

Higher Education and Human Capital Building: Perspectives of Faculty and Students

Zehra Habib

Associate Professor and Senior Fellow Institute of Business Management, Karachi

Sarwat Nauman

Associate Professor Institute of Business Management, Karachi

Abstract

A major role of higher education is to generate human capital for economic growth of a country. The purpose of this qualitative research was to explore how higher education programs are contributing to the development of human capital. The head of the department (HOD) and three faculty members of the Department of Education of a private university in Karachi were interviewed individually for their standpoints on contribution of their department for building human capital. Four focus group interviews were held with students of the department regarding their viewpoints on how the knowledge they acquire was helping them engage practically with industry. Findings from data of HOD projected that instead of tertiary education being the base for developing human capital, the foundation should be laid from the school system. Faculty believed that though they were trying via needs analysis and digital resources to understand industry requirements, management has to play a role in connecting faculty with industry. Students described courses as theoretical and were very vocal about incorporating practical and experiential learning. The education department of this university lacked in the generation of human capital. The way forward is to take pragmatic steps to encourage building of human capital via tertiary education as this is a main factor in ensuring economic progress.

Key words: Human capital; economic growth; higher educational institutions; engagement with industry.

Introduction

Apart from the role of education to bring about social change and produce responsible citizens of society, it is extensively recognized that a major aim of education is to generate human capital for local, nationwide and worldwide economic growth. (Bloom et al., 2014, Chankeseliani, et al., 2021). The development of knowledge and skills via education for enhancing output and creativity of students through planned instruction is known as human capital development (Enyekit et al., 2011). Investments in education are called human capital not only because of obtaining larger economic gains, but also because the workforce cannot be detached from the resources acquired through education (Amadeo, 2020). Educating youth at the tertiary level is a huge step towards acquisition of strong human capital for any country which aspires for economic rewards in the global scenario (Mohammed & Rufai, 2016).



A weak economy is one with insufficient skilled labor because the education sector does not fulfill needs of the job market which results in placing untrained or unskilled people at positions that require a specific type of education (Sipilova, 2013). The role of higher education is to produce human capital by training a labour force that is skilled and responds to the needs of the labour market (Lauder & Mayhew, 2020). Even though there are many European countries which have an effective elementary education system, they cannot compete with the US as their tertiary education system is not as extensive as the system in the United States (Goldin, 2016). Hence, US has a skilled workforce which has been expanding over the last few decades (Goyal, 2019).

The role of human capital correlates with the education levels of faculty (Amir et al., 2015), because a workforce of highly educated and specialized labor in higher educational institutions have an accumulation of human capital which they transfer to students and in this way contribute to production of human capital (Lehmann, et al., 2020). Therefore, specialized human capital with reference to teachers must be valued at all cost (Best, 2010). However, such specialization may not be possible if the capital market of a country is lacking and undeveloped because teachers may be lacking financial means to develop their specializations that can be transferred into effective human capital (Becker, Murphy, & Tamura, 1990; Gorman, 2016).

Considering the relevance of human capital development and education, research in economics of teachers has exponentially grown because such studies examine factors contributing to effective teaching and provide insights regarding qualities of a good teacher. Literature demonstrates that a major factor for promoting teacher effectiveness correlates with appropriate teacher education and was adding positively to education related human capital. (Burgess, 2016). In Pakistan, like elsewhere around the globe, acquiring higher education has had an impact on Pakistan's economic growth as well as on an individual's financial standing (Abbas & Foreman-Peck, 2008).

The emphasis for financial reward through acquiring higher education is gaining ground in many developing countries (Olaniyan & Okemakinde, 2008). In order for a country to increase its human capital across its educational system, it is incumbent to create an inspiring vision which guides majority of the educationists, school leaders and teachers to pursue this vision (Fullan et al., 2015). Such a vision is missing in the case of Pakistan and this creates hindrances regarding production of human capital by the education sector. Thus Burgess (2016) underlines the need to fill the niche in research on the supply side of higher education that may seek to understand how effective are the education programs and if these programs are generating human capital for the education sector.

