvantaged student groups. TEF considers student diversity factors including subject, age, admission method, race, gender, region, economic and social status, etc. Each factor has several categories. TEF divides students with the same category of factors into a group. Students can be divided into thousands of groups. In the quantitative evaluation, TEF designed Core metrics and Split metrics. The core evaluation incorporates all diversity factors into the weighted calculation, and only one factor is extracted for the sub-

measurement at a time; the university can also provide supporting materials to explain its weaknesses. Learning support measures for student groups. Through the above methods, TEF has realized the attention to student diversity.

KEF aims to reflect the diversity of knowledge exchange in different types of schools. Each school has its most suitable knowledge exchange activities, which depend on many factors. Ignoring university differences to evaluate is not only unfair but also leads to the convergence of university knowledge exchange [9]. For this reason, the KEF technical advisory team specially launched a university classification study and examined the impact of factors such as the size of the university, scientific research capabilities, teaching characteristics, infrastructure, and region on the knowledge exchange activities. According to the conceptual framework of university classification, the University of England is divided into 32 professional universities and 99 comprehensive universities. In the professional universities, the art group and the STEM group are distinguished, and the comprehensive universities are divided into 5 groups. The evaluation of knowledge exchange in each university is based on the performance of each school in its group, which has the same basis for comparison. This evaluation also makes the comparison between groups meaningful, so that all parties can see the advantages of different types of universities so that they can be more targeted when looking for partners.

2.4. Simplify university affairs and optimize the implementation of effective integration

Throughout the evaluation activities, the Excellence Framework project team strives to simplify university affairs to the greatest extent and ensure simplicity and convenience; on the other hand, it strives to optimize the evaluation implementation process to the greatest extent to ensure the scientificity and reliability of the results. At the same time, the project team tried to effectively integrate these two aspects.

The simplification of university participation by the Excellence Framework not only reduces the administrative burden on universities, but also ensures the standardization of quantitative data, narrative texts, and university submissions, thus laying a foundation for the optimization of evaluation work. First, the Excellence Framework uses existing data as much as possible. The basic information of academic staff in the REF, doctoral degree data, and research income are all obtained from the Higher Education Statistics Agency (HESA). All quantitative evidence of TEF comes from National Student Survey (NSS), HESA and university student employment survey, etc. All quantitative data of KEF comes from Innovate UK report, HESA, and HE-BCI [10]. These data are generally extracted uniformly by project staff. Secondly, each Excellence Framework provides standard templates for text materials and strictly limits the length of the text. For example, REF2021 stipulates that each case form should not exceed 5 pages, scientific research environment materials must meet the word limit, and TEF requires supporting materials not to exceed 15 pages. Finally, to facilitate universities to participate in the evaluation, each Excellence Framework project team will issue corresponding guidelines, and a large number of flowcharts will be used to enable universities to clearly understand the materials to be submitted and the submission process.

Optimizing evaluation work is an important guarantee for simplifying university affairs. To this end, the Excellence Framework project team has implemented the following principles in its work to ensure that the evaluation is fair and effective. The first is to ensure the scientific nature of the evaluation plan. Each project team will invite relevant experts to study the technical effectiveness of the plan. For example, the TEF project team entrusts the National Statistics Office to evaluate the effectiveness of indicator data sources, and the KEF project

team invites Cambridge University. The Center for Science, Technology, and Innovation Policy conducts specialized research on university classification. The second is to increase the democratization of evaluation work. Each excellence framework includes as far as possible various stakeholders in the evaluators. For example, the TEF expert group is composed of teaching experts, student representatives, and employer representatives. The REF evaluation group includes representatives of various interests. In addition, relevant evaluators should be added at the request of the university to ensure that experts have sufficient knowledge. The third is to ensure the coordination and unity of the evaluation work. In addition to uniform training for all staff, each project team has taken certain coordinated management measures. TEF selected several people from HEFCE and QAA and ordered them to coordinate the work of the teams. The chairman of the REF main evaluation group, the director of REF, and the consultants of each group will regularly discuss the progress and problems of each group. The chairman and members of the main evaluation group will regularly participate in the meetings of the sub-evaluation groups to ensure the unity of action. Finally, to maintain the transparency of the evaluation process, REF requires the team secretary to record the details of the team's work procedures, and make them public after the evaluation activities are over, and accept supervision from all parties. TEF and KEF have also taken similar measures to ensure the transparency and traceability of the evaluation process.

3. Development trend of excellence framework system

Although REF, TEF, and KEF have different maturities, they all face some similar controversies. These controversies have triggered many thoughts and discussions and constituted the focus of the three joint adjustments in the future. The adjustment trend has also emerged in practice, indicating the future direction of the external evaluation of British universities.

