

Standardized Research and Measures for Leadership Education

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Abstract: In today's fast-changing global environment, the importance of leadership education is becoming more and more pronounced. Effective leadership not only drives organizational success, but also fosters teamwork and innovation. However, there are currently significant differences between different educational institutions and training programs; leadership education has not resulted in a standardized training and enhancement program or measure, and there is no valid and accepted assessment standard for leadership education, leading to differentiation and non-standardization of leadership education. This paper focuses on the reasons for the lack of standardization of leadership education in the current society, and combines practical case studies of business and organizational structure to prove that most of the leadership education in the current society lacks standardization. At the same time, this paper uses the BSCS 5E Instruction Model and the Kirkpatrick assessment model to help study how to standardize leadership education, and at the same time establishes a relevant training and assessment system to help the society or the trainees to better improve their own leadership ability, in order to improve the quality of education, and improve the effectiveness and standardization of leadership education.

Keywords: Leadership, 5E-model, Kirkpatrick model, Standardization

1. Introduction

Currently, in the field of leadership education, more demand comes from business programs or other non-profit organizations, which are also at the forefront of leadership education research. Even so, there are still large gaps in the field of leadership education because these business programs and non-profit organizations have a high degree of overlap in their requirements for leaders, so their research on leadership education focuses on how to guide subordinates or coordinate interdepartmental functions, which is a very one-sided and narrow approach to the field of leadership education. Leadership education also involves many other aspects, for example, in the past few decades, studies have shown that school leaders play a crucial role in the development and maintenance of teaching standards in schools, so the application of leadership education in educational management is very important [1]. It also involves various aspects of teaching, quality education, subject competence education and the biological field. So this paper would like to study the standardization of leadership education to make up for the gaps in these aspects to a certain extent.

First of all, contrary to popular belief, leadership is not measured by a leader's prestige or social status, nor is it linked to power, although it is more likely that a person will have power while

possessing leadership, but this does not mean that power is a criterion for leadership [2]. Similarly, in different fields we can find outstanding people who may be leaders in their field, but can their leadership be quantified or standardized for teaching? For example, Tommy Shelby in the American TV series “Bloodsport”, or some other non-conventional field of excellence. Obviously, the most standardized field in which leadership can be measured is education, where the role and standards of leadership can be best defined. It is in education that the role and criteria of leadership can be best interpreted, because the first priority or the fundamental idea of education is to provide leadership and guidance to others, so that they can better inherit the knowledge and experience summarized by their predecessors, and then go out on their own path. This paper hopes to study how to standardize leadership education as a way to solve the current phenomenon of lack of ability and insufficiency of leaders in society, and at the same time to contribute to the cultivation of excellent and standardized leaders in more fields. The purpose of this paper is to break the stereotype of leadership education, to make a detailed explanation of the standards and definitions of leadership, and to emphasize the importance and necessity of standardization of leadership education, as well as how to standardize leadership education for further discussion.

2. Current Status of Leadership Education

2.1. Differences in the Content of Leadership Education

At present, the content of leadership education covers a wide range of disciplines, from psychology, engineering to business, etc. The main leadership education is widely recognized by us from the organizational structure and business training. It is undeniable that the cultivation and demand for leaders' ability in this kind of field is indeed more than that of most other disciplines or fields, and at the same time, they are at the forefront of the practice and content of leadership education. Take Harvard Business School and Stanford University for example, the former's leadership courses emphasize case studies and practical experience, focusing on cultivating students' decision-making ability and strategic thinking; while the latter focuses more on innovation and entrepreneurship, with course content including design thinking and teamwork. This difference is normal because they each need different leaders, and accordingly, their leadership education will be different.

2.2. Differences in Teaching Methods

Differences in teaching methods for leadership education are obvious, and this is also related to the subject area; leaders in the business model we are more looking for their leadership tools as well as strategic thinking and vision, which this paper will mention later on, and which mostly comes from the genetic aspect. School or college leaders need to be more capable of guiding and relieving the pressure of teaching, which leads to differences in their teaching methods, with the former mostly constructing theoretical knowledge systems and the latter needing to be practically integrated into the curriculum.

2.3. Lack of Assessment Mechanisms

At present, many leadership education programs lack an effective evaluation mechanism to accurately measure participants' learning outcomes and leadership enhancement. Possible factors contributing to the lack of evaluation disposable budget, low degree of professionalism, over-reliance or trust in training solutions, and deficiencies in approaches, methods, and tools [3]. At present, the usual assessment standard is to combine the actual task with task-oriented leadership education assessment. First of all, the cycle required in this way is too long, and secondly, in the task there will be a lot of non-human factors, which makes it more difficult to reasonably assess the results of leadership

education. Not only that, it also greatly increases the cost of trial and error of the organization or the training side, which in turn reduces the demand for leadership education.

