Development Of Exemplary Leadership Practices Among Engineering Students Through A Community Service Approach Of Private Universities In Zhengzhou, China

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ARTICLE INFO	ABSTRACT
	This study aims to develop a community service activity approach to enhance leadership among engineering students at a private university in Zhengzhou, Henan Province, China. This approach aims to improve students' exemplary leadership practices and develop best practices for community service activities. Through reviewing the literature and structured interviews, the researcher developed four approaches to effective community service activities (the four effective activities are mentoring activities, spiritual activities, volunteer service activities and activities of social organizations) and developed a questionnaire to investigate the current status of students' exemplary leadership practices and community service activities. Four student affairs deans, four student management teachers, four student research directors, and 683 engineering students from four private universities in Zhengzhou, China participated in this study. The research results show that: 1) Before the implementation of the approach in this study, students' awareness of exemplary leadership practices was at a medium level. However, students' awareness of community service activities is generally higher. 2) Students' exemplary leadership practices are positively related to community service activities. 3) After implementing the approach, students' exemplary leadership practices have been improved. Discussions are conducted based on each research objective, and recommendations are made to schools and teachers at the end of the study. **Key Words:** Approach, Community Service Activities, Exemplary Leadership Practices Skill, University Student Leadership, Engineering Students

Introduction

As leadership has evolved and changed, its scope has expanded-student leadership has inspired educational institutions to pay attention: the leadership of institutions of higher instruction not only recognizes the importance of patient leadership but also has a responsibility to prepare students for success in their careers. This perception in the institutions of higher learning has influenced both the development and practice of student leadership. For example, Jean and others involved in student leadership decisions in the 1970s understood their schools, their programs, their learning, their assessments, and their communities to provide activities for the development of student leadership. Specifically, colleges and universities must prepare students as future leaders to empower them to share leadership with others. As a result, many colleges and universities offer leadership development programs for students in their courses and co-curricular. For example, in Lambert's (2018) study, leadership competencies include a commitment to a position and joining an organization that facilitates the development of student leaders' experiences as well as campus life skills.

In order to promote student leadership development activities, leaders and administrators must pursue

effective strategies in higher education institutions: approaches that can expand the study of student leadership. For example, higher education scholar Green (2018) pointed out that academic challenge, active learning, teacher-student interaction, and university environment are characteristics that associated with effective student leadership development, and students' participation in leadership development activities can enhance their skills and knowledge. However, these leadership developments require students to engage in specific practical activities to achieve them. Kouzes & Posner's exemplary leadership practices illustrate an operating system of student engagement in specific practical initiatives (Kouzes & Posner, 1995). Like leading by example, inspiring a shared vision, challenging the process, motivating others to action, and inspiring people; rather than being ideologies or theories of leadership, they imply how to practice and develop leadership and make a difference. Participation in any of the behaviors associated with the exemplary leadership practices does not require any particular personality person, nor does it require any particular person with an advanced degree; the average student can participate (Kouzes & Posner, 2003).

Chinese scholars have also seen the importance of developing student leadership (Zhou et al., 2016). At China's national university student conference in 1996, renowned Chinese educator suggested that student leadership is something that can contribute to the nation and the world; these students have a clear mind, the ability to distinguish between truth and falsehood, and a healthy body (Zheng et al.,2019). With the increasing development of Chinese university leadership education research, the goal of talent development in higher education institutions has changed-enhancing students' leadership skills is a crucial mission of higher education institutions (Yu & Mhunpiew, 2022). More and more universities in China have made leadership development of college students a fundamental goal of talent training. They have developed educational practices for student leadership, including national comprehensive vital universities such as Zhejiang and Tsinghua Universities, Shanghai Jiao Tong University, and Southwest University of Finance and Economics, as well as local comprehensive universities and specialized universities such as Shanghai University of Chinese Medicine, Shanghai Polytechnic University, Chengdu University, Zhejiang Agriculture and Forestry University and many more institutions of higher learning (Weng, 2012).

