The Research of Soft Environmental Construction of Law Laboratories in Colleges and Universities

JIN Xin 1,*

¹ Nanjing Normal University Jiangsu Nanjing 210097, China.

BSTRACT The professional laboratory culture of institutions of higher learning is of great significance to the cultivation of the professional skills of the students and the construction of the entire educational environment. Unlike science and engineering laboratories which mainly embody the characteristics of science and technology, the characteristics of arts laboratories lie in humanity. The law laboratory which belongs to the arts laboratories has its own unique laboratory culture. Soft environmental construction of law laboratories which enbody the laboratory culture is of greater importance compared with the hardware facilities construction. This article analyzes and discusses the significance, construction contents and methods of the soft environmental construction of law laboratories.

Key Words
law, laboratory, laboratory culture,
soft environment.

orrespondence to:

JIN Xin

No.122, Ninghai Road, Nanjing Normal University Law School, Nanjing, Jiangsu Province 210046, China. E-mail: JASONJX1983@163.com. (1983-, male, engineer, mainly engaged in Theory and Practice of Forensic Studies).

he hard and soft environmental L construction of institutions of higher learning decide the entire developmental level of the laboratories. Soft environment of a laboratory is manmade environment such as operating mechanism, cultural atmosphere; hard environment is the hardware facilities such apparatus, workshops and lands used for experiments. The hard environmental construction of institutions of higher learning receives great attention and the input intensity is being increased because of its material and tangible conditions and its immediate effect; the soft environmental construction are often overlooked suffering insufficient input because of its non- material and intangible conditions and its long effect.

There are various majors in colleges and universities and the professional laboratories have their own unique features. The laboratory cultures of science and engineering and arts professional laboratories are of significant difference. In arts laboratories the practicalness of the law laboratories is undoubtedly the most prominent, for the science of law is a very practical subject. The educational purpose of law is not only to impart knowledge but also to provide the educatees with some professional training opportunities. The talents cultivated by law education should possess both solid theoretical basis and practically operational capacity correspondingly. The law laboratories of colleges and universities assume the responsibility to cultivate the practically operational capacity of the law talents.

1. The Characteristics of the Law Laboratories of Colleges and Universities

In the traditional law teaching process in our country, the teaching aim is to impart systematical, scientific and basic knowledge of law. However, the legal science education is not simple knowledge-transference and academic cultivation, and it is more of a kind of vocational training which teaches the students the necessary skills and qualities as legal professionals. At present, the existing model of teaching of law major in numerous colleges and universities pays attention to theories and makes light of practicalness, which is the vitality of law. Our country in the new century needs advanced trained personnels who have comprehensive qualities in law. If we see from professional ability alone, the graduates of law should not only master the theories and basic knowledge of law but also have a command of law. The law laboratories of colleges and universities are the experiment teaching bases of law. The practical teaching of law is to cultivate the ability to solve practical cases and problems through practical participation in law operation. It can also cultivate the ability to analyse and solve problems with theory teaching and therefore improve the level of professional practice. In western countries the practicalness of law is even more outstanding and the law majors have stronger practical ability which includes logical thinking ability, negotiation ability, capacity to action, communicative competence and the ability to investigate and survey, etc. In our country the law majors should master abundant professional theories and specialized knowledge when they are engaged in legal profession and at the same time they should be skillfull

at legislation operation, making make intellectual enquiries and expressing themselves. At present advanced legal education in our country should cultivate practical legal personnels of high quality. Therefore the most basic starting point and objective of the teaching of law should be the practical ability of the students. Law major in colleges and universities should make adjustment to their training program prepared for the undergraduates, establish law laboratories, add the practical teaching link, enhance the quality of practical teaching and alter the intrinsic model of teaching in accordance with social development. So that the students will be able to experience the two roles and the true meaning of law and the mission of justice they bear in real cases in practice. And they will master legal professional standard in practice, further establish professional ethics and law faith the legal profession operators should possess and lay a solid foundation for becoming advanced specialized legal personnels. Take the law school laboratory of Nanjing Normal University for example. It has two experimental locelluses, which are used for criminal investigation and moot court. The former has four experimental rooms and the latter has two. Each experimental locellus has its own unique laboratory culture and even each experimental room has its distinctive culture. For example, criminal investigation laboratory which is the combination product of engineering course both of science and technology and humanity are embodied in soft environmental construction of law laboratories. The moot court laboratory is used for the teaching of moot court, which applies theoretical knowledge and judicial basic skills etc. they learned in class to practice comprehensively. It can also enable the students study creatively and make flexible use of what they have learned. This kind of model of teaching is often exercised in the way of holding a hearing through personal involvement of the students and finally fulfills the educational aim of the concordance of theories and practice. With the change of the legal education in China, attention is transformed from theoretical education to practical education. The model of moot court teaching, as a practical teaching

method, is widely used in modern legal teaching.

