Research on the Value Implications and Path of Integrating the Spirit of Scientists into the "Three-Wide Education" in Colleges and Universities

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Abstract: In the era of building a strong country in science and technology and education, the education process of universities is required to deepen connotation urgently. The patriotism, innovation, truth-seeking, and teamwork of the scientist spirit are in high conformity with the "Three-full Education" principles, full participation by all staff, full integration through the whole process, and full collaboration. The trend of higher education now stresses variations of knowledge transfer better than soul cultivation. The isolation of the spiritual influence of scientists from the practical influence of scientific research has diminished the capability of talent cultivation. The systematic characteristics of the spirit of scientists, as the collective personality symbol of Chinese scientists and technology workers, could pull the loose ends of the university talent education system together and balance the "separation of form and spirit" dilemma in education practices and inject a soul core into the innovative talent cultivation. Moreover, systematic representation of the scientists'' spirit is an inevitable choice, not only incipiently to address the national strategic requirements but also a logically framed start to reconstruct the educational framework in universities. The depth of the spirit will establish the height of talent growth, and the personified representation of the scientist community holds greater potency for education.

Keywords: Scientism; "Three-Wide Education"; Path Study

1. Introduction

In the situation where university "Three-Wide Education" system needs to fulfill its fundamental task of cultivating new era talents, the spirit of scientists is an evocative carrier of values. When practices such as quantum computing and gene editing disrupt human civilization, human spirituality of meaning will exceed the importance of technologies. What matters more than the technologies are the spiritual motivations behind the technologies: we saw the feeling of obligation and the urge for exploration of Chinese S/X/T workers working on "bottleneck" technology need to be reflected on the genetics of the education system. As it currently stands, the spirit of scientists in university education practice is primarily publicizing acts, and does not adequately translate to an in-depth transfer from cognitive awareness to action. The significance of

this research is its revealing of the closed-loop mechanism of spiritual succession: embedding spiritual codes while code binding lectures deliver knowledge codes, being training on scientific research embodies value internalization; and administration and service can reveal doors of spiritual enlightenment.

2. The Theoretical Basis of Scientist Spirit and "Three-Wide Education" in Colleges and Universities

2.1. Concept and Goal of "Three-Wide Education" in Colleges and Universities

The model of "Three-Wide Education" in the context of universities is developed within the framework of educational reform and innovation in the new era. The essential meaning, or connotation, of "Three-Wide Education" is to be seen in three functional dimensions: the time dimension, which means throughout the process, the framework of responsibility decomposition which considers full staff action, and the spatial area which means full collaboration. The "Three - Wide Education" encourages and develops three fundamental principles of higher education leading it beyond the divides of subject separation in rather traditional higher education management structure, and emphasizes that university groups have to take on the responsibility of education whatever their position (in the roles these groups play). It is attentive to the connectedness of a student's collaboration process in their full growth cycle from the point of entrance into the university and beyond the adapting phase into the exit-graduating phase with individual development. It integrates the impact of each of these educational attention areas - the influences of the educational factors in variety of spaces, including curriculum teaching and learning, campus culture, living contexts and situations. And the educational systems to the fundamental cultivation of virtue and education [1]. It turns the functional area of cultivation from an abstract ideal into a mobilized action system, enhances the effectiveness of its political ideological education dimension through resources and planning structures while ensuring that we actually move student talent development as they are concerned with higher learning".

2.2. Intrinsic Connection between Scientist Spirit and "Three-Wide Education" in Colleges and Universities

The spirit of scientists, which is based on values of truth-seeking and practical approaches along with qualities of collaborative teammates and committed individuals, as well as non-instrumental enthusiasm toward exploration constitute a strong foundation to mediate the potential divide between value guidance and the professional training in the university education system. The operational mode of collective full-staff collaboration under the "Three-Wide Education" framework requires teachers, administrators, and social forces to cooperate as a network of responsibility, and the paradigm experience of collaborative efforts among scientists can be reestablished into an resource linkage mechanism. The positivist methodology of the spirit directs processes of education to transform the boundaries of traditional experience-based models and to drive conceptualize dynamic possibilities. The type of process orientation in scientific research training, created the rigorous experience of observation, evidence collection, and rational deduction, reshapes the cognitive structures of students and could lead to varying facets of the educational elements on campus to be nourished in substantial systemic growth. The methodology of education practice should be enacted, and process and critical and innovative potential are presented in scientific thinking to promote purposeful drive toward educational goals.

