

A Comparative Study of Higher Education System Between India and Germany in The Present Era

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ABSTRACT

The study paper provides a comparison between the higher education system of India and higher education system of Germany in respect of aims and objectives, structure, curriculum, opportunities and current issues or their common focus areas in the present era. The paper also gives a glimpse of history of higher education in ancient India-the era when India used to provide world class higher education and also history of higher education of Germany. The data are collected from primary and secondary sources. The methodology adopted for the study is documentary analysis. The results reveal that both India and Germany have same type of educational structure comprising of bachelor degree, master degree, doctoral and post-doctoral programs and emphasize on professional expertise but India focuses primarily on theoretical knowledge and democratic values inculcation, science and spiritual education and Germany focuses chiefly on practical implementation of theoretical knowledge, skill development, research and innovations, capacity building in higher education, forming intellectual property, entrepreneurial development, creating diversity of people and ideas, promoting global citizenship and societal sustainability. The USP of German higher education is that quality higher education is provided at a very low cost or no tuition fees charged at the world class German universities, offers diversified course, dual study programs and a lot of flexibility like switching major and education policies are formulated frequently considering the present need and demand. Recently both countries' focus areas are digitalization of higher education, teacher improvement program for higher education, internationalization, foreign students and faculty exchange programs, increase in spending on education and decentralization of higher education. The paper concludes with India being a largest democracy and one of the developing nations, Indian higher education system can consider German higher education system as a benchmark and can imbibe the positive qualities for improvement and enrichment.

KEYWORDS: Comparative study, Higher education system, present era

INTRODUCTION

Higher education comprises all post-secondary education, training and research guidance at education institutions such as universities that are authorized as institutions of higher education by state authorities (*JICA in reference to the World Declaration on Higher Education adopted by the World Declaration adopted by the World Conference on Higher Education, 1988*).

In ancient India both formal and informal ways of education system existed. Students went to viharas and universities for higher knowledge. Among the prominent Vedic scholars, we find Maitreyi, Viswambara, Apala, Gargi and Lopamudra and many more. Many monasteries/ viharas were set up at Benaras, Navadeep and Kanchi for monks and nuns to meditate, debate and discuss with the learned and renowned scholars for their quest for knowledge during this period. Around these viharas, other educational centers of higher learning developed, which attracted students from China, Korea, Tibet, Burma (Myanmar), Ceylon, Java, Nepal and other distant countries. The Chinese scholars Xuan Zang and I-Qing gave vivid account of education in India. The most notable universities of ancient India were Takshashila, Nalanda, Valabhi, Vikramshila, Odantapuri and Jagaddala. Takshashila or Taxila was famous for higher education in India and in her curriculum ancient scriptures, law, medicine, astronomy, military science and eighteen shilpas or arts were taught. At Nalanda University subjects like fine arts, medicine, mathematics, astronomy, politics and art of warfare were taught (*NCERT*).

Once a hub of higher education in ancient India, the position of Indian higher education sector is quite at stake in the present scenario. As per the ranking of **Quacquarelli Symonds (QS) World University Rankings 2024**, which provide an international benchmark for the performance and popularity of universities the world over, has again disappointed the country's education sector (*DECCAN HERALD, 2023*). In the 20th anniversary edition of the rankings for 2024, Indian Institute of Technology (IIT) Bombay emerged only as the best Indian institution by securing 149th rank (*THE HINDU, 2023*).

The Ministry of Education, Government of India has released All India Survey on Higher Education (AISHE) 2020-2021. The Ministry has been conducting All India Survey on Higher Education since 2011., covering all higher educational institutions located in India and imparting higher education in the country. The total enrolment in higher education has increased to nearly 4.14 crore in 2020-21 from 3.85 crore in 2019-20. Since 2014-15, there has been an increase of around 72 lakhs in the enrolment (21%). The total number of Universities/University like institutions registered is 1,113, Colleges 43,796 and Standalone Institutions 11,296 (*PRESS INFORMATION BUREAU*).

The number of students going overseas has increased by a significant 68% in comparison to 444,553 students going abroad in 2021, the data shows. The number of students choosing to study abroad showed a significant rise from 454009 in 2017 to 517998 in 2018 and 586337 in 2019. However due to COVID-19 pandemic, the number fell by half, declining to 259655 in 2020, the Bureau of Immigration, Ministry of Home Affairs maintains departure and arrival data of Indians. UGC chairperson **M. JAGADESH KUMAR** stated that in 2014, there were 200 million students in higher education institutions globally and this figure is going to get double by 2030 and a significant percentage of these students will be Indians (*HINDUSTANTIMES.COM*). After China, India is the second country with the most foreign students in Germany i.e., 33,753 (*erudera*).

In Germany two historical periods have huge influence on German tradition of higher education. One is the medieval period during which the first European universities were founded and the early nineteenth century of neo-humanist renewal and reform of the university in Prussia.