2. The Significance of Soft Environmental Construction of Law Laboratories 5. Conclusion

2.1 Improve experiment teaching mechanism, laboratory system, stimulate the enthusiasm of the experimenters, motivate innovation, set up positive and favourable working and studying style and improve the level of law laboratories. The experimenters are the fundamental of a laboratory whose level directly influence the level of the whole laboratory. Scientific and reasonable operating mechanism can motivate the working and studying positivity of the experimenters and enables them improve their self-quality initiatively and the entire level of laboratory will be improved.

2.2 Make the experimenters have a sense of belonging, keep their enthusiasm and make them preferably participate in the construction and management of the laboratory. Through the construction of laboratory environment cultural atmosphere and the cultivation of team spirit, we make the experimenters have a sense of belonging and collective honor, so that the experimenters will be engaged in the construction and management of the laboratory heart and soul and muchly.

2.3 Give support to the construction of hard environment, and effectively promote the use ratio of the hardware. Through the adjustment of the management system and the training of the personnels, we can solve the problems such as the instruments and equipments lying idle or useless because of improper operation maintenance and excavate the using potential of the hardware to the utmost.

2.4 Form laboratory culture and popularize the function of knowledge and propaganda. Through the soft environmental construction of laboratories, the laboratories can have their own particular laboratory cultures. We can popularize their knowledge, stimulate their interest and indicate directions for them and so on; we can enable people who want to know the laboratory to feel the visualized and vivid function of propaganda.

3. The Contents of Soft Environmental Construction of Law Laboratories

3.1 Optimize and Perfect Operating Mechanism and Management System

These studies strove to improve concordance of test results among laboratories while ensuring that the assays were predictive of in vivo outcome. The CPPs achieved the goal of producing reliable and repeatable in vitro toxicity testing for ENMs; however, improving the predictability of the assays is still a work in progress. Care needs to be taken to understand the limitation of in vitro testing and not to overinterpret in vitro studies without comprehensive companion in vivo studies. These studies used well-characterized nanomaterials, including a positive and negative control, in addition to a well-established dispersion protocol ensuring stable suspensions in cell culture media. This consortium effort provided a series of harmonized protocols and tested models for the nanotoxicological field to use. The results also demonstrated that toxicity and inflammasome activity did not always track each other and that different cell types yielded different estimates of safety of different ENMs. Consequently, future studies should utilize multiple end points and multiple cell types to avoid false-negative results. Finally, this effort serves as a good template for future endeavors in the field of nanotoxicology, providing key elements necessary for collaborative efforts between laboratories.

3.1.1 Establish scientific and rigorous management system, perfect supervising mechanism and rewards and punishment measures and ensure that the laboratories can operate safely and stably so as to provide the laboratories with the power of "stability".

3.1.2 Optimize the existing opening system of the laboratories, perfect the sharing mechanism of the large, precise and precious instruments. Make sure that the laboratories are open indeed, the resources of the laboratories are shared truly and bring vitality to the laboratories.

3.1.3 Perfect the assessing mechanism of the laboratories including the assessments of the

opening degree of the laboratories, equipment use ratio, innovation of the quality of the experimenters, update and transformation of the instruments, teaching achievements, characteristics of the laboratories and giving service to the society, etc. We want to promote construction by means of making assessments and bring dynamic to the development of the laboratories.

- 3.2 Build high-quality legal experimental teams and construct innovative academic teams. Soft environmental construction of law laboratories needs a legal academic team whose members have high quality in knowledge, strong competence of practice, management, innovation and responsibility. Such an academic team must have extensive knowledge including not only solid basic theoretical knowledge related to the majors but also forefront knowledge and development trend; not only the operation and maintainance of the experimental apparatus but also the ability to update and transform the equipments; not only teaching and scientific research but also modernizd management ability; not only master various kinds of lawsuit court trial procedures expertly but also pay close attention to domestic and overseas true cases which are in the process of happening. In order to construct such a kind of academic team, we should start with the following aspects:
- 3.2.1 Adopt flexible staffing policy and attract scientific research teaching techniques and talented managers to serve the laboratories. Optimize the quality and age of the experimenters and set academic echelon.
- 3.2.2 Constantly train the experimenters, encourage them to engage in advanced studies and study and investigate them in batches, by different level and make pointed references. Only in this way can we construct such a kind of academic team that will be stronger and stronger and the soft environment of the laboratories will strive for further improvement.
- 3.3 Build Favourable Working Environment and Academic Atmosphere

Healthy and harmonious working environment and academic atmosphere are the key points of the soft environmental laboratories. Harmonious working environment can ensure the experimenters carry out teaching and scientific research normally and smoothly. Loose and harmonious, free and democratic academic atmosphere can encourage the experimenters to have the courage to explore and practice and thereby boost discipline construction.