Along with the development of student leadership activities in China, the researcher (Zhang, 2021) in his study, he noted from the dimension of leadership and the mission of the University that the training of tomorrow's leaders is the permanent mission and theme of the college, and that the college education is the preparation education for the tomorrow's leaders. Specifically, the noble vocation of modern-day universities is to cultivate creative people or elites who can serve society in the coming future and meet the trend of globalization. To summarize, the vocation of the modern University is to train high-quality talents who can adjust to social development, serve society and have the ability to innovate. In the leadership sense, such talent is a leader in a broad sense, and they are leaders in a certain sense, regardless of their job and position.
In particular, in the study by Yan et al. (2019), they explain that China started to focus on students' leadership skills more than a decade ago. Several studies are related to student leadership, such as young leadership development in schools, pharmacy students' Leadership, and Chinese students' leadership training (Karagianni & Jude, 2018; Yue & Ye, 2022; Haber & Buckley, 2015). Chinese higher education institutions are also well aware that leadership development is essential for students, but their engagement could be improved. In addition, relevant research in China has only been conducted on drawing on theory, exploring practice, and educational feedback, without actual activity projects. Although Jie (2015) found that researchers in the country have made some gains in student leadership research in recent years, there need to be more practical developmental approaches and the leadership competencies required. In addition, Wang & Hu's (2014) plan for the Chinese Dream suggests that it was introduced by Chinese President Xi Jinping when he visited the "Road to Revival" exhibition. Chinese civilization has a history of 5,000 years and is the only country in the world with a complete history and culture. In the past, the Chinese people were technologically advanced in productivity, apparatus manufacturing, and technology. However, with the advent of the Western Industrial Revolution, the Chinese nation is gradually unable to keep pace with the times, and its strength is being weakened. In order to achieve the Chinese dream as soon as possible and realize the remarkable renaissance of the Chinese nation, Cui & Wang (2015) suggested that student leadership development is becoming a new attraction for talents, such as national strategies, social sustainability, and student growth.

Research Objectives

Based on the above statements and research questions, the objectives of this study are as follows:
(1) To explore the types of community service activities implemented in private universities in Henan Province in Henan Province most effectively enhance students' development of the exemplary leadership practices skills.
(2) To measure the current level of proficiency in each of the exemplary leadership practices skills among engineering students enrolled in private universities across Henan Province.
(3) To identify the impact of participation in different types of community service activities influencing the development of each of the exemplary leadership practices skills in engineering students attending private universities in Henan Province.

(4) To propose an approach designed to effectively cultivate each of the exemplary leadership practices skills within the engineering students of private universities in Henan Province.

(5) To verify the differences in the degree of improvement in students' exemplary leadership practices skills based on variations in how they engage with the proposed approach's procedures.

Research Conceptual Framework

Based on the above literature, the researcher plans to target engineering students from four schools ranked second, third, sixth and ninth among private universities in Henan Province, aiming to use the second part of the questionnaire to learn from exemplary leadership The five dimensions of practices: being a role model, inspiring a shared vision, challenging the process, enabling others to act, and encouraging hearts and minds explore ways to improve students' leadership skills. At the same time, a community service activity questionnaire was developed to evaluate the overall level of the school's community service activities from six dimensions: Mentoring activity, Spiritual activity, Volunteer service activity, Membership of social organizations, Discussion activities on solving social problems, and Social organization activities.

In doing so, this study will examine the impact of demographic factors on students' exemplary leadership practices and community service activities. Through correlation analysis and regression testing, the correlation between students' exemplary leadership practices and community service activities was analyzed to verify whether there is a correlation between the five dimensions of students' exemplary leadership practices and the six dimensions of community service activities, and to analyze the important dimensions. and results are analyzed and incorporated into the activity approach. The new activity approach will be further implemented and evaluated in one of the sample schools to test the effect of the activity approach and promote the implementation of the activity approach.

Figure 1 Research Conceptual Framework

Figure 1 above presents the conceptual framework of this study, describes the main variables and shows the research focus and procedures.

Literature Review

Exemplary Leadership Practices

All organizations aspire to ultimate success. To be successful, an organization must have a clear and articulated vision and ensure that all employees understand this vision, including those with leadership titles (director, principal, leader, manager, senior, or supervisor) and those without leadership titles. This perspective must be shared while fostering a non-racial culture in the organization that moves toward this vision. For the sake of this, leaders that guide and encourage others to achieve the envision of the organization are imperative (Díaz et al., 2019). Leadership experts Kouzes & Posner (2018) argue that everyone is a leader because everyone is a contributor to the organization, regardless of their official title, and they have achieved success through their personal decisions. Thus, Kouzes & Posner (2023) spent 20 years studying leadership and developed five practices of model leadership-leading by example as a leader, stimulating a shared view, challenging the course, enabling others to take action, and encouraging hearts and minds. Therefore, people

within organizations believe that the decisions they are allowed to make related to exemplary leadership are crucial to driving organizations toward success (Ghias et al., 2018).

Kouzes & Posner's exemplary leadership practices (2019) also examined the principles of transformational leadership. These exemplary leadership practices are based on the premise that leadership is based on one-to-one or one-to-many relationships (Kouzes & Poser, 2007). They asked: ordinary people to describe extraordinary leadership experiences to identify patterns of success among leaders (Kouzes & Posner, 2017). Their findings culminate in exemplary leadership practices densifying the core leader behaviors that produce success in any organizational unit (Kouzes & Posner, 2017).

