

Empirical Analysis on the Learning Status of Chinese College Students

Yan Dai

School of Public Affairs, University of Science and Technology of China, Hefei, China

Email: daiyan@hfut.edu.cn

How to cite this paper: Dai, Y. (2019) Empirical Analysis on the Learning Status of Chinese College Students. *Open Journal of Social Sciences*, 7, 85-95.
<https://doi.org/10.4236/jss.2019.72006>

Received: October 21, 2018

Accepted: February 9, 2019

Published: February 12, 2019

Copyright © 2019 by author(s) and Scientific Research Publishing Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

Abstract

According to the empirical analysis on the present learning status of undergraduates from the central region of China, Chinese college students learning is dominated by instrumental rationality instead of the value rationality. They pay more attention to the evaluation results of knowledge, while ignoring the understanding and application of the knowledge. They attach great importance to the external evaluation and ignore self-growth. They show inadequate initiative, enthusiasm and passion in learning but great interest in Internet funs and games. These problems require the Chinese colleges and universities make positive adjustments in faculty assessment and students' academic evaluation, the coordination of internal and external educational resources, and the involvement of information technology in classroom teaching, so as to solve the structural inconsistency in China's labor market.

Keywords

Goal, Motivation, Undergraduate Teaching Reform

1. Introduction

In 2016, for the first time the Chinese Ministry of Education issued the *Report on the Quality of Higher Education in China*, which shows that the gross enrollment rate of Chinese universities has reached 40%, higher than the world average, and is expected to reach 50% in 2019, entering the popularization stage. This means that the focus of China's higher education will gradually shift from quantity to quality. In fact, in 2007, the Chinese Ministry of Education launched the "Undergraduate Teaching Quality and Educational Reform Project", and in 2010, published *The National Medium and Long-Term Education Reform and Development Program (2010-2020)* to establish the grounds for implementing the reform and ensure the quality of higher education.

In April, 2016, Peking University, as a pilot university to initiate the program of comprehensive education reform called “The PTS Pilot Program” (PTS is denoted as Peking University, Tsinghua University and Shanghai), launched a new round of “growth-oriented” education reform at undergraduate level under the philosophy of “knowledge consolidation with interdisciplinary development, free choice of learning and excellent teaching”. The reform is characterized by the means of optimizing the allocation of resources and adjusting the measurements of teachers’ performance assessment to make classroom teaching more appealing and boost students’ learning initiative. In this way, as a leading educational institution in China, Peking University answers to the structural inconsistency in China’s labor market.

At the same time, the academia has undergone similar developments. Over the past 40 years, on the international, it first studied the educational planning of the system (mainly in the 1970s) and then the importance of school management (mainly in the 1980s). Until the last 15 years, the educational research began to focus on the students learning [1]. Research on the learning ability of undergraduates shows that learning ability is a complex combination of temperament, life experience, social relations, values, attitudes and beliefs [2]. Professor B. J. Mc Gettrickcan of University of Glasgow in Scotland, referring to the models of DNA structure, points out learning is composed of two learning chains. One chain reflects the willingness to learn (including attitudes, values, emotions, intentions and motivations, etc.); another reflects the structure achieved by learning, including the knowledge, skills and understanding. When students are willing to learn, there is a positive interaction between two chains. Because students are those who persuade themselves to acquire special knowledge and skills; learners are those who construct their meaning from their own experience [3].

This means that in order to understand the effectiveness, the direction and specific measures of China’s higher education reform, we have to figure out whether undergraduates are positively learning or passively learning. Therefore, this paper makes an investigation and analysis on the learning state of undergraduates in central China by means of random sampling.