3. The Value Implications of Integrating the Spirit of Scientists into "Three-Wide Parenting" in Colleges and Universities

The investigation and academic integrity encapsulated in the spirit of scientists embed immeasurable–energy–into the educational ecosystem of universities. The perseverance of scientists in the business of respect for the truth significantly increases students' psychological resilience through confrontation with various disappointments. The inclusion and

assimilation of these spiritual dispositions modifies the static modality matrix of the typical education system. The formers' authentic representations of problem-justinelle and methodological displays of inquiry about scientific practices are incomparably better prospects than preachings. Administrators make use of research stories to create service scenarios that humanize their serving and make value transcriber emotionally warm. The ethical criteria established by scientific communities, severely alter the values grid of contemporary youth. The particular honest stance on experimental data processing constrains the utilitarian nature of academic behavior in all teaching moments, and in contextualized mode gives order of values reconsideration. The way of thinking constituted through constant engagement restructures the usage of knowledge. The critical and skeptical positions shift the mode of learning from simple reception toward active construction. The formation of a habit of innovating collaboration in the practice field diminishes the boundary of individualism, and the academic community's collaborative ethics renegotiate into the operating norms [2].

4. Analysis of the current situation of the integration of the spirit of scientists into the "Three-Wide Education" in colleges and universities

Currently, in the policy design of universities, the spirit of scientists has not yet formed a systematic transmission chain. The administrative directive pass through multiple-tier conveyance and results in cognitive attenuation of the spiritual essence at the operational implementation layers of departments and faculties. There are material barriers in the cooperative mechanism between education subjects. The advisory team has no professional support in the history of science with respect to the spirit's interpretation merely resting at the level of recounting actions while professional teachers are used to directing their focus on technical instruction while neglecting values coupling. The design of practical activities is ritualized, with a persistent excessive emphasis on output indicators of achievements in science and technology innovation competitions undermines the character building function during the processes as well the theater-type performance of academic lectures scarcely activates deep identification. Lastly, there are structural contradictions at the level of resource allocation. The physical education bases to establish the spirit of scientists can hardly cover non-key universities due to a complex process for fund approval. Furthermore, the interdisciplinary teacher training programs are limited by the performance appraisal system and therefore make it difficult to tap into potential. The gradient differences in the efficiency of spirit transformation reflect the key defects in the evaluation and feedback system. The evaluation of activity effects often lacks a continuous tracking mechanism for the degree of value internalization.

5. Research on the Path of Integrating the Spirit of Scientists into "Three-Wide Education" in Colleges and Universities

5.1. Curriculum Education Path

Reconstruction of the curriculum system must incorporate the establishment of infiltration paths for the scientist spirit combining both overt and covert tactics. Scientific and technological ethics debates and analytical case studies of significant scientific discoveries represent potential units within a professional course module whereby where the transition from the imparting of cutting edge technologies will also simultaneously be the process of interpreting the historical context. At the implementation level of teaching activities, a stepwise exploring task chain must be created, and experimental instructional links of failed-scenario simulations and erroneous-data processing should ensure students acknowledge the resilient characteristics of scientific research within the process of repeated verifications. Reformed evaluative mechanisms will have to break out of traditional quantitative-indicator frameworks, and design the construction of a multi-dimensional gauge which includes specifications on integrity checklists/guidelines and levels of collaborative contributions. In the academic reporting review process of assessment activities, the authority to original records must augment obligations to help contain/increase the authentic nature of the process. The strategy for teacher training should

shift towards in-depth immersion in methodology. Regular workshops on restoring scientific research scenarios should be held to prompt teachers to organically integrate spiritual elements into lesson plan design. During the on- campus period of the expert supervision team, the specific manifestation of scientific thinking cultivation in teaching objectives should be mainly observed so as to revise the implementation plan in a timely manner [3].

5.2. Scientific Research Education Path

Setting up scientific research platforms should set up a steplike real-world research setup. When undergraduate teams of students undertake technology verification projects with relatively low risks, their engagement in adjusting to unexpected data will inherently soften their hallmarks of truth seeking character disposition. The building of the tutor team needs to focus on activating the demonstration function of scientific research behaviors. The strict demeanor of senior scholars working through the repeated verification of key data enriches the cultivation process through group meetings and papers discussions, and the open-collaborative idea constructed by young researchers sharing in pre-prints is an implicit teaching resource. The improvement of the academic setting is to get rid of the impetuous and utilitarian ecosystem. The labs post warning pictures of cases with costs of academic dishonesty, and adopt a paper draft archiving system that requires recipients to retain their original modification trails to demonstrate the proof of truth and facts. The annual science and technology innovation story exhibition broadcasts cases of scientific research setback recovery, replacing the achievement-recognition-dominated model, and non - utilitarian academic exchanges gradually reshape the value - cognition coordinate system.

