

RESEARCH ON THE PROFESSIONAL DEVELOPMENT OF MIDDLE SCHOOL GEOGRAPHY TEACHERS BASED ON CORE LITERACY

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Abstract: The professional development of middle school geography teachers is the core and key to the implementation of geography core literacy. It clarifies the main problems existing in the professional development of middle school geography teachers, constructs a competence system for the professional development of middle school geography teachers based on core literacy, and proposes strategies for the professional development and promotion of middle school geography teachers based on core literacy, so as to provide a new path for the professional development of middle school geography teachers.

Key words: core literacy; Middle school geography; Teacher professional development; Development community

The International Charter on Geographical Education states that, in the context of the various global challenges facing humanity, geographical education remains the most important way to foster geographical literacy among citizens. With the continuous deepening of the new geography curriculum reform in China's basic education, the core quality system of geography is clearly proposed in the middle school geography curriculum standards, including man-land coordination, regional cognition, comprehensive thinking and geographical practice. Core literacy in geography has emerged as a new direction in the development of geography education and teaching in the new era, which places higher demands on the professional development of secondary geography teachers. As direct participants in geography education and leaders of geography teaching activities, the continuous improvement of geography teachers' professional development ability has a significant impact on the quality of geography teaching [1-4].

Teacher professional development is the improvement of teacher education teaching theory level and the continuous optimization of teacher education practice [5], which is comprehensively manifested in the ability to combine theory and practice, teaching reflection ability and innovation ability. Strengthening the professional development of teachers is an important guarantee to fully carry out the fundamental tasks of fostering morality and educating people, implementing the strategy of rejuvenating the country through science and education, and building a

high-quality education system. This is an important foundation and basic premise for effectively raising the educational level of teachers and promoting the overall development of students. Clarify the basic theory of the professional development of middle school geography teachers based on core literacy, correctly identify the main problems existing in the professional development of middle school geography teachers, build the professional development ability system of middle school geography teachers based on the subject core literacy, and put forward the professional development and promotion strategy of middle school geography teachers. It plays an important role in promoting improved teacher education practices, improved teacher quality, and overall student development.

1. Problems with professional development of secondary geography teachers

1.1 Lack of deep understanding of the connotations of geographic core literacy

Teachers generally have a low understanding of the connotations of core literacy in geography, and pay insufficient attention to basic education reforms. Teachers can realize from a theoretical level that the formation of core literacy in geography has an important impact on the future development of students, but they fail to implement core literacy in geography in the actual teaching process.

1.2 Lack of innovation in the application of teaching methods and teaching design

Middle school geography teachers organize instruction mainly using classroom teaching and group collaborative discussions, and the application of teaching methods, the selection of teaching resources, and the design of instructional processes are not innovative. Geography core literacy needs to be designed and implemented through innovative teaching activities that allow students to deeply understand and internalize.

1.3 Lack of reflective consciousness and ability to reflect in teaching

Middle school geography teachers mainly reflect on the teaching process from the teacher's perspective in conjunction with the teaching objectives of the curriculum, but neglect to reflect on the design of teaching links from the student's perspective. At the same time, they also lack a comprehensive reflection on the three-dimensional objective, ignore the student's discipline status and fail to fully explore the student's potential.

1.4 Formalization of teacher professional development related training

Professional training for geography teachers is mainly carried out in various forms, such as network training, centralized training and school-based training. However, various related teacher training programs generally focus on theoretical teaching, lack practical training, lack relevant evaluation and evaluation mechanisms, and the training process is merely formal, which seriously hinders the professional development of teachers.

1.5 Weak theoretical and practical capacity for practical teaching of geography

Geography teachers in middle schools attach more importance to theoretical teaching and neglect practical teaching of geography, lack in-depth exploration of geographical problems in life, and have not yet formed practical education teaching concepts such as geography that learning is useful to life and geography that learning

is useful to lifelong development. Therefore, the practical teaching and mentoring capacity of geography teachers in middle schools needs to be improved.

2. Construction of a professional development competency system for secondary geography teachers based on core literacy

The professional development competence system of middle school geography teachers based on core literacy includes: Middle school geography teaching design ability, teaching evaluation ability, teaching reflection ability, teaching innovation ability, teaching implementation ability, communication and cooperation ability, the ability to control the geography teaching process, the ability to draw and use maps, the ability to draw and design prints and geographical charts, good language expression ability, the ability to use and make geographical visual teaching AIDS, guide students in geography Ability of practical activities, teaching and research ability, ability of applying geography education theory, ability of optimizing and applying geography teaching methods, ability of analyzing and organizing geography teaching materials, ability of evaluating geography learning, ability of using geographic information, ability of flexibly using geographic multimedia technology, ability of developing and managing geography curriculum resources.