The historical roots of the German higher education institutions dated back to the common European tradition of the medieval university during the 12th century. The first universities within German dominated holy Roman empire of that time were Prague (1348) and Vienna (1365). Then by the end of the 15th century, the universities in Heidelberg (1385), Cologne (1388), Erfurt (1392), Wurzburg (1402), Leipzig (1409), Rostock (1419), Trier (1454), Greifswald (1456), Freiburg (1457), Ingolstadt (1472), Mainz (1476), Tübingen (1477), Wittenberg (1502) and Frankfurt/Oder (1506) came into existence. As a

rule, they were state institutions. Around 1700 there were forty universities existed in the German state. Many of these were dismantled or transferred to other locations. But the three oldest universities that continuously existed within the boundaries of the Federal Republic of Germany are Heidelberg, Freiburg and Tübingen.

Later Halle (1694), Göttingen (1737), Erlangen (1783) were founded as Modern 18th century universities and these institutions paved the way for the renewal of German university education and the period of neo-humanist reforms. During this period the University of Berlin (the model for German universities in general) was established (1809/1810). The neo-humanist concept of education emphasized on individual personality development, the notion of self-induced learning and the idea of the university drawn from German idealism (Kant, Fichte, Hegel and Schelling). The principle was based on “freedom of teaching and learning” for professors and students and the “unity of research and teaching”. The purpose of university level teaching was not to transfer knowledge by rote learning but to acquaint students with research and allow them to participate in it, to think independently, to develop qualities necessary for a university educated person’s position in professional life and in society.

During the second half of the 19th century the independent schools and polytechnics received the status of technical university like Karlsruhe (1865), Munich (1868), Aachen (1870), Braunschweig (1872), Stuttgart (1876), Darmstadt (1877), Berlin (1879), Hannover (1880), Dresden (1890), Danzig (1904) and Breslau (1910).

At the end of the WW1 the reconstruction of the university education system was undertaken and in the similar manner the reconstruction of the university system done in Federal Republic of Germany after WW2. The Framework Act for Higher Education took place in 1976 created a uniform legal framework for higher education system and in 1985 it went through a major revision.

The types of higher education system are universities, theological seminaries, teacher training colleges, art academics, Gesamthochschulen (comprehensive universities), Fachhochschulen, Fachhochschulen for Public Administration.

At present (2022/23) a total number of 2,915,700 students enrolled in higher education institutions in Germany.

German education system encourages both academic and vocational based education as it offers a lot of choices.

RATIONALE OF THE STUDY

In Indian education system, a student’s marks define the outcome and not the skill. Indian education system is concentrated more on the marks that a student has acquired rather than giving importance to the skill or competency that has been built. Rather than training the student and imparting long lasting knowledge, the education system is fixated on the student’s retention and rote learning abilities. Even the examinations are based on the same value. The curriculum of schools and higher educational institutions is also based around clearing an exam and getting a job rather than all round and skill development of student. Learning is secondary. Indian education system is heavily dependent upon marks and learning rather than skill development and creating competency.

Germany has more opportunities for free higher education than other European countries. The focus of German education system is to think independently and to have an independent opinion. This education system believes “*I’m thinking, so I’m living*”, the famous quote by *Rene Descartes (Mamatova et al., 2021)*. This is accepted as a golden rule in German education system. They seek to discover the

undiscovered aspects of the students, to educate them in the spirit of novelty and invention. Foreigners can also study at German universities on the basis of non-governmental funds and government grants. The total number of international students studying abroad in Germany is 440,564 and international student enrolment increased by 29.4% from 2015 to 2022 (*erudera,2023*). The students can enjoy low cost or no cost of education in German public universities which rank among the top universities of the world. Germans believe everyone should have free access to higher education and contribute to the economic growth of the country. Moreover, the German universities focus extensively on Research. They have partnerships with local and international research institutes and offer state-of-the-art research facilities and laboratories for students.

In this context, a comparative study has been drawn between the higher education system of India and the higher education system of Germany. India being a developing country, her higher education system can benefit immensely from Germany as she is one of the developed nations with literacy rate of 99% in 2023 (*World Population Review*) and employment rate of 77.20% in March, 2023 (*Trading Economics*).

PURPOSES OF THE STUDY

- To study and compare the aims and objectives of higher education system between India and Germany.
- To study and compare the structure of higher education system between India and Germany.
- To study and compare the present curriculum of higher education between India and Germany.
- To have an understanding of which higher education system between the mentioned two provide better opportunities.
- To highlight the current issues of both Indian and German Higher Education system.

RESEARCH QUESTIONS

- What is the aim and objective of Indian higher education system?
- What is the structure of Indian higher education system?
- What is the status of present curriculum of Indian higher education system?
- What is the aim and objective of German higher education system?
- What is the structure of German higher education system?
- What is the status of present curriculum of German higher education system?
- What are the current issues that being highlighted in higher education system of India and Germany?

METHODOLOGY

It is purely a *qualitative research* approach associated with *documentary analysis*. The researcher collected data from primary and secondary sources.