2. Research Design

The theoretical basis of this study includes Goal Setting Theory and the Competence Iceberg Model. Based on previous studies, Locke E A (1968) and other American psychologists formally proposed the “Goal Setting Theory”, which says human behavior is influenced by conscious goals, plans, intentions, tasks [4]. Rothkopf and Billington (1979) found that students with specific learning goals can do better in focusing on and learning the target-related articles than the target-unrelated articles [5]. Locke and Bryan (1969) found that in the task of car-driving, individuals with multiple feedbacks in their performances improved their scores in the goal-oriented dimension, but their scores were not improved in other dimensions [6]. The task-related knowledge and strategies

aroused by goals affect actions [7].

The Goal Setting Theory proposed by American psychologist Locke. E. A. *et al.*, argues that the individual goal consciously regulates his behavior, and the goal itself is motivating, which can turn people's needs into motivation, make people's behavior towards a certain direction, and make timely adjustment and revision by contrasting the behavior result and the established goal, so as to achieve the goal [8]. Similarly, the Competence Iceberg Model invented by D. C. McClelland, a famous American psychologist, indicates that an individual's competence can be divided into the surface, observable part, including basic knowledge and skills, behavior and performance, etc. and the undersurface, unobservable part, including one's social role, self-image, traits and motives, etc. The unobservable part is not only stable but critical in influencing an individual's behavior and performance [9].

Both the Goal Setting Theory and the Iceberg Quality Model emphasize the guiding role of goals and motivations. Under the guidance of this theory, this paper extracts the core qualities related to the learning status of undergraduates from relevant research literatures, which include interest orientation, achievement motivation, self-cognition, behavioral habits, peer influence, social support, time management, etc. These core qualities are studied in five dimensions for data collection. The five dimensions are: self-cognition and specialty identity, academic learning input and time allocation, class attraction and learning enthusiasm, learning motivation and motivation source, and the value pursuit of learning. There are 42 questions designed in this questionnaire. Through the test normally undergraduates can complete this questionnaire within 30 minutes.

The reason we choose full-time undergraduates from universities in the central region of China as the subjects of the study is that both the population and the income of the region are in the middle of the all indicators of China, which is more convincing compared to other regions. The investigation is conducted by mainly written questionnaires and some interview cases.

3. Results Analysis

The questionnaires were distributed to full-time undergraduates in college, using the random sampling method. 1362 questionnaires were distributed and 1112 were answered, so the response rate was 93%. The samples include 870 males, accounting for 77.9% of the total; 247 females, accounting for 21.8%. There are 806 Engineering students, 191 science students and 113 arts students. They mainly come from rural area, accounting for 46.3% and those from cities and towns accounts for 21%. Based on the results of the data analysis and the purpose of this study, the investigators selected 28 people for the interview (**Figure 1**).

3.1. Vague Self-Cognition and Unsteady Specialty Identity

According to the survey, 59.3% of the undergraduates' major is not their first choice. But when they are asked "what will you do if you have a chance to change

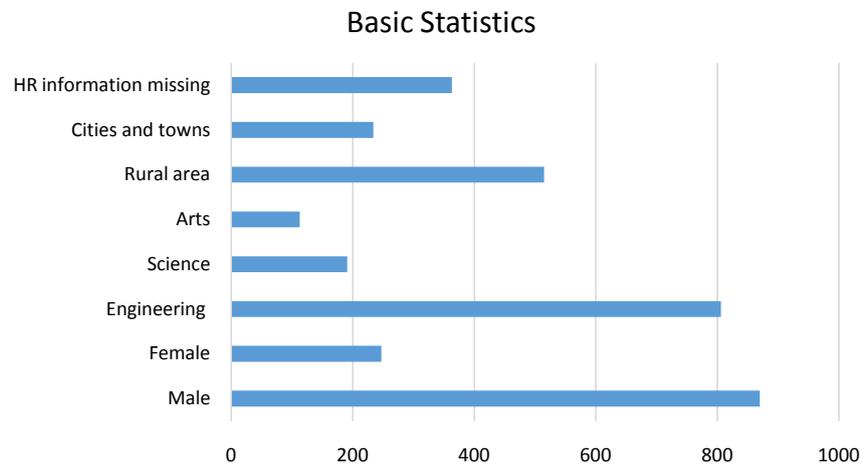


Figure 1. Basic statistics.

your major”, only 28.2% of the undergraduates insist that they will not change their major. The number of students majoring in the first choice is almost equal to that of not majoring, which indicates the unsteady specialty identity among the majority of these students.