5.3. Cultural Education Path

Transitioning a physical space means reprimting the environmental infiltration/permeation system for the spirit of scientists. When a special area focused on the history of science is constructed at the corner of the library and concerted around phenological observational devices, the architectural space takes on the ritualized conditions to explore knowledge. The update to the campus sculpture cluster embeds the prototype stories of local scientists, changing the routes of movements for leisure, instead into conduits for spiritual dialogue. Artistic creation activities should establish a series of production mechanisms that integrate science and technology with humanities. Regularly creating and managing all aspects of creating a drama on the scientific research-themed should carry the laboratory conflicts onto the stage. Each year and the science and technology- themed installation art exhibition invokes creators to speak to ongoing research teams so that they can extract materials from the real world dilemmas and visual art expression activates perception of the concrete from the abstract spirit. The innovation of campus rituals focusing spatially, for the design of having process experience. In the inaugural ceremony for a new laboratory, a ritual that destroys data from failed experiments is added to enhance the sense of awe of the ethics in scientific research. The cultivation of the teacher-student community focuses on the construction of a sense of community. The "Week of Displaying Failed Results" requires each college to announce valuable research designs that have been rejected. Interdisciplinary tutor groups conduct non-utilitarian academic conversations in the form of wilderness hikes to eliminate hierarchical barriers, and the details of daily scientific research life gradually accumulate into the core cells of the cultural texture [4].

5.4. Practical Education Path

Social practice projects should be designed around actual situations. Students in agricultural and forestry universities are stationed in semi-arid land, conducting drought-tolerant crop screening. The natural phenomenon of abnormal data is a constant and recurrent theme that forces teacher-student pairs to construct an orientational understanding of the spirit of seeking truth and living ready to live with ambiguity. When using technology to help farmers, contradictions between traditional experience and modern practice initially challenge one's re-interpretive faculties, but the dialectical integrative process of understanding the limits of lived experience (local wisdom) and scientific law enhances an understanding of the limits of empirical thinking. Volunteer service activities become vehicles for disseminating scientific and technological

knowledge. Classes on community science popularization have even more layered challenges, undoing complex principles into concrete (hands-on-verifiable) life experiments. Teaching elderly learners how to use intelligent devices and encountering cognitive barriers, using patient and holistic approaches to adjust interactions train specific capacities (including patience and humanistic care action) for those in science and technology professions. The innovation of the industry-university- research cooperation mechanism focuses on tackling real-world pain points. After real-world enterprise technology diagnosis projects are incorporated into the curriculum design, students' repeated correction experiences when facing problems of production parameter drift enable them to truly experience the professional standard of striving for excellence. When participating in the iterative testing of medical device prototypes, the process of recording thousands of minor fault data not only alleviates the anxiety about utilitarian achievements but also fosters a rigorous and pragmatic professional inertia.

5.5. Management Service Path

The institutional system design must also create a constrained network that enhances scientific research integrity. After a third - party data traceability verification link is added to the review mechanism of academic achievements, the abnormal result review mechanism makes sure, at the procedural level, that short-sighted speculation can no longer be possible. The teacher title promotion channel interpolates a secondary spot-check of the original experimental records over the last ten years, and therefore, this long-term mechanism imposes on daily scientific research actions a standard subjective awareness regulated to comply with the standard norms. The re-engineering of service processes revolves around an in-depth education scenario integration. When the smart campus cloud platform provides an organizational function of assigning an identifiable link tracing the collaborative trajectory of scientific research teams, an expense reimbursement system that simultaneously tracks sharing load rates of equipment puts the resource allocation logic playfully in-line with the direction of the dedication spirit. Service to the academic reference consulting service develops the climate to analyze researchers' academic contexts and imposed by subject librarians playing gatekeepers of academic standards and acting better with permissions during the pre-check of duplication. The redesign of the teacher-student interaction space adheres to the ideas of co - creation of value. Two fixed seats for postgraduate observers to enable them to engage in the meetings for administrative decision-making ensure that the flow of speaking rights is maintained. The staggered supply of meals from the logistics department which is at the new institute for those remaining overnight in the laboratory brings a detailed level of warmth that shows humanistic care. The innovation of the mechanism for resource allocation demonstrates the dimension of incentive compatibility. The design that connects the management fee commission ratio for horizontal projects with the success rate of repeated experiments formalizes the rigor for scientific research as a quantifiable material incentive. The policy preference that gives pre-print sharing teams inside- track access to the large-scale instrument reservation system makes open-mindedness and inclusiveness into something tangible as an institutional practice [5].

6. Conclusion

The process of combining the spirit of scientists with "three-wide education" is essentially a process to reconstruct the value chain of university education. The research demonstrates that course teaching should dismantle disciplinary barriers, better define the spiritual elements, and convert Yang Zhenning's wisdom of exploration and Tu Youyou's determination into teaching practices, such as modular teaching cases. The "Mentor Responsibility System" needs to be in place for scientific research training so that the spiritual discipline of practice is internalized in the mentors' words and the sense of collaboration through the words of the mentors in the direction of project attack. Cultural education cannot be as brief as crass sloganeering but must be related to the building of real and spiritual places such as innovation laboratories named after scientists. In practice, field trips can be arranged to the historical and contextualized teaching of science and technology issues in spiritual sanctuaries like the "Two Bombs and One Star" base. Attention should be given to the management and service pathways as they have value. This integration project is not a short-term project, but it needs

some and some other policy support to help with the rearranging of resources. The integration, as learned from the dual construction of knowledge map and spiritual bloodline, will form the foundation of the next generation of national rejuvenation in both innovative ability and spiritual backbone.

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