Institutionalization of Instructional Research in Schools of Ethnic Minority Areas in China

BY

YIN Guo-jie[1*], CHEN Min-jie[2]
[1,2] Mianyang Teachers' College Mianyang, Sichuan Province, PRC

Abstract

Institutionalization of instructional research refers to the systematic, scientific and efficient system of rules and regulations to manage, organize, implement and evaluate instructional research activities. This study aims to present the status quo of the institutionalization and reveal administrators and teachers' perceptions about its values for it provides institutional supports to organization and conduction of instructional research activities. A questionnaire has been adopted and delivered to participants from primary and secondary schools in Aba Autonomous Prefecture of Zhang and Qiang Nationalities. Data were collected and progressed with Microsoft Excel. Results demonstrate that the institutionalization of instructional research is affirmed by most teachers, but there are differences among schools and disciplines regarding management, resource availability, evaluation and leadership participation. Further discussions cover recognition and understanding of institutionalization of instructional research activities, perceptions about the differences among schools and disciplines, and relevant parties' responses and reactions. This study implies practical and perceptive significances concerning the quality of school education and teachers' professional development.

Keywords: Instructional Research; Institutionalization; Ethnic Minority Areas

INTRODUCTION

It is well acknowledged that teachers should take instructional research as one of their institutional missions, not confined to delivering knowledge to students. For instructional research activities, researchers in China have interpreted and proposed different definitions from perspectives of purposes, natures, contents, and processes. Xie (1999) defined instructional research activities as ones targeted for researches jointly conducted by teachers of the same course. Gong (2014) took instructional research activities as scientific and reflective practice for teachers to analyze and solve specific educational and instructional problems in a purposeful, process-oriented, and methodical manner. Therefore, instructional research activities are conducted with teachers as researchers, educational and instructional issues as contents, and promotions of students' and teachers' development as goals. The institutionalization of instructional research activities refers to the management, organization, implementation, and evaluation of instructional research activities with a set of systematic, scientific, and efficient rules and regulations, covering management, contents, organizations (the organizational structure of instructional research activities), implementations, and resource (time, place, fund, personnel, and other necessary resources) allocation in instructional research.

Promoting education in ethnic minority areas has long been a great challenge to governments around the world, but it is an important part of national education. Therefore, many countries have taken actions to improve education in ethnic minority areas. For example, the Ministry of Education in China had issued "Program for National Education and Science Research (2014-2020)" in 2014 and set up a special committee of experts, and the State Council of China had issued "Decisions to Speed up Developing National Education" in 2015. Both signify the importance of institutionalization of instructional research. On June 23, 2019, the Chinese Ministry of Education (MOE) issued "Guidance from the CPC Central Committee and the State Council on deepening the reform of education and teaching and comprehensively improving the quality of compulsory education". It officially stated the

supporting role of instructional research and claimed that instructional research be strengthened and improved, the management system be rationalized, and national, provincial, municipal, county, and school-level instructional research systems be improved, and independent instructional research institutions be set up. (MOE, 2019a) On November 20, 2019, the Chinese Ministry of Education issued the "Guidance on Strengthening and Improving the Instructional Research of Basic Education in the New Era", pointing out that instructional research was an important support for ensuring the quality of basic education and had been playing a very important role in promoting curriculum reform, guiding teaching practice, promoting teacher development, and serving educational decision-making. (MOE, 2019b)

Instructional research, as a form of grass-root research in educational researches, has won popularity among teachers in many primary and secondary schools in China since the last round of basic education reform beginning at the end of 20th century. (Li, 2018) However, educational researches, including instructional researches, cannot yet meet needs of national education for their late start, poor foundation, inadequate investment, separated researchers, and being undervalued. (MOE, 2014) Therefore, this study intends to check the latest progress in the institutionalization of instructional research in primary and secondary schools in ethnic minority areas in China.

2. Literature Review

Many researchers in China have discussed instructional researches, covering topics as strategies of organizations and managements (Fang, 2021; Li, 2020; Li *et al*, 2021; Liu 2022; Liu & Liao, 2021), practice and reflections (Chu & Zhou, 2015; Dong, 2016; Gong, 2006; Jiang, 2014; Wu, 2020; Yin, 2019), forms and models (Liu & Zheng, 2023; Qin, 2010; Tang, 2005; Wang & Li, 2008; Zhang, 2021; Zhang, 2023), teacher development (Chang, 2004; Gan, 2019; Li, 2013; Tan *et al,* 2023; Wang, 2022; Zhang, 2012; Zhou, 2021), curriculum reform (Fang, 2021; Tian, 2020), and effectiveness (Chen, 2018; Zhou, 2020).

School-based instructional research has attracted many researchers. It is an important and practical means of organizing and conducting instructional researches to many primary and secondary schools, especially in the countryside or ethnic minority areas. After examining instructional research activities from the perspective of education ecology, Zhong (2018) proposed a new model of school-based instructional research. In this model, teachers conduct researches individually, supported by disciplinary and cross-disciplinary researches. Meanwhile, school-based instructional researches are supported by interschool and cross-regional researches. This model has improved the effectiveness of researches, promoted schools' development, and initiated a new ecology for researches. Liu & Liao (2021) discussed ways to enliven school-based instructional research with self-organizing theory, holding that it led to participants' active adaption to changes, and effective strategies for research patterns and organizations, by information exchanges with the outside world after the cyclic process of "dissipation --- drive mechanism --- trigger mechanism --- ordered mechanism". Starting from the

effectiveness of school-based instructional research activities, Li *et al.* (2021) uncovered and analyzed problems such as limitations on time and place, deviation from teacher development in goals, lack of systematicness in procedure, and unsoundness in feedback mechanism. They have also brought forth suggestions for improving the effectiveness of school-based instructional researches, including innovating online researches, combining individual and collective researches, designing research procedures for deep research, and developing a reasonable feedback mechanism.

