Exploration of Incentive Mechanism on Informatization Management of the University

Kan Ji and Xiaojun Chen

ABSTRACT

In order to effectively promote the information construction in this paper expounds the necessity of information construction, clearly constructs the principle of information incentive based on the present situation of information construction in SWPU (Southwest Petroleum University), and puts forward various effective measures to mobilize teachers and all units to actively participate in information construction. The reasonable and effective use of incentive measures not only promotes the better development of information construction, but also achieves the effect of strengthening university service, guaranteeing teaching and encouraging the cultivation of innovative talents.

1. INTRODUCTION

In 2016, Outline of National IT Development Strategy issued by The General Office of the Central Committee of the CPC and the General Office of the State Council, pointed out "the wave of informatization characterized by digitalization, networking, and intelligence has flourished, and the person who is able to grasp the opportunities, win the advantages, win the security and win the future[1]. " With the impact of information technology and according to the requirements of the Outline, information construction of the university clarifies work content, guides work direction and ensures work goal. As the feature of information construction promotion in SWPU (Southwest Petroleum University)such as improving management level, integrating information resources, innovating traditional research methods, and integrating management business processes, etc. the information construction has come achievements, while as there are not enough teachers and students takes part in, no remarkable effect has been achieved. As a result, constructs information incentive
mechanism is proposed, with the mechanism, the enthusiasm of teachers and students is enhanced, helping the development of information construction of the university.

In view of information promotion, our university has set up Information Promotion Department. According to the requirements of the Outline, Information Promotion Department guides the direction of information construction, introduces more than ten management measures and systems, practices the bottom-up and top-down informatization promotion strategy. After several years of hard work, information construction of our university has made remarkable progress, which has laid a solid foundation for the development of educational informatization. However, here is still a certain gap compared with the needs of teachers and students, especially in the aspect of school-level auxiliary decision-making. The current situation of information promotion is analyzed as follows.

(1). In comprehensive understanding of informatization, insufficient subject consciousness. And the view of information needs to be changed. It is difficult to implement the top-level design without establishing a sustainable and efficient operation mechanism.

(2). Lacking incentive policies. Due to restraints on the operation funds, information department authority, etc. our university fails to formulate strong support policies about information promotion. Therefore, the enthusiasm of teachers, students and the departments to participate fully in information work is not high.

(3). No evaluation criterion of information. Because of lack of evaluation criterion of information, the scientific and fair evaluation of information construction, application and guarantee is hindered. At the same time, there is lack of necessary promotion influence on teachers, students and the departments.

(4). Lack of unified management and monitoring of information facilities. Information facilities are various and widely distributed, it is difficult to grasp utilization efficiency and operation status.

(5). Unevenage distribution of IT technicians. Teachers over 40 years old have a low level of information as a whole. At the same time, there is a shortage of teachers with professional skills and information technology.

(6). Lack of life-cycle management of information construction projects. Project implementation is disjointed from project planning, combining with hasty project demonstration, unstrict technical indications, insufficient effect, and lack of necessary tracking evaluation.

2. NECESSITY

Since the 1980s, the wave of informatization has swept the globe and becomes a technological revolution after the Industrial Revolution. Informatization has become the basic development trend of human society. The global informatization is initiating great transformation all over the world, speeding up the development of
informatization is the common choice of all countries in the world [2]. Ten-year Development Plan for Education Informatization (2011-2020) points out that “Explore the comprehensive deep integration of modern information technology and education, lead the innovation of educational concepts and educational models with information technology, to give full play to the support and lead role of educational informatization in education reform and development[3].” Higher education based on informatization is the future development trend. Information construction is one of the important parts of universities. Based on information technologies and methods, to achieve the working aim and task, we need to optimize management methods, improve the level of work management and work methods, and reduce the inefficiency and inaccuracy caused by backward working methods in the process of management. Therefore, information construction that effectively promotes the development of school and standardizes school management, is the inevitable trend of colleges and universities.

3. CONSTRUCTION PRINCIPLE

Motivation is an academic term, is to encourage, guide, keep and standardize the behavior of organization members and effectively achieve the goals of the organization and individual by designing appropriate external reward forms and work environment according to the code of conduct and punitive measures [4]. Motivation is to mobilize people’s creativity, initiative and enthusiasm in various effective ways, enabling people not only to complete tasks by work hard, but also to perfectly accomplish tasks and goals. In order to construct incentive mechanism scientifically and reasonably, we should abide by the following basic principles.

