

# Understanding and Applying the Key Elements of Knowledge Diplomacy: The role of international higher education, research and innovation in international relations

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**Abstract.** Few would question the changing landscape of international higher education, research and innovation (IHERI) or the increased complexities and interconnectedness of the relationships between and among countries of the world. But paradoxically, there is a lack of research on the intersection of these two evolving phenomenon. This article aims to address this by proposing the concept of knowledge diplomacy, instead of soft power, to understand the role of IHERI in building bilateral and multi-lateral relationships based on collaboration, reciprocity and mutuality of benefits. A definition and conceptual framework for knowledge diplomacy are proposed and examined in detail. Three IHERI initiatives – The Pan African University, the German Jordanian University and RENKEI – a research network between Japanese and UK universities – are examined to illustrate how the major elements and principles of the knowledge diplomacy framework can be applied. The article ends by posing questions about the future of knowledge diplomacy and the need for further research.

**Keywords:** international higher education, international relations, innovation, knowledge diplomacy, mutuality, partnership, research, soft power

## Introduction

International higher education has a long and rich history with respect to its contribution to international relations. But in today's more complex, interdependent and globalized world there are new rationales, opportunities, benefits and risks attached to this phenomenon. Examining the role of international higher education, research and innovation in building and strengthening relations among countries is not new. Traditionally the contribution of international higher education is seen through the lens of cultural diplomacy (Gienow-Hecht & Donfried, 2010; Goff, 2013), public diplomacy (Byrne & Hall, 2014) science diplomacy (Ruffini, 2017; Leijten, 2017), education diplomacy (Piros &

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Koops, 2020) and soft power (Yang, 2010; Nye, 2005). However, using a knowledge diplomacy framework for analysis rather than these traditional lenses is more recent and the focus of this article.

International relations is undergoing profound changes related to the role of state and non-state actors, new strategies, and the heightened focus on current challenges such as climate change, food security, pandemics, human rights, migration, in addition to the conventional but still important issues of peace, security, and economic development (Cooper et al., 2013). The landscape of international higher education, research and innovation is also evolving including the development of international joint universities, regional centres of excellence, international and thematic research networks, education/knowledge hubs and cities, among others (Altbach, 2013; Knight, 2015a). It is important to leverage these changes in diplomacy and international higher education to develop a collaborative approach to address urgent global issues. This article introduces the concept of knowledge diplomacy as a new framework to explore and understand the contemporary and changing role of international higher education, research and innovation (IHERI) in international relations and to illustrate how key elements of the proposed knowledge diplomacy framework can be operationalized.

The outline of the article is as follows. The first section highlights major changes in diplomacy such as the role of non-state actors and the use of soft power, as well as new developments in international higher education which impact its role in contemporary international relations (IR). The following section introduces and unpacks the concept of knowledge diplomacy by discussing the proposed definition and conceptual framework. Each of the five foundational elements of the framework – intentions, actors, principles, modes and activities – are examined. To further illuminate the key characteristics of knowledge diplomacy, the next section illustrates how they can be operationalized in real life situations by examining three initiatives that are clearly contributing to strengthening partnerships between countries using IHERI activities. Finally, the last section looks to the future and addresses some of the issues and challenges facing the understanding and use of the concept of knowledge diplomacy. The focus of this article is on the conceptualization of knowledge diplomacy with some examples of key characteristics. It does not explore the role of IHERI in current geo-political tensions between and among countries.

Research on the role of IHERI in IR requires an interdisciplinary approach and attention to how different concepts and terms are used across fields of study. In this article, the term country is used in a broad and inclusive way to cover concepts such as jurisdictions, nations, societies and systems. Diplomacy is another term used in a variety of ways and its definition is hotly debated in IR. For the purposes of this article diplomacy is used in a generic way and broadly refers to the management of relations between and among countries. Higher education refers to the processes of teaching and learning whether it be in a formal or informal manner using a broad range of strategies. Research includes the gathering of information on a subject, investigation, or experimentation aimed at producing new knowledge. Innovation refers to the application of research findings and new knowledge to produce change or new ideas. Knowledge, in the term knowledge diplomacy, is used in

a representational and inclusive sense not literally. It refers to the combination of higher education, research and innovation.

### **The contemporary and changing worlds of diplomacy and international higher education**

The shift from a state-based approach, typically centered on the role of the Ministry of Foreign Affairs and professional diplomats to a multi-actor approach is a hallmark of the new world of diplomacy (Hocking et al., 2012). Not only have a broad spectrum of government organisations – including higher education, science and technology agencies – become key players in diplomatic relations, so too have civil society organisations, multi-national firms and expert networks (Pigman, 2010). Higher education and research in the form of national and regional associations, universities and colleges, research centres, disciplinary groups, expert networks, foundations, and governmental agencies are but a few examples of the diversity of state and non-state education actors actively engaged in international relations (Knight, 2015b).

