



# Team Building Analysis of Vocational Colleges Based on AARRR Model

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**Abstract.** With the deepening of the integration of industry and education in vocational education in China, there are higher standards and higher quality requirements for the construction of teachers in vocational colleges, and the importance and necessity of team sustainable development are becoming increasingly prominent. Taking the construction of the "National Huang Danian-style Teacher Team" in a university as an example, this paper analyzes how to form a team, improve team activity, improve team retention, build team brand profitability effect, and self-propagation of team influence through the generalized application of AARRR model, so as to provide new ideas and new paths for the sustainable development of the team, and also provide reference for the high-quality construction and optimization of the teaching team of other vocational colleges.

**Keywords:** AARRR model, vocational colleges, Team building

## 1 Introduction

On December 5, 2017, the "Several Opinions of the General Office of the State Council on Deepening the Integration of Industry and Education" pointed out that it is necessary to strengthen the construction of the teaching team of the integration of industry and education, support in-service teachers to practice and exercise in enterprises on a regular basis, and promote the cooperation between vocational schools and large and medium-sized enterprises to build a "dual-teacher" teacher training base. [1] [2] Over the years, the integration of industry and education has been a key platform for higher vocational colleges to "improve quality and efficiency", but there are problems of convergence of professional structure, low professional level and weak brand awareness, as well as the lack of supporting mechanism and asymmetric resource sharing [3], resulting in the integration of industry and education, but has never reached the ideal integration state [4].

In order to adapt to the integration of production and education, and promote talent training, Shandong Electric Power College "Smart Grid Protection and Control Teacher Team" since its inception, members of the dynamic update, continuous adjustment, over the years focus on team model construction and optimization strategy analysis, from the teacher morality, education and teaching, social recognition, scientific

research and innovation and other aspects of the establishment of vocational colleges and universities co-construction education system, and finally stood out among many university teams across the country, won the honorary title of "National Huang Danian-style Teacher Team".

This paper analyzes the complete life cycle of team building[5][6]: that is, how to carry out scientific and reasonable member formation, maintain a high degree of activity of members, and how to continue to link the forces of both schools and enterprises in the context of the integration of industry and education, build a high-level and structured teacher team, win the comprehensive competitiveness of the team, build a team brand, and form a radiation driving role, and summarize the development concepts and ideas suitable for vocational colleges to strengthen the integration of industry and education and improve the quality of talent training.

## 2 AARRR Model

In 2007, Dave McClure, a Silicon Valley venture capitalist, innovatively proposed the concept of AARRR model [7], which corresponds to the abbreviation of five states or stages: user acquisition, user activation, user retention, user revenue, and user referral. Generally speaking, the AARRR model is mainly aimed at the commercial sales area, with the intention of developing users. Through a series of ways, a fission growth trend of users is formed, and then self-propagation and promotion, and finally the benign growth of commercial users is realized. [8]

## 3 Team Building AARRR Model Analysis: A Case Study of a "National University Huang Danian-style Teacher Team"

For the commercial sales field, the "users" in the AARRR model are the actual target customer groups, and the number of users is indicated at each stage. For the field of vocational education teachers, the "user" in the AARRR model can be broadly understood as a whole concept, that is, a group or an organization, so the model can correspond to the formation of the teacher team, the optimization of group activity, the lean development of the group, the building of the brand power of the group, and the influence of the radiation power of the team in the five stages of user acquisition, user activation, user retention, user profit, and user recommendation in the traditional sense.

### 3.1 User Acquisition Phase

That is, the stage of team formation of the institution. Strengthening the top-level design and selecting discipline leaders and backbone forces to join the team is the premise of team development.

**Publicize the Advantages of Characteristics.** Timely release the school and team promotional videos on the school's official website, WeChat public account, Weibo and

major media platforms, actively participate in the National Vocational Education Publicity Week, scientific research competitions and achievement declarations, and undertake industry training. Digitally present the achievements and honors of the school and the team, speak with facts, forward through the network, and spread through the fission of "one belt and more", continue to deepen the school's visibility, show the good image of the school, show the school's excellent soft power and hard power, and let more talents know about the good teaching resources and development platform that the school has, so as to attract relevant backbones of the industry to participate in the teaching and training of the school's relevant teams.

**Select Team Leaders.** As the heart and soul of team development, the role of the team leader cannot be underestimated. The team leader led the provincial professional inheritance innovation platform, relay protection technology innovation team, etc., and won a number of honorary titles, giving full play to the leading role of the person in charge.

**Linkage of Multiple Resources.** The first is the service profession itself, which has both teachers with strong theoretical teaching and talents with strong technical skills; The second is to tap human resources, including full-time teachers in the school, as well as enterprise backbones and technical mentors from the front line. Relying on four platforms such as "Shandong University Engineering R&D Center" and five innovative teams such as "Relay Protection Technology Innovation Team", the team builds a school-enterprise dual-subject teacher team, and jointly undertakes the tasks of course teaching in the school and technology research and development and enterprise training outside the school, and strives to achieve the goal of complementing each other's advantages and fully excavating the overall role and function of the team.