3.1 Follow the principle of demand; vary from individual, need and time

The needs of teachers and students are different because of individual differences, as well as different goals and motivation structures in different periods. Their most urgent needs are different. Only when they meet their most urgent needs, the incentive effect is the strongest. Because the most urgent needs of teachers and students in different periods are the first motive force to motivate them to work and study. We understand the most urgent demand trend of teachers and students in different periods by targeted approach in order to mobilize initiative and enthusiasm of teachers and students to promote the development of informatization.

3.2 Material incentive combines with spiritual incentive

Take spiritual incentive as the main goal and material incentive as the auxiliary goal, and take spiritual incentive as the essential guidance measure, and material incentive as the basic guidance measure. From a psychological point of view, it is a common psychology that everyone wants to be recognized or appreciated by others. Teachers and Students enhance self-confidence and gain respect from colleagues through spiritual incentive, which can produce sense of honor, value and sense of belonging. When teachers and students are recognized and appreciated by colleagues and outsiders, it is unimaginable for them to release their potential abilities. However, material incentive is also indispensable. It is necessary to strengthen the work of more
and more, distribute according to work, and ensure that they are rewarded for their excess workload, so as to help teachers and students better participate in construction and management of informatization.

3.3 Positive incentive combine with negative incentive

Positive incentive by material incentive or spiritual incentive helps teachers and students to constantly satisfy from the psychological and physiological aspects, constantly accept school policies and leaders’ positive guidance, and stimulate enthusiasm for work and study. Excessive things can have drawbacks and side effects, positive incentive is no exception. Negative incentive including criticizing education, punishing mistakes and special rectification is also effective measures to improve work efficiency, correct mistakes, and mobilize people’s enthusiasm and initiative. It is necessary to properly balance punishment and reward, so as to maintain the positive and harmonious atmosphere of the whole collective.

3.4 Timeliness combines with clarity

Incentive should be timely. The timelier positive incentive is, the more active people will make contributions, which is conducive to bring the climax of people’s working enthusiasm and release their creativity. The timelier negative incentive is, the more attention is paid to the mistakes in the work, so as to avoid making mistakes of later work. The important issues that teachers and students pay attention to and the indicators of reward and punishment methods should be open on the common platform. At the same time, we should also make clear what the incentive content is, what the incentive purpose is and what the incentive measures are.

3.5 Fairness combines with rationality

The implementation of the incentive mechanism also focus on fairness and justice. The implementation of the incentive measures should not bet based on personal feelings or position. It should be measured by the same leader. Reward and punishment should be fair and equal. The incentive measures should be reasonable and appropriate, which should be determined the appropriate incentive amount according to the value of the target itself[5]. Fair and reasonable incentives can fully mobilize the enthusiasm of teachers and students, and maximumly stimulate their potential ability on work and learning.

3.6 Combine the goals

In order to mobilize the enthusiasm of teachers and students to participate in information construction in the university, leaders should combine the goals of information construction with the goals of personal development, and should equally treat teacher’s promotion, position appointment and student’s participation in innovative entrepreneurship projects, with the goals of information construction.
4. METHODS AND EFFECTS

With the continuous improvement and deepening application of digital campus construction in our university, the direction of information application and development should be adjusted accordingly. The requirement of information management and improve information is satisfied, meanwhile, the objective and impartial information mechanism should be established by full use of information system data and IT in order to arouse the initiative, enthusiasm, creativity and honor of teachers, students and departments.

There are various factors that affect information development, besides education funds, teachers resources, policy measures, rules and regulations, the subjective enthusiasm of teachers and students is also an important factor. In addition to the distribution of scholarship and reward, evaluation, assessment and honor are also important factors that affect the subjective enthusiasm of teachers and students. A set of objective and fair evaluation system is conductive to mobilize the subjective enthusiasm of teachers, students and the departments. And therefore the sustainable development of information is promoted.

There are many ways to establish information incentive mechanism. Different incentive measures play different roles.