The increasing use of ‘soft power’ has also had a far-reaching impact on the nature of relations between and among countries. Developed by Joseph Nye, the concept of soft power is popularly understood as the ability to influence others and achieve national self-interest through attraction and persuasion, rather than through military force or economic sanctions – commonly known as hard power (Nye, 2004). Nye notes that the notions of coercion or command are normally associated with hard power while soft power is associated with the concepts of compliance through attraction and persuasion (Nye, 2010). The introduction and use of term soft power by Nye has had a major impact on how the expanding role of international higher education in diplomacy is conceptualized. For instance, Nye (2004) believing in the importance of gaining power through attraction and persuasion states that “the number of countries that regard education as the best way to promote national interests on the world stage is increasing..... Big powers for the first time in history started to pay special attention and importance to the education systems of their universities” (Nye, 2004, p.16). In 2009, he continues to highlight the power of higher education and says that “countries, such as the United States are perfectly informed about the fact that the education system is one of the most essential instruments in terms of dominance in the global political arena. Everyone knows that the education system allows the improvement of economic and political situation of the country” (Nye, 2009, p.17). Lively debate focuses on the rhetoric, potential and limitations of soft power (Hayden, 2012) but in general Nye’s concept of soft power has been influential in the study of international relations and also international higher education even though there are multiple and conflicting interpretations of the concept.

When discussing the contributions of international higher education to improving relations between and among countries (Jones, 2010; Altbach & McGill Peterson, 2008; Li, 2018) often-cited programs of soft power in higher education include the Fulbright Program, British Council activities,

German Academic Exchange Service (DAAD) initiatives and Erasmus Mundus projects. Clearly, these are respected and long-standing programs that are well accepted and make enormous contributions. But why are they described as instruments of soft power when at their heart they promote exchange of students, faculty, culture, research, knowledge, and expertise? Yes, there are self-interests at play, but there is a mutuality of interests and benefits involved for all partners. International higher education is not traditionally seen as a game of winners and losers – it is focused on exchange and partnerships and builds upon the respective strengths of countries and higher education/ research institutions. Yet, it is naïve to ignore the reality that IHERI can be used as a means to gain competitive advantage or to push national self-interests and foreign policy priorities over the interests of others (Wojciuk, 2018). The important issue at play here is to distinguish between the different goals, strategies, and outcomes when IHERI is used in a collaborative manner ensuring mutual but different benefits between partners and countries as in a knowledge diplomacy approach, and when IHERI is used to gain influence and advantage over other actors and countries as in a soft power approach.

### **A working definition and conceptual framework for knowledge diplomacy**

In a recent study Knight proposed the following definition for knowledge diplomacy “*the process of building and strengthening relations between and among countries through international higher education, research and innovation*” (Knight, 2021). In this definition, diplomacy is intentionally framed as a process – a series of actions to receive a result. This approach to defining knowledge diplomacy is consistent with the understanding that diplomacy is generally understood as the process of developing relations between and among countries to operationalize foreign policies (Griffiths et al., 2014). This is a concise and generic definition that captures the meaning of knowledge diplomacy but does not include specific actors, values or strategies. There is much confusion about the use of definitions and descriptions in conceptualization research. A ‘definition’ differs from a ‘description’. The latter has the latitude to change depending on the specific objectives, actors, and outcomes of a particular set of circumstances while definitions usually do not change and that is why they are succinct and address the meaning of core concepts only. A conceptual framework is different again from a definition or a description. A conceptual framework is an analytical tool to explore the meaning and deepen the understanding of a concept such as knowledge diplomacy by identifying and categorizing the foundational elements or concepts of a phenomenon (Ravitch & Riggan, 2016). The proposed conceptual framework as presented in Table 1 is oriented to the phenomenon or process of knowledge diplomacy not a policy or a theory of knowledge diplomacy. The structure of the proposed conceptual framework for knowledge diplomacy is based on five foundational elements: 1) intentions, purpose or driving rationales 2) multiple actors and partners 3) underlying principles and values 4) primary modes or approaches used and 5) the activities or instruments (Knight, 2021).

The following sections discuss each constituent element of the conceptual framework for knowledge diplomacy.