3. Strategies for professional development and promotion of middle school geography teachers based on core literacy

3.1 Strengthening the integration of vocational education and training for geography teachers

Actively promote the integration of vocational education and training, effectively link basic training, quality training and skill training, and enhance teaching reflection ability and lifelong learning awareness. To better accommodate the transition from student to teacher, higher normal colleges need to strengthen the training and cultivation of geography teaching skills by increasing the proportion of practical courses. Schools should fully meet the various training needs of geography teachers, enhance their professional development capabilities and update the teaching concepts, teaching methods and teaching skills of middle school geography teachers in a timely manner.

3.2 Improving the structure of knowledge and improving geographical literacy

Pay attention to the accumulation of professional knowledge of geography, build a perfect knowledge system of geography, deeply explore the deep integration of geography and other disciplines, establish a three-dimensional knowledge network, and realize the reconstruction of geographical cognitive structure. Focus not only on the horizontal connections and intersections of knowledge, but also on its vertical deepening and unfolding. An in-depth analysis of the internal knowledge structure of geography not only extends the depth and breadth of the knowledge network, but also gives full play to the coordination of disciplines and broadens the breadth of the knowledge network system.

3.3 The Importance of Attaching Reflexive Practice to the Teaching of Geography in Middle schools

The dynamic relationship between pedagogical geographical practice and pedagogical reflection has been proposed to enhance the pedagogical capacity of geographical practice. In middle school geography teaching, teaching assessment and teaching reflection have been intensively carried out, and a professional geography teaching reflection framework has been developed for teaching practice-teaching reflection and re-teaching practice. The dynamic model of pedagogical practice and pedagogical reflection was constructed to promote objective, rational, and comprehensive understanding of pedagogical issues by geography teachers, thus continuously promoting the development of pedagogical reflection among geography teachers and the professional development of geography teachers in middle schools.

3.4 Construct a developmental evaluation mechanism for geography teachers.

The purpose of constructing a scientific and comprehensive developmental evaluation mechanism for geography teachers is to provide teachers with feedback and information consultation on teaching, help teachers reflect on and summarize the strengths and weaknesses in teaching, analyze the root causes of problems and deficiencies, and explore measures and ways to overcome defects and maintain advantages. Objective evaluation results, improvement recommendations and professional development goals are provided to teachers to promote their professional quality, so that they can continuously improve their teaching practices and enhance their professional development.

3.5 Building a Professional Development Community for Geography Teachers

To build a community of learning and practice for secondary geography teachers, to strengthen their sense of collaboration, and to realize the sharing of teaching resources and teaching experiences through all forms of communication and collaboration, to learn and progress together. To build a good community environment for professional development and form a win-win cooperation culture among geography teachers, geography cooperative teaching strengthens the cooperation and development among teachers from the main teaching links such as lesson preparation and class, forms a stable teaching team, and promotes the professional development of teachers.

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References:

- [1] Wang Jian, Xu Libo. Connotation and approach of Teacher Professional Development: Taking Practical knowledge as the core [J]. Journal of China Normal University (Humanities and Social Sciences Edition), 2008,47 (3): 125-129.
- [2] Zhang Jiahui, Zhan Xiufang, Shen Feimin. Factors Influencing the professional development of excellent Geography teachers: A Content analysis based on the growth experience of excellent Geography teachers [J]. Journal of Tianjin Normal

University (Basic Education Edition), 2017, 18 (3): 13-17.

[3] Li Xinli, Yao Meng, Liu Min. A survey of senior high school geography teachers' professional development based on Geography core literacy: A case study of Shanxi Province [J]. Geography Teaching, 2019 (15) : 13-17,32.

[4] Zhang Jiahui, Xu Feng, Deng Ruonan. The requirements of the latest high school geography curriculum standards for the professional quality of geography teachers [J]. Journal of Tianjin Normal University (Basic Education Edition), 2018, 19 (3): 8-11.

[5] Cui Yundu, Wang Shaofei. Teacher professional development is the improvement of professional practice [J]. Educational Research, 2014, 35 (9): 77-82.