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Issues of Attitude and Perception towards Intellectual Property Rights (IPR) in Academicals Institutions: A Review of Research

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Abstract: ***Governments, businesses, the private sector, and numerous sectors of the public now depend more and more on intellectual property (IP). Given the rapidity of technological, social, and commercial innovations, the requirement for IP education is now greater than ever and increasing each and every day. There should be additional education and training for IP professionals. It is similarly apparent that their knowledge of intellectual property must be both general and, at the same time, more focused on the opportunities, difficulties, and practical, day-to-day realities that education faces. However, in numerous countries, the lack of instruction on how to teach IP effectively is just as much of a barrier to IP education as the shortage of qualified professors. The General concept of Intellectual Property Rights is Patents, copyrights, Trademarks, and Geographical Indications. This paper addresses the obstacles and opportunities for teaching intellectual property (IP) at the GFG (Government First Grade) colleges in Karnataka state, taking on data from a large survey and analysis of the disciplines offered in undergraduate and higher education extension programs, as well as conversations with professors those in charge of those programs and fields. The conversation concludes with some suggestions for how to strengthen the intellectual property education and training with the goal of transforming them into tools for promoting innovation within states.***

Keywords: Intellectual Property education, IP rights, Teaching challenges, Innovation policy, Karnataka colleges

1. Introduction

It is generally accepted that innovation and knowledge are key drivers of economic expansion. Nonetheless, perceptions, dissemination, and the way results are integrated back into society are the primary factors that set a specific nation apart from another, irrespective of the area of knowledge (Ana Maria Nunes et, 2012). We have found that, at the risk of becoming merely "imitators" or "modernisers," nations can play a key role in the quick displacement of the technological and innovative frontier due to the wide and diverse development of scientific and technical expertise and its general transformation into products, processes, goods, and services.

Numerous studies have focused on important topics related to encouraging innovation and information exchange in a society, where creativity and knowledge are also essential for economic advancement. This inevitably led to an increase in the significance of the knowledge the economy has attention on topics like intellectual property rights (IPRs) and the study of the factors that influence learning and innovation. In this respect, a growing body of economic literature seeks to understand the dynamic implications of IPR protection, as well as the association between these rights and competition, their importance in international technological transactions, and their relationship to countries' overall economic development strategies (Maskus, 2008).

The speed with which digital content can be accessed and replicated in the modern era increases the likelihood of intellectual property (IP) theft (Cuarto, 2019). Teachers devote a lot of time and energy to producing innovative studies (Casyao–Doroin, 2020) and educational resources (Dantic, 2023) that improve learning and instruction for students. However, these materials are susceptible to unauthorized use, distribution, or reproduction in the absence of sufficient protection systems or awareness of IP rights. Monitoring and acknowledging these as important intellectual properties is essential given the rise in research and development outputs in Philippine secondary schools (Tinao et al., 2018).

There is a research gap regarding the intellectual property of these works, even though teachers are crucial to the creation of research projects and educational materials. Understanding college instructors' awareness, proficiency, and level of IP rights compliance has received little attention. There aren't many studies in the nation that look at IP-related subjects like faculty and student awareness (Aldeguer, C., 2014; Tinao et al., 2018)

This environment emphasises the necessity of skilled human resources and intellectual capital as essential components of businesses and nation states' innovation strategies, as well as for the setting up, preservation, and development of a suitable intellectual property system within nations. For them to participate in global discussion forums like the World Trade Organisation (WTO) and World Intellectual Property Organisation (WIPO), which aim to protect and defend national interests among other things (Amorim-Borher, 2008).

In India all of this nation's learners are to receive a comprehensive, interdisciplinary education, according to the New Education Policy 2020 (NEP 2020). One the goal of this program is to close the divide between the existing status of the learning framework and the necessities of employment.

The professional qualification that acts as a stepping stone to work is given sufficient importance by NEP (Arpana Sharma et, al 2022).

