medical schools with problem based learning

medical schools with problem based learning have revolutionized the way medical education is delivered, focusing on active learning through real-world clinical problems. This innovative approach emphasizes critical thinking, collaboration, and self-directed study, contrasting traditional lecture-based curricula. Problem based learning (PBL) helps students develop essential skills for clinical reasoning and lifelong learning, making it a preferred model in numerous medical schools worldwide. This article explores the concept of PBL, its benefits, the structure of programs that use it, and highlights notable medical schools implementing this method. Readers will gain comprehensive insights into how problem based learning transforms medical education and which institutions lead in this field.

- Understanding Problem Based Learning in Medical Education
- Benefits of Problem Based Learning in Medical Schools
- Structure and Implementation of PBL Curricula
- Top Medical Schools with Problem Based Learning
- Challenges and Considerations in PBL Medical Schools

Understanding Problem Based Learning in Medical Education

Problem based learning is an educational methodology that centers on using clinical problems as a starting point for acquiring knowledge. In medical schools with problem based learning, students work in small groups to analyze and solve patient cases, which promotes active engagement with the material. This approach contrasts with traditional didactic teaching, where lectures dominate and

students passively receive information. Instead, PBL encourages self-directed learning by requiring students to identify gaps in their knowledge and research relevant medical concepts independently.

Origins and Principles of PBL

The problem based learning approach originated in the late 1960s at McMaster University in Canada as a response to the limitations of conventional medical education. Its core principles include student-centered learning, collaborative group work, and integration of clinical and basic sciences. The method encourages the development of critical thinking skills and the ability to apply theoretical knowledge to practical clinical scenarios, which better prepares students for their future roles as physicians.

Key Components of PBL

In medical schools with problem based learning, several key components define the educational experience:

- Small Group Sessions: Students typically learn in groups of 6-10, guided by a tutor or facilitator rather than a traditional lecturer.
- Case-Based Problems: Realistic patient cases serve as the foundation for discussion and learning.
- Self-Directed Study: After discussing the problem, students identify learning objectives and conduct independent research.
- Facilitator Role: Tutors guide the learning process without directly providing answers, encouraging inquiry and exploration.
- Integration of Disciplines: Basic sciences and clinical knowledge are integrated throughout the curriculum rather than taught separately.

Benefits of Problem Based Learning in Medical Schools

Medical schools with problem based learning offer numerous advantages that enhance the educational experience and clinical competence of future physicians. The PBL approach aligns well with the demands of modern healthcare by fostering skills that extend beyond memorization, such as problem-solving and teamwork.

Enhanced Critical Thinking and Clinical Reasoning

By focusing on real clinical problems, students develop critical thinking skills essential for diagnostic reasoning. The iterative process of analyzing cases and reflecting on knowledge gaps promotes deeper understanding and the ability to think like a clinician. This prepares graduates to handle complex patient scenarios effectively.

Improved Communication and Teamwork

Group discussions inherent in PBL help students refine communication skills and learn to collaborate effectively with peers. These interpersonal skills are crucial in multidisciplinary healthcare teams, improving patient care outcomes.

Greater Retention and Application of Knowledge

Active engagement with material through problem solving leads to better knowledge retention compared to passive learning models. Students learn to apply theoretical concepts to practical situations, bridging the gap between classroom learning and clinical practice.

Development of Lifelong Learning Habits

PBL nurtures self-directed learning, encouraging students to take responsibility for their education. This habit is vital for physicians who must continuously update their knowledge in a rapidly evolving medical field.

Structure and Implementation of PBL Curricula

Medical schools with problem based learning implement this pedagogical approach in various ways, but common structural elements ensure consistency and effectiveness.

Curriculum Design

PBL curricula typically divide the medical program into phases that integrate basic sciences with clinical exposure. Early patient contact is often emphasized, allowing students to apply foundational knowledge in clinical contexts from the start. Modules are organized around thematic clinical problems rather than isolated subjects.

Assessment Methods

Assessment strategies in PBL programs differ from traditional exams, incorporating formative assessments that evaluate problem-solving skills, participation, and reflective learning. Common assessment tools include:

- Case presentations and group discussions
- Objective Structured Clinical Examinations (OSCEs)
- Written assignments focused on clinical reasoning

• Peer and self-assessment components

Faculty Roles and Training

Faculty members in medical schools with problem based learning serve primarily as facilitators rather than lecturers. This role requires specific training to guide discussions effectively, encourage participation, and provide constructive feedback without dominating the learning process.

Top Medical Schools with Problem Based Learning

Several prestigious medical schools worldwide have adopted problem based learning as a central feature of their curricula. These institutions are recognized for their commitment to innovative medical education and producing well-prepared physicians.

McMaster University Faculty of Health Sciences

As the pioneer of problem based learning, McMaster University remains a leader in PBL medical education. The curriculum focuses on early clinical exposure and integrates PBL sessions with traditional learning methods, maintaining a robust emphasis on student-centered education.

University of Maastricht Faculty of Health, Medicine and Life Sciences

Maastricht University in the Netherlands is renowned for its problem based learning curriculum, which integrates basic sciences and clinical training in a cohesive manner. The university employs a modular system centered around clinical problems and emphasizes student autonomy.

Harvard Medical School

While Harvard employs a hybrid curriculum, it incorporates significant problem based learning components, especially in small group discussions and case-based learning. This approach supports the development of critical thinking and clinical decision-making skills.

University of New South Wales (UNSW) Faculty of Medicine

UNSW in Australia uses a PBL model that emphasizes early patient contact and interdisciplinary learning. The program fosters collaboration and problem-solving skills necessary for modern medical practice.