Exemplary Leadership Practices for Students

Over the past several decades, human behavior has been studied discussions of leadership behaviors, for example, the capability to read people's minds or predict the way forward, to name a few. Daniels (1981) and Bennis (1959) also wrote: more and more may be written about leadership than any other subject in behavioral science research, but less is known about leadership. Daniels (1981), early studies on model leadership considered the extreme power of people with parts beyond their normal abilities. Furthermore, Bennis argues that the behavioral problems implicated in leadership research have plagued humans since the beginning of research development (Singletary-Johnson, 2017).

Kouzes & Posner began researching leadership behaviors in education-five practices (Kouzes & Posner, 2012) in 1983 and published a book, The Leadership Challenge, in 1987. A study based on more than 550 answers from public and private organization managers. This research then continued, and in 1995 they conducted a new survey: it interviewed 42 managers and employees from several industries, received 780 responses, and created the second edition of The Leader Challenge. That book became a working guide for educational leaders (Singletary-Johnson, 2017). In addition, Kouzes and Posner published a measurable leadership tool known as the Leadership Learning Practices Inventory (LPI). The LPI first surveyed more than 3,000 leaders; the study was later expanded to over 10,000 leaders and 50,000 employees to ascertain the effectiveness of the final leadership inventory of practices. The five model leadership behaviors are (a) leading by example, (b) stimulating a shared vision, (c) challenging the process, (d) getting others to take action, and (e) encouraging hearts and minds (Kouzes & Posner, 1995). As Kouzes & Posner (2007) continue to examine, effective leadership is a universally understandable course that can be learned and taught to anyone at any time and in any community or professional setting. In essentially, that effective leadership knows no race or religion, no ethnic or cultural boundaries (Tran, 2020).

As their research progressed, Kouzes & Posner (2003) found that although individuals exhibit different behaviors in their leadership praxis, there are many common and consistent leadership patterns in what they consider exemplary leadership practices. They then assumed that significant leadership development requires, first and foremost, the development of self and personal awareness and that leadership is also observable as a pattern of behavior. They argue that leaders make the most important contributions not just today, but those that enable people to adapt to change and prosper and grow, For the long-term advancement of people and organizations (Kouzes & Posner, 2017). In addition, Kouzes & Posner (2007) modeled exemplary leadership practices behaviors: first, students should lead by example and be role models for others. Second, student leaders can encourage team members who share a common vision. Third, student leaders can challenge procedures, change stereotypes, and create new group organizations. Fourth, leaders develop each individual's talents to achieve the same goals. Fifth, it inspires the heart of each partner to work together to achieve their dreams. Specifically, exemplary leadership practices (Kouzes & Posner, 2003, 2006, 2010, 2013) include leading by example, inspiring a shared vision, challenging the process, getting others to act, and encouraging hearts and minds.

Kouzes & Posner's five models of model leadership have been widely used. For example, according to the exemplary leadership practices proposed by Kouzes & Posner, it was determined that a correlation exists between management's behavior and employees' perceptions and attitudes. Researcher have concluded that top management executive behavior strongly influences employees' organizational commitment and that employee perceptions are related to complete management behavior, which affects organizational performance (Kouzes & Posner, 2010). A study conducted by McNeese-Smith (1996) on Seattle-area nonprofit hospital personnel found that job satisfaction, productivity, and organizational commitment were related to these exemplary leadership practices skills. They concluded that using the five good leadership practices encouraged employees to produce positive outcomes (McNeese-Smith, 1996). Also, Sessoms's (2003) study found the participant's perceived application of Kouzes and Posner's exemplary leadership practices skills by participants with leadership experience in development. They concluded that employees had higher expectations than their managers regarding executive leadership skills. Employees have higher expectations for organizational leadership practices than their managers when it is known that the manager has leadership development experience (Sessoms, 2003; Hutton, 2012).

Furthermore, it was used in a study conducted by Aimar & Stough (2007) trying to understand the perceptions of Argentine leaders and U.S. Leaders about Kouzes & Posner's leadership practices and the conclusion that leadership practices can provide direction, especially in terms of what leadership needs to be developed in the organization competencies need to be developed in organizations in particular (Aimar & Stough, 2007). In Abu-Tineh et al.'s (2008) study of Jordanian School principals, the extent to which Kouzes and Posner's leadership behaviors were utilized was determined. The conclusion reached that since these exemplary leadership practices competencies represent effective leadership, they should be incorporated into the training process of the Jordanian School system (Abu-Tineh et al., 2008；Hutton, 2012). Subsequently, in a study by Mancheno-Smoak et al. (2009) on human resource professionals, we identified the impact of cultural values and job satisfaction on an individual's implementation of Kouzes & Posner's exemplary leadership practices. It was found that cultural values and job dissatisfaction are indicators of an individual's tendency to perform leadership behaviors (Mancheno-Smoak et al., 2009).