Purpose

This research was conducted to understand how human capital is being produced in Pakistan, specifically from the perspective of courses designed in education programs. The Department of Education of a private sector university based in Karachi was examined to understand the perceptions of the Head of the Department and faculty members on human capital development through higher education courses offered by their department. Additionally, this research sought to understand how students view the current courses taught at the education department and the extent to which these courses were helping them to contribute to the industrial needs.



Research Questions

- 1) How does the Head of the Department of Education view engagement with industry and development of human capital via courses taught at their department?
- 2) How do faculty members of the education department view generation of human capital via their teaching practices?
- 3) How do students perceive the viability of their courses at the education department in gearing them towards industry needs?

Literature Review

Human Capital Generation Through Education

In current times, Human Capital Theory has become the most dominant foundation in the field of education (Gillies, 2015). Human capital theorists underscore that there is a robust correlation between human capital and economic growth because the more educated a population, the more productive that nation will be (Nickolas, 2019; Sakamota &Powers, 1995; Pettinger, 2019; Schultz, 1971). Furthermore, the theory underscores the role of education in enhancing the output and competence of the workforce, subsequently contributing to building human capital of a country (Ali & Jalal, 2018). The overall level of literacy of a country and particularly the levels of higher education acquired, project not only the knowledge and abilities attained by individuals, but also has the capacity to promote benefits in the public and privatecapital good because it offers utility to a consumer and also serves as an input into the production of other goods and services" (Olaniyan & Okemakinde, 2008, p. 479).

The foundation of the theory of human capital lies in its emphasis on investment in education at all levels and is one of the most significant economic concept of Western education (Fitzsimons, 2018). Irrespective of whether the country is developed or developing, the human capital theory generates a validation for huge spending on education, throughout the globe (Botev, et al., 2019; Fagerlind & Saha, 1997). Economists underscore that it is not the material recourses of a country that matter so much because it is human resources of a nation that decide the speed at which a nation develops (Olaniyan & Okemakinde, 2008). Countries such as Hong Kong, Korea and Singapore which have invested highly in education have prospered economically by leaps and bounds (Bloomenthal, 2021; Robert, 1991; Tilak, 2001).

Education plays a major role in the advancement and expansion process because human capital is seen as pivotal for enhancement and improvement in any field (Olaniyan & Okmakinde, 2008). Thus education is a force for generating new ideas and new products and is critical to economic strength of a country because of its capacity to intensify the output of the prevailing labor force (Babalola, 2003).

Inquiries of return on investment in higher education have become a common interest, not only amongst scholars, researchers and higher education policy makers but also amongst the general public (Dorius et al., 2017). Human capital theorists emphasize that investments in human capital at the higher educational level will yield returns both individually and for the society (Becker, 1993; Bowen, 1977). In recent developments, tertiary education researchers have extended the traditional model of human capital theory to include the broader social, economic and policy perspective of colleges and universities (Perna, 2006). Education plays a huge role in building the economy of a nation, thus investment in education is considered to be highly fruitful. It contributes



to individuals' opportunities in the job market, bringing about economic as well as related benefits. Thus viable and lasting development cannot happen in a country if there is dearth of the human capital of skilled persons to contribute to progress in the economy (Chankeseliani, et al., 2021; Fullan, Rincon-Gallardo, & Hargreaves, 2015).

Human Capital in Pakistan

Quality higher education enhances teaching and learning and is crucial for success of economies in developing countries (McGrath, 2010). However, according to Memon (2007), in Pakistan, tertiary education has been overlooked, particularly from the perspective of promoting economy. Pakistan's Higher Education Commission on its official website, declares the objectives of higher education as the following:

- Promotion of entrepreneurship/self-employment among youth
- Commercialization of viable research stemming from university
- Closer linkages between Industry-Academia
- Contribute to the economic growth by employment generation and creation of small and medium start-up companies.

Even though these goals indicate that each aim is directly or indirectly linked to development of human capital. One of the main causes of low human capital in Pakistan is the absence of any link between the skills and education given at the higher education institutes and the industry (Ali, et al., 2012; Munir et al., 2018). The was further elaborated by Abosetegne (2000) as cited in Ali et al., (2012) that the weak association between higher education and the industry arose because of lack of policy that would ensure a steady connection between the higher education institutes and the labour market. This disassociation causes a disparity between the industry needs and the human capital produced by the Pakistani higher education institutions (Ali et al., 2012; Nauman & Hussain, 2017). One reason for this may be that there are only two universities in Pakistan that have a Human Resource Development department with the sole purpose of connecting the university with the industry (Asrar-ul-Haq, 2015).