**Table 1. Conceptual framework for knowledge diplomacy**

<b>Intentions, Purpose, Rationales 1</b>	<b>Actors, Partners 2</b>	<b>Principles, Values 3</b>	<b>Modes, Approaches 4</b>	<b>Activities, Instruments 5</b>
<p>To build/ strengthen relations between and among countries through international higher education, research and innovation (IHERI)</p> <p>To use IHERI to help address global challenges and promote peace and prosperity</p> <p>To strengthen IHERI through enhanced relations between and among countries</p>	<p>Government departments and agencies related to education, science, technology, innovation at all levels</p> <p>Intergovernmental agencies related to IHERI</p> <p>NGOs related to IHERI</p> <p>HEIs</p> <p>Research centres</p> <p>Think Tanks</p> <p>Centres of Excellence</p> <p>Research Networks</p> <p>Foundations</p> <p>Innovation Centres</p> <p>Experts</p> <p>Private sector - Multi-national Corp</p>	<p>Reciprocity</p> <p>Mutuality</p> <p>Cooperation</p> <p>Common ground</p> <p>Exchange</p> <p>Commonality</p> <p>Partnership</p> <p>Common good</p> <p>Inter-disciplinary</p> <p>Multi-sector</p> <p>Transparency</p>	<p>Negotiation</p> <p>Communication</p> <p>Representation</p> <p>Conflict</p> <p>Resolution</p> <p>Compromise</p> <p>Collaboration</p> <p>Mediation</p> <p>Conciliation</p> <p>Building trust</p> <p>Dialogue</p>	<p><i>Generic:</i></p> <p>Networks</p> <p>Joint projects</p> <p>Conferences</p> <p>Summits</p> <p>Coalitions</p> <p>Track Two</p> <p>Agreements</p> <p>Working Groups</p> <p>Institution building</p> <p><i>IHERI specific:</i></p> <p>Intl joint universities</p> <p>Student/scholar exchanges</p> <p>Research networks</p> <p>Education/ Knowledge Hubs</p> <p>Scholarships</p> <p>ODA projects</p> <p>Twinning and Joint Degree Programs</p>

Source: (Knight, 2021)

### *Intentions, purpose, rationales*

The macro level goals underlying knowledge diplomacy include building and strengthening relations between and among countries and using IHERI to help address global challenges. Central to the notion of knowledge diplomacy is collaboration among the different actors and partners working towards meeting both self and common interests. This depends on, and further strengthens, positive and productive relations between and among countries. Because knowledge diplomacy brings together a network of different partners from various sectors to address common issues there will be different intentions, self-interests and implications for the individual countries and actors involved. This means that in spite of common concerns, actors will bring different needs, priorities and resources to the partnership and tensions among the actors are inevitable. These differences will need to be respected, negotiated and mediated to ensure that the strengths and opportunities for each partner are optimized. This is done through a horizontal collaborative type of relationship that acknowledges the different but

collective rationales, needs and resources of the group of partners to reach a common understanding. This is core to the notion of diplomacy in general, and knowledge diplomacy in particular.

### *Actors and partners*

While universities and colleges are key players in knowledge diplomacy there is a broad range of other state and non-state IHERI actors involved. These include national, regional or international centres of excellence, research institutions, foundations, think tanks, professional associations, private sector companies, non-governmental organizations, education and knowledge hubs and cities, and different sector governmental departments/agencies. In many cases the IHERI actors are working with other sectors and/or disciplines depending on the nature of the initiative. Common partners include industry, civil society groups, foundations, governmental agencies. Working with a diversity of IHERI and other partners is a key feature of knowledge diplomacy. Knowledge diplomacy includes actors and partners working together in bilateral/multi-lateral relationships and at national, regional and international levels with the aim of building stronger relationships between countries as well as sharing knowledge to address national, regional or global issues and research priorities.

### *Principles and values*

Principles and values are an integral part of diplomacy (Rathbun, 2014) and foreign policy (Srinivasan et al., 2019) and thus core to understanding knowledge diplomacy and differentiating it from other terms. The values of cooperation, reciprocity and mutuality are fundamental building blocks of knowledge diplomacy. Different needs and resources of actors will result in different benefits (and potential risks) for partners. Mutuality of benefits does not mean that all actors/countries will receive the same benefits in a symmetrical fashion. It does mean, however that the principle of mutuality and reciprocity of benefits will guide the process and there will be collective and different benefits accrued for different actors and countries. The conceptual framework makes the fundamental principles/values of knowledge diplomacy explicit. Making values explicit does not necessarily imply that they are normative in nature or indicating a preferred approach. Whether these values are interpreted to be inherently good or desirable is in the eye of the beholder (i.e. key actors and stakeholders) and are dependent on desired outcomes. For instance, cooperation and reciprocity can be seen as desirable in some cases where in other circumstances competition is seen as more attractive and advantageous.

