Strategies for improvement of WeChat-PBL teaching: experience from China

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Introduction

Problem-based learning (PBL) is an approach to learning that is used to a greater degree in many medical schools worldwide. It surpasses traditional teaching not only in fostering understanding and the retention of knowledge,¹ but also in developing social and cognitive abilities.² However, it has limitations including more time consumption,³ concerns about overlooking things,⁴ the high self-motivation required and a predominating uncertainty about the breadth and depth of learning without a syllabus.⁵ How to avoid these shortcomings interests many medical workers. Not long ago, we have put forward WeChat-PBL teaching, which has proved efficient in overcoming its disadvantages.⁶ Now, we suggest some tips to exert its best benefits in WeChat-PBL teaching.

Preparation of the faculty

Traditional teaching model has a deep-rooted influence on a majority of faculty, so one of the essential steps in the process of curriculum change is to prepare the faculty. First, the teaching faculty members should be given lessons to understand the changes and the reasons for these changes before they teach the class. Second, the university should give a lecture about the operating of WeChat-PBL system. Feedback on the proposal should be provided to deal with faculty questions, and handle any fears or uncertainty anytime during the teaching process. When faculty members become aware about their roles in the new PBL curriculum and what they need to do, they usually perform better.⁶ Additionally, the universities can provide an unique teaching award to encourage a reflection on teaching, validating techniques, increase their passion for teaching, and motivate teachers to seek excellence in teaching.⁷ Our university encourages all the faculty to learn PBL teaching, sets standards in the operation and sets funds to honor the faculty who will contribute to the teaching before adopting the teaching method.

Prepare students for their role and responsibility

PBL is a learning process that requires students to be actively involved in collaborative group work. Students are the main characters in the process so they should understand their roles in PBL tutorials. However, in practical teaching, students only have a hazy idea of what PBL entails, even though most schools using PBL as a main element of their program are very explicit about what it entails.⁸ There is a need for training them in workshops on how to learn and what to do in this curriculum. Our university provides a lesson about what is best for students to do in this system. For example, the lesson require student to search for literature, do presentations, raise questions and make discussions on their own before teachers organize the discussions. Such training will enable them with skills of literature searching, preparing their self-directed learning issues, and understanding their roles in PBL tutorials.⁹

Carefully select and present clinical and imaging sources

Preparation of clinical and imaging data is prerequisite for teaching. They deserve careful selection and presentation. Teaching staff should choose typical cases for teaching. In our university, teachers are also doctors. After obtaining written agreements from patients, the teacher collects their clinical data, including basic information, chief complaint, symptoms, signs, and laboratory examinations based on the syllabus. Students are requested to sign the consent form before the class to avoid any privacy disclosure. The data is presented in words or pictures (some identical or significant signs). Imaging data and surgery materials are presented in images and videos, respectively. Select materials suitin g different stage of students according to their current knowledge and teaching requirement curriculum, and provide students with the opportunity to encourage their research skills and lateral thinking.⁹
Disciplines are involved in a specific course. per course, which learning tasks are covered and which disciplines should be involved in the design construction and implementation of the new curriculum. To establish working groups and subcommittees needed for the necessary to establish a new curriculum committee. The committee works with the department of medical education to receive end: a ‘mixed methods’ study of junior medical students’ perspectives. The feedback can be provided in verbal or written or even through the WeChat anytime. Besides, workshops are a useful mechanism and can be scheduled at a convenient time for faculty feedback. It emphasizes the application of adult learning theories to on-the-job teaching strategies and provides opportunities for peer discussions and skills practice. Feedback from students: Clinical teachers can improve their skills and teaching efficiency from the feedback from students. Feedback can ensure the flow of the curriculum meets the learning needs of the students and make a successful implementation to the curriculum. Students might provide their views about anything, like the study contents, suggestions for presentation, through electronic questionnaires, voice, letters or even in class. In our university, a regular questionnaire in WeChat is given every two months to teachers and students. WeChat is not limited to those who have access to a computer, and users can communicate from any device with internet capabilities. It breaks the spatial and temporal limitations of the traditional classroom, stimulates students’ learning enthusiasm, improves their practical abilities, and enhances their sense of teamwork. The strategies we put forward above are intended to maximize its effects. However, more strategies still need exploration.

Conflicts of Interest
The authors declare that they have no conflict of interest.

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