

## ESTABLISHMENT OF UNIVERSAL SCHEMATIC MODELS ON MISSIONS AND VISIONS COVERING ON QUALITY EDUCATION AND RESEARCH AT UNIVERSITY/HIGHER EDUCATIONAL INSTITUTES OF THE GLOBAL VILLAGE

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### 1. ABSTRACT

For better survival and long life, man requires pollution-free safe, sound and peaceful healthy planet where responsibilities cover saving of pollution-free soil, air, water, crops and food materials including proper awareness to every aspect of life (Fig. 1–2). After best survival in healthy planet man requires for building of better career where university/higher educational institutes with quality missions and visions are important. The aims or missions of the university/higher educational institutes covers/includes to develop quality students/graduates, quality teachers/academicians, researchers and scientists and quality administrators. Behind quality graduates, teachers/scientists and administrators there are lots of supporting materials and each has its own area and guideline. The final vision of the university/institute to build/establish as a Centre of Excellence (Fig. 1). This is the universal guideline and concept, and there is no shortcut or alternative methods/techniques to recognize a university as Centre of Excellence. Here all techniques/methodologies and guidelines are evaluated and established under 12 schematic models (Fig. 1-12), where Fig. 2 covered on saving of planets and Fig. 13 used as an example of university for the coming decade of 2021-2029.

**Keywords:** Students, graduates, teachers, professors, models, research, centre of excellence, university, higher educational institutes, mission, and vision.

### 2. Introduction

To become a good responsible strong kind hearted person he/she needs sound education that treated as backbone of the nation. Otherwise, it is also like as a man without an aims is like a ship without a rudder i.e. only education never makes a man perfect. Education is not only the collection of certificate-it is the successful earning and strong building of themselves (students) so that they can proceed with the nation as prosperous one in the global village. On August 1993, as Head of the Dept. of Soil Science, BAU, Mymensingh, I as only the representative of Bangladesh (even not as VC) presented an article “Higher education in Bangladesh” (50 pages, printed in the conf. proceedings) at the International conferences on Vice Chancellors at Kobe, Japan where more than 600 Vice Chancellors were participated from more than 100 countries of the world, and king and queen of Japan gave an warm reception to all of participants. I as Professor of BAU, exchanged views and concepts to 40-50 VCs of different countries. At that time (1993) there were only 6 universities of Bangladesh like Dhaka, Chittagong, Rajshahi, Jahangirnagar, BAU and BUET, and some high quality colleges like AM college, Mymensingh, Jogonnath college, Dhaka, Karmaikal college, Rangpur, BM college, Barishal, Azizul Haque college Bogra, Gurudoyal college, Kishorganj, Kortia college, Tangail, Victoria college, Comilla etc. were included with students, teachers and programmes. During 1980s Bangladesh faced severe crisis of higher education facility where thousands of students left for India for graduate and postgraduate studies because then university seats were limited and several lakh Bangladeshi HSC passed students could not enter the university education. So, then in 1990s (1992) private university system was developed and now there are 57 public and 109 private universities in Bangladesh. University education means teaching/learning and research. Without research university education covers only 20–30% success. For a standard university education covers at least 50% teaching and 50% research although super quality university requires 80–90% research. For world wide recognition, university is recognized through its number of professors in the campus. The more the

number of professors in the university the more the quality and strength of the campus. University professors can contribute through 10-20% teaching and 70-80% research. In developed countries for govt plan and programme, they take advise from university professors. University professors' positions are highly honourable and respectable to all and in Finland where TV news appears like as the Honourable President of Finland declared to Mr. Him/her (name/names) as professors at the dept., university of Helsinki; Jyvaskyla university etc. (I followed that in 1976-84, first Bangladeshi in Finland). Our UGC very often talks about the importance of research for the univ. teachers but they never evaluate or handle those who are doing or already done excellent contributions for the nation. Moreover, as they handle good research/publications without politics they are really or greatly neglected. Practically, in Bangladesh. University teachers/professors' research or contributions is treated/counted for personal satisfaction and during last 50 years of my teaching, research and contributions-I myself can be counted as the proof document of the nation (Sattar, 2022)<sup>20</sup>. Here in this study missions and visions of university/higher educational institutes where quality graduates, teaching, research and publications as well as quality university with all aspects i.e. to develop university/higher educational institutes as centre of excellence through 12 schematic models and their analyses have been established in the global village.

### **3. Growth development and success of schematic model works of Sattar**

Sattar first started his schematic model works in 1977/78 through building of routes of pesticides in the environment, movement of pesticides in the environment, cycles of chemicals in the environment. He widely discussed these schemes/models with his supervisor renowned great international scientist Prof. Paasivirta where he greatly encouraged Prof. Sattar, and then he presented those models in the Finnish Annual Chemistry Days Conferences in Helsinki in 1979-82 at poster and/or oral presentation. 1981/82, he started to develop works covering routes of pesticides in Bangladesh environment and during his thesis presentation ceremony on 20 December 1980, he showed 20-25 such schematic models to 300-350 audiences that was the great success and opening the door of model works/contributions of Sattar. Here his official contribution and publication started in Finland (Sattar, 1983)<sup>1</sup>. Then quickly published 60 models on a book Routes of pesticides in the environment (Sattar, 1982)<sup>2</sup>. In 1994/95, he started to publish Bangladesh Journal of Environmental Science as Editor-in-Chief first environmental journal in Bangladesh and during 1995-2021, he published 41 volumes of the journal where his 50-55 articles covered on models as part or full articles of Models (Sattar)<sup>3-14</sup>. His model development works covers on agriculture, soil science, pesticide science, environmental science, general science, social science, climate changes, global warming, natural disasters and management, arsenic, heavy metals, land degradation, soil pollution, food safety, food security, health hazards, rising of sea water or not, environment and human peace, dust contaminations, urban disasters, education and research, agrochemical contaminations, toxicology (Sattar)<sup>1-14</sup>. The books cover 30-35 published models (Sattar, 2013)<sup>15</sup> and 150-160 published models too (Sattar)<sup>16</sup>. Then Sattar succeeded to proceed/develop hundreds of models in literature (Sattar)<sup>17-18</sup>, and also established 100 models on Bangabandhu's life and philosophy (Sattar)<sup>19</sup>. At least 10 articles purely covered or handled with model schemes. Even his food safety contributions included about 40 models (Sattar)<sup>7</sup>. So, on schematic building and development works, Sattar<sup>1-19</sup> is pioneer as well as the maximum areas and maximum number of model builder in Bangladesh. This present model contributions covers on missions and visions covering on all aspects of the university and higher education institutes of the world.

### **4. Brief description of quality education guideline models through missions and visions with an example of FIU (Fig. 1-13)**

Through 13 figures (Fig. 1-13) covering 13 models described the universal quality education guidelines and schemes including missions and visions of each. Here all 13 models (Fig. 1-13) are highly self explanatory. Fig. 1 covered the summary of the models of Fig. 3-12. On the basis of the models and contributions the analyses covered 11 areas under quality education programmes of the universities/higher educational institutes, and they are listed below as chapters 5-16.