- 3.3.1 Advocate academic equality and freedom at work.
- 3.3.2 Set flexible research deadline and standard for the experimenters, and encourage exploration and creativity.
- 3.3.3 Support teaching communication, have trial lectures and attend lectures and exchange the contents of prepared lessons regularly.
- 3.3.4 Support academic exchanges, hold symposiums regularly to exchange achievements in scientific researches and introduce advanced technology.
- 3.4 Highlight the Characteristics of The Legal Laboratories

Various laboratories will have their own characteristics because of the difference of the tasks of teaching and scientific researches, personnels and apparatuses. Based on these characteristics, we develop these laboratories into distinctive characteristics of the laboratories, highlight the advantages. This is very important to soft environmental construction of the laboratories.

- 3.4.1 Highlight the features of teaching of legal laboratories through innovative and competitive products of the students.
- 3.4.2 Highlight the scientific researches of the legal laboratories through the projects of experimental curriculum educational reforms and scientific research awards, etc.
- 3.4.3 Highlight the characteristics of social work of the legal laboratories through circuit court trial and legal aid achievements, etc of the colleges and universities.
- 3.5 Pay attention to the cultural construction of the legal laboratories and promote the exhibition of the laboratories. The culture of the laboratories is the sign of the soft environmental laboratories. Good laboratorial culture can let people (the experimenters, teachers, students, parents of students, leaders who check up the work, people of the same trade

or occupation who make the visit, investigation and survey, etc.) feel the particular cultural atmosphere as soon as they step into the laboratories. Good cultural atmosphere has great effect on people and it can lift the laboratories whose hardware environment may not be so strong to a higher level. Although various laboratories have their own characteristics, the laboratorial cultures are different. The legal laboratories have their own characteristics, so they must promote the exhibition to the outside world, try to build favourable cultural atmosphere, highlight the function of social service and give full play to the educational function.

3.5.1 Beautify the environment. Whatever the laboratories exhibit, the interior and surrounding environment is isotopic carrier. Therefore, to beautify the environment and the surrounding environment is the first step of promoting the exhibition and it is a necessary step. Clean and tidy environment which has characteristic style of the legal laboratories is good to promote the exhibition.

3.5.2 Exhibit the contents. Preeminent laboratorial culture has great effect on education. Life philosophy, pearls of wisdom and scientific research teaching results, etc. It has frontal influence on their outlook on life and enables the students to study knowledge as well. The contents exhibited should be combined with practice and they are vivid. The legal laboratories can make classic case analysis in the exhibition contents, the views on politics of famous jurists at home and abroad and the extract of legal masterwork.

3.5.3 Professional exhibition by different level. In order to let the beholders get familiar with the teaching research work done in the laboratories, we should carry out professional exhibition by different level. Popularize cognitive exhibition, physical model exhibition, teaching and scientific research exhibition, and leading-edge and prospecting exhibition. Only through this exhibition way from the shallower to the deeper can we solve the problems, arouse the interest of the students and get more familiar with the laboratories.

3.5.4 Take advantage of science and technology to enrich exhibition

methods and pay attention to interaction. Use the way of science and technology such as virtual reality technology, image technology to let the exhibition effect more lively and perceptual to make the wall, halls and corridors "speak". Through the methods of touch screens, websites and message boards of technical exchange of the laboratories, let the laboratories and the students interact with each other and greatly improve the educational function of the exhibition. If we can fulfill the five aspects mentioned above, it will give great support to soft environmental construction of the legal laboratories from fundamental to

4. Methods of Soft Environmental Construction of Legal Laboratories

Soft environmental construction not only needs holistic view but also and even more attention to each tiny point, setting the orientation of good soft environmental construction of legal laboratories. Now let's talk about how to build good soft environmental construction of legal laboratories in colleges and universities from the following aspects.