4.1 Achievement Incentive

According to the statistical analysis of relevant data extracted from information system and operation logs in Information Promotion Department, the key indicators to motivate achievement of teachers, students and departments are found out. Meanwhile, Information Promotion Department creates quarterly rankings according to the key indicators, and publicizes the work performance of advanced units and advanced figures on prominent position of campus portal in order to set an example, standardize the behavior of teachers and clearly improve the direction of work. By establishing an effective and objective feedback platform, the information achievement will be announced to the whole school so that teachers and students can clarify the direction of future work and learn from outstanding units and teachers.

<table>
<thead>
<tr>
<th>Information application system</th>
<th>Key indicators</th>
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<tbody>
<tr>
<td>Services Portal</td>
<td>Top 10 application system visits</td>
</tr>
<tr>
<td>Office Hall</td>
<td>Top 10 process usage</td>
</tr>
<tr>
<td>Feedback System</td>
<td>Top 10 unit processing</td>
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<tr>
<td>Course Center</td>
<td>Number of construction course</td>
</tr>
<tr>
<td>Station System</td>
<td>Top 10 website visits, Top 10 information release and update</td>
</tr>
<tr>
<td>Library Management System</td>
<td>Loan and return monthly, Classification by the subject, Top 10 loan counts by the school, Visitors monthly, Top 10 visitors counts by the school, etc.</td>
</tr>
<tr>
<td>One Card System</td>
<td>Canteen consumption record monthly, Recharge method statistics monthly</td>
</tr>
<tr>
<td>Mail System</td>
<td>Visits count statistics by identity</td>
</tr>
<tr>
<td>Copyrighted Software</td>
<td>Activation counts monthly, Download counts by software</td>
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Figure 1. Information achievement.
4.2 INSTITUTION AND POLICY INCENTIVE

The university should formulate rational institution and policy about information, especially in the teachers’ performance distribution, labor insurance benefits, title promotion, and job evaluation and so on, coupled with detailed and clear rules and regulations, give full pay to the subjective initiative, and make every effort to build information construction. Institution and policy must be continuous, and maintain objectivity, fairness and justice. Institution and policy cannot be misunderstood by human feelings and emotions. Only by maintaining objective and impartial attitude can teachers and students better contribute to information construction. The establishment of scientific and objective institution and policy has a strong incentive and guidance effect for teachers and students.

4.3 WORK INCENTIVE

Teachers and students should actively participate in the management of information construction, establish the sense of ownership, participate in the discussion of information work and organizational decision-making at different levels, and contribute to information construction. The more people involve in the information work arrangement and information work decision-making, the smoother the information work is carried out. Managers should know how to judge the person assign them to handle the work. Each work makes teachers feel that they are valued and trusted, and it is helpful to carry out the management of information construction efficiently. And the challenging works give full play to teachers’ potential.

4.4 STUDY INCENTIVE

In order to create conditions of academic communication, going out for training and further study for teachers, and break the age limit of information teachers, especially teachers who are over 40 years old and have a low level of information technology, the university encourages them to participate in academic communication at home and abroad and going out for training. Good incentive of further study cultivates excellent IT technicians, and meanwhile, builds a team of teachers with business skills and information technology regardless of age.

4.5 SUPERVISION INCENTIVE

The investment of information construction funds in our university is neither in fixed amount nor in accordance with the plan. In many cases, it relies on the special funds of the superiors. As a result, information construction is sudden construction when there is already funds, and just only planning when there is no funds ready. The consequences are that the demand of information project is not clear enough; the investigation and argumentation of information project are hasty; the technical parameters are not well understood; and the implementation effect is difficult to evaluate. In order to deepen and refine information management, information project management system should be developed to ensure the planning, certification, implementation and effect of the project, and track the whole processes of the project,
so that it provides auxiliary support for leaders to make decision on information construction.

![Figure 2. Main interface of information project management system.](image)

5. CONCLUSIONS

Information construction is the inevitable trend of higher education development, and is a complex and important system engineering. In conclusion, information incentive measures are generally recognized and supported by the University, which also reflects the strategic policy of breakthroughs, reform and innovation, and overall promotion in the process of building a high-level energy university. The incentive measures should be used reasonably and effectively. Incentive methods should be constantly improved in practice, so as to improve the breadth and depth of information construction and better serve for the university service model, scientific research organizations and innovative personnel training.

REFERENCES