Kouzes & Posner's exemplary leadership practices. Inventory for Students serves as the core theory of this study to help leaders implement exemplary leadership practices in their organizations and contains the following: the Student Leadership Practices Inventory (2006): the Student Workbook (2006); the Student Leadership Practices Scale; the Counselor's Guide (2006); the Student Leadership Plan: achieving personal best Achievement Action Guide (2006). The researcher asserted, the more frequently people are perceived to participate in the LPI, the more likely students are to become influential leaders.

Community Service Activities

The roots of community service activities as a part of educational activities can be dated by Dewey (1986). In the mid-twentieth quarter, when the concept of service learning emerged (Jacoby, 1996), the researchers concluded that the theory had not evolved from the views of leadership. However, that learning by service has always carried the shadow of a Functional-Industrial Paradigm. For instance, several conceptions of service learning relied on an expertise model in which teachers assume they know the challenges faced by a community and the path to implementing change. Based on noble obligations or deficits, this approach limits or removes the voice of community institutions. The community's focus on different projects, not partnerships, disproportionately benefits students and teachers. It presumes that leaders have the skill and attributes to analyze and treat problems in the community problems (Wagner & Pigza, 2016).

In contrast, Bass & Stogdill (1990) argued that leaders are the focus of group processes that, unlike the traits people are born with, can be taught and learned and observed and learned (Jago, 1982). Furthermore, Brewer & Devnew (2022) also proposed that prepared processes and systems will lead to more effective leaders rather than relying on innate leadership skills and involving students early in community service activities such as volunteerism, internships, collaborative group project activities, participation in relevant service to citizens, and opportunities to connect with other communities-inclusive learning to accomplish various tasks. Students can demonstrate additional competencies such as effective time management, goal setting, building positive relationships, using practical conflict resolution skills, building leadership skills to help others, participating in community management action plans, and increasing appreciation and respect for others across racial and ethnic groups. While these benefits accrue, students also recognize these activities as a whole.

Researchers have identified practical ways to engage students in community service activities for over a century. On the one hand, community service activities in Sweden consist of social welfare. It takes care of the, takes care of the disabled and is organized under the leadership of the municipalities. Swedish community service agencies cost an estimated $20 billion (SEK 175 billion) per year then and have more than 250,000 employees (Socialstyrelsen, 2010; Statistics Sweden, 2013). Most employees are typically uneducated, while 80% have university degrees (Norrman, 2003). In this context, the lack of knowledge about the leadership of such community service activities is considered problematic (Johansson, 2003; Varg, 2003).

Moreover, looking at the research literature, the need for community service leadership research has also emerged in the USA, UK, and Germany (Schneider & Seelmeyer, 2019; Ma et al., 2019; Avendano et al., 2019). Thus, the discussion on leadership in community service activities has begun. Horishna et al. (2019) analyzed participants' resistance to the leadership role. It is a vital aspect of the participants' community service activities, emphasizing that leadership is an important aspect; however, she also implied that participants were keen on direct contact with clients rather than taking on leadership roles. Also, she suggested that ideological limitations, a sense of powerlessness, and a general lack of social status prevented participants from becoming leaders. She argued that schools should take responsibility for developing student leadership to enhance the student participants' leadership potential (Horishna et al., 2019).

Students' Exemplary Leadership Practices and Community Service Activities
It is significant for students to have leadership skills; however, student leadership development activity projects usually come from commercial management programs. Skalicky et al.'s (2020) study found that

leadership competencies can include holding a position or a commitment to a position and joining an organization that helps students develop leadership experiences and skills throughout their school life. Developing student leadership skills is both an art and a science. Suppose college educators can master leadership theory, the laws of personal student development, professional knowledge, and the leadership development process. In that case, it will help increase the efficacy of student leadership development.

Furthermore, the International Leadership Association (ILA) 2009 guidelines state that it can help educators build leadership knowledge. However, students' previous experiences, personal values, gender, and performance can also influence their ability to develop as leaders. Some researchers will also focus their research on the definition and characteristics of leadership, such as the importance of the stakeholders, early involvement, the expectation of today's leaders, and the benefit of students becoming college leaders. When looking at approaches to leadership, it should include a response to the view that the unknown is the future, there are no leadership models, and it helps to prepare for the ascent of change by embracing and creating change, engaging in structured learning, and learning to lead collectively. On the one hand, according to the requirements of the organization's needs, leaders should have some common characteristics: to be a strong leader, people should have a strong sense of ethics, the capacity to understand the dynamics of change, the ability to communicate with others, ability to demonstrate engagement in evolving and sharing new ideas and knowledge and to be a strong leader who is aligned with others.