It is believed that instructional research exerts a great influence upon teacher development. Chinese researchers have summarized and proposed workshops (Dong *et al.,* 2021; Meng & Bi, 2022; Xian & Su, 2021) and communities of instructional researches (Chen, 2018; Liu & Zheng, 2023; Xu, 2018; Xue & Chen, 2022) to assist teacher development. Gao (2022) claimed that teachers could develop and classify their individual experiences from instructional researches and they were helpful to solving classroom problems and promoting teacher development. Gan (2019) and Qi (2020) analyzed teachers' instructional research competences and factors influencing the development of their competences. Zhang (2019) discussed contents of instructional research activities.

As instructional researches are closely related to teachers' classroom instruction and have become part of teachers' routine work, their values are rarely questioned. Many studies in China have signified their values in teacher development, and some offer suggestions to promote instructional researches in primary and secondary schools in ethnic minority areas. While most researchers have acknowledged the positive effects of instructional research activities, Gan (2019) has identified deficiencies in teachers' awareness and competence of research, in addition to contents, forms, and supports of instructional research activities.

Institutionalization refers to the act or process of establishing a group, movement, program, etc., as a permanent and publicly recognized entity for the promotion of a particular cause, or the process of making a principle or pattern of behavior into a normative policy or practice perpetuated in public establishments such as schools, courts, legislative bodies. It indicates a transformation of social life of groups and organizations from a special and irregular way to a generally recognized and fixed model. Institutionalization is the process of the development and maturity of groups and organizations, and it is also the process of change in the standardization and orderliness of the entire social life. The progress of institutionalization includes establishing commonly-accepted values, setting norms and regulations, and setting up an institution or organization. Institutionalization helps promote a sound, standard, and perfect set of rules, norms, and regulations. It can also coordinate, regulate and standardize human behaviors to achieve social harmony. Furthermore, it can strengthen collective cohesion within an organization or institution.

So far, present studies on instructional research activities in China focus on significances and values, contents, models, and organizations and implementations. However, little has been covered in the literature about the institutionalization of

instructional research in primary and secondary schools in ethnic minority areas. How is instructional research institutionalized? The institutionalization of instructional research can legitimize, rationalize, and provide supports to research activities, and it can be an indicator to observe how a school manages and evaluates research activities and to predict the quality of school education. Therefore, it is worthwhile to have a look at the status quo of the institutionalization of instructional research in primary and secondary schools in ethnic minority areas.

This study intends to check the institutionalization of instructional research in primary and secondary schools in ethnic minority areas in West China. Specifically, this study intends to present and analyze the management, organization, implementation, and evaluation of instructional research activities in targeted schools in ethnic minority areas. So it will cover the following 4 questions: 1) Management: Is the management mechanism of instructional researches systematic and excellent in schools? 2) Resources: Do teachers have enough time to conduct instructional researches? Do teachers have a safe and comfortable place to conduct instructional researches? Are facilities and instruments essential to instructional researches well available to teachers? 3) Evaluation: Are the school's instructional researches under (regular or irregular) evaluation? 4) Leader participation: Are school leaders personally involved in instructional research activities?

3. Methodology

3.1. Research Method

This study mainly adopts the method of quantitative survey via questionnaire.

A questionnaire has been adopted after analyses of research objectives and questions. Then, it is delivered to candidates of this study via WeChat QR or webpage. After they have finished the questionnaire in scheduled time, the survey comes to an end. At last, the data are collected and analyzed, and questions are discussed.

3.2. Research Instruments

A questionnaire has been adopted in order to make clear the status quo of the institutionalization of instructional researches in primary and secondary schools in ethnic minority areas. The questionnaire consists of respondents' background information and items concerning the institutionalization of instructional research, i.e., management, resource availability, evaluation, and leadership participation in instructional research activities. Respondents answer the questionnaire by scanning the WeChat QR code or logging in to the designated website.
The primary data were processed with Microsoft Excel 2013.

3.3. Sampling

In this study, teachers from primary and secondary schools in Aba Autonomous Prefecture of Zhang and Qiang Nationalities were chosen as subjects, because it was one of the three autonomous prefectures of nationalities in Sichuan Province. It shares much the same with other ethnic minority areas regarding national history and the development of economy, science and technology, and education.

In this study, the questionnaire was delivered to those attending vocational in-service training for excellent teachers in 2022 organized by the Department of Education of Sichuan Province. A total of 286 valid questionnaires were finally collected. Among the respondents, 30.77% (N=88) are male, and 69.23% (N=198) are female; 69.58% (N=199) are full-time teachers, and 30.42% (N=87) are teachers on different administrative posts (school leaders, middle-level and grass-root administrators).