This discrepancy can be handled if the Pakistani government allocates a higher budget than it is allocating for education. The current investment of Pakistan is a paltry 2.3% in the fiscal year 2019-20, which is lowermost in the region (Education Budget of Pakistan, 2020). Education creates a more skilled workforce that adds positively to human capital, therefore investment in this sector is of prime importance (Khan et al., 2005; Lauder & Mayhew, 2020). Currently, Pakistan's higher education is divided into two typed of educational institutes: The public sector universities, which cater to the lower income groups, and the private universities that provide education to the high-income groups. Since the private universities are expensive and are not accessible to the less privileged, therefore they do not benefit the lower strata of the society and do not fully take part in human capital development (Hunter, 2020; Khan et al., 2005). To develop pertinent human resource for the industry comes under the domain of higher education, but in Pakistan, this connection is still not firmly established. It is the need of the day that Pakistan must design policies and activities around development of human capital through providing necessary education to its masses.



Methodology

The research study is a qualitative case study because it aimed at making an in-depth investigation of relation of higher education to human capital development. According to Watkins (2012), in order to acquire a comprehensive image, it is significant to conduct research based on qualitative methods. Among the intellectual goals of qualitative studies, Maxwell (2013) includes comprehending the meaning of participants' insights, understanding the context in which the research is being conducted, understanding the processes regarding how events take place and developing causal explanations. Qualitative research adopts an interpretive paradigm whereby subjective meanings participants assign to the phenomenon under investigation are analyzed by the researchers (Starman, 2013).

Within the qualitative research design, a case study approach was used because this approach has been widely used in the social sciences and has particularly been valued in practice based fields such as education, management, public administration. "A case study is a comprehensive description of an individual case and its analysis" (Starman, p. 31). A case study approach is applied for description and analysis of individuals, a group of people, such as a school department or event in a particular situation. Case studies are relevant when the research goals require a comprehensive description of a phenomenon (Yin, 2018). Since the objective of this research was to obtain in-depth insights of participants of one department of one university, a case study method was most suited.

Setting and Participants The case for this research was the department of education of a single private university in Karachi, Pakistan, and the units of analyses within the case included the head of the department of education, the faculty and the students studying in the department.

Data collection Tools

Individual Semi Structured Interviews

Individual semi structured interviews were conducted with the Head of the Department, (who also teaches courses) and three faculty members in March 2020. The interview with the HOD lasted for 45 minutes whereas the individual interviews with faculty members were approximately of 50 minutes' duration. The protocol for informed consent was strictly adhered to and participants signed the informed consent form. All interviews were conducted in English.

Focus Group Interviews

Four focus group interviews were conducted with six students in three groups and five in the fourth group. Two groups comprised student participants from the MPhil in Education program and one group each comprised students from MBA in Education, and PhD in Education programs. The PhD in Education program focus group included five participants. Three focus group discussions were conducted in Fall 2020, whereas the fourth focus group discussion was conducted in Spring session of 2021. As was the case with the faculty members, all focus group interviews of students were conducted in English and strict guidelines for ethical concerns were followed. The purpose of the research was explained to students and informed consent was obtained from them.



Data Analysis and Findings

Data were recorded and transcribed and the strategies of analysis recommended by Merriam (2009) were followed for analysis. Both researchers studied data thoroughly, coded data during initial readings, and later combined similar codes to develop three main themes: 'Awareness of the Industrial Needs,' 'Need for Industrial Engagement' and 'Role of Faculty.'