5. **Healthy planet through preserving of living beings with sound life of soil, air, water, plants, and safety food materials (Fig. 2):** For better survival and long life, man requires safe, sound and peaceful planet where major responsibilities cover pollution free air, water, crops, food materials, and those must be managed and handled through wide awareness to every aspect of life (Fig. 2).
6. **Missions and visions of university/higher educational institutes model (Fig. 3):** It covers universal guideline regarding proper missions and vision of the university or higher educational institutes where production of quality graduates and research, and finally to reach the goal as centre of Excellence (Fig. 3).
7. **Quality higher education guideline model (Fig. 4):** It shows the all major requirements for running a sound university or higher educational campus for producing quality graduates, researchers and scientists or philosophers (Fig. 4).
8. **Higher education quality management guideline model (Fig. 5):** It covers all major academic and administrative cells/offices or requirements/units for smooth running the campus, and under this guideline a university campus can produce high quality graduates and researchers for proper development of the nation (Fig. 5).
9. **Research discovery guideline model (Fig. 6):** This model shows a detailed description regarding starting to ending and success to invention of research guideline of the university or higher educational institute. For production of high quality scientists and researchers this guideline model must 100% work (Fig. 6).
10. **Research project management guideline model (Fig. 7):** This model explains guideline regarding starting to ending i.e. how to handle a quality research project at the university or higher educational institutes which is the major part of quality university (Fig. 7).
11. **Accreditation standard for quality education model (Fig. 8):** For fulfillment of university under quality education, now it requires a minimum standard in teaching, research and other facilities under the guideline of accreditation (Fig. 8).
12. **Teaching and learning methodology for quality education model (Fig. 9):** For quality education, role of students, teachers, and lecture/learning methodology are important where pillars 1, 2 and 3 well show the success (Fig. 9) stories covering missions and visions.
13. **Teachers and students relationship and the ideologies and philosophies (Fig. 10):** For quality education there must be sound relationship between teachers and students and again they must develop proper/sound ideologies and philosophies for successful entry and gaining the education (Fig. 10)
14. **Model on missions and visions of students and teachers at the university/higher educational institutes (Fig. 11):** To reach the goal of life, every student and teacher must have own mission and vision although they are universal to all over the world like good education and knowledge and quality job in life (Fig. 11).
15. **Model on missions and visions of scientists/researchers/professors' (Fig. 12):** Missions of researchers/scientists/professors or philosophers includes 10-12 concepts/contributions against 4-6 visions of life (Fig. 12).
16. **Model on missions and visions of an example like Fareast International University (FIU) (Fig. 13):** Fareast International University (FIU), Banani, Dhaka is a very new private university in the country. FIU is just growing and hope to grow quickly after starting the main campus at Uttara in 2023. It covers sound mission and vision which would be fulfilled in the decades like 2020s (Fig. 13). At this moment in 2022, the programmes are smoothly running. Chairman Sheikh Kabir Hossain is an excellent man (Cousin brother of Father of the nation-Bangabandhu and uncle of Honourable Prime Minister Sheikh Hasina). He hopes and desires-once the campus would stand as Centre of Excellence in Teaching and Research, and I believe it and strongly support his desires and wishes. Start here and succeed here-is the main goal of the campus.

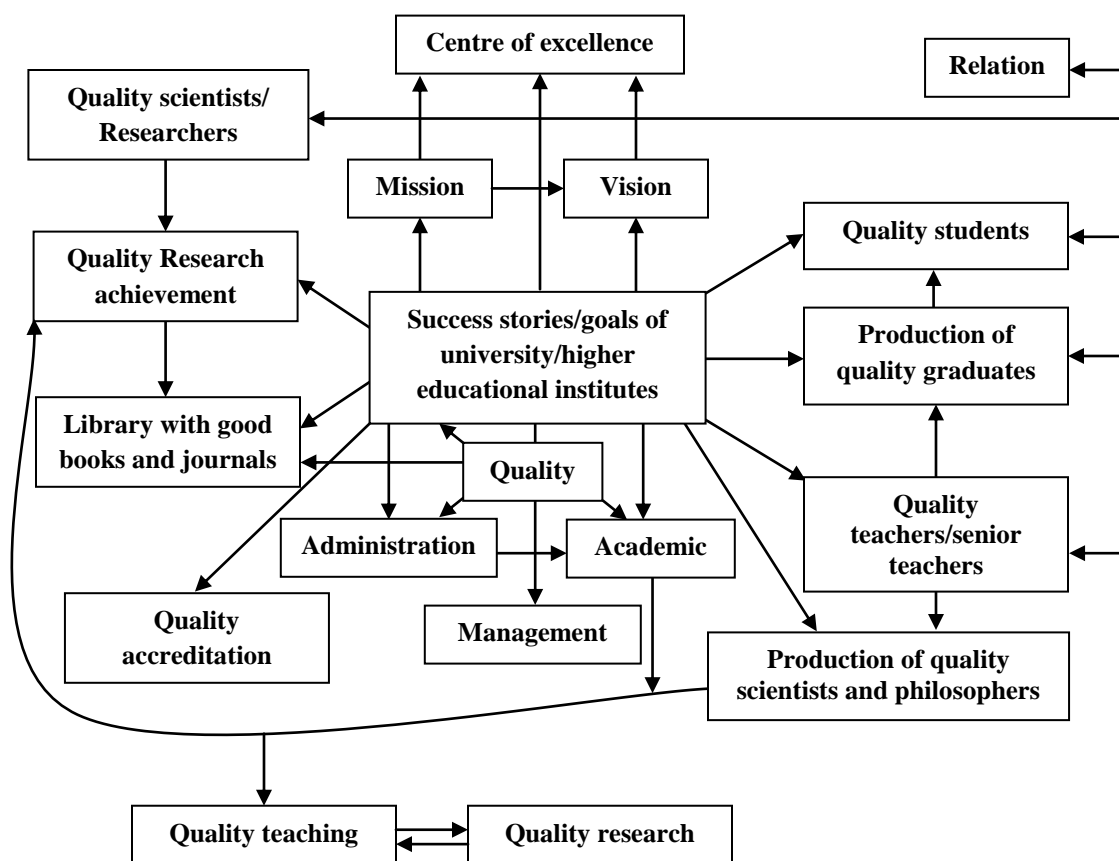


Fig. 1. A summary guideline techniques for the production of quality graduates i.e. missions and visions at university/higher educational institutes (Sattar, 2022; Ref. this article)

5. Healthy planet through preserving of living beings with sound life of soil, air, water, plants and safety food materials (Fig. 2)