### *Modes and approaches*

Knowledge diplomacy is based on horizontal relationships between and among major actors and countries and focuses on collaboration, negotiation and compromise to ensure that the goals are met

and there are benefits for all. There is no doubt that in spite of common concerns, there will be potential conflict given inevitable differences in self-interests and expectations among actors. However, a diplomatic approach in general, and knowledge diplomacy more specifically, rely on negotiation, mediation and conflict resolution to address these differences and find a common ground. In general knowledge diplomacy is based on a collaborative win-win approach to addressing common issues as well as meeting individual country self-interests.

### *Activities/ Instruments*

The activities/instruments generally associated with international relations and diplomacy include joint meetings, conferences, track two negotiations, summits, coalitions (Cooper et al., 2013). These are central to diplomacy in general and also apply to knowledge diplomacy. However, because knowledge diplomacy has international higher education, research and innovation at its core, there are additional salient activities which differentiate it from other types of related diplomacies. Traditionally the activities such as scholarships and student/scholar exchange have been cited as important to building partnerships (Chou & Spangler, 2018) but as previously discussed more contemporary IHERI developments such as international joint universities, international thematic and interdisciplinary research networks, education/knowledge hubs, regional centres of excellence, international branch campuses, alumni networks, centres of excellence and twinning programs play an important role in knowledge diplomacy.

Important to emphasize is that the elements of the knowledge diplomacy framework can overlap with different types of higher education internationalization activities. However it is misleading to suggest that they are the same. Knowledge diplomacy builds on the fundamental functions of higher education (teaching/learning, research, knowledge production and innovation, and service to society). Normally, the process of knowledge diplomacy involves multiple forms of IHERI as dictated by the nature and complexity of the issue being addressed. Individual IHE activities (i.e., student mobility, scholar exchange, joint conference) are part of the larger networked series of activities involving multiple actors and strategies but as stand-alone activities they normally do not constitute knowledge diplomacy. As stand alone activities they are more accurately described as internationalization strategies and while they have multiple benefits they are not specifically designed to contribute to sustainable international relations between countries although that can be a by-product. Thus it is important not to conflate or label all international education higher education internationalization activities as knowledge diplomacy. It is prudent to recognize that while the concepts overlap due to the use of similar actors and activities the rationales, intentions and outcomes can differ.

## Illustrating the key elements of knowledge diplomacy

The purpose of this section is to illustrate how the major elements of the proposed conceptual framework for knowledge diplomacy can be applied in real life situations. To that end three contemporary IHERI initiatives are analyzed to demonstrate how the five foundational elements of the knowledge diplomacy framework can be operationalized. These IHERI initiatives have been operating for more than five years and come from different developing and developed countries in the world. They are the Pan African University – a region wide multi-campus initiative founded by the African Union, the joint German-Jordan University jointly established by the German and Jordanian governments and located in Jordan, and RENKEI a network of universities from Japan and the UK working on knowledge economy initiatives.

### *Pan African University<sup>1</sup> – a regional university*

The Pan-African University (PAU) is an example of a contemporary IHERI initiative involving a university with multi-campus located across the African continent. PAU was initiated in 2013 to establish a regional university system to serve the entire continent in key development areas and to strengthen the regional integration goal of Africa's Agenda 2063. The initiative was started by the member states of the African Union and is funded jointly by the African Development Bank, host African countries, World Bank and international partners. The PAU is made up of five post-graduate, training and research institutes, hosted at leading universities in the West, North, East, Central and South regions of the African Continent. Each institute focuses on one of the strategic areas for African advancement, as determined by the Conference of Ministers of Education of the African Union. The research institutes are: 1) Kenya: Basic Sciences, Technology and Innovation located at Jomo Kenyatta University of Agriculture and Technology, 2) Nigeria: Life and Earth Sciences, including Health and Agriculture, located at University of Ibadan, 3) Cameroon: Governance, Humanities and Social Sciences located at University of Yaounde II, 4) Algeria: Water and Energy Sciences located at the Abou Bakr University of Tlemcen, 5) South Africa (future plan): Space Sciences Institute located at Cape Peninsula University of Technology (Africa Union, 2016).

**Intentions, purpose, rationales:** The PAU is considered to be a key player and contributor to the operationalization of the first 10-year phase of the African Union's Agenda 2063. The Agenda 2063 outlines a vision for pan-African unity for the creation of an 'integrated, prosperous and peaceful Africa, driven by its own citizens, representing a dynamic force in the international arena.' The Agenda 2063 document, ratified in 2015, charts a path for 'inclusive and sustainable development, a

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<sup>1</sup> <https://pau-au.africa/>



politically-integrated continent, peace and security, fused together by a strong ‘cultural identity, common heritage, shared values and ethics’ (African Union, 2015). This is clearly an example of using IHERI to further African regional integration in a similar fashion that the European Union used higher education to realize their goals of developing a strong regional identity and deeper social, economic and cultural integration.