Related background information includes the levels, the geographical locations, and the types of schools in which respondents work, and the main disciplines they teach. In terms of school levels, 50.70% (N=145) of respondents work in junior secondary schools, 32.87% (N=94) in regular primary schools, and 16.43% (N=47) in senior secondary schools. In terms of schools' geographical locations, 55.59% (N=159) of respondents are from schools in counties, 34.27% (N=98) from schools in townships, and only 10.14% (N=29) from schools in the countryside. (Most teachers in rural schools are not on the list of this training, so the total number of respondents is very small.) In terms of school types, 37.41% (N=107) of respondents are from regular junior secondary schools, 32.52% (N=93) from primary schools, 18.53% (N=53) from combined secondary schools, 7.34% (N=21) from regular high schools, and 4.20% (N=12) from 9-year schools. In terms of discipline, 28.32% (81) of respondents teach English, 20.28% (N=58) mathematics, 18.53% (N=53) Chinese, 5.24% (N=15) physics, 3.50% (N=10) chemistry, 2.10% (N=6) biology, and 22.03% (N=63) other disciplines.

It can be seen that respondents are from different posts, and they work in schools of different levels, geographical locations, and types, and teach different disciplines. Therefore, they are representative enough for this small-scale study.

4. Results

Results of the questionnaire reveal the status quo of the institutionalization of instructional researches from four aspects: management, resource availability, evaluation, and school leadership involvement. (Table 1)

4.1. Management

About 85.66% (N=245) of the respondents report that their schools have a fairly complete and sound set of management rules and regulations for instructional research activities. Of course, there are differences among schools of different types, levels, and geographical locations, and among different disciplines in a school.

As to the management system for instructional research activities, regular junior secondary schools have done better than other types of schools, schools in counties have done better than those in towns and rural areas, junior secondary schools have done better than senior secondary and regular primary schools. Except for the disciplines of physics, chemistry, and biology, the Chinese discipline has done better than the disciplines of math and English.

4.2. Resource availability

To conduct instructional research activities, teachers need some spare time, a safe and comfortable place (an office or a classroom),

and essential facilities and instruments. All these are resources essential to instructional research activities.

4.2.1. Time allocation

According to the survey results, 83.92% (N=240) of the respondents report that their schools arrange a fixed time period for instructional research activities for each discipline.

In the case of time allocation for each discipline for instructional research activities, regular high schools and regular junior secondary schools have done better than combined secondary schools and primary schools. Schools in counties have done better than schools in towns and rural areas. Junior secondary schools have done better than senior secondary schools and regular primary schools. Among the three major disciplines of Chinese, Math, and English, the Chinese has done the best while the English has done the poorest.

4.2.2. Facilities and Instruments

To conduct instructional research activities, teachers need a safe and fairly comfortable place, and necessary facilities and instruments such as audio or video recorders, computers, and printers, or projectors.

According to the survey, 70.98% (N=203) of the respondents report that their schools can spare them with a place (an office or a classroom), and they share with other teachers in turns for instructional researches, and can use audio and video facilities or other necessary instruments in school.

It seems a bit easier to primary and regular junior secondary schools than combined secondary schools to facilitate instructional research activities. It seems much easier to schools in counties and towns than schools in rural areas to facilitate instructional research activities. Schools in rural areas are poorly facilitated, there aren't enough offices or classrooms, office equipment or furniture, and other instruments essential to instructional researches activities. It seems a bit easier to regular primary schools and senior secondary schools than junior secondary schools to facilitate instructional research activities. Teachers who teach Chinese have easier access to facilities and instruments than those who teach mathematics and English.

4.3. Evaluation

To encourage teacher participation and examine the results of instructional researches, schools usually evaluate instructional research activities regularly or irregularly. A total of 79.37% (N=227) of the respondents reports that their school would regularly evaluate their instructional research activities.

| Schools | | Management | | Resource availability | | | | Evaluation | | Leadership involvement | |
| | | | | time | | facilities | | | | | |
		Valid N	Percent (%)	Valid N	Percent (%)	Valid N	Percent (%)	Valid N	Percent (%)	Valid N	Percent (%)
School Types	primary	79	84.95	73	78.49	68	73.12	66	70.97	84	90.32
	regular junior secondary	94	87.85	95	88.79	77	71.96	93	86.92	88	82.24
	9-Year*	9	75.00	10	83.33	9	75.00	8	66.67	10	83.33
	regular high	18	85.71	19	90.48	15	71.43	16	76.19	15	71.43
	combined secondary	45	84.91	43	81.13	34	64.15	44	83.02	44	83.02
Geographical Location	county	140	88.05	138	86.79	117	73.58	127	79.87	137	86.16
	town	83	84.69	81	82.65	70	71.43	80	81.63	82	83.67
	rural area	22	75.86	21	72.41	16	55.17	20	68.97	22	75.86
School Level	regular primary	80	85.11	74	78.72	68	72.34	67	71.28	84	89.36
	Junior Secondary	128	88.28	126	86.90	101	69.66	122	84.14	120	82.76
	senior secondary	37	78.72	40	85.11	34	72.34	38	80.85	37	78.72

Discipline	Chinese	50	94.34	48	90.57	42	79.25	43	81.13	48	90.57
	Math	51	87.93	48	82.76	41	70.69	51	87.93	48	82.76
	English	63	77.78	63	77.78	51	62.96	57	70.37	67	82.72
	Physics*	13	86.67	14	93.33	12	80.00	13	86.67	13	86.67
	Chemistry*	9	90.00	7	70.00	6	60.00	8	80.00	8	80.00
	Biology*	4	66.67	4	66.67	2	33.33	4	66.67	3	50.00
	Others	55	87.30	56	88.89	49	77.78	51	80.95	54	85.71
Total		245	85.66	240	83.92	203	70.98	227	79.37	241	84.27

*The sampling is too small and difficult to present statistical significance, therefore they are omitted when analyzing and comparing data.