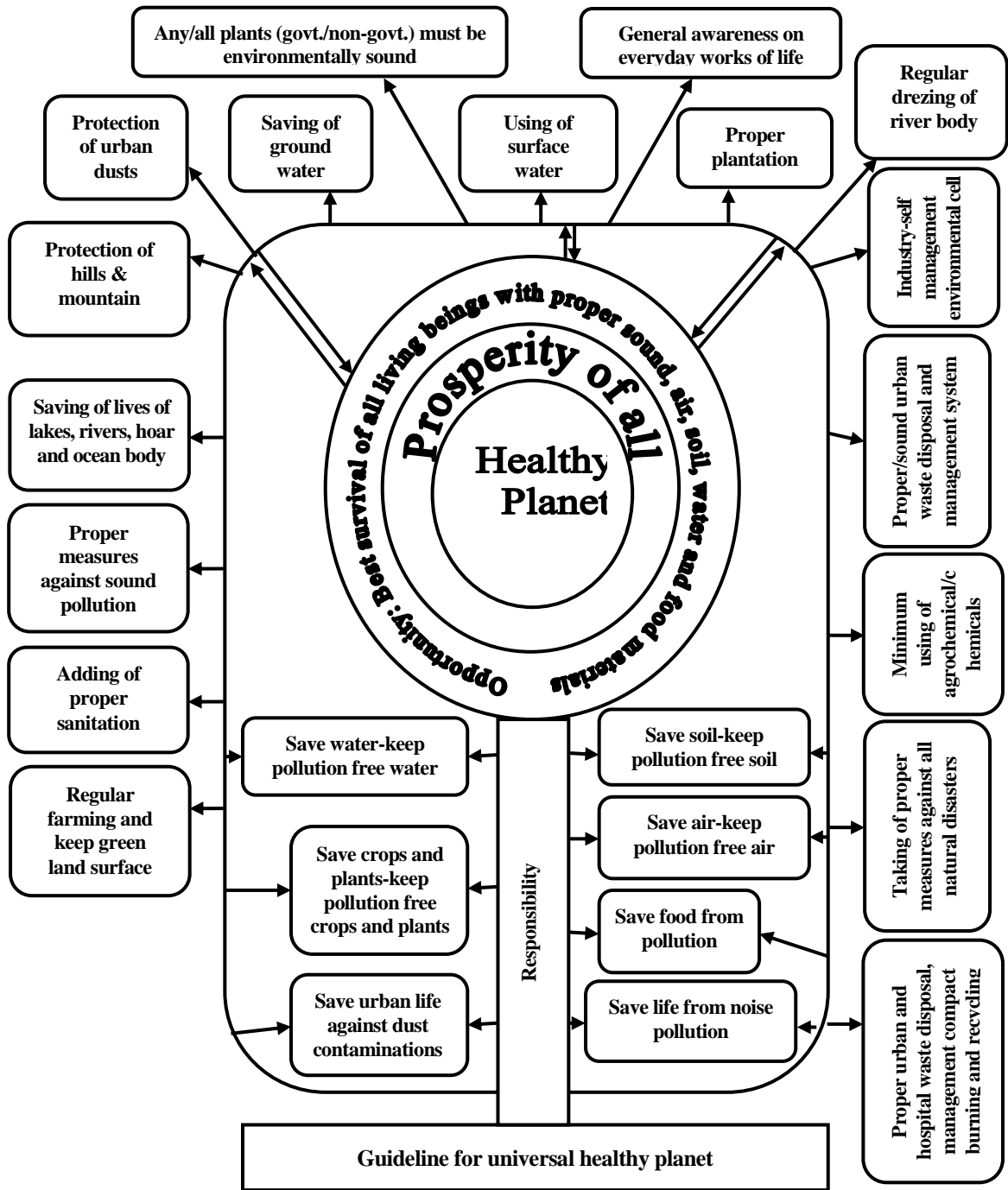


Fig. 2. On the basis of the theme of world environment day 5 June 2022 a universal healthy planet guideline (Sattar, 2022; Ref. this article).

6. Missions and visions of university/higher educational institutes' model (Fig. 3)

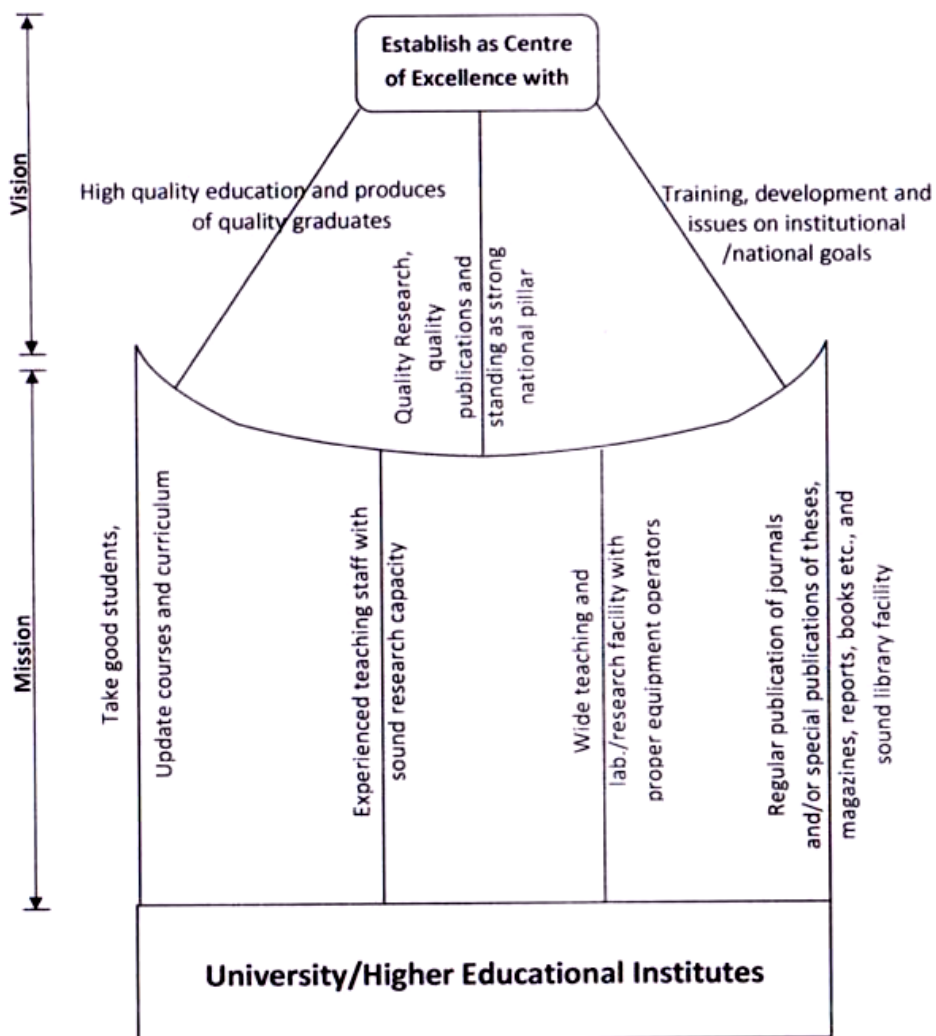


Fig. 3. Universal vision and mission of the university or higher educational Institutes of the global village (Sattar, 2022; Ref. this article)