Awareness of Industrial Needs:

While comparing the standpoints of the HoD, the faculty, findings indicated that these were mostly different with regards to the awareness of the industrial needs. The analysis is given below: *Hod's standpoint*

The results showed that to produce human capital through industrial engagement was not an easy feat and required support from the education industry as well as from administration. The HoD considered that human capital development should actually commence from early stages of education because she emphatically expressed that human capital "cannot suddenly be generated from higher educational institutions." She opined that a country's foundation for human capital is laid by the school system. The school system should be geared towards skills development and towards practical, pragmatic and experiential learning from the very beginning. Such a system she felt was lacking in Pakistan. An excerpt from her interview will shed further light on this:

"We need to start from the very foundations of education. When the foundation is strong, we get the desired results. In our country, I'm sorry to say, particularly in the public sector education system, none are catering to development of human capital. We have to have skills based teaching geared to generating human capital from the very beginning. Our education policy makers need to look into that....if from the beginning we think in terms of generation human capital, we at the tertiary level would not face the challenges that we do."

The HOD felt very strongly that students of the education department are already engaged with industry so they should be aware of the industry needs. This was said in the context of the Department of Education because most of the students studying at the department are working in the private sector education system whereas a few are also engaged with non-governmental organizations (NGOs). Her take on the issue was: "Students are already coming from the industry and are well aware of the needs of the industry and they should be the ones informing us about that." Thus, she considered students of the department to establish a connection between the education industry and the university where they studied.

The faculty's standpoint

The same thought was put forward by a faculty member in the following words:

"Students are our bridge to the industry, they tell us what is happening in the industry. I have regular discussions with students regarding what might be changing in their workplace, what new needs emerge, I make a mental note and revamp and reconsider the course. This is of immense help to me in keeping in touch with the industry."

Nevertheless, the faculty believed that the onus of gauging industry needs lies on the management of the institution. In the words of a faculty member: "This responsibility of knowing needs of the industry and establishing engagement with industry lies on the shoulders of institutional management and absolutely not on faculty"



Having said that, it was clear that the faculty felt the need to understand what the education industry demanded from them and what skills should be inculcated in their students. hence other than having a discussion with the students, who for them represented the industry, they used digital resources to understand what skills were in vogue and conducted needs analysis before the commencement of their course. However, they felt that most of the digital resources "cater to the educational needs of developed countries and not much is available with respect to Pakistan's educational perspective." One of the two participants who advocated digital resources added that if every country developed digital resources in accordance with the needs of its individual industry in different sectors, then advantages of digital resources would be immense in terms of awareness of industry needs. But then he added that for such a thing to be possible, experts in every field need to join hands.

Another way to assess the demands of the industry was through doing a needs analysis with students when they first enroll in their courses. In this manner, needs of the students related to the industry were established and courses taught were molded based on those needs. One faculty member's perspective related to needs analysis is the following:

"When students come to class, I assess their needs in the first two classes, and, I specifically ask them about needs that relate to active engagement with industry. Then, based on the feedback given by students, I make changes in the course outlines I've developed and that works well for me as well as for my students."

The students' standpoint

On the other hand, students who were working in non-profit organizations complained that non-profit sector is not given importance to in any course and on the other hand, those working in the government sector education department complained that most of the courses were based on foreign studies, as such there was a disconnect between what they studied and what was happening at the ground level in Pakistan. Nevertheless, positive views of students included acquisition and application of knowledge in their work settings and attainment of confidence due to better performance in the workplace. Though these standpoints are not directly related to generation of human capital, insights of students help to understand gains acquired from higher education. The following statements included elucidate this point further. "I feel I am gaining knowledge,....you know, I certainly feel that I'm gaining knowledge." Another student stated that, "Some of this knowledge, though not all that I've learned, I can apply to my teaching practices, this gives me confidence." Yet another perspective of a student highlights this aspect further:

"Because of the all the courses I have taken, I have increased my knowledge in the field. Not only do I apply the knowledge in practical teaching....for example, we were taught about learning styles, and I know that I have to gauge learning styles of students and teach accordingly. So this has helped practically, I feel more confident now. I think that I am ready to move on and take up higher positions in my school!"

Need for Industrial Engagement

When it came to the theme of the 'Need for Industrial Engagement', the HoD and the faculty were of the view that the students were already engaged with the industry as they were working. But this was not always true, as there were a few students who were not working anywhere and the same can be seen from the results below.



The HoD's standpoint

The HoD was of the view that the education department was already linked with the industry as the students were coming from the education sector. She further said that,

"Our students conduct research which is linked with the education industry,they go out there, they look at the problems there and then they research to get solutions to those problems. So we are well connected with the education industry."