- The primary sources consist of information from the website of MINISTRY OF EDUCATION, DEPARTMENT OF HIGHER EDUCATION OF GOVERNMENT OF INDIA, FEDERAL MINISTRY OF EDUCATION AND RESEARCH (German term: BUNDESMINISTERIUM FÜR BILDUNG UND FORSCHUNG), UGC, NIEPA, DAAD, OECD, EURYDICE, etc.
- The secondary sources comprise of research article, thesis, research papers collected from Shodhganga, ResearchGate, various blogs and other repositories.

DATA ANALYSIS PROCEDURE

In the study, data have been analysed in the following procedure:

- Relevant data regarding higher education system of India and Germany have been collected from various primary and secondary sources.
- The collected data have been analysed systematically.
- The analysed data have been categorized or labelled.
- Then the data have been organised and generalised.

DATA ANALYSIS AND INTERPRETATION

AIMS AND OBJECTIVES OF HIGHER EDUCATION

AIMS AND OBJECTIVES OF HIGHER EDUCATION IN INDIA

The University Commission or Radhakrishnan Commission (1948-49) emphasized on the physical, mental, social, cultural, moral, political, economic and spiritual development of students through higher education.

The aims of higher education as recommended by this commission were:

- To awaken the innate ability to live the life by developing wisdom
- To train for democracy
- To develop certain values like fearless of mind, strength of conscience and integrity of purpose
- To acquaint with the cultural heritage
- To impart vocational and professional training

The KOTHARI COMMISSION (1964-66) defined the aims in the following terms:

- Higher education and policies should serve the social purposes
- There should be sufficient unity of purpose in the diversity to produce a community of values and ideas among educated men and women
- There should be respect for human personality, freedom of belief and expression for all citizens, a deep obligation to promote human well-being, faith in reason and humanity
- Mere vocational and technical education, important though they are, do not necessarily serve the spirit
- Preserve the values of democracy, justice and liberty, equality and fraternity
- Universities to educate people according to the understanding and vision of the framers of the Constitution

National Policy on Education 1986 visualised the higher education as:

- Dynamic and innovative
- University system should have freedom and flexibility to innovate in teaching and research
- Autonomy of colleges and departments.
- Provision of means to interact across boundaries of institutions and funding agencies
- Better infrastructure
- More rationalised funding for research, integration of teaching, research and evaluation

The revised policy of NPE 1986, “Programme of Action, 1992” laid importance on higher education, particularly on graduate, post-graduate and research work. It also suggested that autonomous colleges should be established according to UGC directives. Technical institutes like medical, engineering, agriculture universities etc should be set up and development of Vocational skill was to be stressed upon

(*Dr. Jyoti Sankar Pradhan*). All the teachers to be trained through innovative training programs, women education, adult education emphasized upon.

According to the country paper of Government of India the aims of higher education of India

- To cultivate new knowledge in the light of new knowledge and discoveries
- To provide right kind of work ethos, professional expertise and leadership in all walks of life
- To promote quality and social justice
- To foster among teachers and students and, through them in society integral development of all values inherent in physical, emotional, rational, aesthetic, ethical and spiritual education
- To promote synthesis of knowledge, unity of scientific and spiritual pursuits that would revitalize the county's heritage and promote the ideal of the whole world as one united family

Against the backdrop of globalized economy, the internationalization and globalisation today are high on the agendas of governments and universities.

AIMS AND OBJECTIVES OF HIGHER EDUCATION IN GERMANY

The purpose of higher education is described in the Framework Act for Higher Education (HOCHSCHULRAHMENGESETZ) as-

- To impart knowledge, skills and methods in students to make them proficient for scientific or artistic work and to act responsively in a free, democratic and social state governed by the rule of law.
- Unity of teaching and research
- To provide professional training to students for scientific and academic research, artistic development and closer links with the requirements of the professional world

Apart from this, it is observed that the aims of German higher education system are

- To focus on practical knowledge instead of theoretical knowledge.
- The courses are structured to meet the needs of the job market requirements to benefit both students and employers.
- To create skilled and trained professionals who can successfully tackle the international job market issues.
- To provide free education and necessary skills for the international students to succeed in.
- To provide theoretical and practical aspects of knowledge i.e., theory and hands-on experiences during the studies
- To develop new ideas and technologies, and innovation is one of the main aims of academia
- Capacity building in tertiary education across the world
- Educational opportunity for all people irrespective of gender, race, religion or ethnicity
- Knowledge transfer to industry partners in form of intellectual property such as patents, licences or copyright or through coproduction of knowledge via contract research with industry is another aim of university
- To help in Entrepreneurial development
- To promote societal sustainability
- To support student and academic exchange, thus creating diversity of people and ideas and helping in internationalisation
- To promote global citizenship, inter-cultural dialogue and understanding and unlearning “intolerance”

COMPARISON OF AIMS AND OBJECTIVES OF HIGHER EDUCATION OF INDIA AND GERMANY

From the collected data it is observed that the aims of higher education of both INDIA and GERMANY put emphasis on professional expertise in individuals.