2. Literature Review for IPR

2.1 General concept of Intellectual Property Rights

The term "intellectual property" (IP) describes any innovation, brand, idea, or different kinds of works of art, science, literature, or technology produced by the human mind's imaginative thinking, which a person has a right to. The original creator or inventor has the legal right to prohibit others from using his concepts, inventions, or products, despite their prior consent, thanks to his intellectual property rights. Additionally, it enables the user to protect it from violations for a predetermined amount of time. IPR grants the creator the ability to receive all profits from their trademarks and innovations (Arpana Sharma et, 2022). IPR is typically separated into the following categories

- **Patents:** Patents grant their author the right to defend innovative technological discoveries that are helpful, like new company items or procedures.
- **Copyright:** The right to preserve original written or published works is known as copyright. The creative output could take the shape of a book, a piece of literature or art, music, etc. Therefore, copyright protects the author of their works to prevent unauthorised duplication.
- **Trademarks:** A trademark is a unique symbol or logo that is linked to a single product made by a particular individual, business, or sector. These registered trademarks distinguish the product or solution from comparable goods or services produced by rival companies.
- **Geographical Indications:** Geographical designations are labels applied to goods that are associated with a particular topographical region and the attributes that are particular to that region (Sreeragi et, al 2021)

2.2 WIPO (World Intellectual Property Organization)

The World Intellectual Property Organisation (WIPO), a unique organisation of the United Nations (UN), is tasked with advancing and utilising intellectual property (WIPO, 2004) administers agreements between nations worldwide and develops and oversees a variety of international intellectual property law frameworks. It makes it simpler and more affordable to protect innovative inventions, concepts, and brands globally by offering global intellectual property services. WIPO offers dispute resolution services like mediation and arbitration. In addition to the aforementioned objectives, WIPO offers aid in the national and regional implementation of IP and innovation plans by governments and other organisations. WIPO's primary goal is to establish the strategies that are necessary for economic growth.

This entails establishing suitable infrastructures, favourable regulatory frameworks for intellectual property, and human resources to maximise IP's potential.

2.3 Intellectual Property Rights Systems in India

The development of society on all levels- social, economic, technological, and cultural- requires the protection of intellectual property rights (IPRs). India is a rapidly developing economy with a thriving culture of innovation (Maurya B R, 2021). Therefore, to ensure their protection, grassroots innovations need a strong and effective enforcement system. This policy's primary goals were to transform the way that inventive energies are synergised in colleges and universities and to encourage innovation among entrepreneurs, with a particular focus on start-ups (Stauf et.al, 2020). The Indian government operates an Intellectual Property division. An agency to assist with such technical projects to boost the country's economy. The Ministry of Commerce and Industry oversees this office. PR plays a vital role in safeguarding innovative research as well (Jajpura et.al, 2017).

2.4 India's Organisational Framework for IP Protection

The Controller General of Patents, Designs, and Trade Marks (CGPDTM) office in Mumbai has the charge of supervising the entire organisational framework of IP protection within India (Mishra et.al, 2020). The operation of the Controller General oversees all IP Acts, including the Patents Act, the Designs Act, the Trade Marks Act, and others. Because Ps are considered intangible assets, valuing them is challenging. India's intellectual property laws are robust are subject to Trade Related Intellectual Property Rights (TRIPS) compliance and are implemented through statutory and regulatory mechanisms. These rules operate within a dynamic legal system and provide a solid foundation and a supportive atmosphere for all communities, including companies, educational institutions, and individuals looking to diversify their ideas.

IPR is significant because it may foster a climate that is just and encouraging for artists, guaranteeing that their work is acknowledged, compensated, and honoured

According to Kronda (2023) IPR gives authors and artists the sole right to use their inventions, works of literature and art, and concepts, claims Kronda (2023). These rights give authors the ability to manage and profit from their crafts, giving them motivation to keep coming up with new ideas and creating unique pieces.

According to Monotti (2013), the possibility of acquiring intellectual property rights, copyrights, and other IPR forms motivates people and businesses to spend money on R&D, which results in breakthroughs across a range of industries.

According to Rojas (2007) advances the case is advanced that institutions must work to create logical regulations pertaining to the application of research results management, especially when it comes to technology transfer activities. According to the author, rules for maximising the value of internally generated content must be established.

According to Dalmarco et al. (2011) found that while some Brazilian colleges are using patents to safeguard their research findings, there are still unanswered problems. They require clarification and have to do with closer linkages to industry, particularly when it comes to technology transfer efforts. This is due to the authors' belief that university

technology transfer (OTT) offices still lack a managerial level capable of optimising the advantages of the creative work done.

This view is supported by Soetendorp (2008), who demonstrates that there is a global need for graduates who can use their expertise, and that the most common queries that scholars have when they start considering the following are some reasons why IP education should be included in courses other than law curricula: Why teach? Who should I instruct? What should be taught? How should I instruct?

Press (2017) also emphasises how crucial it is for business personnel to be aware of IPR since they must safeguard their trademarks, designs, and inventions. A lack of knowledge may cause unintentional violation or a failure to profit from intellectual property assets, which could result in serious monetary and reputational damages.