It seems that regular junior secondary schools and combined secondary schools are more likely to evaluate the conduction of instructional research activities than primary schools. Schools in towns are a bit more likely to evaluate the conduction of instructional research activities than schools in counties and rural areas. Junior secondary schools are more likely to evaluate the conduction of instructional research activities than senior secondary and regular primary schools. The disciplines of mathematics and Chinese are more likely to be evaluated than the English discipline for the conduction of instructional research activities.

4.4. School leadership involvement

Supports from school leaders, especially their personal participation, will help promote the instructional researches. A total of 84.27% (N=241) of the respondents report that leaders in their schools would participate in instructional research activities for corresponding disciplines.

Leaders in primary schools tend to participate more in instructional research activities than those in other types of schools. Leaders from schools in counties tend to participate more in instructional research activities than those from schools in towns and rural areas. Leaders in regular primary schools tend to participate more in instructional research activities than those in junior secondary and senior secondary schools. School leaders tend to attend instructional research activities for the discipline of Chinese more than other disciplines.

5. Discussions

To wrap up the above interpretations of data in Table 1, the following three statements can be made about the institutionalization of instructional researches in primary and secondary schools in ethnic minority areas in China.

First, the institutionalization of instructional researches has been accepted by most teachers in schools in ethnic minority areas. Most respondents have expressed their acceptance of instructional research activities in their schools. Most schools have set a complete and effective management mechanism for instructional research activities, most school leaders attach importance to and personally participate in these activities, and most schools can

arrange time, provide a safe and convenient place and essential facilities for these activities, and will evaluate the organizations and conductions of these activities.

Secondly, there are differences in the institutionalization of instructional researches among disciplines in schools in ethnic minority areas. Among the three major disciplines of Chinese, mathematics, and English, the Chinese discipline has achieved the best in terms of management, resource availability, evaluation, and leadership involvement, while the English discipline lags behind Chinese and mathematics, especially in management and resource availability.

Thirdly, there are differences in the institutionalization of instructional researches among schools in ethnic minority areas. Management and leadership participation in instructional research activities are fairly better than evaluation and facilitation of instructional research activities. (Fig. 1) In the case of management, combined secondary schools are superior to other types of schools, schools in towns and counties have done better than rural schools, and junior secondary schools are better than regular primary schools and senior secondary schools. In the case of time allocation, junior secondary schools can afford more time than schools of other types and levels, and schools in towns afford more time than those in counties and rural areas. In the case of facilities and instruments, primary schools can better provide facilities essential to instructional research activities than other types of schools, and schools in towns and counties have done better than those in rural areas, and senior secondary schools have done better than primary and junior secondary schools. As to the evaluation of instructional research activities, junior secondary schools have attached more importance than those of other types and levels, and schools in towns and counties tend to evaluate more than those in rural areas. As to leadership involvement, school leaders in counties and towns tend to participate personally more than those in rural schools, and leaders in primary schools participate more than those in junior secondary and senior secondary schools.
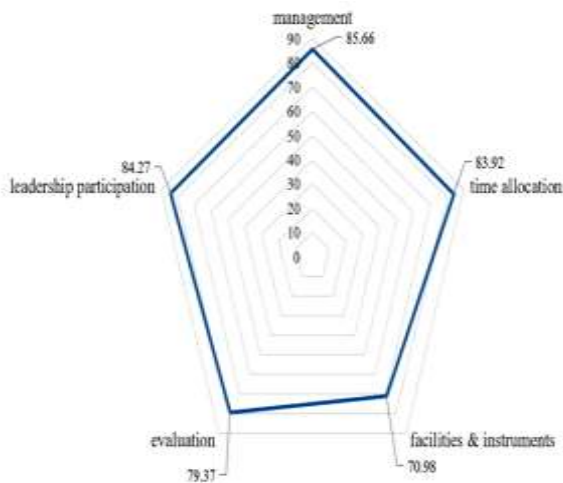
Fig. 1 Institutionalization of instructional research

With regard to the institutionalization of instructional researches in primary and secondary schools in ethnic minority areas, the following three questions deserve further considerations. The first two questions relate to perceptions of the institutionalization and its differences in existence, and the third question relates to stakeholders' attitudes and actions towards the institutionalization.

    (1) How to recognize and understand the institutionalization of instructional research activities in primary and secondary schools?

Previous studies do have discussed understandings of instructional research activities, but hardly of the institutionalization of instructional research activities. Frase (2009) took instructional research as an enlargement of understanding instruction and education. If the institutionalization of instructional research is taken as an organism, then the head is an establishment of rules and regulations, the body is an effective organization and promotion of activities, and the wings (or arms/legs) are conduction of evaluations and provision of resources. Only when the head, the body, and the wings work together can the institutionalization of instructional research go efficiently and successfully. The development of the instructional research mechanism lies mainly in the completeness and soundness of rules and regulations regarding instructional researches. The management of instructional research is part of a school's routine management. A systematic management of instructional research activities can provide an institutional guarantee for a scientific and effective organization, implementation, and evaluation of instructional researches, improve the efficiency and effectiveness of instructional researches, and help improve the scientificity, standardization, and effectiveness of school management.