3.1. From government-led evaluation to multi-party interest balance

The Excellence Framework is still essentially a means of achieving its policy goals led by the British government. Since the 1980s, the British government has been running through neoliberal ideas and related new public management models in national governance. Neoliberalism is economic liberalism and political conservatism, emphasizing both market mechanisms and national authority. Therefore, the essence of the new public management model adopted by the British government is to complete the government's strategic goals based on business logic such as performing inspections and market competition. In more and more affairs, the government not only sets goals but also determines how to achieve them [11]. Although all opinions can be incorporated in the formulation of the Excellence Framework program, the main design of the program and the final formation are all controlled by the government. In the end, it is the government that tells students and companies what a good quality of higher education is through the evaluation results. And through the choices of students and companies, universities can understand what the government wants. This is not only incomplete multiple accountabilities but also a new form of enhanced intervention [12].

However, as the concept of universities changes and their initiative increases, as the status of consumer's increases and their rationality increases, the development of the framework for excellence and other university external evaluations will inevitably be led by the government to further transform into a multi-party balance. In recent years, British universities have changed their closed and arrogant negative posture, agreeing to show their operation process

transparently and openly to the society, and more actively introduce the university's contributions and quality improvement measures to the public, and will also present it to the public after various evaluation results are released. Explain the meaning of the evaluation results to avoid misunderstanding by the public. For example, after the TEF results were announced, the Russell Group reminded students that TEF is only a one-sided measurement of teaching quality. Universities have also adopted more powerful means of power to interfere with the government, such as increasing lobbying for parliament and issuing more research reports on higher education policies. These methods will make the university change from passive to active, reduce the right to speak of the framework of excellence on quality issues, and also increase the right to speak of the university in the formation of the framework of excellence in the future. With the improvement of consumer status, higher education consumers are gradually reluctant to be represented by the government; especially the student groups gradually become independent and rational. During the formation of the TEF program, the National Union of Students (NUS) has begun to show a strong influence. Due to TEF's use of NSS, the parade organized by NUS even had to abolish the NSS. Eventually, the parliament's delay in approving the link between TEF and tuition is not unrelated to the NUS parade. With the improvement of students' rationality, the influence of students will only increase in the future development of the teaching excellence framework. Similarly, the influence of industrial and commercial groups in REF and KEF will continue to increase. As D. Palfreyman said, the next challenge facing England's higher education policy will come from the improvement of consumers' rationality, and this challenge has now begun [13].

3.2. From focusing on economic contribution to investigating the social impact

Under the influence of neoliberalism, the evaluation program of the Excellence Framework will guide universities to make economic contributions as a priority goal. Neoliberalism contains the economic ideology of education. It believes that higher education is fundamentally an economic resource and should be maximized to serve the development of the British economy [14]. The British higher education policy under this guidance has always promoted the economic development of universities. Contribution comes first [15]. REF2014 introduced the "research influence" dimension. Although HEFCE claims that the "influence" is a broad economic and social effect, the definition of this dimension in the evaluation guidelines is very narrow. This dimension is to promote cooperation between universities and industry and commerce and limit universities to economic goals. However, TEF only emphasizes employment performance in the quantitative evidence of student learning achievements and pays special attention to salary level. Such evaluation also emphasizes the economic contribution of education and will guide students to pay attention only to salary and not a social contribution. Although KEF's evaluation dimensions also include cooperation with the public sector, community services, etc., its evaluation indicators are still considered to be lack of effective evaluation of humanities, arts, and social sciences activities, which is more conducive to guiding universities to strengthen cooperation with industry and commerce and focus on intellectual property and commercialization.

In the face of such issues and disputes, REF2021 has revised the definition of research impact in the material submission guidelines and extended it to research impact in various fields such as society, economy, culture, public policy, health, and community. The TEF and KEF project teams have also made it clear that they will introduce new evaluation indicators and measurement methods in subsequent evaluations, breaking through the existing data's emphasis on economic indicators. More importantly, the government's economic primacy of

higher education policy has been challenged by more and more challenges, including those from the opposition parties. The Conservative government has gradually hoped that universities will be able to reach the gap between short-term economic benefits and broader social long-term missions. Strike a balance. Therefore, higher education policies, including the framework for excellence, will inevitably shift from focusing solely on the economic contribution of universities to comprehensively promoting the realization of the social mission of universities.