Through interview we find that the reasons for the instability of undergraduates’ specialty identity are as follows: First, most students hardly know about their own interests and expertise due to the lack of direct and indirect experiences. “What I was told in high school is only to study hard and barely about finding my excellence and I had little time and energy to explore my interests”, says A. “At college, teachers will leave as soon as they finish the class. They seem very busy and have no time to communicate with us”, says F.

Second, the undergraduates didn’t totally understand the chosen major when they filled in the application form for universities and colleges. They didn’t know the professional knowledge structure, training skills, future development and the required mental conditions. “While filling in the application form, what I was concerned first is the rank of the school, and then the major superiority. As for the major content, I didn’t think much about it”, says D.

Third, the social relationship network of undergraduates is relatively simple. Their major choice is affected greatly by family occupation preference, parental preference, high school teachers’ recommendation, media reports and future income, etc. The development of information technology doesn’t have a significant impact on undergraduates’ major choice. “My teacher and parents have chosen the major for me, and I don’t hate that major, so I never think so much”, says C. Very few undergraduates can choose their major according to the internal factors like their own interests and values, etc.

The general tendency on undergraduates’ specialty identity shows that the problem has not become gradually alleviated with their academic study but intensified. Survey shows that their desire to change major increases at higher grade. 50% of the senior are strongly eager to change their major. Interview indicates that with the growth of age, students’ self-cognition and major under-

standing are deepening, especially their eagerness to focus on their own interests and capacity preference. Study shows that major-related interest, values and competence can have a significant positive impact on academic achievements [10]. The present situation undoubtedly has a negative impact on the students' academic achievement.

3.2. Inadequate Efforts in Major Study and Greater Impact from Information Technology

The survey discovers that only 18% of the students spend over 3 hours in major courses after school, and over half only spend less than 2 hours, as is shown in **Table 1**. More students directly pointed out that "It is easier to pass the major courses than the core curriculum, because the major teachers all from our own department. We needn't spend too much time in preparing for the exam", says W.

In sharp contrast to major learning, 93.8% of college students averagely spend more than 2 hours a day using digital terminals, and 15.1% of students spend more than 5 hours. The graduation requirement for the target university undergraduates is at least 190 credits, each credit corresponding to 16 class hours, which count to be about over 3000 hours. So on average the undergraduate need spend at least 5 hours per day in class learning. In addition, there are still all kinds of lectures, trainings, community activities and class activities and so on. Their non-discretionary time is averagely about 7 hours per day. If the daily activity time is 16 hours, that means that students spend most of their free time on the internet, which means information technology deeply penetrates into their lives and has a great impact on their learning status. When asked "Will you join us to conduct a public interest experiment: stay away from cell-phones and the internet for 72 hours?", almost all the students think it too absurd to participate in the experiment, and the results can be seen in **Table 2**.

3.3. Boring Classes and Unenthusiastic Students

The survey shows that 49.3% of students say they have no passion for learning now. Only 38.8% think that the college courses are attractive to them, and most think the major courses are boring. 56% of those who think the courses are attractive point out the reason is that they have to work hard on the major courses,

Table 1. Time invested in the professional courses.

	Frequency	Percent	Valid Percent	Cumulative Percent
in 1 hour	347	31.2	31.2	31.2
1 - 2 hours	528	47.5	47.5	78.7
2 - 3 hours	199	17.9	17.9	96.6
3 - 4 hours	20	1.8	1.8	98.4
over 4 hours	18	1.6	1.6	100.0
total	1112	100.0	100.0	

Table 2. Willingness survey of staying away from cell-phones and the internet for 72 hours.