7. Quality higher education guideline model (Fig. 4)

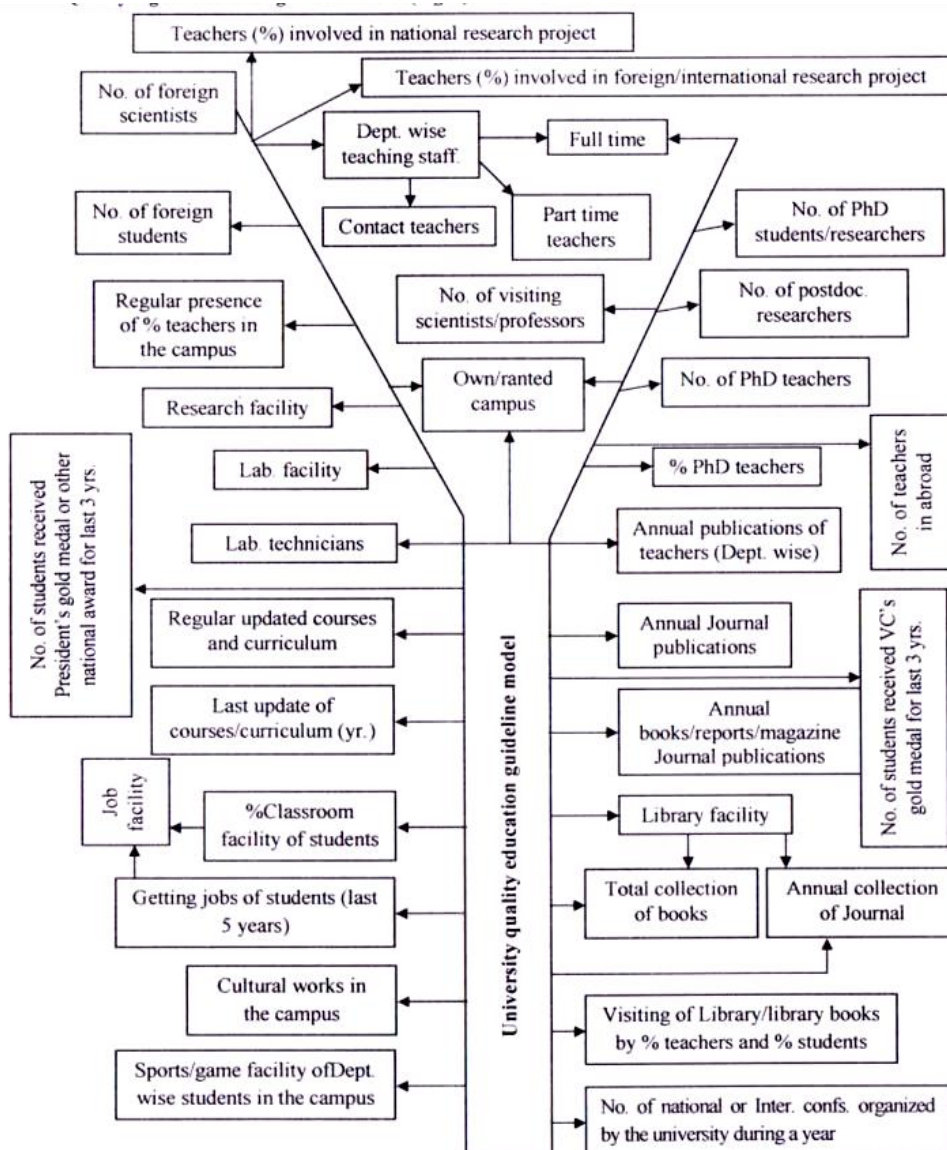


Fig. 4. A schematic guideline of university/higher educational institute's universal quality education model (Sattar, 2022, Ref. this article)

8. Higher education quality management guideline model (Fig. 5)

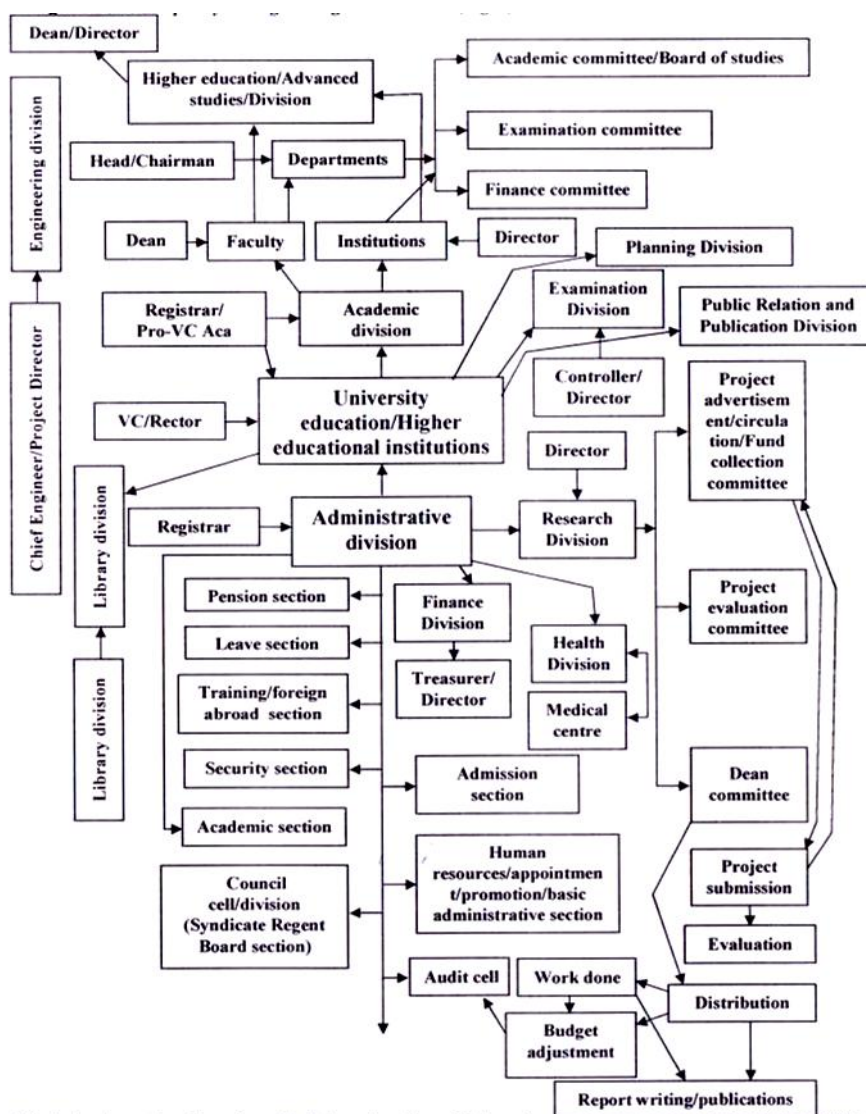


Fig. 5. A schematic universal model of the university or higher educational institute's management guideline (Sattar, 2022; Ref. this article).

9. Research discovery guideline model (Fig. 6)

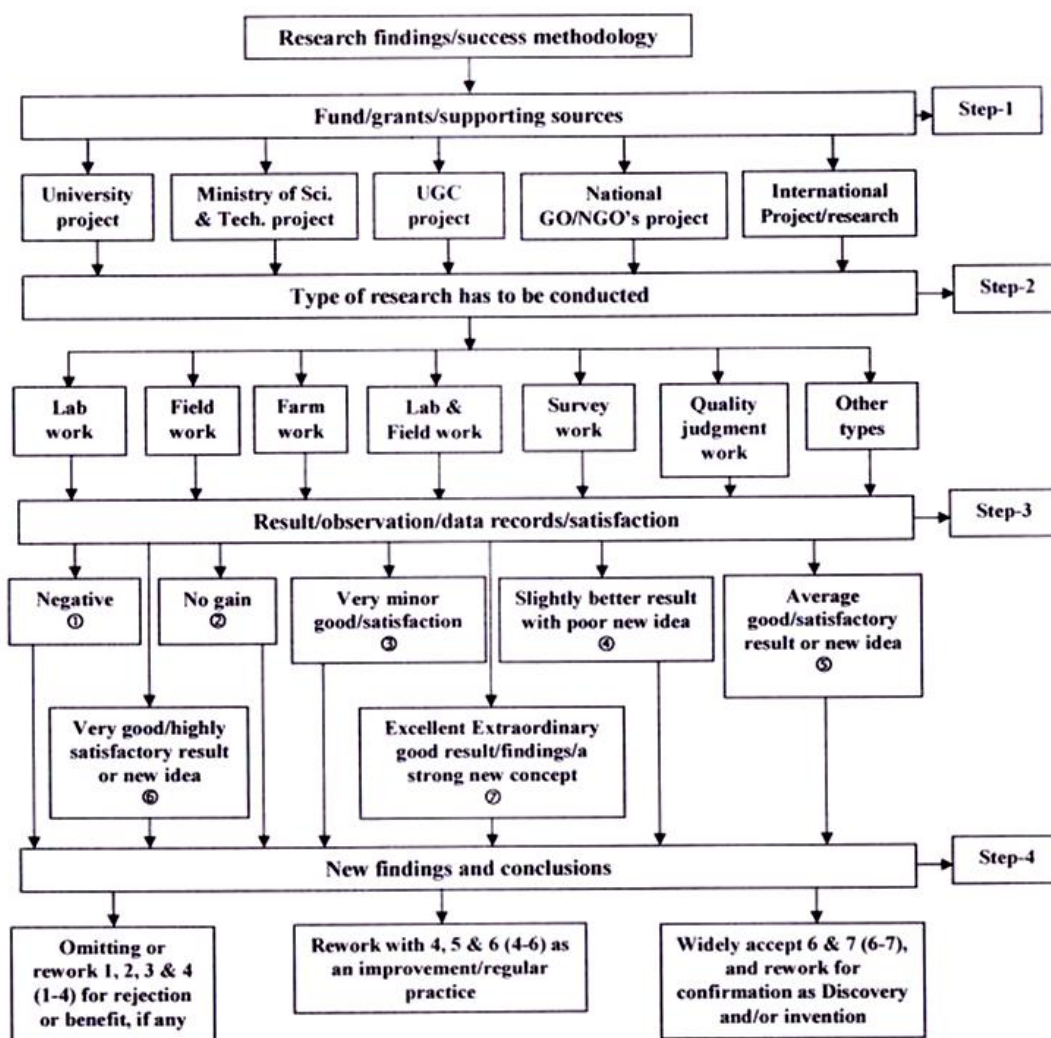


Fig. 6. A schematic guideline for successful handling of research with a conclusion of new finding/discovery or invention (Sattar, 2022; Ref. this article)