To illustrate, leadership today is not a one-person position; it is a result of the critical role stakeholders play in achieving practical university goals and the increasingly complex changes universities are making to improve organizational relationships, and it requires more people to be involved in the change efforts to ensure excellent university success. Ashford & Sitkin (2019) review leadership pedagogy's structure and discusses the creation of pedagogy for leadership learning and development in specific contexts. It suggests that higher education leaders should plan the content of the overall structure and incorporate relevant leadership theories needed for comprehensive educational programs; the remaining sections focus on the importance of understanding and providing effective pedagogy for students with specific backgrounds while exploring how to avoid errors in teaching practice effectively. Specifically, the researcher discusses the process of mentoring students and student organizations and implementing effective leadership initiatives in and out of the classroom (a study by scholar Cáceres-Reche et al. 2021). In particular, found that in universities, there are usually fewer chances for students to use their leadership skills. University leadership and partnerships serve to identify, promote, and develop student leadership, and a key player in the university leadership system is the stakeholder. Those stages of stakeholder-ship may be among alums, community leaders, constituencies, faculty, staff, students, and parents. In addition, the four approaches to leadership development designed by researchers Guthrie & Jenkins (2018) are as follows: 1. Personal growth. Enables participants to reflect on their behaviors (e.g., perceptions of risk or emotional intimacy), values, and desires. 2.Conceptual understanding. Facilitates conceptual knowledge of leadership development. Guided by the essence, the phenomenon is understood through leadership development questions. 3. Feedback. Feedback takes up most of the program and measures participants' skills in various leadership behaviors. 4. Skill building. Strategic designers determine what critical leadership skills they will teach. These behaviors are designed as modules and introduced to participants to practice or imitate. Participants' performance and feedback are assessed and coached to build on their strong points and avoid their weak points. Subsequently, participants can practice and improve their leadership skills.

A study by scholars Lebron et al. (2017) found that almost all university mission statements focus on developing students' leadership skills. This empowers students to make a difference not only in their own lives but in the life of their team, the university, and those in the community. In addition, higher education institutes have various leadership development activities and practices to enhance students' leadership skills. The most common student leadership learning outcomes are discipline-based accrediting bodies. To illustrate, one of the most popular types of groups that students participate in is the Problem Based Organization (PBO). This group focuses on developing leadership skills for professional development, and university administrators can intentionally develop and achieve their educational mission through PBO.

Research Methodology

Participants
This study intends to take four universities among the top ten private universities in Henan Province, China as the research objects. Depending on the different populations of the selected universities, the sample size ranges from 155 to 191 people; the total sample for this target is 683 third-year ordinary college students. Students with internships and leadership activities were selected to participate in this study.

This research, as part of the action plan designed by the researcher, will be implemented directly at Zhengzhou Technology and Business University in China, starting from October 1, 2023, and ending on December 31, 2023. On October 1, 2023, the researcher will conduct a questionnaire to the target schools by

distributing questionnaires online. Students must complete and submit the questionnaire before October 6, 2023. Subsequently, the researcher screened out valid questionnaires, modified, exported, carefully checked all the data collected, and then imported it into SPSS for data analysis and processing. Based on the survey results, the researcher spent three months conducting an approach to community service activities for students, which was completed by December 31, 2023.

Questionnaire Design

The questionnaire compiled in this study is called "Five Practice Questionnaire on Student Model Leadership and Community Service Activities in Zhengzhou Private Engineering Colleges." Before designing the questionnaire, the researcher organized and designed the latest systematic literature, conducted interviews, and then developed the questionnaire for this study based on this information. And it has been tested by experts for IOC effectiveness and pilot testing.

The questionnaire part mainly consists of two parts: The first part interviews the students' demographic information, mainly including the name of the institution, gender, age, parents' educational background, scholarship status, family type, etc.

The second part is to investigate students' exemplary leadership practices and current community service activities. Exemplary leadership practices Some questionnaires are taken directly from Kouzes & Posner's Leadership Practices Inventory (LPI), including *Modeling the Way, Inspiring a Shared Vision, Challenging the Process, Enabling Others to Act, and Encouraging the Hear*t. Each factor contained 6 items, resulting in a total of 30 questions. The community service activity's part was developed by the researcher based on a systematic literature review, previous studies, and related theories, and includes 6 key activities, including Mentoring Activities, Volunteer service activities, Membership of social organizations, Discussion on solving social problems, Activities of social organizations, Spiritual activities. Each dimension contains a different number of items, with a total of 34 questions.