### 3.2 Increase Activity Phase

That is, the active optimization stage of the team. The continuous activation of team activity lies in whether the team can integrate the superior resources of professional disciplines to achieve resource sharing, whether the members are united and cooperative, and whether the roles of all parties can give full play to their due roles and values.

**Pay Attention to Leading Development.** Pay attention to the cascade development of the team, and effectively form a mechanism of "passing on and helping the old, middle and young". Pay attention to the guidance of experience, give full play to the motivational role of high-level talents with high academic qualifications, improve their theoretical level, and strengthen teaching reflection. Gather the coordinated development of major-related disciplines to achieve the effect of knowledge dialogue.

**Dig Deep Into the Strength of Specialization.** Cooperate with various power grid enterprises, manufacturing enterprises, and network access testing institutions, launch school-enterprise cooperation proposals to relevant enterprises in the industry, select

outstanding talents in the industry as part-time tutors, and sign short-term or long-term joint teaching and training contracts; Full-time teachers are selected to participate in on-site exercises, understand front-line technical skills, encourage teachers to obtain technician certificates, and actively participate in the release of the event. Establish a full-time and part-time integration, two-way flow, mutual employment and mutual recognition mechanism, work together inside and outside the school, break through the mechanism resistance of talent flow, solve the current situation of strong full-time theory and weak practice, improve the "five forces" of teachers, and implement them in school training, teaching and scientific research innovation.

**Carry out in-depth Activities of "Professional Construction Year"**. Systematically develop high-end training projects, participate in the revision of the National Occupational Classification Dictionary, accelerate the construction of professional groups, establish a flexible introduction mechanism for excellent teachers, promote the three major projects of high-end talent leadership, famous teacher cultivation and young talent lifting, implement special actions such as campus recruitment, expert talent appointment, and talent cultivation in short supply, carry out the evaluation and competition of "five forces" of teachers, and stimulate the entrepreneurial vitality of all employees.

### 3.3 Improving Retention Phase

That is, the lean development stage of the team. Relying on the school's advantageous resources of school-enterprise integration, it strengthens the allocation of full-time and part-time teachers, and uses advanced training and teaching bases to consolidate the professional ability of the team in practice, so as to gradually improve the development of the team and the value-added value.

**Strive to Establish Morality and Cultivate People.** Construct an education pattern of "ideology and politics as the soul and knowledge as the base", create a "curriculum ideological and political collection", invite part-time teachers to regularly carry out activities such as "model workers, craftsmen, and excellent technicians" into the classroom among teachers and students, organize team lecture halls, academic exchange activities, and visit model worker innovation studios, integrate on-site and training and teaching, and promote the "genetic" integration of professional and ideological and political education, so that the ideological and political construction of the curriculum can be seen and touched.

**Dedication to Education and Education.** Construct "on-site, production-oriented, and scientific research-oriented" educational resources, and build training rooms, test halls, and simulation training rooms for various voltage levels, so as to support the implementation of training and teaching, and ensure the implementation of scientific research projects. It has achieved remarkable results in constructing a "combination of science, reality and virtuality" education method, and integrating scientific research

achievements into teaching methods and model reforms. Construct a school-enterprise "dual-subject" education model, in-depth study of the laws of education and teaching, promote the concept of "four linkages", implement the "four truths and one reality" action teaching content of real environment, real tasks, real projects, real crafts, and hands-on practice, and create a "1.5+1+0.5" education and training combined teaching system of 1.5 academic years of theoretical learning, 1 academic year of practical training exercises, and 0.5 academic years of top post practice (see Fig. 1).

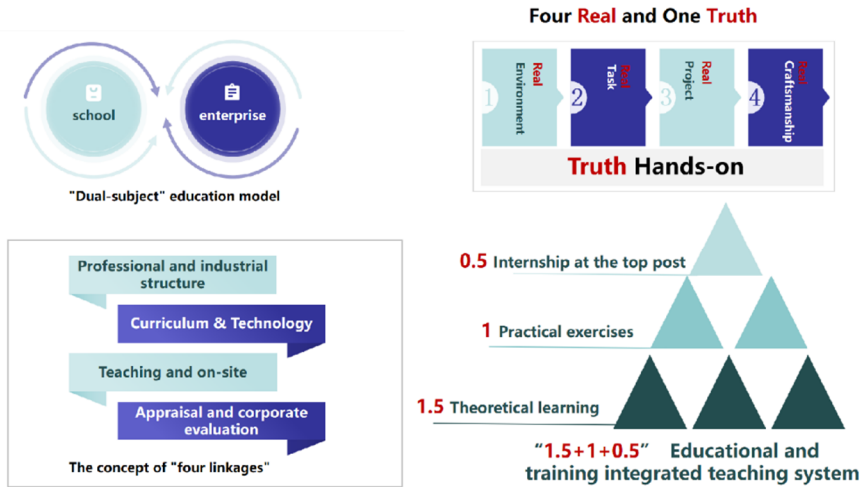


Fig. 1. Education Method

### 3.4 Profit Acquisition Stage

That is, the stage of building team brand power. Through the influence of brand power, we will consolidate scientific research capabilities, serve social employment, help industry publicity, further accumulate relevant achievements and scientific research funds, support the three major functions of teaching, scientific research and service, and continue to strengthen team building.