10. Research project management guideline model (Fig. 7)

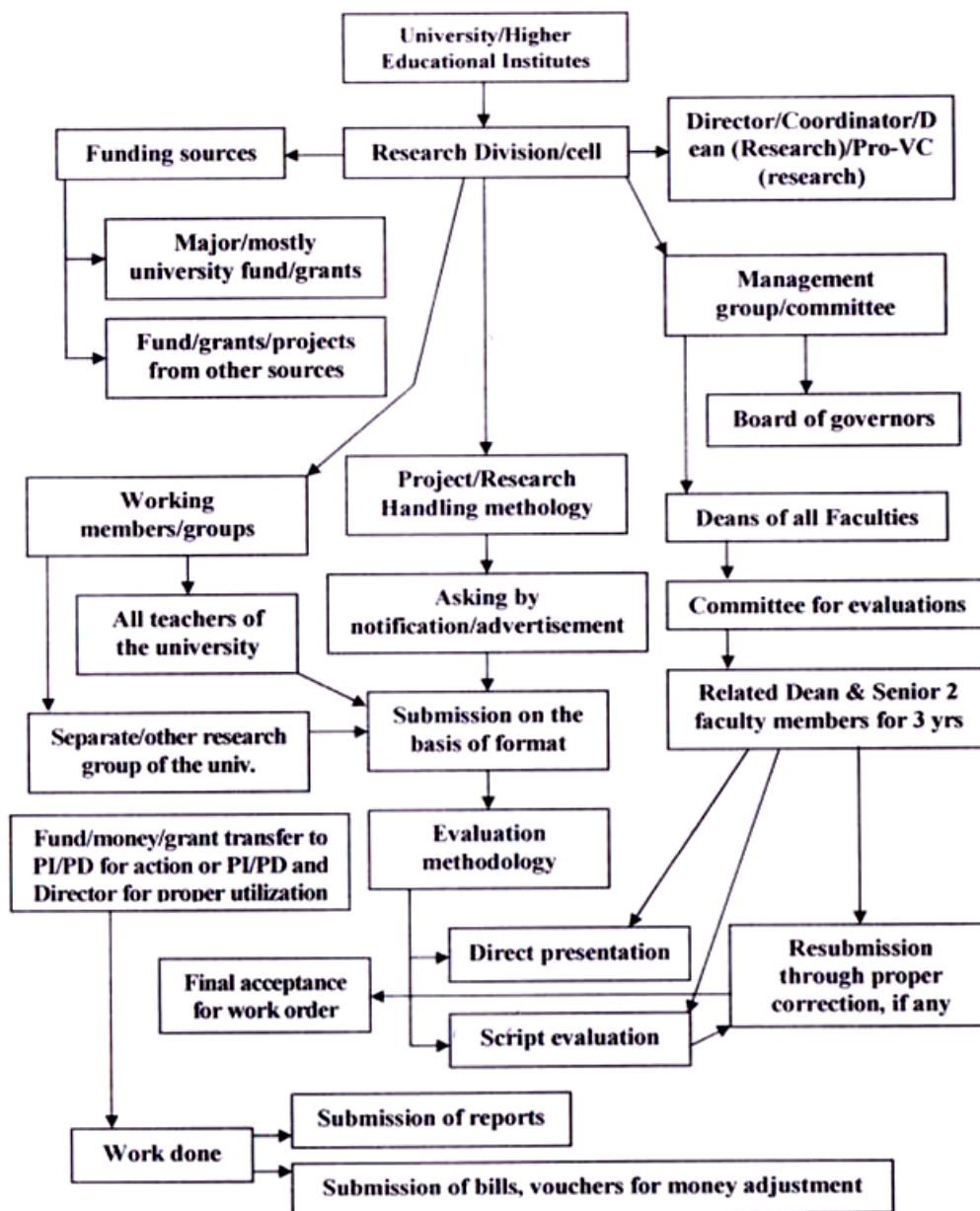


Fig. 7. A schematic outline of university/higher educational institute research project management guideline (Sattar, 2022, Ref. this article)

11. Accreditation standard for quality education model (Fig. 8)

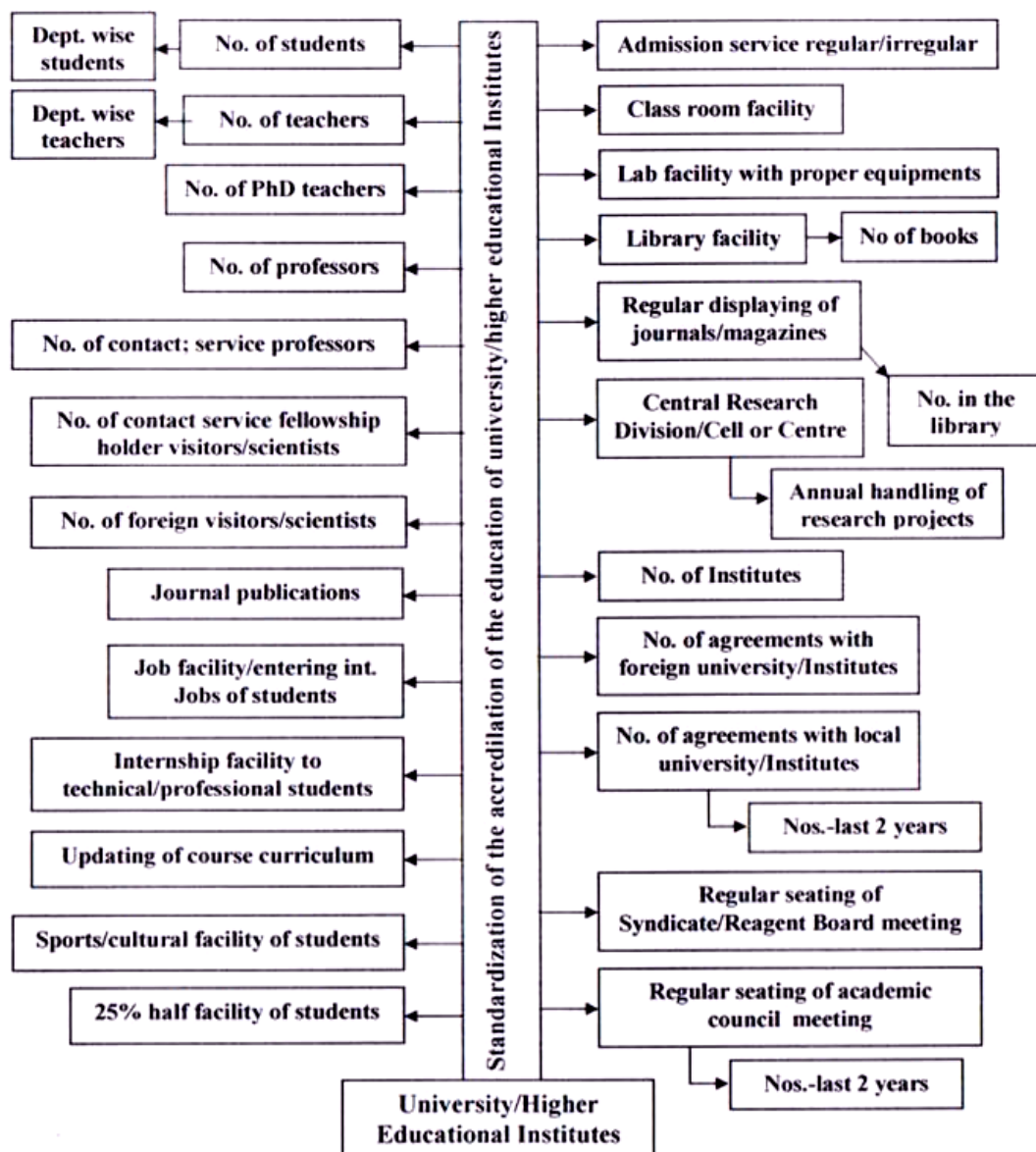


Fig. 8. A schematic analysis of the guideline for standard of accreditation of quality university/higher educational institutes at the global village (Sattar, 2022, Ref. this article)