Indian higher education system considers more the social values perspective of democracy, justice, fraternity, equality. Science and spiritual education are also an integral part of Indian higher education system.

In German higher education system research and teaching are the main pillars. Dual studies are an integral part of higher education system which provides theoretical and its practical implementation. Thus, companies have closer connection with German Universities and research institutions. Skill development is one of their main foci in higher education. The country provides outstanding research opportunities to both national and international students and individual receives research funding from either government bodies or other organisations or foundations. Germany is one of the best research nations globally. Therefore, development opportunities are enormous. To provide free of cost or negligible-cost quality higher education is the USP of the German higher education system. Apart from this, Germany being a developed country German higher education has the responsibility of capacity building in higher education across the world; providing educational opportunity to those who are interested irrespective of caste, gender, creed; forming intellectual property; entrepreneurial development; promoting societal sustainability; creating diversity of people and ideas through foreign exchange of students and faculty; promoting global citizenship and unlearning intolerance.

STRUCTURE OF HIGHER EDUCATION SYSTEM

STRUCTURE OF INDIAN HIGHER EDUCATION SYSTEM

Indian higher education structure is a systematic, structured and organised learning completed through Bachelor's or Undergraduate degree program, Master's or Post Graduate degree program, Pre-Doctoral and Doctoral programs and through non-formal education like Open and Distance learning system and learning through MOOC as continuing education and adult education. There are universities, colleges, standalone institutions. The UGC is the regulatory body of higher education, AICTE is the regulator of technical education. NAAC and NBA are the accreditation bodies.

As per AISHE 2020-21 report, 1113 universities in India were listed in its portal. The type wise number of registered universities are shown in Figure 1.

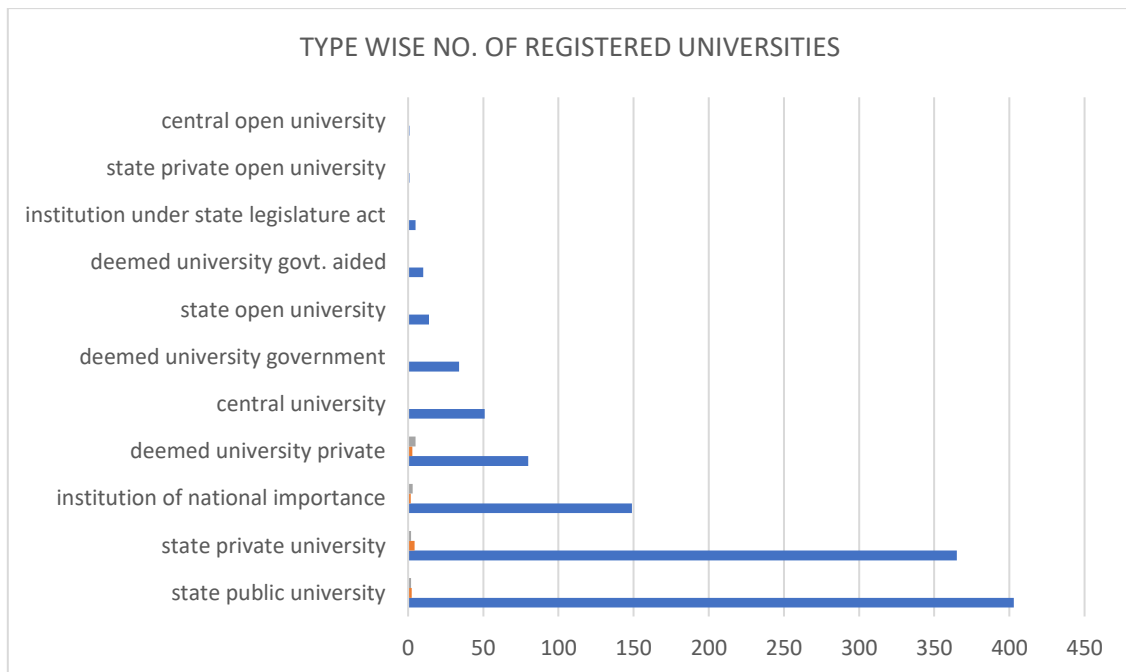


FIGURE 1: NUMBER OF REGISTERED UNIVERSITIES (SOURCE: AISHE 2020-21)

There are 43796 Colleges registered under AISHE belonging to 314 Universities (*AISHE 2020-21*). The number of registered Standalone Institutions across the States are 11296 (*AISHE 2020-21*).

STRUCTURE OF GERMAN HIGHER EDUCATION SYSTEM

The diverse structure of the German university system inherently supports one of the basic principles of UNAI “...to provide the opportunity for every interested individual to acquire skills and knowledge necessary for the pursuit of higher education” (*Zyl A.V., 2013*).

