

## Developing a communication decision-making model for continuous improvement of teaching quality

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### Abstract

Continuous improvement of teaching quality is necessary. In addition to develop related policy to improve for continuous improvement of teaching quality, leaders of college also positive communicate with faculty and hope faculty can cooperate with related policy. However, due to faculties of different personality traits may have different responding and behaviour, therefore, leaders of college should develop different communication approach based on personality traits. Based on above, the purpose of this study is to develop a communication decision-making model to decrease the conflict with faculty of different personality traits, and ensure they are willing to cooperate with related policy about continuous improvement of teaching quality.

**Key words:** Continuous improvement, communication, personality traits, decision-making

### Introduction

Continuous improvement of teaching quality is an important work in the higher education institution. Through the continuous improvement, it is not only to improve the teaching quality, students' learning process and effect but also be ensure.

To improve the continuous improvement of teaching quality, more leaders of colleges positive design and develop related policies and encourage faculty to cooperate with these policies. Even though, faculties who usually have different personality traits. According to [1], different personality traits will appear different behavior, they have different thinking and decision-making process. Finally, they will show a different attitude when leaders of college require to cooperate with related policies.

Some faculties may be willing to cooperate with related policies on continuous improvement of teaching quality; however, some faculties may doubt, hesitate, even resist based on responding of personality traits. For this reason, [2] indicated that the development of communication approach is necessary based on different personality traits. Exactly, [3] found that leaders of college should adopt different change leadership to deal with faculties of different personality traits. It means, if leaders requirement faculties to cooperate with related policies on continuous improvement of teaching quality, leader should change their communication approach based on different personality traits.

Even through, existing studies lack to develop communication approaches based on personality traits. Therefore, results of existing studies are hard to provide related

suggestions for leaders of college. Based on above, the purpose of this study will try to develop a communication decision-making model based on personality traits. According to the decision-making model, leaders of college can adjust their communication approach when they persuade faculties of different personality traits to cooperate with related policies for continuous improvement of teaching quality

### Literature review

#### *A. Continuous improvement in higher education*

According to [4], improvement of teaching quality is so important under students learning process. Exactly, continuous improvement means repeated improvements of anything [5]. In the higher education, effect of continuous improvement was proved that has positive effect on improvement of teaching quality. Therefore, more and more researchers tried to explore how improve the continuous improvement for raising the teaching quality. For example, [6] adopted the network analysis to explore how improve the continuous improvement; [7-8] suggested the quality management system and six-sigma should be implemented; [9] pointed out that leaders of college should identify for total quality management elements.

In addition to improvement approach, existing studies also explore improvement process. For example, [10] indicated that 5 steps were involved in continuous improvement process, including outcome development, measure selection, cyclical assessment planning, benchmark designation, and practice; [11] developed a training program for teaching assistant to establish a continuous improvement rule.

Based on above, issue on continuous improvement of teaching quality almost mature, and researchers in higher education field also have focused on the issue and explore deeply. Thus, more colleges have developed more related policies to improve the continuous improvement of teaching quality, and list on the route planning.

#### *B. Personality traits and communication*

According to America Psychology Association (APA), different conditions in the life will affect people's psychology developing, and lead to different personality. Therefore, faculty from different growth environments who will has different personality traits. In the recent, more and more leaders found that they should adopt different communication with faculties of different personality traits for interaction.

Based on above, although continuous improvement of teaching quality has become an important work in the college, and leaders also develop related policies to improve the continuous improvement, however, faculties of different personality traits are not likely that all cooperate with these

policies. For this reason, [12] indicated that leaders develop different communication approach to communicate with faculties of different personality traits, that is necessary.

Even though, the development of different communication approaches almost focusses on the role of students. Although [3] suggested that researchers should classify personality traits for faculties, and further develop different communication approaches, however, existing studies is still not to explore. Therefore, if we hope to know how require faculties of different personality traits to cooperate with related policies for continuous improvement of teaching quality, try to identify different communication approaches based on personality traits that is priority.

## Methodology

### A. Communication decision-making model

According to research purpose, this study is to develop a communication decision-making model based on personality traits. By the model, leaders can easily adjudge how choice a fit communication approach to requirement faculties of different personality traits to cooperate with relation policies of continuous improvement. Based on above, we will collect related literature and adopt the meta-analysis method to develop a large communication decision-making model.

### B. Taxonomy and multi-criteria decision-making

According to the communication decision-making model, this study further combines with the big five scale to develop a questionnaire and investigate to college's faculties. After, we will use taxonomy approach to classify for faculties, to identify for clusters of different personality traits.

In the analysis process of taxonomy, we first use ward's method and squared Euclidean distance to generate the dendrogram and an agglomeration schedule table. Based on agglomeration schedule table, further decide numbers of cluster. In the second, use K-mean cluster to distinguish for samplings. Third, use ANOVA to test the difference between clusters. Finally, explore for composition of different cluster in personality traits, and further identify for every cluster, to understand the personality traits focus of every cluster.

Based on taxonomy results, we further analyze for different clusters, to understand that faculties of different personality traits should adopt which communication approach. Based on above, we need to combine with communication decision-making model, and adopt the multi-criteria decision-making to analyze.

Concept of multi-criteria decision-making approach is to select the optimal solution through liner programming, non-liner programming, fuzzy, or analytic hierarchy process. In this study, consider the communication decision-making model, therefore, we will adopt the analytic hierarchy process to explore communication approach for faculties of different personality traits.

Analysis process of analytic hierarchy process can be divided into three stages, first stage is to establish matrixes based on the communication decision-making model. In the second, develop expert questionnaire based on communication decision-making model to collect related data. Third, use these data to produce comparative weight of matrixes. After, according to results of

taxonomy analysis, try to calculate the optimal communication approach solution for different personality traits.

## Conclusion

This study is just a research proposal; therefore, we just present for research introduction, literature review, and a simply concept of methodology. In the next, we will further finish collection of related literature, further develop expert's questionnaire, and finish all analysis process. In the research contribution, we believed that our research results have greater academic implication and practical implication. In the academy implication, we try to extent the gap of existing studies on leadership of higher education; in the practical implication, research results will help leader of college to understand how easy communicate with faculties of different personality traits for continuous improvement of teaching quality.

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