This study collected data with the assistance of student affairs faculty and program directors at four universities and processed the data through qualitative and quantitative methods, including systematic literature review, interviews, descriptive statistics, multivariate analyses, multiple correlations, and regression analyses. , paired sampling t test, etc. to analyze the data. The specific method is determined according to the relevant research objectives.

Findings

For Research objective one: To explore the types of community service activities implemented in private universities in Henan Province in Henan Province most effectively enhance students' development of exemplary leadership practices skills.

For this objective, researchers used literature reviews and interviews to determine what current community service activities and students' exemplary leadership practices are.

Table 1 Literature Review Details

Key Words	Book and Articles found	Book and Articles Select	Book and articles final selected as samples for exemplary leadership practices for students
Student Leadership	3,820,000	2,305	65
Student Leadership Development	3,710,000	1,408	
Student Leadership Activities	3,350,000	934	
Community Service Activities	3,170,000	676	

For Research objective two: To measure the current level of proficiency in each of the exemplary leadership practices skills among engineering students enrolled in private universities across Henan Province. For this objective, descriptive statistical methods such as mean and standard deviation are used to determine students' exemplary leadership practices in Zhengzhou's private universities.

H1: There is a significant correlation between students' exemplary leadership practices and community service activities.

Table 2 Correlation between Students' Exemplary Leadership Practices and Community Service Activities

	Students' Exemplary Leadership Practices	Community Service Activities
Students' Exemplary Leadership Practices	1	
Community Service Activities	.556**	1

N=683, **. Significantly off at the .01 level (both sides).

Table 2 shows the results of the analysis between students' exemplary leadership practices and participation in community service activities. From the data point of view, students' exemplary leadership practices are highly correlated with the correlation coefficient value of community service activities.

Table 3 KMO and Bartlett's Examination of Students' Exemplary Leadership Practices and Community Service Activities From Table 3, we can see that the correlate KMO and Bartlett's Lesteion between students' exemplary leadership practices and community service activities is reliable and credible.

For Research Objective Three: To identify the impact of participation in different types of community service activities influence the development of each of the exemplary leadership practices skills in engineering students attending private universities in Henan Province.

For this objective, the researchers used regression analysis to predict the impact of community service activities on students' exemplary leadership practices.

H2: Students' participation in community service activities significantly affects their exemplary leadership practices.

Table 4 Multiple Regression Results of the Survey Data Related to the Community Service Activities Impact on Students' Exemplary Leadership Practices.

	Coefficients				
	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	t	Sig.
(Constant)	2.368	.072		32.845	.000*
Volunteer Service Activities	.245	.026	.395	9.535	.000*
Mentoring Activities	.082	.023	.186	3.548	.000*
Spiritual Activities	.066	.023	.159	2.830	.005*
Social Organization Activities	.056	.027	.120	2.093	.037*
Discussion Activities on Solving Social Problems	-.031	.027	-.068	-1.132	.258
Membership of Social Organization	-.042	.021	-.098	-1.959	.051
a. Dependent Variable: students' exemplary leadership practices					

According to 4, it can be seen that the p value and correlation coefficient results between students' exemplary leadership practices and community service activities factors. Based on the results of data analysis, it can be seen that the correlation coefficient values of the five dimensions of students' exemplary leadership practices and the four factors of community service activities are highly correlated, and most of them are moderate to highly positive correlations. Therefore, community service activities significantly influence students' exemplary leadership practices. Since the P value is less than 0.05, the coefficient (a) table shows from high to low the degree of community service activities that are significant for students' exemplary leadership practices skill. Specifically, the important community service activities are Mentoring Activities (ß=0.186, P=.000*); Volunteer Activity, (ß=0.395, P=.000*); Spiritual Activity (ß=0.159, P=0.005*); Social Organization Activities (ß=0.12, P=0.037*). In addition, there are two unrelated community service activities, which are Membership of Social Organizations (ß=-0.098, P=0.051*) and Discussion Activities on Solving Social Problems (ß=-0.068, P=0.258*).

In summary, regression analysis proves that H 2 is accepted, which means that community service activities significantly affect students' exemplary leadership practices.

For Research Objective Four: To propose an approach designed to effectively cultivate each of the exemplary leadership practices skills within the engineering students of private universities in Henan Province.
For this objective, structured interview was first used to explain the depth of the findings, and then an effective approach was formulated based on the research results for objectives two and three.

To this end, the researcher conducted a series of steps for the development and implementation of the action plan based on the main quantitative results of correlation and regression analysis, as well as the descriptive results of engineering students' exemplary leadership practices and community service activities.