A review of the stated objectives reveals how PAU strives to enhance collaboration and integration between and among African countries through IHERI activities. The two primary academic objectives are to 1) stimulate collaborative, internationally competitive, cutting-edge fundamental and development-oriented research, in areas having a direct bearing on the technical, economic and social development of Africa while recruiting, training, and retaining African talent, and 2) enhance the mobility of students, lecturers, researchers and administrative staff between African universities to improve teaching, leadership, collaborative research and create regional/continental integrating networks<sup>2</sup>.

**Actors:** The African Union, the African Development Bank and five national African governments are the key state drivers behind the PAU. State and non-state actors include universities, centres of excellence, foundations and research centres that are members of the five regional networks. International universities and governments are additional partners, and share expertise, participate in joint research projects, and provide some funding opportunities. For instance, Germany supports the research institute in Algeria; Sweden works with the institute Cameroon; India and Japan are involved in supporting the institute in Nigeria; and China collaborates with the institute in Kenya. The European Union has also been involved, providing initial funding for student scholarships. The African Development Bank was the main funder of the project and the World Bank provided additional start-up funds.

**Principles/values:** Partnership and collaboration are key principles driving the development and operation of regional networks which are co-ordinated by a continental wide strategy. Cooperation with African based public and private organizations for internships, joint research, and knowledge exchange are a priority and illustrate the importance of mutual benefits. The relationships between the regional education and research networks and international governments and universities further demonstrate the value and benefits of working as partners. The theme of each network illustrates the multi-sector and interdisciplinary nature of the entire PAU initiative. In terms of mutual benefits, African researchers and graduate students benefit from the increased collaboration in their region as well as the international support and exchange with their international thematic partners. National governments in the host African counties have benefited from increased research capacity at their

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<sup>2</sup> <https://pau-au.africa/>

institution and developing a leadership role in their region to collaborate with industry and non-governmental organization while addressing major societal issues facing the continent. International partners have benefitted from finding common ground, building trust and deepening relationships with African research institutes and industry. In turn, these activities and benefits contribute to the operationalizing of the Agenda 2063 goal of “inclusive and sustainable development, a politically-integrated continent, peace and security, fused together by a strong ‘cultural identity, common heritage, shared values and ethics’ (African Union, 2015).

**Modes:** A project as large and ambitious as the Pan Africa University is not without conflicts and differing priorities among the major players and funders. Negotiation, conflict resolution, mediation and compromise are necessary to reach common ground and a way forward. The creation of five regional networks consisting of multiple state and non-state actors also requires a consultative and collaborative approach to negotiating priorities, budgets and strategies. These are fundamental modes used in diplomatic relationships and are essential in knowledge diplomacy.

**Activities/Partners:** Based on the primary goals and operating principles of PAU, the main IHERI activities focus on graduate level programs including internships, knowledge production and innovation; academic exchange of students and scholars across Africa; and joint research within the networks and with international partners. Scholarships are available to students from African countries as well as those of the African diaspora. Enrolment quotas are in place to ensure regional representation and gender parity. No more than 20% of new students can be from the host country and an equal number of men and women must be accepted. An interesting and important feature of PAU is that graduate programs are designed to intentionally build a unified African identity beyond national differences. Students are required to take two general education courses to further this aim: General History of Africa and Gender and Human Rights. All students are required to collaborate with industrial or governmental partners throughout their program, with internships being mandatory. Finally, students must sign a contract committing to work in Africa after the completion of their program to ensure that the new talent continues to work towards African development priorities and integration.<sup>3</sup>

Two flagship research projects illustrate the emphasis on collaboration, partnerships and mutuality of benefits as well as the types of global/ regional issues being addressed. The West African Science Center on Climate Change and Adapted Land Use project was developed jointly by researchers from the Universities of Cotonou (Benin), Bonn (Germany), and Miami (USA) and their industry and governmental partners. The aim of this project was to create sustainable institutional relationships that develop a community of experts in areas of natural resource management aiming to

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<sup>3</sup> <https://pau-au.africa/>

conduct research and offer practical applications. The Institute for Water and Energy Sciences in Algeria offers another example of the PAU's collaborative research projects with its researchers working with German universities to host international research symposia bringing together specialists in water and energy sciences from around the world (Koli et al., 2019).

When fully realized, the PAU will be the sum of five thematic regional institutions/networks with 50 related centres of excellence across the African continent working towards and using IHERI and knowledge diplomacy as a means to achieve the long term goal and core aspiration of Agenda 2063 which is to make Africa 'strong, united, resilient and influential global player and partner.'