3. Analysis of the Need for Standardization in Leadership Education

Before discussing the necessity of standardization in leadership education, one must first think about what kind of education can be called standardized and what the definition of standard is. The former is answered by the fact that this paper argues that a very important aspect is that it can be taught; a theory or an education can only be standardized if it can be taught. The latter is fundamentally that there are two types of standards, one of a technical type and one of a non-technical type, and for the non-technical type, the definition of standards is program and practice [4], which can also be understood as theory and practice. Currently, the widely accepted view in business and education is that part of leadership can be taught. Because there are many traits of leadership, which include the leader's personality (positively leading style translates into relevant leadership behaviors in the workplace, and such behaviors are shared with employees through a number of pathways, which affects employee engagement [5]), the leader's unique strategic thinking as well as temperament, which originate more from the genetic level, if we want to standardize the teaching of this part of the trait, then we need to edit human genes from a genetic point of view, which is obviously unethical and unrealistic. But many satisfactory leadership skills and behaviors can be taught [6]. The standardization of leadership education is not, in the author's opinion, to breed everyone into a leader, which in itself is not in line with the needs of the market and society; after all, leaders are only a minority group.

The focus of leadership education is how to help leaders do better, to help them improve their own leadership level and ability, which is the key point that leadership education needs to be taught and standardized. This paper argues that the standardization of leadership education focuses on two aspects: the first is the transfer of knowledge; schools or companies can summarize a fixed set of leadership behavior paradigms and leadership skills training. The transfer of this knowledge is the same as ordinary subject knowledge education, mostly in the form of books and topics. The second point is the accumulation of experience; the training party needs to put the leaders into the real environment to develop their leadership skills. Just like swimming, not before the water to do the so-called technical training is empty talk; the real swimmers are cultivated in the water, the leaders are the same, they need a real scenario to help them better grasp the knowledge learned, and at the same time, through practice, to help accumulate their own knowledge and experience, which is the same as in the case of the leaders. Their own knowledge and experience are the keys to helping them improve their leadership ability, which is also the core of leadership standardization.

4. Methods and Measures for Standardizing Leadership Education

As mentioned earlier, the core of standardization of leadership education is the transfer of knowledge and accumulation of experience, and this paper will use the BSCS 5E Instruction Model (which will be shortened to 5E-model later for ease of understanding) to help the authors standardize leadership education. First, let's briefly introduce the 5E-model. The core of the theory consists of five important parts: Engagement, Exploration, Explanation, Elaboration, and Evaluation. Each stage has a specific function that can help learners better understand the knowledge being taught [7]. This paper will focus on how this learning theory can be standardized by combining it with leadership education.

4.1. Engagement

Trainers or course assignments will use short activities to stimulate curiosity and trigger the prior knowledge of the leaders because different leaders have different levels of education and different

cultural beliefs, which leads to different prior knowledge, and by collecting and guiding their prior knowledge, it helps them to engage with new concepts, which will lead to the standardization of leadership education. These activities should be able to make connections between the leaders' past and current learning experiences, reveal their prior concepts, and guide their thinking toward the learning outcomes of the current activity.

4.2. Exploration

The exploration phase involves guided inquiry activities that help leaders identify opportunities for alternative conceptual explanations and build new explanations that make sense to them [8]. The exploration experience provides leaders with a common base of activities on which to identify current concepts (i.e., misconceptions), processes, and skills, and to facilitate conceptual shifts. Leaders can complete laboratory activities that help them use prior knowledge to generate new ideas, explore problems and possibilities, and design and conduct preliminary investigations.

4.3. Explanation

The explanation phase focuses leaders' attention on a particular aspect of their engagement and exploration experience and provides opportunities to demonstrate their conceptual understanding, process skills, or behaviors. This phase also provides an opportunity for the trainer to introduce the concept, process, or skill directly. In this phase the trainer will actually begin to provide the leader with knowledge transfer education; the first two phases were all about guiding and inspiring the leader to continue deep learning and establishing a deep learning environment. At the same time, leaders will explain their understanding of the concepts. The explanation by the trainer or the course may lead them towards a deeper understanding, which is a key part of this phase. In this part, the trainer will provide the important elements of leadership education mentioned before, which is to help the leaders to train their knowledge and skills, to help them to understand more deeply the differences and roles between different leadership styles, and a good leader will understand when to adopt the appropriate leadership styles, and at the same time it will help the leaders to correct the mistakes and deficiencies of their previous leadership behaviors; this is the specific role of the explanation stage.