Teachers have pre-set and sufficient time to participate in instructional research activities, and have a safe and convenient place and essential facilities and instruments to carry out instructional research activities. These resources ensure the institutionalization of instructional research activities. Without supports of these resources, the effectiveness of instructional research activities will be greatly lowered, or they would just become an empty title. The evaluation of instructional research by

schools is not only an affirmation of teachers' participation in these activities, but also an incentive for teachers to stick to instructional researches, and an external drive for the routinization and continuous development of instructional researches. Principals in primary and secondary schools are responsible for the equality of school education. Therefore, their participations in instructional research can help them supervise the organization and implementation of instructional research activities, find out or re-examine problems in these activities, or stimulate other teachers' enthusiasm for these activities by setting an example.

    (2) How to perceive the differences in the institutionalization of instructional research activities among schools and among disciplines?

It is generally believed that difference is a rational expression of the existence of all matters in the world and a drive that induces competition and promotes development. Therefore, difference is normal, essential, and reasonable. Well, what's the point of differences in the institutionalization of instructional researches among schools and among disciplines?

Differences in the institutionalization of instructional researches among different schools reveal the fact that schools differ from each other in degrees of attending to and standardizing the organization, implementation, and evaluation of instructional research activities. These differences also indicate that there is a lack of a unified standard (or something like a "handbook" or "guideline") for the institutionalization of instructional research activities and that local education administrative departments haven't done enough to manage the institutionalization of instructional research activities in primary and secondary schools within their jurisdiction. Without unified standards or guidelines, and without local supports of educational resources, what schools can do is to "tailor" the institutionalization of instructional research activities. Since the contents of instructional research in many schools are about issues closely related to classroom instruction, the development and quality of instructional researches will directly affect the quality of teachers' instructions. Therefore, differences in the institutionalization of instructional researches will lead to imbalance in educational quality among schools within the same administrative district. Population migration across regions and the speed-up urbanization in China have profound impacts upon the distributions of schools and educational resources, especially in mid-and-west China populated by ethnic minorities. Student enrollment in rural schools decreases as many families (and thereby students) move to counties and towns. In many ethnic minority areas, construction of school campus often favors those in counties. To make the matter worse, some schools tend to take whatever measures to compete for "potentially excellent" students in order to survive and develop in scale. This in turn will aggravate vicious competitions among schools and lead to the deterioration of educational inequality. This is not what we need, nor what we want to face.

Differences in the institutionalization of instructional researches among disciplines indicate that equality among disciplines has not yet been completely achieved. Therefore, it is necessary to

coordinate and manage instructional research activities for different disciplines from the point of school management and ensure all disciplines equal importance in instructional researches to establish harmonious relationships among teachers. Influenced by traditional exam-oriented education, disciplines in schools are usually labelled as "major disciplines" or "minor disciplines", "prior disciplines" or "secondary disciplines", and teachers are accordingly labelled. These unreasonable and insulting labels distort teachers' significances and contributions in education, resulting in reductions of teachers' remuneration and welfare benefits, and the loss of a stable and sustainable development of the teaching staff. These differences have affected teachers' perceptions about themselves and the discipline they teach and worsened interpersonal relationships among teachers of different disciplines. This will further affect teachers' attitudes towards their work and school management and finally affect students' academic achievements and performances.

Therefore, differences in the institutionalization of instructional researches, among schools or among disciplines, will certainly affect educational equity and the masses' desire for a fair access to high-quality education. The negative impacts of these differences may be far-reaching and beyond our present perceptions, so they should be treated seriously and be understood comprehensively.

(3) How should relevant parties respond to the institutionalization of instructional researches?

For the institutionalization of instructional research activities, school administrators and teachers are the most important stakeholders at the school level, and their attitudes and actions will directly affect the effectiveness of the institutionalization of instructional researches. As Hu (2013) has claimed that the value of instructional researches lies in improving instructional quality and developing a learning community, all the relevant parties should respond proactively with a correct perception as guide.

First, it is advisable that administrators in primary and secondary schools in minority areas attend to and promote the institutionalization of instructional researches for the sake of local educational development. School administrators can formulate and standardize benchmarks and requirements for the organization, implementation, evaluation, and management of instructional research activities for different disciplines. It is also necessary for school administrators to coordinate and allocate resources for instructional research activities to ensure a balanced development for each discipline. The institutionalization of instructional research is a key to ensuring and improving the quality of instructional research activities and enhancing the school management. The degree of institutionalization reveals how school administrators treat instructional research activities, and it can also indicate the importance that school administrators attach to students' and teachers' development in addition to regular teaching. Teaching is the most important part in school management, and students and teachers are the main body of teaching affairs. Whether school administrators put teaching and students' development in the first place or not, and whether they respect and encourage teachers' enthusiasm and creativity in work

or not depend on whether they attach importance to the organization, implementation, evaluation, and management of instructional research activities or not. That is the institutionalization of instructional research activities.