12. Model on teaching and learning methodology of teachers and students (Fig. 9)

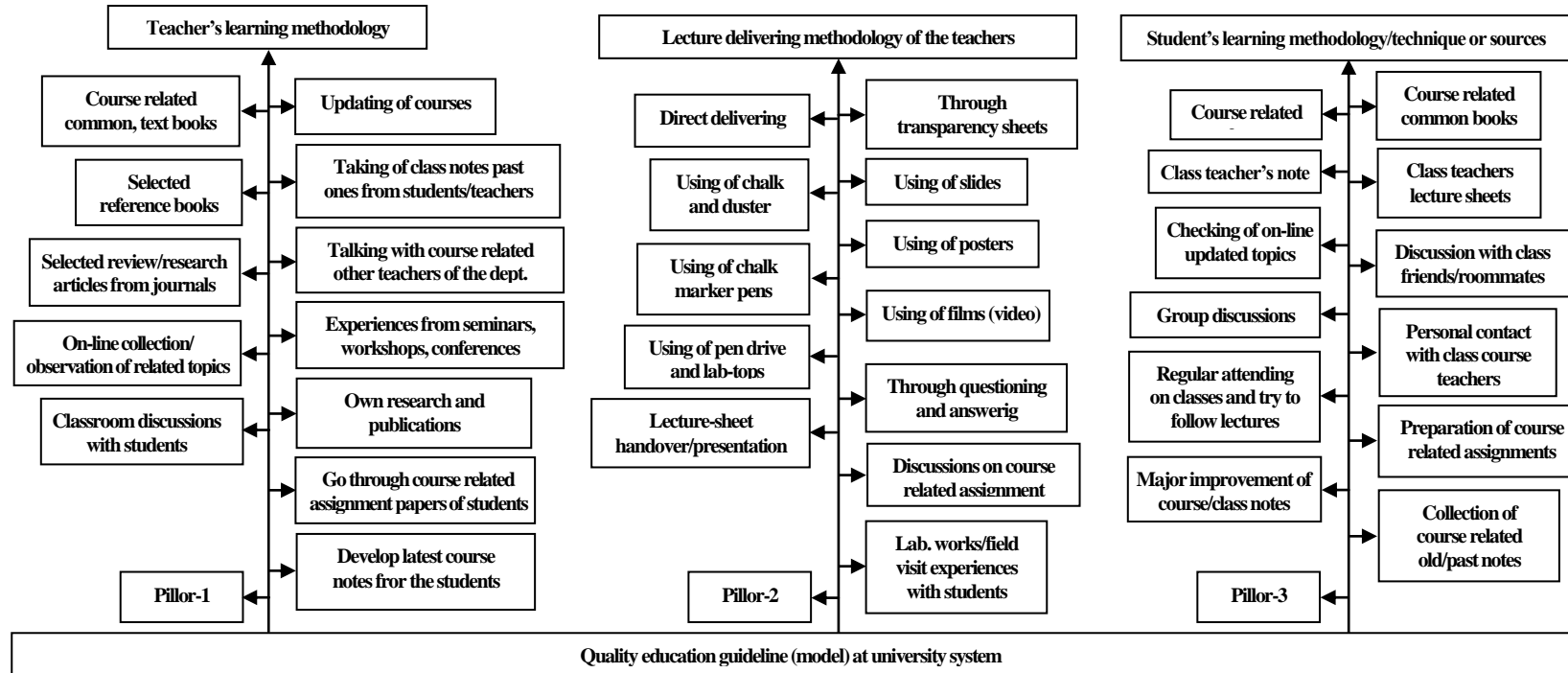


Fig. 9. Guideline on quality education covering teaching and learning methodology at the university or higher educational Institutes (Sattar, 2022, Ref. this article)

13. Teachers and students relationship, ideologies and philosophies (Fig. 10)

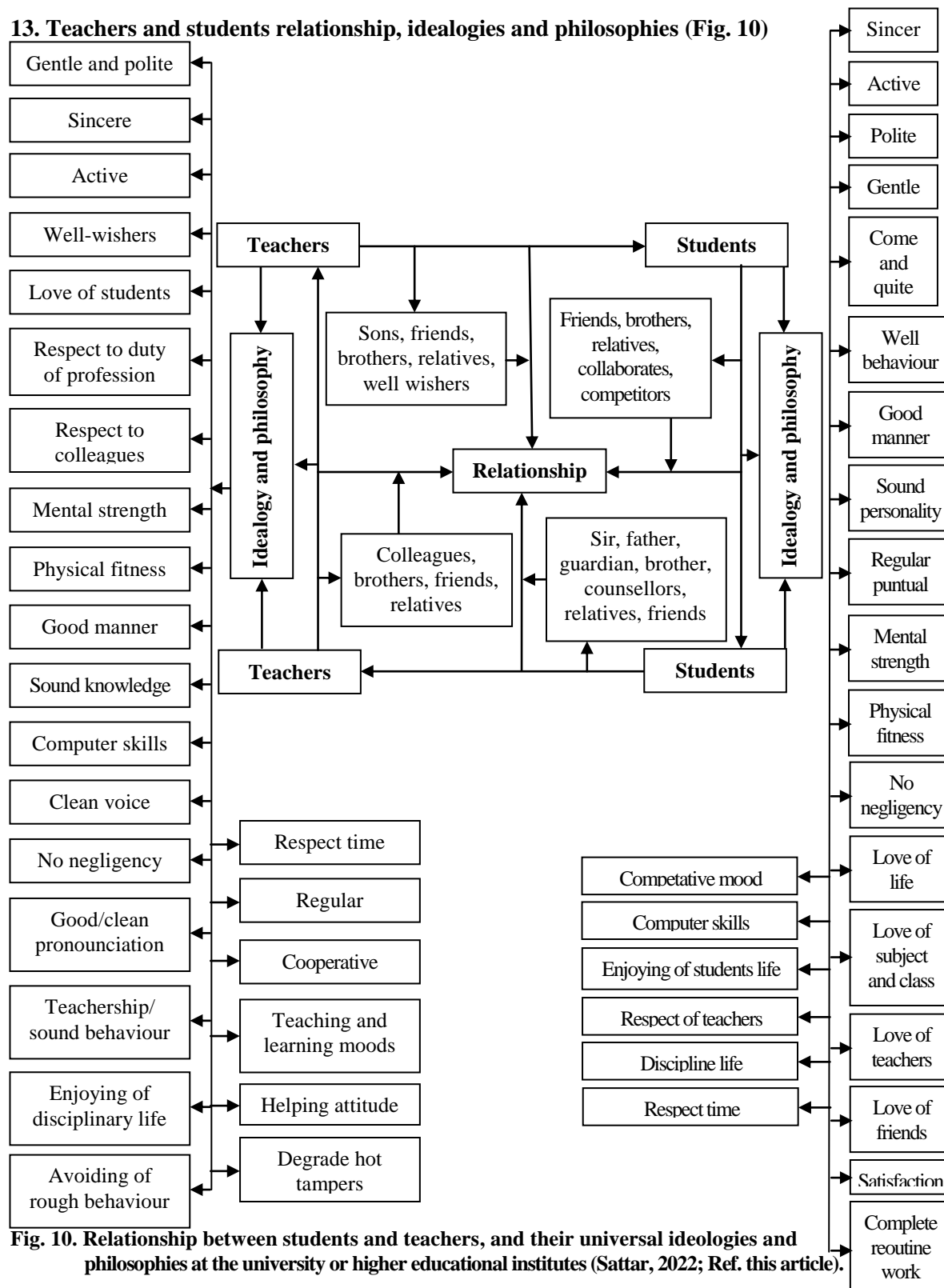


Fig. 10. Relationship between students and teachers, and their universal ideologies and philosophies at the university or higher educational institutes (Sattar, 2022; Ref. this article).