German higher education structure can be categorised as:

- Universitäten (Academic Universities) offering programs based on theoretical knowledge and methodological expertise, only they have the right to confer doctorates and habilitations. They include Technische universitäten, Pädagogische Hochschulen (universities of education), Kunsthochschulen (universities of arts) and Musikhochschulen (universities of music)
- Fachhochschulen (Universities of Applied Sciences) concentrate on programs related to technology, medicine, social work, business. They cannot provide PhD-level degrees, at least not in their own right. They focus on employability. They do applied research rather than fundamental research
- Berufsakademie (vocational academy) offers apprentice programs

The best **German Accreditation Council** is a foundation of public law with legal capacity that the Lander have set up for accreditation and quality assurance in teaching and learning at German HEIs. For getting into university students have to take Abitur examination, the entrance examination for university (*NCEE*). The Doctoral programs, Master’s program, Bachelor’s program and Integrated program are offered by German Higher Education Institutions.

GENERAL EDUCATION	VOCATIONAL EDUCATION	
MAMASTER	MASTER	MASTER
BACHELOR UNIVERSITAT/ KUNSTHOCHSCHULE/ MUSIKHOCHSCHULE	BACHELOR FACHHOCHSCHULE	BACHELOR BERUFSAKADEMIE DUALE HOCHSCHULE

FIGURE 2: TERTIARY/ HIGHER EDUCATION IN GERMANY

(Source: European Observatory of Service-Learning in Higher Education)

COMPARISON OF THE STRUCTURE OF HIGHER EDUCATION SYSTEM OF INDIA AND GERMANY

Based on the data available for the study, it can be concluded that both India and Germany have the same type of higher educational structure comprising of universities, colleges, higher education institutes offering Doctoral degree, Master degree, Bachelor degree.

The German education system offers Integrated program to the students. They have separate fundamental research institutions which focus extensively on fundamental research, separate entities carrying out applied research and vocational academy providing huge vocational education to the students.

Both the countries have strong regulatory and supervisory network for controlling and supervising higher education institutions.

PRESENT CURRICULUM OF HIGHER EDUCATION

PRESENT CURRICULUM OF INDIAN HIGHER EDUCATION

The curriculum is a comprehensive and structured curriculum that aims to provide a well-rounded education to students in different subjects and disciplines. The Indian curriculum is designed to help students to develop range of skills and competencies, including critical thinking, problem-solving, communication and collaboration. It emphasizes on academic excellence, with a focus on examinations and grades.

After independence different commissions like University commission, Education commission in different periods stressed upon various aspects to be included in higher education like moral education, religious education, physical education, rural education, science and technological education, social studies and research, liberal education, cultural education, extra-curricular activities in higher education, teacher education, research and development, professional studies, vocational education, etc.

According to the UGC Act 1956, University Grant Commission is the key player in maintaining the higher education like organising, maintaining, coordinating it and encouraging research work.

Eminent scientist and Bharat Ratna awardee CN Rao believes that 90% of the universities and higher educational institutions in the country have outdated curriculum, keeping them from making into the top institutions of the world (*PTI, 2015*). As said by Rao there is no improvement in the content. Curricular aspects to be revised and restructured.

During 2001-2002, the central government took the initiative to prepare a model code of curriculum and prepared a syllabus for each PG programme with UGC – approved nomenclature (*University Grants Commission, 2001 as cited in (Chakrabarty A. & Singh A. Kumar, 2023)*). The universities across the country either directly adopted the model curriculum or framed syllabi keeping the model curriculum as the guiding principle but it was never made compulsory since the universities have their aspirations and essence of autonomy while preparing their curriculum or syllabi (*Chakrabarty A. & Singh A. Kumar, 2023*). The Government of India initiated the “Restructuring of Curriculum in Higher Education” in 2016 (*Press Information Bureau, 2016 as cited in Chakrabarty A. & Singh A. Kumar, 2023*). India witnessed a steady reform from a “model syllabi” system to a “common curriculum” on a miniscule portion of each program of study. The higher education learners in India can now study choice-based, choice-driven, skill-based papers along with their core area. But the common curriculum was only for the “Choice Based Credit System (CBCS)” and not on the core course structure (*Chakrabarty A. & Singh A. Kumar, 2023*). Today, all knowledge is interdisciplinary which has been given consideration in selecting best practices (*NAAC, 2008*).

Goals and trends of global knowledge has been given importance, pride in Indian heritage, values and India’s unique contribution in this respect has been incorporated in the design of curriculum development (*NAAC, 2008*).

The recent initiatives in curriculum design of Indian higher education as mentioned by (*Bhargava A., 2022*) are as follows:

- To provide job-oriented courses
- To provide diverse program options
- To impart education for the overall development of the students
- To develop scientific temper among students
- To enable students to improve their communication and practical skills
- To provide quality education to the students regardless of gender, caste or creed
- To encourage students in sports and visual arts who want to make career in these fields
- To develop healthy political approach and good leadership quality among students acquiring higher education

There are vocational courses included in Indian HE curriculum but numbers are sparse.