### *The German-Jordanian University – an international joint university*

As discussed, the landscape of international higher education is changing dramatically and goes beyond the traditional activities of scholarships, student and scholar mobility and bilateral university agreements. An innovative development in international academic partnerships is the creation of international joint universities (IJUs). IJUs are new independent universities created through collaboration between higher education institutes and governments from two or more countries. These new institutions move beyond the branch-campus model where one university establishes a 'bricks and mortar' campus of its own in another country. Instead, an IJU is cofounded by the government/university located in the host country and the government/universities located in the foreign partner country. Together they develop a new university based on joint academic programs, collaborative research projects, scholar and student exchanges and partnerships with local industry, governments and non-government organizations (Knight & Simpson, 2021).

Germany has been a leader in this area, establishing seven new IJUs in partnership with foreign governments in Vietnam, Egypt, Mongolia, Kazakhstan, Jordan, Oman and Turkey and several more are in the planning stage. In the German experience of co-founding IJUs, it is common for the new IJU to begin with a Memorandum of Understanding between the two governments, after which a council, with representation from both countries, is established to determine the mission and operations of the new institution. These councils include university leaders, academics, and government officials from foreign affairs and education ministries. Together they determine mutual priorities, roles and responsibilities, and benefits. IJU's are based on and exhibit many elements of the knowledge diplomacy framework as illustrated by examining in some detail the German-Jordanian University.

The German-Jordanian University (GJU) was one of the first IJUs and was jointly created in 2005. It draws on the German education and applied research model to create relevant academic programs to meet the human resource needs of Jordan, build high-tech research capacity in Jordan through partnerships between Jordanian and German academics and industries, and strengthen relationships and trust between the two countries. The German-Jordanian University is committed to facilitate student and scholar exchanges, joint academic programs, scholarships, joint research and engagement

with industry, and outreach in Jordan and the surrounding region.

**Intentions, purpose, rationales:** The GJU was jointly created and funded by the Ministry of Higher Education and Scientific Research of the Hashemite Kingdom of Jordan and the Federal Ministry of Education and Research of the Federal Republic of Germany with the explicit mandate to integrate, ‘people and nations; cultures and disciplines; science and practice’<sup>4</sup>. The GJU is modelled on the German applied-sciences approach and is characterized by a strong focus on putting knowledge into practice and on promoting knowledge transfer, often in collaboration with industry, non-government agencies, research centres and foundations.

**Actors/Partners:** The key players in this bilateral initiative include national governments, universities and their external partners including industry, business and local non-governmental organizations from both Jordan and Germany.

**Principles/Values:** As illustrated by their collaborative efforts to fund and establish this new international joint university and its stated mandate to integrate, ‘people and nations; cultures and disciplines; science and practice’ the key principles supporting this IHERI initiative are cooperation, reciprocity, working towards common interests according to the needs and priorities of each country, and mutual but different benefits.

**Modes/Approaches:** Throughout the planning, development, and operationalization stages of GJU there was continuous consultation, dialogue, negotiation, collaboration and exchange between the Jordanian and German governments and founding universities. It can be described as a horizontal relationship trying to maintain a win-win approach to ensure that the different needs, priorities and expectations of each country were respected.

**Activities:** As already discussed the major activities include joint academic programs, collaborative research initiatives, student and scholarly exchange, collaboration on applied science and innovation with industry and governmental and non-governmental agencies. An example of an innovative and successful joint initiative has been the establishment of the GJU Office for Industrial Links mandated to create and sustain liaison between university and non-university actors for the purposes of research, training and employment. To that end, as of 2019 the office has developed 32 partnerships within Jordan including several with major NGOs and governmental agencies and has signed 75 partnership agreements with German businesses ranging from Thymoorgan Pharmaceuticals to Puma Athletics. These partnerships focus on research, innovation and provide students with the opportunity to

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<sup>4</sup> <http://www.gju.edu.jo/content/about-gju-687>

complete 5-6 month internships in Germany or Jordan and transition smoothly into the workforce in addition to expanding the network of partnerships between the two countries.<sup>5</sup>

In terms of research and innovation all GJU graduate programs are actively engaged in research with an emphasis on producing new knowledge for application and innovation, especially with business and industry. However, research is also conducted for the broader public good in Jordan and the surrounding area. For example, the department of Architecture and Interior Architecture has a strong focus on architectural conservation. Faculty and graduate students work with local communities to develop sustainable architecture projects that account for heritage buildings and surrounding archeological sites. Likewise, the graduate department of Social Work, focuses on the needs of migrants and refugees, and faculty research deepens the knowledge base on displaced people with a specific focus on Syria and other countries in the Middle East.