	Frequency	Percent	Valid Percent	Cumulative Percent
About 1 hour	69	6.2	6.2	6.2
2 - 3 hours	341	30.7	30.7	36.9
3 - 4 hours	347	31.2	31.2	68.1
valid 4 - 5 hours	186	16.7	16.7	84.8
over 5 hours	168	15.1	15.1	99.9
6	1	0.1	0.1	100.0
total	1112	100.0	100.0	

otherwise they cannot graduate. Less than 20% of students prefer courses for personal reasons, and less than 10% prefer courses for their teachers' teaching methods. Among the 28 students surveyed, 25 students expressed strong dissatisfaction with the way of teaching. "Our teacher just read from PPT, never look at us during the whole class", says L. "The time on our teacher's PPT is 2007. It is out-dated and boring. We don't like to study at all", says W.

With the two-tailed test of Pearson correlation coefficient, we find that there is a positive correlation between the degree of specialty identity of university students and the attractiveness of university courses, and the correlation analysis shows a significant correlation at 0.01 level, which is illustrated in **Table 3**.

Here, we can directly see that most undergraduates are passive and task-oriented in the pursuit of high scores and ranks in standardized tests during college education, and their learning initiative is mainly dependent on the external evaluation system.

When asked "which course is most impressive during college?" a nearly half of the students choose the skill-training courses like College English or Engineering Drawings and only 3.4% of them choose the liberal-arts courses like Buddhist Culture or Yoga. In the following interviews, it is showed that there are two reasons for their choice preference. One is that skill-training courses can be closely related to qualification tests and the relevant certificate can help in employment and the other is that in high school most Chinese students are required to choose between science and liberal arts as their future major direction. Therefore, those who chose science have relatively weak knowledge basis in liberal arts. Besides, only small amount of class hours in liberal arts is offered in colleges and the lecture cannot impress the students before the subject is fully imparted.

3.4. Unclear Life and Career Goals and Unmotivated Learning

It is indicated in the *Drive*, authored by Daniel Pink, that in the new era of Motivation 3.0, compared with external rewards and punishments, the internal satisfaction is the exact drive to motivate an individual. Therefore, goal as well as the goal-setting based on one's interest and achievement motivation becomes an important dimension to distinguish excellent learning results. As Chickering

Table 3. An investigation on the relationship between the professional identity and the curriculum attraction.

		Is this major your first choice?	Are university courses attractive to you?
Is this major your first choice?	Pearson correlation	1	0.031**
	Significance (two-tailed)		0.002
	N	1112	1090
Are university courses attractive to you?	Pearson correlation	0.031**	1
	Significance (two-tailed)	0.002	
	N	1090	1090

**Significantly correlated at 0.01 level (two-tailed).

said, goal-setting means more consciousness in behavior, enables the evaluation on interest and various choices, clarifies the aims and plans to achieve the goal in spite of difficulties. “A sense of autonomy has a powerful effect on individual performance and attitude” [11].

The survey reveals that only 6.3% of undergraduates has a clear plan about their career and 62.3% has unclear or no concern about their career planning. Over half of them has not planned their future life and nearly 10% rarely think about it. A two-tailed test of Pearson correlation coefficient shows that there is a positive correlation between career goal and life planning and the correlation analysis indicates a significant correlation at the level of 0.01, which means that the undergraduates with a relatively clear career goal have a more definite life planning.

When asked “do you hope to set goals for your career and life?”, 89.4% of undergraduates agrees and nearly half of undergraduates responds that they want to have their own cause and strive for it but they cannot find the direction, indicated in **Table 4**.

The lack of goal is the main cause for the unenthusiastic learning and living status of undergraduates and relevant analysis shows that those with a relatively clear goal are more actively involved in major study, club activities and hobbies.

In the interviews, most students express their dissatisfaction with their current learning and living status, but they don't know how to deal with it. “We really want to study hard but we are not motivated”, says L; “I don't like what they teach in class. However, I have no idea about what I like”, says L; “after class I don't want to be engaged in anything but reading novels and playing games in dorm”, says Q. It is indicated that only 2.7% wants to participate in social practice and 70% shows no interest in it because half of them believe it will adversely influence their academic study and a third of them is afraid of being cheated.