PRESENT CURRICULUM OF GERMAN HIGHER EDUCATION

In Germany universities focus on basic research with a theoretical and research-oriented curriculum. The German universities are traditionally responsible for the training of the next generation of academics and are accredited to offer, among others, Bachelor’s, Master’s and PhD degrees (*Zyl A.V., 2013*).

The curricula of the universities of applied sciences are more application oriented and include integrated and supervised work assignments within industry and/or other relevant institutions. This category offers Bachelor’s and Master’s degrees only (*Zyl A.V., 2013*).

The colleges of art and music aim at integrating artistic teaching, practice and research and provide practical and theoretical training to the PhD level. There are some courses that lead to state certified exams

like medicine, law and the training of teachers. There are some remaining degree programmes that lead to a “Diplom” qualification (Zyl A.V., 2013).

Universities and equivalent higher education institutions offer a range of subjects including languages, humanities, sports law, economics, social sciences, natural sciences, medicine, agronomy, forestry, nutritional science and engineering sciences.

In German higher education the most notable part of the curriculum is the Apprentice program (Ausbildung program). It is a dual system of education and training that combines both theoretical and practical learning. There are more than 350 different occupations covered under this program and the most popular are automotive technician, electrician, carpenter, chef, dental assistant, computer operation, hairdresser, IT specialist, medical assistant, office management clerk, nurse (Meridian Overseas). These programs help in skill development.

Teacher education in Germany is rigorous. Candidates must have earned an abitur for entry into teacher training at universities or colleges of education. Initial teacher education approximately 5.5 to 6.5 years (NCEE, 2017).

Research collaborations on global challenges like climate change, poverty and energy security are extensively carried out (Zyl A.V., 2013).

COMPARISON OF THE PRESENT CURRICULUM OF HIGHER EDUCATION OF INDIA AND GERMANY

From the collected data it is observed that after Independence, India has gone through curriculum reconstruction but the pace is slow. In different period different aspects have been included in the curriculum. UGC introduced “model curriculum” in 2001-02 which was adopted by the universities. Some universities still exercise old teaching methods and rely on outdated curriculum which has not been updated more than a decade. Being a developing country, India has a lot of scope. There have been recent initiatives to introduce job – oriented courses, education for holistic development, scientific temper among students, improving communication and practical skills, equitable education, encouraging sports and visual arts as a career, developing leadership and healthy political approach among students.

Germany being a developed country focus extensively on various spheres. In general, it focuses on basic research with a theoretical and research-oriented curriculum. On the other hand, it focuses on application-oriented curriculum with integrated and supervised work assignments within industry and other relevant institutions (Zyl A.V., 2013). There are diversified courses offered. Dual studies focus on theoretical knowledge and practical orientation which help in skill development. Teacher education is also an important part of curriculum.

Research collaborations on global perspective like climate change, poverty and energy security are carried out extensively (Zyl A.V., 2013).

UNDERSTANDING OF WHICH HIGHER EDUCATION BETWEEN THE MENTIONED TWO PROVIDES BETTER OPPORTUNITY

In India the educational approach is traditional theoretical whereas in Germany the educational approach is modern practical in nature. The Dual studies program is such an example. This program provides the opportunity of gaining theoretical and practical aspects of knowledge. The hands-on experiences develop skilled and trained professionals to tackle the international job issues. The international students favour

these dual studies program a lot. This program offers a diploma equal to a Bachelor's degree, with a possibility of Master degree after completing the internship program.

German higher education system provides a unique feature of switching major subjects while the course is ongoing. Indian higher education system does not provide this facility.

In India due to limited research funds, research initiatives in Indian education are restricted. But in Germany the scope of research is huge. Leading organisations and government provide funds to individuals for research activities. Germany gives a lot of attention to developing new ideas, technologies and innovation. These are main assets of Germany. Germany is one of the best research nations for science and technology. Both private and public sectors provide postdoctoral jobs and fellowship to international researchers. More than 32,000 international researchers and scholars are conducting research in Germany along with funding.

In India although scholarships are given to social and economic backward students still higher education does not reach to many. In India private higher education institutions charge a hefty amount for admission and tuition fees. But in Germany education is not a commercial product. Free higher education is for economic growth and welfare of the society. Due to low tuition fees and high-quality education 90% students enrol in public universities. German higher education structure is based on the HUMBOLDT SYSTEM (*Pasternack & Wissel, 2010*). This system was structured by Wilhelm Von Humboldt, the that education is a social need and that has to be serviced by the state freely. Academic talent is the only requirement to study in German higher education institutions and all of the teaching and research costs of the academics have to be covered by the State (*Pasternack and Wissel, 2010*).

While present focus of Germany is to provide quality education to both national and international students, capacity building, ensuring sustainability goals. India still focuses on increasing just enrolment (GER) only.