Degrees of perfection of the management mechanism for instructional researches in a school reflect differences in importance attached by school administrators to instructional research activities, and have a direct and profound impact on the development of these activities, which in turn affect the efficiency of school management and educational quality. The improvement of educational quality is a basis for achieving the equitable and comprehensive development of education, and a guarantee for meeting the masses' thirst for a better life. A scientific and effective mechanism of instructional researches provides a sound guarantee for promoting the normalization and improving the quality of instructional research activities. Evaluating the organization and implementation of instructional research activities can urge teachers to participate in instructional researches to a certain extent, and help develop a mechanism and improve the quality of instructional research. Therefore, school administrators should provide human resources, time, place, materials, facilities and instruments essential to instructional research activities. In case a school doesn't have enough resources, the administrative can develop a consortium of instructional researches with schools in the same administrative region or neighborhood to solve this problem.

Chakraborty & Biswas (2019) claimed that the level of construction and the degree of openness of school infrastructures exert a powerful influence on teachers' researches, and the atmosphere in the workplace affects teachers' attitudes to and proficiency in researches. Although the provision of a safe and comfortable place for instructional research is usually restricted by estates in a school, and the sum of educational resources varies among schools, it is not too difficult for a school to arrange some time apart from school timetable, and allocate materials and facilities essential to instructional research activities. Furthermore, schools can improve the utilization efficiency and maximize the benefits of limited educational resources by elaborate coordination, overall plan, and unified management. Of course, schools should avoid bureaucracy or excessive administrative interventions in instructional research activities. Otherwise, it would result in teachers' rejections and lead to perfunctory participations in instructional research activities. Taking a humanistic attitude towards the administration of instructional researches will help school administrators construct a warm, friendly, harmonious atmosphere, and induce teachers' active supports for school management.

Secondly, it is sensible that teachers attach significances to and wholeheartedly participate in instructional research activities for the sake of their professional development as they are heroes of these activities. As results of the survey show, there is still much room of improvement for the institutionalization of instructional research for the English discipline (and some other "minor disciplines") in primary and secondary schools. What made it? Didn't schools attach importance to instructional research activities

for English? Or didn't English teachers attach importance to instructional research activities? Of course, it is not the case. In some small-scale primary schools, there are just two or three English teachers. There is only one English teacher in some mini-schools. In this case, it is understandable that English teachers find it very difficult to organize and conduct instructional researches by themselves. Therefore, it doesn't make any sense without teachers' participations even if these schools have a complete and perfect set of rules and regulations for instructional researches. However, as Nassaji (2020) pointed out that multiple measures or data sources are very important in L2 instructional research, so it was feasible for English language teachers in small-scale schools to respond initiatively and take full use of information technologies to conduct instructional researches.

In fact, results will be much better as long as teachers are willing to make changes. Yin (2019) reported instructional researches in the western regions of China that instructional research activities play a positive role in solving instructional problems, promoting the development of regional education ecology, and strengthening communication and exchanges among participants, but there are still problems such as participants' low enthusiasm and utilitarian motivation. Dong (2016) reported in her survey that teachers are not highly motivated to participate in instructional research activities, and they hardly have the intention of cooperation and sharing, nor the spirit of learning from others. Wu (2020) analyzed the causes of teachers' low participation and poor efficiency of instructional researches. Some teachers in primary schools do not have correct understandings and consistent expectations for instructional research activities, and some do not spare enough time and energy for these activities, and some just passively take part in these activities, and some are inadequately equipped with instructional researches. There is no doubt that instructional researches will benefit teacher development when teachers give full play to their roles, and take the initiative to participate actively in instructional research activities. In most cases, the topics and contents of regular instructional researches in schools focus on difficulties teachers have in classroom instruction. In other words, contents of instructional researches usually cover analyses and processing of teaching materials, designs of instructional activities, selections of teaching and learning methods, classroom management, helps to disadvantaged students, in-class evaluation, and development of curriculum resources, etc. Suaizisiwa (2021) concluded that collaboration and contextual methods can increase students' understanding of the material being taught, spur student seriousness, train students' perspectives on the material being taught.

In the process of participating in instructional research activities, teachers discuss, communicate and share their ideas or wisdoms about these issues in various forms, such as collective lesson preparations, lesson evaluations and assessments, and heterogeneous instructional designs for the same content. Sprague (2019) valued sharing in instructional research. It is very conducive to the growth of novice teachers. Novice teachers can understand these contents quickly, but they do not have sufficient practice in classroom instruction and management. By participating in

instructional research activities, novice teachers can gain the power to progress and develop quickly. In instructional research activities, exchange and sharing of experiences from expert teachers also contribute to the development of a teacher community. Studies have proved that teachers' participation in instructional research activities has a great impact on the quality of teaching. Chakraborty & Biswas (2019) reported in their study that students are more active and interactive when schools value research-based deep learning, for it can boost students' perseverance, curiosity, critical thinking, and cognitive skills, and help hone their analytical skills and foster creativity.

Teachers' professional development includes both professional development of teachers as a group and that of teachers as individuals. An individual teacher's professional development marks the professional development of teachers as a group, and the latter will enforce the former. As Gong (2014) has declared that only a combination of the external demands and teachers' desire to participate can help realize the value of promoting teachers' professional development, though many Chinese researchers agree on significances of instructional researches and there are various forms of instructional research activities. After considering the relationship between teachers' ability of instructional research and their professional development, Li *et al.* (2015) suggested establishing a professional team dedicated to instructional researches to promote teachers' professional development. Li (2018) concluded that instructional research activities can promote a shift in teacher development from "top-down" mentoring to professional development based on equal cooperation. Novice teachers grow into experienced and expert teachers through effective participations in regular and thematic instructional research activities.