The above survey reveals a very high proportion of passive learning among undergraduates, which is depicted in **Table 5**. Most students are lack in both intrinsic goal, the competence and curiosity to explore the outside world. They rely on the standardized evaluation system and teachers' coaching, but the change in

Table 4. Survey of the undergraduates' learning goals.

	Frequency	Percent	Valid Percent	Cumulative Percent
To have a lot of wealth, to achieve their own material desires	147	13.2	13.2	13.2
To find a favorite cause and fight for it	545	49.0	49.0	62.2
To live with families peacefully	238	21.4	21.4	83.6
Valid To go sightseeing and experience a different world	169	15.2	15.2	98.8
To have the status and power that the others envy	13	1.2	1.2	100.0
total	1112	100.0	100.0	

Table 5. An analysis of the correlation between the goal and the learning state of the undergraduates.

		Do you have a clear plan for your future career or life?	Are university courses attractive to you?
Do you have a clear plan for your future career or life?	Pearson correlation	1	0.055**
	Significance (two-tailed)		0.000
	N	1112	1090
Are university courses attractive to you?	Pearson correlation	0.055**	1
	Significance (two-tailed)	0.000	
	N	1090	1090

**Significantly correlated at 0.01 level (two-tailed).

college learning and evaluating methods causes a continuous decrease in the external system's influence on the college students. Both the internal and external factors lead to their passive learning status. Although the students are not satisfied with their learning status, they don't know how to resort to external resources to correct it.

3.5. Major Influence by Economic Society and General Lack of Action

When asked "what's your purpose of attending college?" 67% wants to find a good job and becomes elite. When asked "what is elite?" 78% assumes elite can freely manage their time and wealth. Seldom do students mention about the social responsibility and sense of commitment and even about knowledge innovation or challenging against the social problems. Besides, 13.2% answers straightforward that they want to super rich and achieve their material desires.

When responding to a fill-in question, "write down the most successful person in your mind", 48% chooses Jack Ma, and totally over 60% students writes a big name in commerce and only 2.5% writes an outstanding name in science or

technology. Besides, 13% writes down the name a TV or Film star. It is obvious that the successful achievers in business field are ranked far from those in other fields.

Furthermore, despite the 67% and 13.2% wanting to be elite and super rich respectively, over half of them have little knowledge about their specialty and up to 65% has never tried to know about the requirements in the labor market and performed related social practice. When asked, “do you want to make a planning for your life like Jack Ma?”, though Jack Ma is their idol, 72% refuses. Among them 42% refuses because they think he is “too tired” and some believe they are “not competent enough”. When followed the question “Do you want to improve yourself to be competent?” most choose “No” and the reason is that “I am a student and my present task is to study and there is no way to improve my competence.”

The above survey shows that the economic society has a major influence on the values of college students and most students use material wealth to measure the meaning and value of learning which in their mind is mainly classroom learning, that is the memorization, understanding and application of classical knowledge, so they lack the courage and perseverance to explore the unknown domains independently.

4. Conclusions

At the popularization of higher education in China, most undergraduates are in the learning status characterized by vague self-cognition, unclear goal, unenthusiastic study, inadequate input in specialty and weak desire to act.

The external causes include: 1) Influenced by economic ethics, media and public opinions, college students incline to instrumental rationality in understanding the value of learning; they value skill-training courses rather than liberal arts and they strive for high examination scores but are indifferent to the in-depth discoveries. 2) The preference of scientific research to teaching efforts in faculty assessment system undermines their enthusiasm in teaching, resulting in dull classroom interaction, out-dated teaching content and difficulty in motivating students. 3) Affected by the information technology, Chinese students spend more energy in Internet and social media, directly leading to the inadequate time and energy in their study.