Student mobility and exchange is a top priority of the GJU. Since 2006, up to 100 students per year travel in both directions between the two countries. The German government has provided scholarships for GJU students to continue graduate studies in German. GJU has also developed agreements with several German universities to host Jordanian students for a year of exchange during their degree. Similarly, agreements are in place for German students to study at the GJU either on short-term visits or for their whole degree program in order to better understand Jordanian culture and develop close academic relationships.

For Jordanian students who are not able to participate in the exchange programs they are able to experience German culture on campus through the language training and social activities of the German Language Centre. All undergraduate students at the GJU are encouraged to take introductory levels German language classes. GIU believes that language acquisition is helpful for Jordanian students and researchers to be more aware of German culture as they forge deeper ties with German partners. This arrangement illustrates the mutual benefits of student exchange and how it plays an important part in strengthening relations between Germany and Jordan.<sup>6</sup>

The review of the GJU demonstrates how IHERI activities, through knowledge diplomacy, are a means to achieving closer ties and collaboration between the two countries and also strengthen academic priorities.

### *RENKEI – The Japan-UK Research and Education Network for Knowledge Economy Initiatives*

In 2010, the UK's foreign secretary visited Japan to chart a plan for stronger university collaborations between the two nations. Japan and the UK are important allies because of their noticeable similarities: both are small, densely populated islands with similar systems of higher education, and both produce

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<sup>5</sup> <http://www.gju.edu.jo/content/industrial-relations-committee-7229>

<sup>6</sup> <http://www.gju.edu.jo/>

internationally respected research and degree programs. Collaboration between university researchers as well as industry and civil society partners is viewed as a key strategy to building trust, strengthening relationships between the two nations and addressing societal issues common to both countries. To that end RENKEI was founded in 2012 as a joint initiative by the governments of Japan and the United Kingdom with the goal of strengthening relationships between the two nations by developing academic-industry research collaborations that would address major societal issues. The British Council serves as the secretariat for the network. Between 2012 and 2018, RENKEI's working groups addressed pertinent issues such as Sustainable Energy, War, Slavery, Aerospace Engineering, Renaissance Entrepreneurship, and Living with an Aging Society.<sup>7</sup>

**Intentions/Purpose/Rationales:** The purpose of the RENKEI network as stated in the 2018-2019 Annual report is “to provide a strong foundation from which other bilateral relationships in trade and security for example can prosper..... the consortium plays a vital role in the sharing of knowledge and ideas leading to deeper levels of trust, prosperity and security between the two countries” (British Council, 2019, p.3). This clearly states that a primary goal driving RENKEI is to strengthen relations between the two countries through IHERI activities illustrating the integral role of knowledge diplomacy.

**Actors/Partners:** The network includes six universities in Japan and six universities in the UK. Core to the mandate of the network is collaboration with partners from business, industry, civil society groups and government agencies. These external partnerships are involved to different degrees in events and projects run by the issue-specific working groups of the network.

**Principles/Values:** The word RENKEI, in addition to the acronym for the name of the network, also means ‘collaboration’ in Japanese. Collaboration, partnership and exchange are foundational values and expressed through the reciprocal relationships among the 12 universities and the cooperation with external partners, especially industry. Mutuality of benefits is a key principle. Both Japan and the UK benefit from the binational research collaborations developed through RENKEI. For example, in the field of Sustainable Energy workshops were held in both Southampton and Tohoku and included senior researchers, graduate students and industry partners. Japan benefited from these activities as specific attention was given to the Fukushima incident and strategies were developed to address energy gaps after natural disasters. Participants from the UK designed low-carbon energy systems for a new section of Southampton. Furthermore, the global scope of both the social issues and the researchers, meant benefits to other countries as research groups went on to design sustainable energy interventions for cities in Bolivia, Taiwan, Mexico and Spain (British Council, 2018).

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<sup>7</sup> <https://www.britishcouncil.jp/en/programmes/higher-education/university-industry-partnership/renkei>

**Modes/Approaches:** During the establishment and operation of the network, the different priorities, needs and resources of each country were discussed and negotiated in order to ensure that mutual but different benefits were accrued for the major actors from both countries. The different working groups of the network were based on a model of collaboration through partnership and exchange of research, students, professors, and knowledge related to their specific theme.