In India education policies are not formulated frequently matching up with the current demand. After National Policy on Education 1986 and its revision on 1992, after such a long gap National Education Policy 2020 has been formulated. Whereas in Germany education policies are formulated frequently matching up with the present need and demand.

In Indian higher education system, curriculum is updated after a long period of time. Whereas in Germany the curriculum is updated every few years to keep pace with the current trends. In Germany education policies determine voting behaviour of the public (*Lergetporer P. et al. 2017*).

At present time India has made huge progress in education but due to lack of skilled workforce, unemployment is huge (*Bhargava A., 2022*). India targets to increase enrolment (GER) in higher education to 50% by 2035 (*said by Dr. Pokhriyal to The Indian EXPRESS, 2020*). But to achieve the target the curriculum related problems in Indian higher education sectors are skill development is not prioritised, lack of diversity in higher education curriculums, vocational courses are sparse, lack of quality research, lack of flexibility and uniformity, outdated and inadequate, lack of faculty support need to be confronted (*Chetty P. & Jain R.*). According to the WORLD BANK data (2022) the unemployment rate in India stands at 7.3%.

So curricular reforms in Indian Higher Education is necessary like embedding employability in curriculum, entrepreneurship education, upgrading curriculum in skill development, to include more vocational courses (*Bhargava A., 2022*).

CURRENT ISSUES OF HIGHER EDUCATION SYSTEM IN INDIA AND GERMANY

Digitalisation

Germany has begun to grapple with a new whole-of-government approach to digital technology. In August 2022, the German cabinet agreed to a first of its kind Digital Strategy. The strategy focuses on three action areas: a networked and digitally sovereign society, innovation in the economy, the workforce, science, and research and the digital state (*Barker T. & Dr. Hagebolling D.*)

According to the **Higher Education Policy Report: Germany**, Digitalisation played an important role in the strategic orientation of Germany as a hub for research and innovation in recent years. There was no intention to convert HEI into online universities but the intention is to make the specific added value of digitalisation usable for the universities. It promotes international partnerships among HEI in developed and developing countries alike. Digitalisation can contribute to increasing the quality of teaching and improving academic education overall.

In India a flagship programme “**Digital India**” launched by Indian Government aims at transforming India into a digitally empowered society and knowledge economy, endowed with digital infrastructure for digital delivery and services. India seeks to digitalise school and university education with projects like digital classrooms, digital boards etc at school level and digital projects like SWAYAM and MOOCs at the university level (*Singh Kishore*).

Teacher training at higher education level

According to EDUCATION POLICY OUTLOOK GERMANY, HEIs in Germany receive their funding in lumpsum amount and have considerable budgetary responsibility and financial autonomy, lander use performance-based indicator to determine small share of tertiary funding. Germany has undertaken various policy measures to increase tertiary attainment like National Programme to enhance the quality of teacher training. The **Teaching Quality Pact (Qualitätspakt Lehre)** of the Federation and of the Lander, in 2010, a support programme to improve the framework conditions for teaching at higher education institutions and student-teacher ratio. In 2019 Innovation in Higher Education Teaching (Innovation in der Hochschullehre) was concluded for promoting further development of higher education teaching and strengthening of higher education system. The Foundation for Innovation in Higher Education Teaching (Stiftung Innovation in der Hochschullehre) was established. Efforts are given to motivate the HEIs in Germany to improve quality and innovations in teaching and learning.

Similarly in India also MINISTRY OF EDUCATION developed programme for professional development include Faculty Induction Programme previously known as Orientation Programme, Faculty Development Programme, Refresher courses, workshops, seminars, conferences, etc.

Internationalisation

Internationalisation of higher education is a link interest of student and academics. The German federal government places emphasis on internationalizing the higher education landscape and is progressively adopting new policies in order to strengthen it with the support of a range of actors, especially through the German Academic Exchange Service- DAAD (*Peksen S. & Leisyte L.*). The German Academic Exchange Service and the Alexander von Humboldt Foundation are major partners of the German tertiary education system to support student and academic exchange. In doing so, the German academic environment is enriched by a diversity of people and ideas and effectively integrated into a global academic network (*Zyl A.V., 2013*).

The Government of India is also trying to open doors for Indian students and academics to get international exposure. The recent policies/regulations on internationalization are changing the dynamics of the education ecosystem (*Bains I.*)

Foreign Student exchange program

In 2022 India and Germany inked a mobility agreement upon education that will help the people of both countries to study, do research and work in each other's country. The agreement appreciates the establishment of digital preparatory courses that Indian students can enrol onto begin their Germany university courses and to participate in research programs in Germany. This agreement enhances internationalization of higher education systems, to interlink further the innovation and research landscapes and to strengthen dual structures for Vocational Education and Training. The migration and mobility partnership ensures Indian students can get joint degrees and dual degrees because of collaboration between Indian and German universities at university level.