Faculty's standpoint

All three faculty members' standpoint was that a number of courses taught at their university were theory oriented. They felt that there needed to be a major shift in the direction of developing pragmatic, experiential and practical courses in order to contribute to generation of human capital and to be directly engaged with industry. Following are few of the statements given by the faculty: "The courses being taught are more bookish in nature and only to a limited extent are these aligned to industry needs." Another faculty member stated that, "The current scenario is not satisfactory. The focus should be on transfer of utilization of knowledge." Yet another faculty members comment was the following:

"I personally go through course that are being taught internationally in my field, then I take whatever is applicable from those courses in the Pakistani context and develop my course outlines accordingly"

A relevant point that emerged from faculty perspectives pertained to collaboration with other higher educational institutions in the country because this would facilitate in exchanging views and may help in achieving the aim. Another participant faculty also believed that conducting needs analysis is one of the best ways to find out what the students need to establish "a practical engagement with industry." Following is an excerpt from her interview:

"We try to make the course as practical and needs based as possible. If students express their practical needs pertaining to the sector of education they work for, I try to cater to their requirements; one recent example I can cite is of a curriculum oriented course where one student said that she was not from the formal education sector but from the informal schooling sector, and what would she gain from the course? I saw to it that side by side with the formal curriculum aspects, I included aspects related to informal curriculum as well; in this way, all students benefitted by studying curriculum from different perspectives."

Students' standpoint

Students were vocal on the aspect of most of their courses being theory based. They underscored that in today's advancing world, they did not need theory but what they were looking for real life, pragmatic teaching. In the words of one student:

"We do not want to study theory, theory and theory...we want to study what we can implement in our lives. We are here discussing about generation of human capital; I don't think this....this is possible if only theory is drilled into our minds and exams taken on the basis of that theory. Human capital can only be generated if we are directed towards learning that we can apply practically and professionally; only then can we positively contribute to generation of human capital."

Yet another student had this to say regarding theory-based teaching:

"How are we expected to function if we are only taught theory? I do admit that some courses give us opportunities for practical and experiential learning. But these are not enough. All courses should cater to practice and not theory. This obsolete following of old methodologies and theories has to be changed."



Unlike the common belief of the HoD and the faculty, that students coming to the Education Department were on job, it was discovered that many of them did not hold any job at all and were totally disconnected with the educational industry. One such student proposed internships in the following words:

"In departments like marketing and other related fields, internships are mandatory. I have friends in this very university who study business administration and they have to do mandatory internships. If higher education is to contribute to human capital development, it should engage students with industry via internships. The education department does not do that and we are the losers."

Role of Faculty

The standpoints of the HoD, the faculty and the students all believed that the faculty plays an important role in human capital generation; yet, they differed in their opinions with regards to how successfully was human capital being generated by the faculty members.

The HoDs standpoint

Even though the HoD in her previous remarks had made it very clear that the department cannot suddenly harbor human capital and that students should be aware of the needs of the industry; this in no way meant that she had liberated the department faculty from their role in human capital generation. The role of the faculty according to her is "categorical and unconditional!" She continued that this should be a system of "give and take." The students should gauge the needs of the industry and share these with the faculty and faculty should have critical and practical sessions wherein they reach out to the students to assess their needs and to decipher what their contribution could be towards fulfilling the needs of industry as cited by students. She further suggested that all faculty members have the highest qualification of PhD, therefore, they should be cognizant of the market demands and dynamics and cater to students and to the market demands accordingly. This strategy, she underscored, would be a major one to contribute to engagement with industry and generation of human capital.

Faculty's standpoint

All faculty members agreed that they had a role to play in the generation of human capital and all believed that they were doing their best to do so. The faculty did feel that the administration was not giving them clear goals as to what exactly were they to do in order to help generate human capital. As a faculty member mentioned,

"We don't have any schools or educational institutions on our panel with which we can engage, in fact, it becomes an issue for students to seek permission from the educational institutions to even do their research. The institute should facilitate us in engagement with other organizations and intuitions."