**Activities:** Workshops, seminar, conferences are key activities of the network. They differ in terms of purpose, scope, format, participants and outcomes. Each thematic working group develops a series of workshops around their topics to further research collaboration and exchange and are hosted by a member university in either Japan or the UK. For example, in 2016 the University of Osaka worked with the University of Liverpool to host a workshop ‘Living with an Ageing Society’. Through field visits, sessions to exchange research and insights into key challenges, the participants worked together to understand the different perceptions of ‘old age’ in Japan and the UK and to prepare research proposals for future collaboration. The workshops/conferences related to Aerospace engineering were designed to build research collaboration with industry. The workshops fulfill a key RENKEI goal of engaging external actors in university to university collaboration in order to strengthen knowledge production and exchange, innovation and relations between the two countries. Approximately 90 external organizations have participated in RENKEI workshops during the first 6 years of operation.<sup>8</sup>

With the completion RENKEI’s first five-year term (2012-2017), the organization set new strategic priorities to guide its activities between 2018 and 2023. During this second phase, RENKEI’s key research areas are Climate Change and Health. These issue areas were chosen to align with the priorities of the 2017 Japan-UK Joint Declaration on Prosperity Cooperation. In this way, RENKEI continues to be a key contributor to strengthening Japan-UK relations and at the same time it has enhanced research capacity and output of professors and graduate students and increased their collaboration with industries across the two countries.

### *Analysis of the three IHERI initiatives*

The analysis of these three IHERI initiatives has illustrated how the key elements of the knowledge diplomacy conceptual framework can be operationalized. The diversity of partners involved in collaborative IHERI activities illustrates how the knowledge diplomacy approach includes both state and non-state actors. The establishment of bilateral and multi-lateral IHERI networks across countries, disciplines and sectors based on collaboration, exchange and partnerships were commonly used to build and expand stronger relationships between and among countries and yielded mutual but different

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<sup>8</sup> <https://www.britishcouncil.jp/en/programmes/higher-education/university-industry-partnership/renkei>

benefits for partners. Traditional IHERI activities such as scholarships, student/scholar exchanges and language training as well contemporary IHERI projects such as regional multi-campus universities, international joint universities, and multi-stakeholder thematic research networks illustrated several of the key activities used in a knowledge diplomacy approach. These correspond closely to the major principles, modes and activities detailed in the knowledge diplomacy framework in Table 1.

Important to note are the officially stated purposes of these three IHERI initiatives. PAU is seen as a key player to realize the African Union's Agenda 2063 declaration which charts a path for 'inclusive and sustainable development, a politically-integrated continent, peace and security, fused together by a strong cultural identity, common heritage, shared values and ethics.' Similarly, the German Jordanian University 'was established to help integrate people and nations; cultures and disciplines; science and practice' through joint IHERI activities and partnerships. RENKEI is used as "a key strategy to building trust, strengthening relationships between the two nations and tackling societal issues" and to meet the objectives of the 2017 Japan-UK Joint Declaration on Prosperity Cooperation. The manner in which IHERI is used to achieve the international relations goals of these three projects aligns with the intentions clearly articulated in the conceptual framework for knowledge diplomacy.

The purpose of discussing these three IHERI initiatives was to illustrate how each element of the knowledge diplomacy framework can be applied in order to demonstrate real life application of the key elements/concepts forming the conceptual framework and how different they are from a soft power approach which uses attraction and persuasion to achieve compliance and competitive edge in a top -down relationship (Knight, 2021).

## **Challenges and issues**

This article introduces the concept of knowledge diplomacy which is based on collaboration, negotiation, conflict resolution, reciprocity, and mutual benefits in the co-creation, transfer and application of knowledge. It involves multiple actors from different countries, from different sectors, and from different disciplines. This differs substantially from a soft power approach which primarily focuses on serving national self interests through competitive higher education and research strategies and the subtleties of persuasion, attraction and compliance. However, it is important to be aware that knowledge diplomacy can easily become a buzzword to camouflage national and regional ambitions to promote self-interest at the expense of mutual interests and benefits. As the concept of knowledge diplomacy becomes more commonplace, unrealistic expectations can be made about its role, contributions and sustainability. Knowledge diplomacy is not a silver bullet. Expectations of its contribution to international relations need to be managed to avoid early misunderstandings or dismissal of its value and potential.

There are many unanswered questions related to knowledge diplomacy. Will politicians



appreciate knowledge diplomacy as an international relations instrument that can advance the interests of some nations without limiting the prospects of others? Can knowledge diplomacy be operationalised and sustained in light of competing priorities within and between countries/regions and a surge in nationalism? Can the contribution and impact of knowledge diplomacy be measured? Is it feasible to develop mechanisms where education, research and innovation complement each other to achieve goals that each could not accomplish on their own? Will knowledge diplomacy be seen as a two-way process whereby IHERI can contribute to building relations between and among countries and conversely, will strong relations between and among countries help to enhance higher education and research? These are but a few of the questions that need to be explored.

Developing a framework, policies, strategies and commitment to knowledge diplomacy cannot be done without facing the harsh realities of international politics and the challenges of the more competitive, nationalistic and turbulent world in which we live. However, it must be asked whether we can afford to ignore the potential of knowledge diplomacy to address and contribute to the resolution of national, regional and global challenges (Knight, 2018).

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