Thirdly, school leaders, as core of a school's administrative staff, should understand the institutionalization of instructional researches and fully perceive its impacts from the perspective of school development. School leaders' perceptions of and attitudes to the institutionalization of instructional researches are the keys to promoting the institutionalization of instructional research activities, achieving desired results, meeting students' needs and teachers' development, and improving the quality of school education. School leaders' respect to the institutionalization of instructional researches does not lie on their verbal emphases on it, nor on issuing some documents in the name of the school, but on their appropriate and timely actions of providing teachers enough resources to conduct instructional research activities, and on their personal participations in these activities. The ultimate goal of school leaders' participation in instructional researches is not to control or supervise other teachers, but to share their wisdoms and experiences with other teachers in the course of participation, and offer suggestions to other teachers (especially young novice teachers) for improvement and progress. At the same time, by participating in instructional research activities, school leaders can have a thorough understanding about other teachers' concerns and difficulties in work, so as to take measures to coordinate educational resources at the school level and serve teachers' work and study well. In this way, school leaders can set an example and

inform school staff of the importance of participating in instructional research activities.

6. Conclusions

On the whole, the institutionalization of instructional researches in primary and secondary schools in ethnic minority areas is fairly effective and satisfactory, but there are differences among schools and disciplines in regards to management, resources, evaluation, and school leadership involvement. Meanwhile, more measures and actions should be taken to provide enough essential resources (time, place, facilities, and instruments) for instructional research activities, especially for rural schools, junior secondary schools, and the English discipline, to ensure and improve the efficiency of instructional researches.

The institutionalization of instructional research activities benefits primary and secondary schools in ethnic minority areas in school management and quality of education. Differences in the institutionalization of instructional researches among schools and among disciplines imply that there is still a long way for relevant parties to go to achieve equality in education and improve the quality of school education. The administrative staff and teachers should attend more to instructional researches for the sake of teacher and student development. All the stakeholders in a school should work together to improve the institutionalization of instructional researches.

This study has achieved a fairly clear presentation of the status quo of the institutionalization of instructional research in targeted schools in ethnic minority areas in China. On the other hand, one deficiency for this study is that the sampling is not big enough. Meanwhile, this paper has just discussed the institutionalization of instructional research, or just presented a brief evaluation of it. The impacts or influences, the results or effectiveness of the institutionalization haven't yet been covered. All these deserve further explorations. Not surprisingly, conclusions in this paper may seem not convincing enough to some outcome-based utilitarians. However, the institutionalization lays a foundation and provides supports to the conductions of instructional researches. It may also be a start-point for analyses or evaluations of impacts or effectiveness.

Acknowledgment

References

1. Chakraborty, D., & Biswas, W. (2019) Motivating factors in a teacher's research and developmental activities and their impact on effective quality teaching in higher education institutions. *Journal of Applied Research in Higher Education*, 4, 609-632.

2. Chang, S.N. (2004) Teacher development in school-based instructional researches. *Research in Educational Development*, 4, 73-75.

3. Chen, W.J. (2018) Exploration and reflection upon the effectiveness of heterogeneous designs of the same lesson in school-based math instructional research in senior high schools. Wuhan: Huazhong University.

4. Chen, Y. (2018) Investigation on the status quo of the development of the teaching and research community of the comprehensive practice project in the G District of Guiyang City. Guiyang: Guizhou Normal University.

5. Chu, M.Q., & Zhou, P.J. (2015) Debates over lessons: from "passive participation" to "deep involvement". *The In-service Education and Training of School Teachers*, 2, 22-25.

6. Dong, L.C., He, W., & Zuo, L. (2021) Innovating training models to help instructors and leading teachers develop in ethnic areas. *Ethnic Education of China*, 1, 30-33.

7. Dong, X.R. (2016) A study about situation of instructional research activities in Y middle school. Linfen: Shanxi Normal University.

8. Fang, C.Y. (2021) Strategies for school-based instructional research of English in general senior middle schools in the context of student orientation. *Asia-Pacific Education*, 22, 32-33.

9. Frase, L. T. (2009) Instructional research: The enlargement of understanding. *Educational Psychologist*, (2), 128-137.

10. Gan, Q.L. (2019) A study on the dilemma and countermeasures of implementing school-based teaching and research in rural junior middle school in ethnic areas. Guilin: Guangxi Normal University.

11. Gao, L. (2022) Research on the internet forum under the horizon of public sphere. Huangshi: Hubei Normal University.

12. Gong, G.S. (2006) The status quo and reflections of school-based instructional research activities in primary and secondary schools. *Journal of Shanghai Educational Research*, 4, 59-60.

13. Gong, X.Y. (2014) A study on the effectiveness of teachers' participation in instructional research activities. Chongqing: Southwest University.

14. Hu, Y. (2013) On the construction of the teaching and research group from the perspective of professional learning community. *Educational Research*, 10, 37-43.

15. Jiang, H.X. (2014) The practical research of teaching and research activities based on problem-solving. Shanghai: Shanghai Normal University.

16. Li, B.K. (2020) Three "critical issues" in the implementation of school-based instructional research activities. *Teaching & Administration*, 5, 26-28.

17. Li, M.Y. (2013) A survey of the school-based teaching research according to teachers' needs. Ningbo: Ningbo University.