Moreover, a large number of German universities charge no or low tuition fees and after the completion of the degree, students can further pursue a higher degree or stay in Germany for 18 months to look for a job, students can do part-time jobs to earn pocket money. The internships allow students to get excellent exposure to the industry in Germany, the strongest economy in Europe. They highlighted the roles of the Goethe-Institute, the German Academic Exchange Service (DAAD), the University Grants Commission and the All-Indian Council for Technical Education to encourage and enable opportunities for students to move abroad for their studies. For a number of years German universities are attracting Indian students with a clear perspective on staying in Germany after graduation. Because of the bilateral migration agreement, Indian students can easily get access to the German labour market (the strongest economy of EU) with a solid education from Germany. The high-quality education with promising job opportunities is a good career for young Indian students.

German universities provide huge and varieties of dynamic higher education courses ranging from Engineering, Natural Sciences and Mathematics to Social science and Education, Law and Management, Public Health, Land Management, etc.

Decentralization of education (a global trend)

Decentralisation increases the efficiency of education system and the quality of educational services (*Bandyopadhyay M. & Govinda R.*). In Germany this is prevailing for a long time. Education in Germany is majorly the responsibility of the individual German state (Lander) and federal government plays a minor role. Lander can change the structure of the system.

In India also decentralisation in education is emphasized upon. The government control in the universities must be reduced, so that the university autonomy and accountability are strengthened and academic decisions are taken on merit (*as recommended by UGC in GOLDEN JUBILEE SEMIMAR-2003*).

Government expenditure on education, total (% of GDP)

According to THE WORLD BANK data, in 2020 Germany spent 4.7% of GDP in education whereas India spent 4.5% of GDP in education. The statistical figure is close to each other but India's population size is too much more than Germany in respect to the total area.

FINDINGS OF THE STUDY

On the basis of the research objectives the findings reveal that:

- + Both India and Germany put emphasis on professional expertise in individuals.
- + Indian higher education prioritizes gaining of theoretical knowledge and social or democratic values inculcation, science and spiritual education.
- + German higher education prioritizes skill development, research and innovation of new ideas and technologies and practical implementation of theoretical knowledge.
- + Capacity building in HE, forming intellectual property, encouraging entrepreneurial development, creating diversity of people and ideas, promoting global citizenship and tolerance and societal sustainability are other important aspects of aims and objectives of German higher education (*Zyl A. V., 2013*).
- + The USP of German higher education is that superior quality higher education is provided to both domestic and international students at a low or negligible cost.
- + Both India and Germany have the same type of educational structure comprising of bachelor's degree, master degree, doctoral and post-doctoral programs.
- + Both countries have strong regulatory and supervisory council for controlling and supervising the higher education system.
- + German higher education program offers the integrated programs for the students.
- + Indian higher education curriculum adopted a model curriculum.
- + Indian curriculum needs to be updated frequently keeping pace with the need and demand of the society and global trends.
- + Recent initiatives have been taken to introduce job-oriented courses, developing communication and practical skills, leadership skill, scientific temper and holistic development.
- + German higher education curriculum focuses extensively on various spheres like theoretical and research-oriented curriculum, application-oriented curriculum with integrated and supervised work assignment within industry and other institution
- + German HE curriculum offers diversified courses- apprenticeship courses helping skill development.
- + In India the educational approach in higher education is still traditional and theoretical, research scope is limited, private HEIs charge hefty amount for education. Education policies are not updated frequently which is very much necessary. Quantity is still the focus. But it has scope and potential for huge improvement in quality.
- + In Germany the educational approach is modern, practical; there are a lot of facilities like switching major while ongoing course, huge hands-on experience for skill development; extensive research facilities; low or no fee education; international students favour dual studies. Education policies are formulated time to time matching with the current trend. In Germany education policies determine the voting behavior of the public (*Lergetporer P. et al., 2017*). Germany focuses on quality education.
- + In the modern era both India and Germany target to highlight some important areas in their higher education system like digitalization, teacher improvement programs for higher education, internationalization, foreign students and faculty exchange programs, decentralization in education.

CONCLUSION

The investigator has studied various aspects of higher education of India and Germany in terms of aims and objectives, structure, curriculum. This is a comparative study where both countries share some similar and dissimilar aspects in their higher education arena. India being a largest democracy has uniqueness in her higher education aspect. But somewhere quality higher education is lacking. Whereas German higher education system has lot of advantages and that is why it has so much demand around the world. It mainly focuses on skill development and practical implementation of knowledge. German higher education is unique for its heavy emphasis on research and innovation.

So Indian higher education system can consider German higher education system as a benchmark for improvement and enrichment. The qualities that are lacking in the Indian higher education can be imbibed from the German higher education system.

EDUCATIONAL IMPLICATION

The findings from the comparative study about the higher education system of India and Germany suggest some educational implication. These are enlisted below:

- The present study can be considered as a guideline for the higher education system.
- Based on the study, the area where India is lagging behind Germany can be observed and improvement in such areas of Indian higher education system can be possible.
- The study can provide educational guideline for the higher education aspirants and their guardians.

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