3.3. From the emphasis on promoting competition to highlighting quality improvement

Neoliberalism promotes the emergence of corporate society and makes competition rules the dominant coordinates of social life [16]. One of the main purposes of the excellence framework designed based on this is to promote university market competition. Although the government has repeatedly pointed out in documents related to the Excellence Framework that the ultimate goal of promoting competition is to improve quality, in fact, the long-term practice only focuses on competition. During the RAE period, the evaluation level was outside the top three disciplines without any funding. In addition, the evaluation at that time was extremely dependent on the peer review of academic oligarchs. In the end, scientific research funds were concentrated in a few universities and their dominant disciplines to the greatest extent [17]. The TEF evaluation results have also caused troubles and brought recession pressure to those non-traditional elite schools that have won bronze medals. In their opinion, its quality has reached the national standard, but after being labeled as a bronze medal, students, especially international students who lack understanding, believe that their quality is low or even unqualified, which affects the school's source of students and sustainability. The UK is trying to create a diversified higher education market, but TEF's competition mechanism does not give emerging universities much room for development.

The British government began to consciously highlight the function of quality improvement in the excellent framework design. In the KEF design plan established at the latest, although there is also a comparison of similar scores, it does not rank or classify, but only shows the differences in the knowledge exchange dimensions of various types of schools. The project team specifically emphasized that this design of KEF is more to let universities understand their advantages and develop targeted development, rather than competing in each dimension; for consumers, KEF does not want them to pass Simple and rude rankings are used to select collaborators but to select the most suitable partners through a detailed understanding of the different characteristics of various colleges and universities. Therefore, interactivity is particularly emphasized in the presentation of results. In the REF period, the government has been trying to maintain a balance between competitiveness and equality. In the reflective study commissioned by the TEF, the damage caused by the competition mechanism has also been raised as a key issue. It is conceivable that the future of REF and TEF The development of the company will inevitably be improved in the direction of outstanding quality improvement.

3.4. From independent development to collaborative evolution

Because REF, TEF, and KEF were established at different times, although latecomers will learn from the forerunners, they can only develop independently of each other. With the establishment of KEF, coordination and co-evolution will become the key issues to be solved by the three in the future. The reason why the three need to work together is rooted in the

close connection between the three mission activities of university teaching, scientific research, and social service.

First, co-evolution must solve the problem of collaboration. Although there are close links between teaching, research, and social services, there are relatively clear boundaries. The difference between social service and the former two is that the purpose of teaching and scientific research lies in the dissemination and production of knowledge, although there will be a certain amount of knowledge production in the process of social service or knowledge exchange. And dissemination, but the main purpose of knowledge exchange is to apply knowledge and directly generate social and economic value. Therefore, REF, TEF, and KEF must demarcate the boundaries of the university activities they evaluate to avoid duplication of evaluations. At present, REF's research impact evaluation includes a certain knowledge exchange activity evaluation. TEF also covers a certain knowledge exchange evaluation when measuring knowledge diffusion, skills, and human capital development. KEF's evaluation of knowledge exchange activities is not comprehensive enough to be difficult. Highlight your independence. The division of evaluation domains will be a problem that must be solved for the three parties to coordinate and evolve together in the future.

Second, co-evolution must solve the problem of cooperation. Teaching, scientific research, and social services constitute a complete system of activities of the university, and they can promote each other and promote together. For the tools to evaluate them, they should also be able to cooperate to promote the development of their respective evaluation activities, rather than increasing the division and competition between various activities. Only in this way can the frameworks of excellence form an organic and unified system. The coordination between REF, TEF, and KEF has been raised by some scholars, and the British government has also begun to experiment in this regard. For example, in the REF2021 plan, the impact on teaching has been added to the relevant forms of scientific research environment evaluation to promote the role of scientific research in teaching. Adding coordinated designs to the plan and strengthening the mutual promotion of teaching, scientific research and social services will be the direction for the co-evolution of the excellence frameworks in the future.

4. Enlightenment from external university evaluation

Although there are still many problems and great room for improvement in the excellence framework system of external evaluation of British universities, it can still inspire the development of external evaluation of foreign universities in terms of its characteristics and exploration of dispute resolution.

First, strengthen the joint participation of multiple stakeholders. The administrative of university external evaluation may lead to the disconnection between university development and the needs of stakeholders, making evaluation only a tool for administrative planning, and therefore it is necessary to provide opportunities for direct accountability for all stakeholders. In addition to encouraging the diversified development of social evaluation, it is also necessary to allow various stakeholders to effectively participate in the external evaluation of universities organized by the government. We need to further open and standardize the official university evaluation program formulation and implementation process, provide students, enterprises, and the public with a channel for opinions and participation, and provide them with possible opportunities to join the evaluation team. At the same time, it is also necessary to improve the user-friendliness of the evaluation results and increase the interactivity so that the results can be used by all stakeholders.