18. Li, M.Y. (2018) Investigation and research on teachers' receptivity to instructional research activities in elementary and middle school. Shanghai: East China Normal University.

19. Li, Y.K., Li, J., & Zhang, Y.F., *et al*. (2021) Effectiveness of school-based instructional research activities in rural schools. *Survey of Education*, 15, 10-13.

20. Liu, G.Y. (2022) Practical strategies for conducting regional instructional research activities. *Teacher Education Forum*, 4, 93.

21. Liu, P.P., & Liao, R.D. (2021) The operation logic of self-organized school-based instructional research activities in primary and secondary schools. *Teaching & Administration*, 18, 43-46.

22. Liu, X., & Zheng, Y.L. (2023) Research and practice of the instructional research mode of teacher community from the perspective of activity theory. *China Educational Technology*, 4, 122-129.

23. Meng, F.H., & Bi, Y. F. (2022) Strategies for guiding preschool teachers' instructional research workshops in ethnic areas. *Journal of Heilongjiang Institute of Teacher Development*, 4, 76-78.

24. Ministry of Education. (2014) Program for national education and science research (2014-2020). http://www.moe.gov.cn/srcsite/A09/s7046/201411/t20141103_178341.html, 2014-11-2.

25. Ministry of Education. (2019a) Guidance from the CPC Central Committee and the State Council on deepening the reform of education and teaching and comprehensively improving the quality of compulsory education. http://www.moe.gov.cn/jyb_xxgk/moe_1777/moe_1778/201907/t20190708_389416.html, 2019-6-23.

26. Ministry of Education. (2019b) Guidance on strengthening and improving the instructional research of basic education in the new era. http://www.moe.gov.cn/srcsite/A06/s3321/201911/t20191128_409950.html, 2019-11-29.

27. Nassaji, H. (2020) The importance of using multiple measures or data sources in L2 instructional research. *Language Teaching Research*, 2, 131-135.

28. Qi, T.X. (2020) Investigation and research on the present situation of teaching and research ability of high school mathematics teachers in ethnic regions. Lanzou: Northwest Normal University.

29. Qin, Y.L. (2010) Design and application of school-based instructional research with Google cloud services. Shanghai: Shanghai Normal University.

30. Sprague, J. (2019) Sharing our gifts: expanding the audience for critical instructional research. *Communication Education*, 4, 502-506.

31. Suaizisiwa, S. M. (2021) The role of the teacher to construct teaching and learning activities creating a freedom to learn (Action Research Study). *Journal of Physics: Conference Series*, 1764 012098.

32. Tan, W.B., Lin, J., & Wei, Y.H. (2023) Strategies of promoting young teachers' professional development by educational narrations. *Western China Quality Education*, 2, 122-125.

33. Tang, G.P. (2005) On the "Three Lessons and One Reflection" model of school-based instructional research. *Journal of Shanghai Educational Research*, 3, 50-51+55.

34. Tian, L.D. (2020) School-based teaching and research activities based on curriculum standards. *Teaching & Administration*, (34):32-34.

35. Wang, Q.L., & Li, S.X. (2008) A literature review of forms of school-based instructional research. *Management of Primary and Secondary Middle Schools*, 7, 31-32.

36. Wang, X. (2022) Teaching and research activities as an assistor to teacher development. *Henan Education*, 5, 77.

37. Wu, L. (2020) Research on the status and problems of primary school teachers' participation in instructional research activities. Changchun: Changchun Normal University.

38. Xian, Y.W., & Shu, H. (2021) Construction and running of preschool teachers' instructional research workshop in ethnic areas. *Ethnic Education of China*, 9, 45-47.

39. Xie, X.G. (ed.) (1999) *Distance Open Education Dictionary*. Beijing: Central Radio and Television University Press.

40. Xu, M. (2018) A practical research on effective cooperative teaching and research between ethnic and Han physics teachers in minority areas. Yining: Yili Normal University.

41. Xue, X.Q., & Chen, W. (2022) Construction and application of online teaching and research community model based on activity theory. *Journal of Guangzhou Open University*, 2, 1-8+106.

42. Yin, Q. (2019) Current situation, problems, and countermeasures of instructional research activities in Gansu Province. Lanzhou: Northwest Normal University.

43. Zhang, H.R. (2023) Directions, approaches and modes of instructional research activities led by new curriculum standard. *Journal of Guangxi Normal University (Philosophy and Social Sciences Edition)*, 2, 1-16.

44. Zhang, J.F. (2019) Status quo of online instructional research in primary and secondary middle schools in ethnic areas in Guizhou Province. *Software Guide*, 4, 11-13.

45. Zhang, K.D. (2021) Implementation of the "three steps and six links" school-based teaching research program in Gaoqing County No. 2 Middle School. Qufu: Qufu Normal University.

46. Zhang, Q. (2012) The case study of teaching and research activities. Wuhan: Huazhong University.

47. Zhong, Y. Y. (2018) "One body with two wings": a new

ecology of school-based instructional research. *Jiangsu Education*, 18, 37-38+41.

48. Zhou, H.W. (2020) Study on the effectiveness of "same class heterogeneity" in school-based teaching and research activities of high school physical education curriculum. Nanchang: Jiangxi Science & Technology Normal University.

49. Zhou, Y.L. (2021) A study of situation of primary school-based instructional research in minority areas of Hainan Province. Changsha: Hunan Normal University.