Step 1: The researcher explained the survey results through interviews, conducted an in-depth study and analysis of the results, established a model, and proposed an approach to community service

activities to improve students' exemplary leadership practices.

Step 2: The developed model will also be checked and verified by 7 experts with rich research and management experience in the field of education management.

Step 3: Then propose an activity approach based on the model and implement it in one of the sample schools.

Step 4: In order to implement the activity approach, the researcher will develop an activity approach manual to promote the improvement of students' exemplary leadership practices.
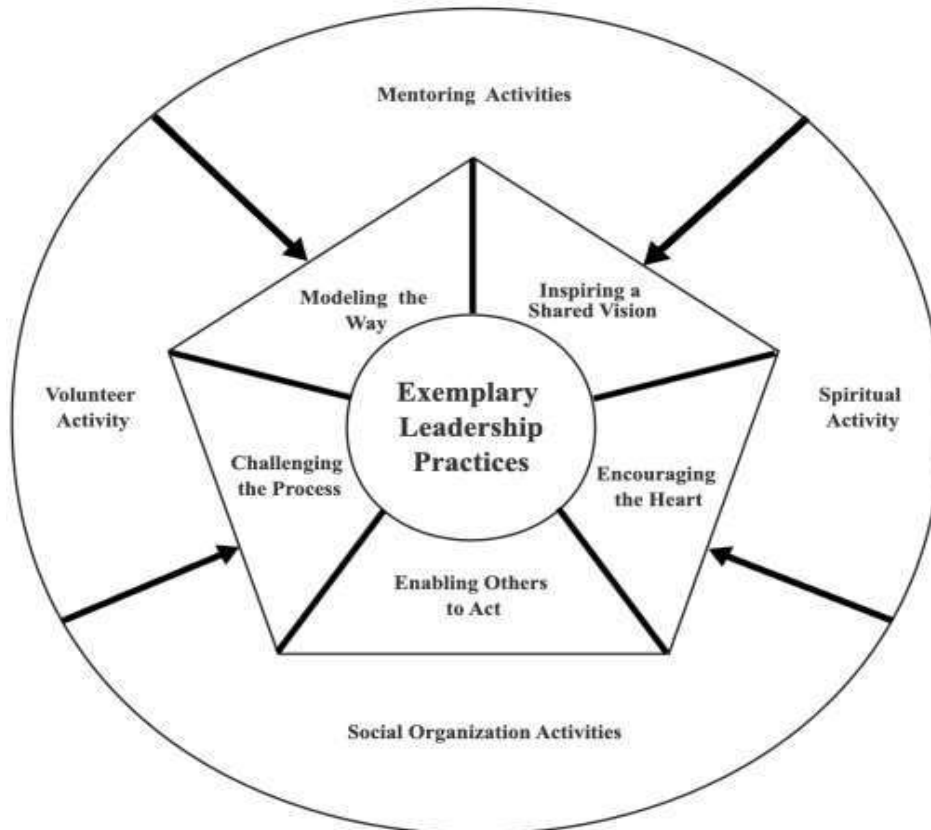

Figure 2 Activity Approach Diagram

For Research Objective Five: To verify the differences in the degree of improvement in students' exemplary leadership practices skills based on variations in how they engage with the proposed approach's procedures.

For this objective, the researchers tested third-year students at Zhengzhou Technology and Business University. Calculate the pre-test and post-test results to find the mean score showing community service activities and students' exemplary leadership practices in the training pathway.
H3: After the implementation of approach, students' exemplary leadership practices skills are improved.
Before implementing the training approach, a pre-test was conducted on 86 students. They will then spend three months performing community service activities, including Mentoring Activities, Volunteer Activities, Spiritual Activities, and Social Organization Activities. Finally, they completed a second student five practices of exemplary leadership skill survey on the last day of training.

Table 4.28 shows the results of paired sample t-test calculations before and after the students' exemplary leadership practices test after the approach was implemented.

Table 4.28 Paired Sample Statistics (Pre-Test and Post-Test) Students' Exemplary Leadership Practices.

	Mean	N	S. D	St. Error
Pair 1 Pre-Test	3.94	86	.55	.05
Post-Test	4.14	86	.56	.06

Table 4.28 Pre-Test shows the descriptive statistics of the pretest and post-test results of Zhengzhou Technology and Business University engineering students' exemplary leadership practices skills. On average, participants scored higher (M=4.14) than the pretest (M=3.94). The standard deviation explains that the scores on the pretest (Std.=.55) and the posttest (Std.=.56) are equally dispersed.