The internal causes are: 1) Undergraduates have little self-cognition about their excellence and hobbies, causing imbalance between one's competence and specialty. Consequently, their learning status and effectiveness are adversely affected. 2) Without the guidance of intrinsic goal, most students are passive in learning, which weakens their learning initiative and creativity.

Modern schools originate from the age of industrial revolution when social requirements for labor are at the level of certain basic and procedural knowledge. The development of technology is more of the reduction in physical labor cost than the intellectual input. During industrialization, the socialized mass

production calls for the standardization and inculcation to characterize education, thus to perfectly match the labor market demands at that time. However, with the innovation in information technology, the society needs talents with individuality and creativity, but the present “intrusive” educational pattern undermines the students’ learning imitative. Some scholars claim the contemporary college education should shift from “profound knowledge” to “personal knowledge” [12], because “This impulse can be stimulated and guided from outside the organism, and it can also be killed. But for all your stimulation and guidance, the creative impulse towards growth comes from within and is intensely characteristic of the individual.” [13].

The author believes that the learning status of the college students in central China can adequately reflect the problems in higher education in China and imply the great challenge in the future China’s labor market. All higher learning institutions in China should refer to the reform case of Peking University and make tailored adjustment in faculty assessment, internal and external educational resources coordination, students’ academic evaluation and the involvement of information technology into the classroom teaching, thus to change the present depression of students’ personality and enthusiasm due to the standardization and the current structure of the inconsistency in labor market resulted from the inefficiency in talent provision.

Acknowledgements

This work was financed by the MOE (Ministry of Education in China) Project of Humanities and Social Sciences (grant no. 18JDSZK095).

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

References

- [1] Zhang, X.Y. (2016) The Study on Features of the Learning Ability of Chinese College Students. *Journal of Education Science of Hunan Normal University*, No. 2, 95-102.
- [2] Crick, R.D., Broadfoot, P. and Claxton, G. (2004) Developing an Effective Lifelong Learning Inventory: The ELLI Project. *Assessment in Education: Principles, Policy & Practice*, **11**, 247-272. <https://doi.org/10.1080/0969594042000304582>
- [3] Land, S. and Jonassen, D. (2012) *Theoretical Foundations of Learning Environments*. Routledge, London. <https://doi.org/10.4324/9780203813799>
- [4] Ryan, T.A. (1970) *Intentional Behavior*. Ronald Press, New York.
- [5] Rothkopf, E.Z. and Billington, M. (1979) Goal-Guided Learning from Text: Inferring a Descriptive Processing Model from Inspection Times and Eye Movements. *Journal of Educational Psychology*, **71**, 310-327. <https://doi.org/10.1037/0022-0663.71.3.310>
- [6] Locke, E.A. and Bryan, J.F. (1968) Goal Setting as a Determinant of the Effect of

-
- Knowledge of Score on Performance. *American Journal of Psychology*, No. 3 398-406. <https://doi.org/10.2307/1420637>
- [7] Wood, R. and Locke, E.A. (1990) Goal Setting and Strategy Effects on Complex Tasks. *Research in Organizational Behavior*, **12**, 73.
- [8] Yang, X. (2004) A Review of the Researches on the Theory of Goal Setting. *Psychological Science*, **27**, 153-155.
- [9] McClelland, D. (1973) Testing for Competence Rather than for "Intelligence". *American Psychologist*, **28**, 1-14. <https://doi.org/10.1037/h0034092>
- [10] Graunke, S. and Woosley, S. (2005) An Exploration of the Factors that Affect the Academic Success of College Sophomores. *College Student Journal*, **39**, 376.
- [11] Daniel, H. (2011) *Drive: The Surprising Truth about What Motivates us*. Riverhead Hardcover, New York.
- [12] Wang, Y. (2011) University Curriculum: Necessity and Possibility to Develop Students' Personal Knowledge. *Journal of Higher Education*, **32**, 64-75.
- [13] Whitehead, A. (1929) *The Aims of Education and Other Essays*. Free Press, New York.