Students' standpoint

In the context of faculty, students emphasized that some faculty members were far too inexperienced and are unaware of latest methodologies of teaching. Other students specified that at times, even though faculty members are experienced and knowledgeable, they do have the know-how or the capacity for transferring their knowledge to students. In this context, one student made the comment that follows:



"University management has to be very vigilant about their hiring policies. They should hire faculty with experience, otherwise, the students suffer. Inexperienced faculty cannot teach, are unaware of latest modes and techniques of teaching and these courses are just a waste of time for us. We pay heavy tuition and this is what we get."

Another student while highlighting the same issue, added another point stated below:

"When we get inexperienced faculty it is we who suffer; at this level of education, we cannot afford to have inexperienced people teaching us. But the irony is that sometimes even knowledgeable faculty cannot transfer the knowledge to us because somehow...I don't know...I don't have the right word....maybe they don't have the capacity to do so; as such when we go out into the industry, our contribution is not much."

Discussion

The results of this study revealed that the education department of the university understudy lacked in the generation of human capital. A study conducted by Alayoubi et al. (2020) provides empirical evidence of the proposition that not only is leadership positively associated with human capital but also are the level of an organizational efficiency and collectivism as a cultural. In this case, there seemed to be a disconnect between the leader (the HoD) and her team (the faculty members). The faculty members felt the need to collaborate and connect with other organizations in order to provide the necessary skills to their student body which is a fundamental requirement for the generation of human capital whereas the HoD felt that the students were already engaged with industry. Muthiah et, al., (2020) and Majid et, al. (2019) note that cooperation within the leadership team along with the participation of faculty in decision-making have significant effect on teacher affective communication. In fact, "the leadership practices in an organization will determine the improvement of overall organizational outcomes" (Majid et, al., 2019, p. 26) and in turn will be responsible for human capital generation.

It was noted that the faculty were trying to use their own sources and means to understand what skills are wanted by the industry, and for the same purpose they were conducting needs analysis, discussions with their students and surfing the internet. However, literature suggests that the best way to understand the needs of the industry and generate human capital is to create a linkage between the educational institution with the industry (Budrin, 2020; Garcia-Alvarez-Coque, et al., 2021) so much so that universities ultimately become power hubs for promotion of innovation (Youtie & Shapira 2008) through their research activities (Garcia-Alvarez-Coque, et al., 2021). This link between the industry and the department was missing which led to frustration in the faculty and students, both. But the irony of the fact is, that the literature also points towards the missing linkage in Pakistan which is responsible for low human capital generation (Ali, Chaudhry & Farooq, 2012; Asrar-ul-Haq, 2015; Nauman & Nasreen, 2017).

It was nevertheless, interesting to note, that the students did feel that they stood out at their workplace even when there was no direct linkage between the skills developed at the university and those required at their workplace. Having said that, the students welcomed project-based learning and internships and were of the view that more projects from the industry can link them with the industry. It is the need of the hour that universities and industry link together for project-based learning or internships as it not only provides knowledge that is relevant and practical skills for employment and hence they contribute to the development of human capital, as the participant



students of these projects are well equipped for professional activities (Budrin et al., 2020; Garcia-Alvarez-Coque, et al., 2021).

The faculty seemed to be sandwiched between the expectations of their organization and the expectations of the students. The HoD felt that the faculty should find ways to cultivate human capital whereas the students felt that some faculty members, particularly junior faculty were deficient in their knowledge. It is the responsibility of the universities to investment in faculty development as it will provide outstanding returns because the faculty will gain expertise not only in research but also in planning industry specific programs (Vedhathiri, 2020). Therefore, to lay all blame on the faculty seems to be unjust.

Conclusion

Though the results of this study cannot be generalized, firstly because this is a qualitative study and secondly because the study analyzed the case of one university, this study highlighted the significance of studying generation of human capital from the perspective of a department of a higher educational institution. The findings indicate that in this case, the Education Department of the investigated private university lacked in the generation of human capital as there was a disconnect between the Education Department and the industry that it was meant to serve.. It was seen that the faculty were making efforts in isolation which could have been more fruitful if they were supported by their university. Nevertheless, these efforts were not totally in vain as the students did feel that they stood out from the rest of their colleagues due to their education at the university, when put in any competition. The directions for future research are that further investigations with a larger sample and mixed methods studies should be conducted in this direction because one of the prime aims of higher education is to generate human capital for the benefit of the citizens and the country.

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