14. Model on missions and visions of students and teachers at the university/higher educational institutes (Fig. 11).

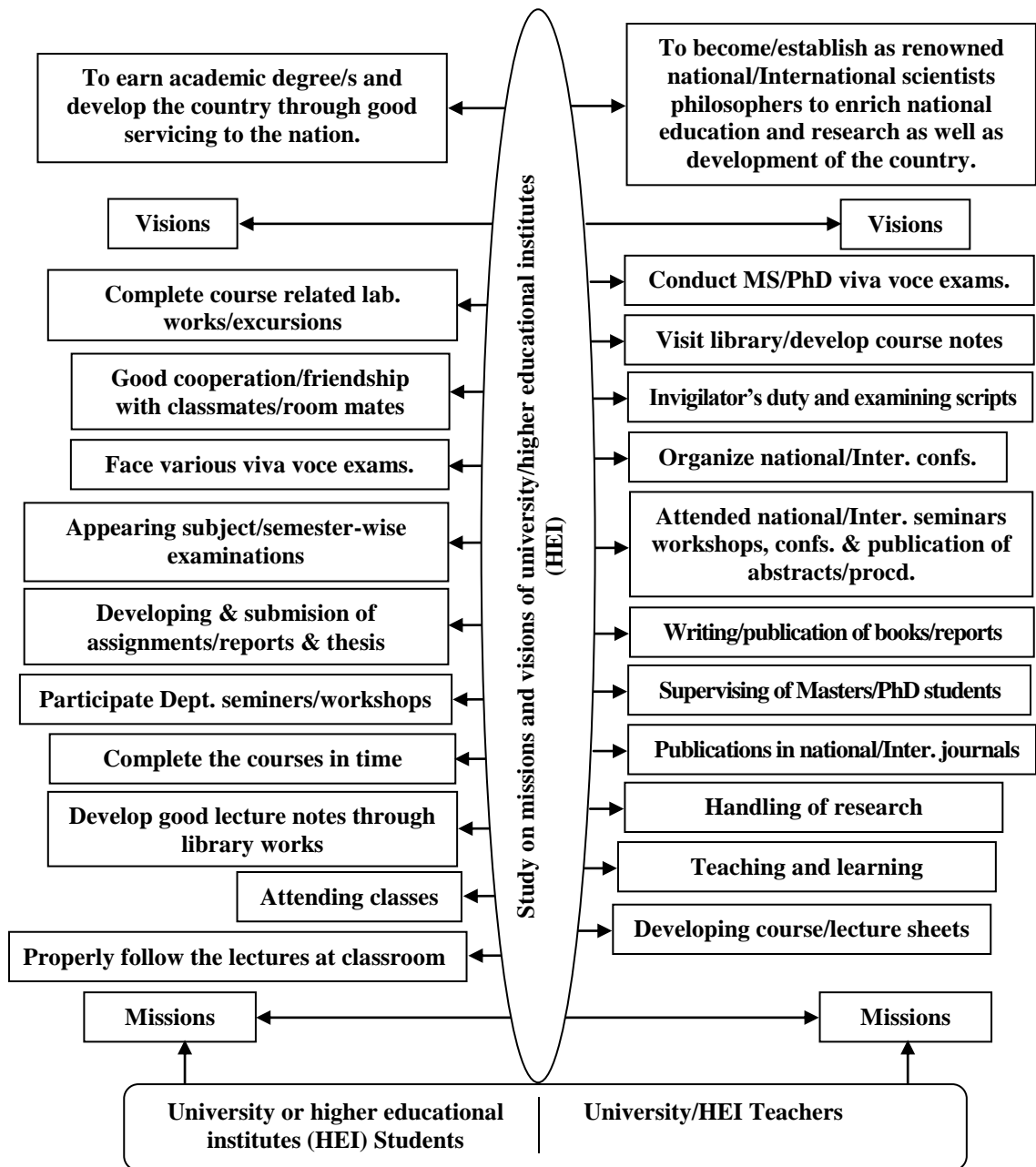


Fig. 11. Missions and visions of the students and teachers of university or higher educational institutes of the global village (Sattar, 2022; Ref. this article) (Fig. 11)