4.4. Elaboration

Trainers will challenge and expand leaders' conceptual understanding and skills. Through new experiences, leaders gain a deeper and broader understanding, more information, and adequate skills. Leaders apply their understanding of the concept through additional activities. In this stage, the practicing stage mentioned above, leaders need to be put into a real leadership situation, which will be a very important challenge for them. In this stage, leaders will do a practicing of the knowledge and skills they have learned in the explaining stage to test if their understanding of these skills and knowledge is in place and if they are able to apply them well to a specific leadership context. At the same time, they will also produce their own leadership skills and concepts at this stage, and this differentiation is the core competitiveness of their future leadership positions. The standardization of leadership education is not to train all leaders to be the same; it is to help more leaders to achieve the most basic leadership skills in the reality of the different levels of leaders, but this standardization will not affect the output of the more outstanding leaders. However, this standardization will not affect the output of the better leaders; on the contrary, the standardization pursued by the authors will better help the output of the good leaders.

4.5. Evaluation

The evaluation phase encourages leaders to assess their understanding and competence and provides trainers with the opportunity to assess leaders' progress in achieving the goals of leadership education. Evaluation in any training system helps to quantify the “knowledge gap”, that is, the gap between what the trainer teaches and what the trainee receives [9]. Here we will use the Kirkpatrick model to standardize the evaluation of leadership education training. First of all, this paper will introduce what the Kirkpatrick assessment model is, which is a classic model for evaluating the effectiveness of training and is divided into four phases: reaction, learning, behavior, and outcome. Through this model, the effectiveness of leadership education can be comprehensively assessed to provide a basis for program improvement. At the same time, the model is also a global standard for evaluating the effectiveness of training. In order to standardize leadership education, the contribution of the Kirkpatrick assessment model cannot be ignored. In addition, the Kirkpatrick model is an efficient and accurate way to measure the effectiveness of adult learning and training. For this reason, the Kirkpatrick model will be used in this phase to help trainers standardize leadership education assessments. This paper later will focus on the response and learning phases.

4.5.1. Reaction

In this stage, the model will test the reaction of the trainees (i.e., leaders) to the training, which will be evaluated at the end of the course because the reaction of the trainees usually has a strong correlation with the duration of the training [10]. However, a valid Level 1 evaluation does not only focus on whether the leaders enjoyed the training course, but also needs to explore the three important aspects of the course content, the physical environment, and the trainer's behavior.

4.5.2. Learning

This is the stage where we measure the level of knowledge and competence that the trainee has gained. If the evaluation of the training program is valid, the trainee can gain important insights into the quality of the program. This can be measured using a Likert scale, but this is not the focus of this paper. In addition to this, at this stage, the pre-test and post-test are very important steps in measuring this training course. The pre-test is the previous knowledge collected in the first stage of our course design (engagement), which is the result of the pre-test, and the post-test requires us to collect the same knowledge as the pre-test after the training is over, and measure the specific learning level of the trainees in this training course by comparing the difference between the two. The difference between the pre-test and the post-test is used to measure the specific learning level of the trainee in this training program. The difference between the pre-test and the post-test can visualize the actual gains and improvements made by the trainees during the whole leadership education training process, and these data can help us better assess their achievements and development.

5. Conclusion

Standardization of leadership education is an important way to improve the quality of education and promote the development of trainees. This paper proposes the use of the 5E-model to help the authors standardize leadership education courses and training, and the authors also utilize the Kirkpatrick model to help us standardize the evaluation of leadership education outcomes. Through the standardization of curriculum design and learning, as well as the final evaluation, this paper concludes that leadership education has been initially standardized. Of course, the research in this paper is still lacking; first of all, there is no practical test to verify the feasibility of this method. The authors only carried out a theoretical study, and hope that later studies can be based on this for practical testing,

and suggest that subsequent studies can be carried out by randomly selecting a group of leaders from schools, commercial companies and non-profit organizations to conduct controlled experiments on leadership education. One group will receive traditional leadership education, i.e., a single aspect of training, such as business training or organizational skills training, and the other group will receive standardized leadership education, and then their abilities will be compared to verify the feasibility of this paper's theory of standardized leadership education. At the same time, this paper only focuses on the reaction and learning stages of the Kirkpatrick model assessment, and the subsequent behavioral and outcome stages need to be studied by more professional scholars. It is hoped that subsequent research can focus on the above two aspects, so as to completely realize the standardization of educational leadership. In the future, with the deepening of standardization, leadership education will become more scientific, systematic and effective, laying a solid foundation for cultivating outstanding leaders.

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