4.1 Mould Favourable Cultural Environment of the Laboratories

Mould people-oriented and studentoriented legal laboratorial culture to implement human-based management. Enrich the experimental contents, reduce the experiments of verification and demonstration, increase enjoyment and profoundity, encourage the students to do the studying experiments and encourage them to design and debug themselves, and at the same time encourage them to take an active part in scientific researches, stimulate the enthusiasm and thirst for knowledge of the students, instruct the students to combine theory with practice correctly to find, analysise and solve the problems.

4.2 Create Favourable Teamwork Atmosphere

United and harmonious team can't do without harmonious interpersonal relationship. Solidarity and cooperation is a kind of powerful weapon to carry out work. Science and engineering laboratories usually have relatively powerful laboratorial team of teachers. Arts laboratorial teacher

authorized strength is much less, so the number of the teachers cannot be compared with that of the science and engineering laboratories. Therefore, the work allocated to the experimental teachers is much heavier. Under this circumstance, the team of experimenters in colleges and universities should pay attention to cooperation and be good at cooperation. The premise of cooperation is harmonious relationship rather than benefit chain based on personal interests.

4.3 Establish Tap Intellectual Resources and Incentive Mechanism Based on the Combination of Training and Employing

The experimental administrators should set up correct staffing notion, increase the training input of the experimenters, and enhance the comprehensive quality of the staff; establish effective incentive mechanism to arouse creativity and enhance the cohesion of the laboratories.

4.4 Enchance Experimental Teaching System Reformation

Innovate experimental contents of teaching, make a rational combination of verification, comprehensiveness, designability and innovation to the experimental contents. Straighten out their relationship. Comprehensive experiments should strive to seek the novelty of the contents and can reflect the frontier contents of the subject.

4.5 Establish Well-organized Operating Mechanism and Scientific Management System

Project the laboratories scientifically, reduce wasting of resources and repeated construction, make the students complete their autonomous learning, innovative learning and investigative study in a favourable practical atmosphere.

5. Conclusion

Soft environmental construction of the legal laboratories in colleges and universities is a dynamical systems engineering of inheritance and development, sedimentary deposits and innovation. Constituting the cultural backbone of the entire professional laboratories. Various elements not only interplay and permeate but also mutually promote and successively couple with each other. Therefore, enhancing the

soft environmental construction of the legal laboratories is an important channel of building brand laboratories and realizing sustainable development. It is also the legal professional building, enchancing legal practical ability and cultivating legal innovative talents. It is laboratorial inherent function realization need of practicing educating people by environment, management, scientific research and teaching. As two important parts to constitute a laboratory, hard environment and soft environment must get developed. Compared with science and engineering laboratories, the funding input in hard environment is much less in legal laboratories. Under the circumstance of considerable fundamental, if we can construct the soft environment well, high standard legal laboratories will certainly provide the development of the students, schools and society with more powerful assistance.

References

- Feng Cuiju. The "broken window" theory and the soft environment construction of laboratories in colleges and universities[J]. Experimental Technology and Management, 2010, 27(1): 294. (In Chinese)
- An Yang. The preliminary research of soft strength on the laboratories of universities and college[J]. Experimental Technology and Management, 2007, 24(9): 150-153. (In Chinese)
- Yan-Han Li. Discussion on university laboratory environment construction[J]. Laboratory Research and Exploration, 2008, 27(6): 151-153. (In Chinese)
- 4. Xin-chang Ma. Study on the construction of soft environment of laboratories in colleges and universities[J]. Journal of Jiamusi Education Institute, 2010, (6): 294. (In Chinese)
- Hua Huang. Establishment of the laboratory soft environment in local newly - built colleges[J]. Journal of Wuzhou Teachers College of Guangxi, 2011, (6): 140-142. (In Chinese)
- 6. Li-Ya Yang. You hua shi yan shi guan li de ruan huan jing tan suo[J]. Shang Ye Huan Jing, 2008, (11). (In Chinese)
- 7. Xiao-ping Hu. Zhuan ye shi yan shi wen hua jian she tan jiu[J]. Laboratory Research and Exploration, 2011, (9). (In Chinese)
- 8. Xiao-Feng Song. Lun gao xiao shi yan shi ruan huan jing jian she[J]. Friend of Science Amateurs, 2010, (11). (In Chinese)
- Yi-Ting Zhang, Xin Li. Gao xiao shi yan shi ruan shi li ji qi ti sheng dui ce[J]. Laboratory Research and Exploration, 2011, (12). (In Chinese).

Science and Nature © ZolCat Academic House