15. Model on missions and visions of scientists/researchers/professors (Fig. 12)

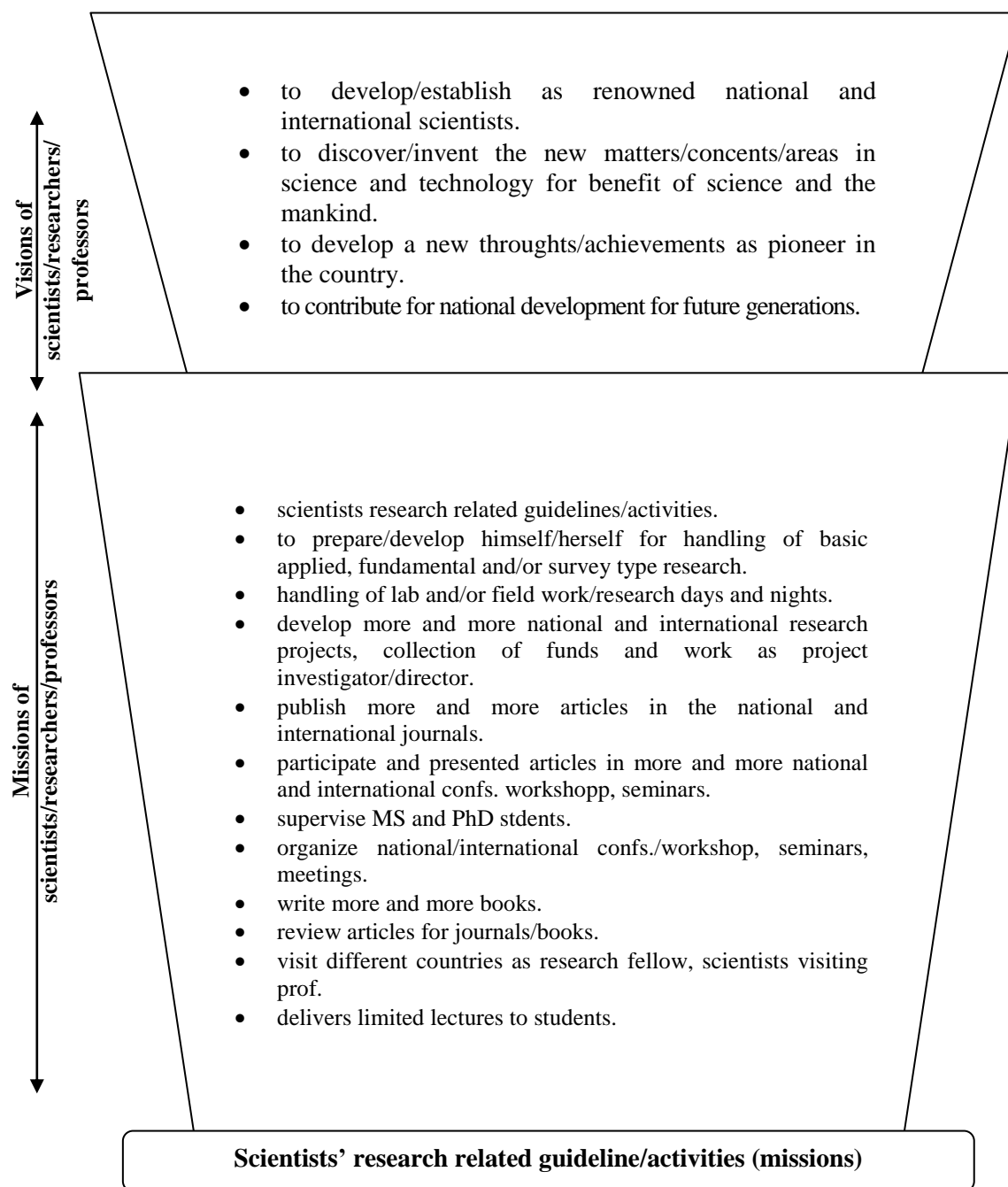


Fig. 12. Missions and visions of scientists/researcher/professors at university or research institutes at the global village (Sattar, 2022; Ref. this article).

16. Model on missions and visions of Fareast International University (FIU) (Fig. 13)

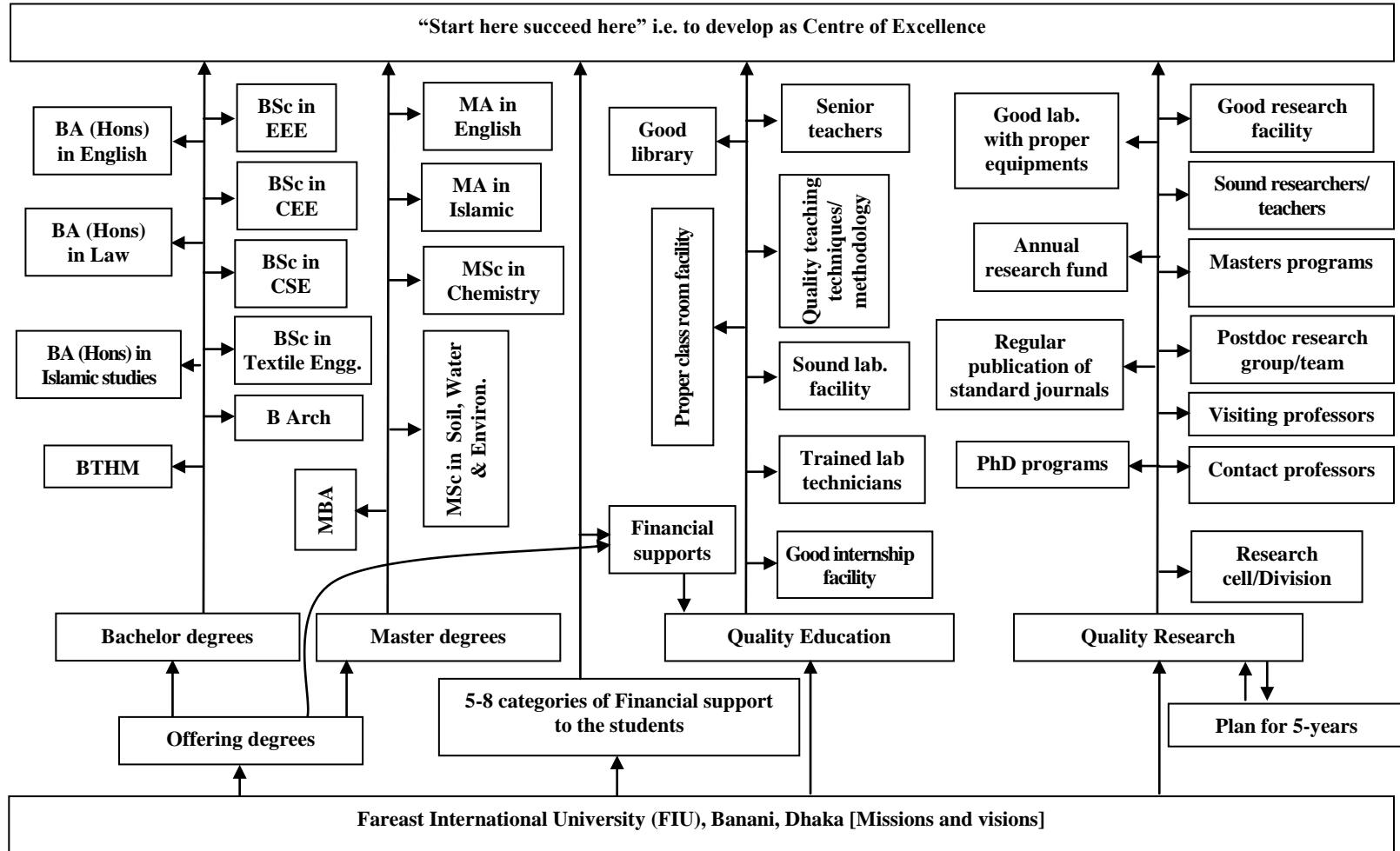


Fig. 13. A schematic outline (analysis) of the case study example of missions and visions of FIU in 2020s (Sattar, 2022, Ref. this article)

**17. Various rules and regulations for running quality university/higher educational institutes**

1. Admission rules and regulations
2. Academic rules and calendar
3. Leave rules of teachers and employees
4. Appointment rules of teachers
5. Promotion and upgradation of teachers
6. Appointment rules and regulations of employees
7. Promotion and upgradation of employees
8. Examination rules and regulations
9. Grading rules and rules of offering certificates and transcripts
10. Rules for higher/post graduate education
11. Rules for handling and guideline for masters and PhD theses/dissertations
12. Rules for handling of research projects
13. Handling/functions and rules of academic council
14. Rules for running the Syndicate/Regent Board
15. Rules for handling the course curriculum and/or credits
16. Rules and regulations of different academic Depts. and faculties
17. Rules covering on missions and visions
18. Structure of organograms and functions of each cell
19. Rules of each Administrative section
20. Running of library management rules
21. Rules for students hall management in the campus
22. Rules and regulations on transport and vehicles management
23. Master plan regulations of the campus for 20-25 years
24. Rules for credit transfer system
25. Regulations for using of dresses for students (male and female)/teachers/employees
26. Rule for the running/management in inter and intra faculty
27. Financial management regulations
28. Rules on medical facility, treatment and availability of doctors in the centre
29. Regulations on environmental management in the campus
30. Regulations for developing of labs. for Depts. with equipments
31. Rules on handling and management of university convocation
32. Regulations for offering of gold modals to the students of the university
33. Regulations for publications of journals of the university
34. Rules for the disciplinary body for actions on students/teachers/employees
35. Rules and regulations covering the power of different bodies like VC, Pro-VC, Registrar, Treasurer, Deans, Heads, Directors, Controllers, Librarian etc.
36. Regulations on students' bodies in the campus
37. Regulations on running/handling of banks in the campus
38. Rules on IQAC cell-activities in all depts.
39. Rules for working on accreditation standard of Depts.
40. Rules and regulations covering the sports and games of the students

## **18. Acknowledgement**

This article is dedicated to Honorable Vice Chancellor Prof. Dr. Rakib Ahmed, Fareast International University, Banani, Dhaka.

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