The research by Allman, Sinjela, and Takagi (2008) actuality, there have been numerous barriers to the global expansion of IP education instruction. About 20 institutions worldwide participated i that determined the primary limitations and difficulties facing academics today, including

a) The challenge of modifying the initiatives to stay current on the swift and dynamic shifts in intellectual property laws.
b) A dearth of current instructional resources that cover the new applications of intellectual property.
c) The a need to improve courses to accommodate an interdisciplinary approach that considers the growing significance of intellectual property within fields like science, business, commerce, economics, engineering, and arts.

2.5 Proficiency in the Design of Industrial Utilities Models, Patents, and Copyright Registrations

Inventions, concepts, including creative works must be protected by patents, utility models, as well as copyright registration. Proficiency in these domains is essential for assessing IP systems' efficacy and pinpointing areas in need of development.

According to Yang (2023), a thorough invention publication is the first step in the patent draughting process. Alfiani (2018) highlights how crucial it is to comprehend legal conditions for obtaining a patent. Ryabokon et al. (2019) and Chan (2021) emphasise the importance of understanding the utility model structure and its implementation processes. The procedures for a successful industrial design submission are outlined by Rivera et al. (2022). Applying for a copyright is defined by InCorp Philippines (2022) as attempting to obtain legal protection for original works. The importance of comprehending the legal requirements and application processes for IP registration is emphasised by this review.

2.6 Disparities in Intellectual Property Rights and Registration: Knowledge and Proficiency

2.6.1 IPR about ChatGPT

Based on the profile variables of the surveyed, this overview of the literature investigates variations in intellectual property rights (IPR) awareness and proficiency in patent, service model, and trademark registration. According to studies conducted by Deshpande et al. (2022), demographic characteristics such as chronological age, gender, and level of education have an impact on IPR awareness; younger respondents frequently demonstrate greater knowledge as a result of their exposure to technological media. Higher academic achievement is associated with greater understanding of IPR ideas, according to Jena et al. (2023). According to Muehlfeld et al. (2020), younger participants might be more aware of IPR but still require more skill development, whereas those who are older might be more competent because expertise in the workplace. According to Lee et al. (2018), respondents with backgrounds in scientific or technological fields are typically better at registering patents and utility models, whereas people who work in the creative sector might be more cognisant of registering copyright.

3. Discussions

All the literature survey discussed previously, we have to enhance some common aspects of intellectual property rights in state colleges. An extensive study is needed in both technology and education to shift classroom teaching paradigms for new learners. Innovative technology such as artificial intelligence, smart boards, and computer gadgets can enhance kids' overall development. Educational institutions perform a key role in providing career advising and encouraging research among individuals. Several institutes, including DST (Department of Science and Technology), DAE, and DBT (Department of Biotechnology), support research projects initiated by faculty and students. The value of research is rapidly increasing in the modern period, as it advances intellectual, economic, societal, technological, environmental, and national development. The India Digital Advertising campaigns are a step in the right direction towards making the whole country a knowledge economy as well as a globally connected community. The administration has taken a number of actions to support IPR across the country and in institutions of higher learning.

IPR regulations encourage these universities to develop, take in, and modify new information in cutting-edge fields. The Intellectual Property Office (IPO) works to raise awareness of intellectual property (IP) in all establishments, particularly universities, and sectors in government agencies, taking into account the enormous potential for intellectual property creation at every level.

4. Conclusion

Several conclusions were drawn in light of the facts and theories. The majority of responders were female and have an average level of education, according to their demographic and professional profiles and expertise, yet their participation in investigations, intellectual property accomplishments, and

connections to pertinent organisations are minimal. The survey respondents' extremely low degree of awareness of key IPR concerns emphasises the necessity for educational programs to improve their comprehension. Additionally, the respondents' incredibly low competency levels in many IPR registration domains highlight the pressing requirement for focused training programs to enhance their knowledge of intellectual property maintenance. Although respondents' dedication to the law on intellectual property rights is generally moderate, there are differences throughout several conformity markers, suggesting inconsistent use of IPR principles in teaching resources.

There are notable variations in IPR awareness according to age and the number of research projects finished. Furthermore, there are notable variations in IPR compliance according to age, teaching position, and the quantity of finished research projects. Interestingly, there is a strong correlation between the degree of compliance and knowledge about IPR procedures, indicating that greater knowledge results in improved adherence to IPR rules. India leads the world in a number of fields, including communication and information technology, pharmaceuticals, nanotechnology, and more. Science and education have a reciprocal relationship in which technology advances educational processes and results, and education advances technical developments.

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