Second, form an all-around evaluation of the functions of the university. The establishment of an excellent framework system for university external evaluation by the British government is of great significance. It attempts to give universities the same important status as teaching, scientific research, and social services and guides the differentiated development of universities through comprehensive university evaluations so that various characteristic universities are recognized so that universities do not have to only scientific research is paramount. We also need to build a comprehensive university evaluation system as soon as possible, with various evaluation mechanisms cooperating, to break the scientific research of evaluation, lead external evaluations to pay full attention to the functions of universities, and promote the diverse and healthy development of universities.

Third, increase the humanity of external evaluation. The scientificization of university external evaluation has not only caused the continuous decline of the humanities and social disciplines of universities but also caused universities to gradually lose the humanistic spirit and ignore the humanistic care and responsibility to society. Increasing the humanity of university external evaluation means not only paying attention to the evaluation of university humanities and social sciences but also providing a platform for universities to show their overall humanistic contributions. The United Kingdom has introduced public participation and social impact on universities in the framework of excellence. The evaluation is precisely for this purpose, which also provides us with ideas worthy of reference. At the same time, since the human element is not easy to quantify, we also need to strengthen the research on qualitative evaluation and the exploration of quality combination methods, to realize the humanistic evaluation under the premise of reducing the burden on universities as much as possible.

Fourth, improve the quality improvement function of external evaluation. Accountability and fund allocation are undoubtedly the important purposes of evaluation activities, but quality improvement should be its original intention and fundamental starting point. At present, university development is hampered by ranking culture, and it is difficult to focus on real quality improvement. The United Kingdom has noticed the problems caused by the ranking competition of university evaluation and removed the simple and rude calculation of the ranking in the KEF scheme. We also need to weaken the competitive factors in the subsequent evaluation plan design, strengthen the quality improvement mechanism, and focus on providing a reference basis for the development of the university's characteristics through scientific classification and displaying differences, and to achieve the unity of internal and external evaluations of the university.

References

- [1] Industrial Facts and Forecasting Research. Evaluation of provider-level TEF 2016-17 (Year 2) (R). London: Department for Education, UK, (2019)
- [2] Office for Students, UK. Joint funding with Research England, [EB/OL], <https://www.officeforstudents.org.uk/advice-and-guidance/skills-andemployment/knowledge-exchange>
- [3] Higher Education Funding Council for England. Annual Report and Accounts 2008-2009 (R), House of Commons, pp.25-28, (2009)
- [4] J. Johnson, "A letter from minister of State for universities, science, research and innovation to HEFCE," [EB/OL], <https://re.ukri.org/documents/2017/jo-johnson-to-david-sweeney>
- [5] Research England, "Consultation on the draft guidance and criteria: Summary of responses," [EB/OL], <https://www.ref.ac.uk/publications/consultation-on-the-draft-guidance-and-criteria-summary-of-responses-ref-201905>

- [6] D. Morri and M. Leach, "UPDATED: Agreement reached on HE Bill as it heads to final stages of debate," [EB/OL], <https://wonkhe.com/blogs/further-changes-to-he-bill-as-commons-gets-set-for-ping-pong>, (2020)
- [7] Research England, "Guidance on submissions," [EB/OL], <https://www.ref.ac.uk/publications/guidance-on-submissions-201901>
- [8] Research England, "Knowledge exchange framework consultation," [EB/OL], T. University KE Framework Good Practice in Technology Transfer
- [9] T. C. Ulrichsen, "Knowledge exchange framework metrics: A cluster analysis of higher education institutions," [EB/OL], <https://re.ukri.org/sector-guidance/publications/kef-metrics-cluster-analysis-hei>
- [10] Research England, "Decisions for the First Iteration," [EB/OL], <https://re.ukri.org/sectorguidance/publications/knowledge-exchange-framework-decisions-for-the-first-iteration>
- [11] T. Tapper, "The governance of British higher education: The struggle for policy control," Springer, no.221, (2007)
- [12] G. Biesta, "Education, measurement and the professions: Reclaiming a space for democratic professionalism in education," *Educational Philosophy and Theory*, vol.49, no.4, pp.315-330, (2017)
- [13] D. Palfreyman and T. Tapper, "Reshaping the university: The rise of the regulated market in higher education(M)," Oxford: Oxford University Press, no.280, (2014)
- [14] T. Tapper and B. Salter, "Oxford, Cambridge and the changing idea of the university," Buckingham: SRHE/Open University Press, no.13
- [15] Department for business, innovation, and skills, *Higher Ambitions: The Future of Universities in a knowledge economy(R)*, London: HMSO, no.41, (2009)
- [16] R. Raaper and M. Olssen, "Mark Olssen on neoliberalisation of higher education and academic lives: An interview," *Policy Futures in Education*, vol.14, no.2, pp. 147-163, (2016)
- [17] Universities UK, "Patterns of higher education institutions in the UK: fifth report," London: UUK, (2005)

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