**Outstanding Scientific Research and Innovation.** Focusing on the three major areas of specialization, combined with the training and teaching process and production site, we will develop education and training platforms and tools to help the training of technical and skilled talents and improve the automation level of the production site; Focusing on the "double carbon" goal, we actively serve the conversion of new and old kinetic energy in Shandong Province, and establish key scientific research projects; Focusing on new power grid technologies, more than 10 major achievements have been developed in the fields of UHV and smart grid, and experts in the power industry have unanimously identified that "some projects have reached the international leading level"; Focusing on the development strategy of new power systems, solving problems

in the industry, and continuing to play a role in new energy fields such as photovoltaic and wind power, it has supported the implementation of national and local development strategies.

**Remarkable Teaching Effect.** The team undertook the construction of 2 national teaching resource databases, presided over the formulation of X certificate standards of the Ministry of Education, 4 national professional teaching standards, and coordinated the promotion of the integration of pre-service and post-service assessment and evaluation. He has won 5 provincial teaching achievement awards, more than 10 textbooks, dozens of invention patents, and has successively won the national curriculum ideological and political demonstration course, the second prize of the national vocational education teaching skills competition, and the "National Outstanding Contribution Unit for the Cultivation of Skilled Talents" and "Shandong Worker Pioneer", and was selected into the Ministry of Education's industry-education integration casebook.

According to statistics, in recent years, the employment rate of graduates of the team's major has always remained above 95%, and the social satisfaction rate has been more than 99%. Since 2015, he has guided students to participate in the national "Internet +" innovation competition and won 7 first and second prizes, and has developed more than 100 modern apprentices for companies in remote areas in the west and Zhejiang, and has achieved remarkable results in talent training.

**Positive Social Services.** Service production enterprises to solve on-site problems, apply existing scientific and technological achievements, deal with accidents in Liaocheng, Weifang, Yunnan and Yunnan substations, and create economic benefits; Serving the training of technical and skilled talents in the power industry, the company trains 100,000 new employees in related majors of the State Grid every year. Serve the dissemination of "Belt and Road" technical standards, carry out exchanges and cooperation between countries along the "Belt and Road", Brazil and other power enterprises, tell Chinese stories well, spread power standards, and show Chinese characteristics; Serve the construction of the network platform of the power industry, create a network university equipment college, train 100 million+ hours online, and realize the sharing of information platform. Service high-standard competition undertaking. It undertook the SCO National Skills Competition and the State Grid Professional Skills Competition. Serve public academic affairs; He served as a member of four societies including the China Electrotechnical Society, and carried out academic exchanges and expert consultations.

The integration of production and education, the joint development of relay protection intelligent maintenance system, has been applied and verified in the intelligent substation relay protection training project; School-enterprise cooperation and cooperation in the development of training simulation system, which has been used by many students and received praise; Taught 600MW generator transformer relay protection course for Luxi Power Generation Company; Taught the course of "Rapid Detection and Analysis of Relay Protection Faults" for the relay protection contestants of Huaneng Group; It has carried out school-enterprise co-construction with NARI Group,

added 3 new majors such as information technology, participated in the China Vocational Education Expo, and greatly increased the proportion of agreement employment and further education, and the brand effect of vocational education has become increasingly prominent.

### 3.5 Self-Propagation Phase

That is, the team radiates the impact stage. The basic principles of the team's ability to produce a self-propagation effect lie in whether there are real job requirements, a strong team organization, a strong foundation for results, and a rising quality of talent training year by year.

Over the years, the team has been deeply rooted in team building and won the title of "National Huang Danian-style Teacher Team", which verifies the scientific rationality of the team's benign operation. With the exemplary and leading role of the team, the school has formed a radiation driving role, leading other teams to further deepen the construction and reform of the university teacher team in the new era, learning from the provincial famous teachers, provincial outstanding young and middle-aged experts, company-level outstanding expert talents and outstanding teachers, national model workers and other typical figures in the team, leading the members to forge ahead in unity, work hard, strive to improve the professional ability and quality of higher vocational teachers, attract more outstanding external forces to join the team building, and jointly promote the construction of a higher-level teacher team. Build a team of high-quality, professional and innovative teachers, and gradually promote the team's operation model to other vocational colleges across the country.

## 4 Summary

The integration of industry and education and the co-construction of schools and enterprises are the only way for vocational education to run schools, and they are also the key to optimizing team building. A good team not only relies on the unilateral strength of the school, but also constructs the AARRR model, adheres to the five-step construction, unites and cooperates with internal members, and supports structured and high-level teachers externally, so as to create a "double-teacher" team with sufficient quantity, full-time and part-time combination, internal and external cross-border, complementary advantages, reasonable structure, knowledge sharing, and close coordination, and constantly improve the pre-service training and post-service training system of teachers, and continue to promote the development of the teacher team.

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