Table 4.29 The Results of Pre and Post Tests by Paired t-Test（Students' Exemplary Leadership Practices）

Pair 1	Mean	Std.	T	DF	Sig.(2-tailed)
Pre-Test-Post-Test	-0.19	Deviation 0.02	-11.59	85	.00

Table 4.29 shows that the repeated measures t-test found that this difference is significant because t (86) = -11.59, p = .00 < .05 significance level, which is highly significant. This supports the significant difference between the means of pretest and post-test, which also shows that students improved in the exemplary leadership practices skills after participating in the proposed training pathway.

Discussion

Students' Exemplary Leadership Practices
Although the current level of exemplary leadership practices among the students in this study is not bad, there is still room for improvement. Especially in Inspiring a Shared Vision, students should be helped to acquire the skills to inspire a shared vision in others. Regarding the ability to "Modeling the Way", universities should guide students to be role models for others. Regarding "Challenging the Process", it is necessary to help students complete each new challenge. On the issue of "Enabling Others to Act", students need to increase their awareness of collaboration and help others implement actions.

If contemporary college students want to stand out from the crowd, they need to know themselves and constantly improve their skills. Just like the five values of exemplary leadership practices. Modeling the way can help you better understand yourself and see the direction of doing things; Inspiring a Shared Vision can enable students to better inspire others to achieve common goals with themselves. Challenging the process allows students to accept new challenges based on understanding themselves. Enabling others to act allows students to understand that while helping others to act, they can also better know what they want. In Encouraging the Heart, students understand that the world is diverse, learn to respect others and develop a sense of belief, encouragement, and belief in their ability to make a difference in their community.

Effective Community Service Activities
To identify the impact of participation in different types of community service activities influence the development of each of the exemplary leadership practices skills in engineering students attending private universities in Henan Province. First, the survey results show that the overall average of community service activities is higher. The value of the dimension Mentoring Activities is the highest, indicating that students have high recognition of leadership coaching activities. The lowest mean value of the dimension is Membership in Social Organizations, indicating that it is relatively difficult to obtain membership in social organizations.

Mentoring Activities have a moderate relationship with students' exemplary leadership practices. Volunteer Service Activities is positively related to students' exemplary leadership practices. Spiritual Activities has a positive relationship with students' exemplary leadership practices. There is a positive relationship between social organization activities and students' exemplary leadership practices. membership of social organizations is negatively related to students' exemplary leadership practices. Discussion activities on solving social problems are also negatively correlated with students' exemplary leadership practices. Therefore, effective community service activities include mentoring activities, volunteer activities, spiritual activities, and social organization activities. The coefficients of multiple linear regression mean that approximately 38.9% of the variation in students' exemplary leadership practices can be explained by these four effective community service activities.

Approach

The approach contains four important items derived from data analysis results, including Mentoring Activities, Volunteer Activities, Spiritual Activities, and Social Organization Activities. The results show that these four community service activities are effective in cultivating students' exemplary leadership practices skills. All students who participate in a leadership training approach can improve their understanding and abilities (Apesin & Gong, 2018; Cadenas & Bernstein, 2020). Caspersz & Olaru (2017) Students found participating in leadership training to be meaningful. Kezar et al. (2017) compared student leadership skills with new and traditional leadership development methods. When it comes to developing leadership skills in students, researchers have found that mentoring or volunteering is more effective than holding a formal position. In other words, holding a formal role is not a necessary collective form of leadership development. The results obtained from this study are very similar to those reported by Dugan et al. (2013): they found

effective leadership development activities including sociocultural dialogue with peers, mentoring relationships, community service, and membership in out-of-school organizations. In Dugan's (2008) study, he noted clear differences between students who participated in the series and those who did not. It can be seen that students' participation in community service activities has a significant impact on improving the exemplary leadership practices skills. In this study, researchers found that students' leadership skills improved significantly after they participated in these activities. The training program was almost a success, with feedback from students and the community at every event. But there are some areas that can be improved. Overall, the trainees performed well in this training. Although the academic pressure of junior students is normal, the students actively participated in the training.

Conclusions

This study takes engineering students from a private university in Zhengzhou, China, as the research subjects, and evaluates the relationship between students' exemplary leadership practices and community service activities. According to the research objectives, the specific conclusions are as follows:
1) In this study, students' awareness of exemplary leadership practices before implementing the activity approach was at a medium level. 2) Students' overall awareness of community service activities is at a medium level. 3) Students' exemplary leadership practices are highly positively correlated with community service activities. 4) Community service activities influence students' exemplary leadership practices. 5) Students' exemplary leadership practices improved after the activity approach was implemented.
At the same time, the researcher carried out a series of relevant training and activities based on this model as the implementation of the activity approach. Internal school surveys, student feedback, teacher leader interviews, etc. all reflected the effect of the activity approach, and the effect of the activity approach was considered to be effective.

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