List of Other Notable Medical Schools with PBL

- University of Sydney, Australia
- University of Dundee, United Kingdom
- International Medical University, Malaysia
- Flinders University, Australia
- Case Western Reserve University, USA

Challenges and Considerations in PBL Medical Schools

Despite the benefits, medical schools with problem based learning face several challenges that require careful management to ensure educational quality.

Resource Intensiveness

PBL requires significant resources, including trained facilitators, small group spaces, and access to learning materials. These demands can increase operational costs and require ongoing faculty development.

Variable Student Adaptation

Not all students adapt easily to the self-directed nature of PBL. Some may struggle with the lack of structured lectures and require additional support to develop effective study habits.

Assessment Difficulties

Evaluating students' performance in PBL settings can be complex, as assessments must measure not only knowledge but also collaborative skills and clinical reasoning, which are less straightforward to quantify.

Balancing PBL with Traditional Learning

Many medical schools combine PBL with traditional teaching methods to address gaps and accommodate different learning styles. Finding the right balance is essential to maximize educational outcomes.

Frequently Asked Questions

What is problem-based learning (PBL) in medical schools?

Problem-based learning (PBL) is an educational approach used in medical schools where students learn through the experience of solving open-ended clinical problems, promoting critical thinking, self-

directed learning, and application of knowledge.

Which medical schools are known for using problem-based learning?

Medical schools known for using problem-based learning include Harvard Medical School, McMaster University Medical School, University of New South Wales, and Maastricht University Medical School, among others.

How does problem-based learning benefit medical students?

Problem-based learning benefits medical students by enhancing their clinical reasoning, encouraging active learning, improving teamwork and communication skills, and helping them retain knowledge more effectively through practical application.

Are there any challenges associated with problem-based learning in medical education?

Challenges of problem-based learning include the need for highly skilled facilitators, potential variability in learning experiences, increased time commitment, and the requirement for students to be highly self-motivated and disciplined.

Is problem-based learning suitable for all medical students?

While problem-based learning can be highly effective, it may not suit every student's learning style. Some students may prefer traditional lecture-based methods, and a blended approach is often used to accommodate diverse preferences.

How does problem-based learning impact clinical skills acquisition?

Problem-based learning positively impacts clinical skills acquisition by simulating real-life scenarios, encouraging application of theoretical knowledge, and fostering problem-solving abilities that are crucial for clinical practice.

Can international medical schools be considered for problem-based learning programs?

Yes, many international medical schools, such as those in Canada, Australia, the Netherlands, and Singapore, offer problem-based learning curricula, providing diverse educational environments for students interested in this approach.

What resources are essential for effective problem-based learning in medical schools?

Effective problem-based learning requires well-designed clinical cases, trained facilitators, access to up-to-date medical resources and databases, collaborative learning environments, and support for self-directed study.

Additional Resources

1. Problem-Based Learning in Medical Education: Theory and Practice

This book offers a comprehensive overview of the principles and implementation of problem-based learning (PBL) in medical schools. It explores the theoretical foundations and practical applications, highlighting how PBL enhances critical thinking and self-directed learning among medical students. Case studies from various institutions illustrate best practices and challenges in adopting PBL curricula.

2. The Guide to Problem-Based Learning in Health Professions Education

Designed for educators and administrators, this guide delves into the design, facilitation, and assessment of PBL in medical education. It includes strategies for integrating clinical scenarios and fostering collaborative learning. The book also addresses common obstacles and provides solutions to optimize student engagement and learning outcomes.

3. Innovations in Medical Education: Implementing Problem-Based Learning

Focusing on innovative approaches, this book showcases how medical schools worldwide have integrated PBL into their curricula. It discusses technological tools, interdisciplinary collaboration, and curriculum redesign to support problem-based learning. Educators will find valuable insights into adapting traditional teaching methods to a PBL framework.

4. Clinical Reasoning and Problem-Based Learning in Medicine

This text emphasizes the development of clinical reasoning skills through problem-based learning methodologies. It presents detailed case scenarios and guidance on facilitating small group discussions to enhance diagnostic thinking. Students and educators alike benefit from the practical advice on linking theory to clinical practice.

5. Problem-Based Learning: A Practical Approach for Medical Students

Written specifically for medical students, this book serves as a companion to PBL sessions by providing frameworks for analyzing clinical problems. It teaches effective self-directed learning techniques and collaborative skills essential in PBL environments. The book includes exercises and examples to build confidence in tackling complex medical cases.

6. Assessment in Problem-Based Learning for Medical Education

Assessment is a critical component of PBL, and this book addresses various methods to evaluate student performance fairly and effectively. It explores formative and summative assessment tools tailored to PBL contexts, such as peer assessment, reflective writing, and objective structured clinical examinations (OSCEs). Educators can utilize these approaches to enhance feedback and learning.

7. Curriculum Development for Problem-Based Learning in Medical Schools

This resource guides curriculum developers through the process of designing and implementing PBL-based medical programs. It covers needs assessment, learning objectives, resource allocation, and faculty development. The book also discusses aligning PBL curricula with accreditation standards and institutional goals.

8. Facilitating Problem-Based Learning in Medical Education

Focused on the role of facilitators, this book provides essential skills and techniques for leading

effective PBL sessions. It addresses group dynamics, questioning strategies, and managing diverse learner needs. Facilitators will find tips to foster active participation and critical thinking among medical students.

9. Problem-Based Learning and Evidence-Based Medicine: Bridging the Gap

This book explores the integration of evidence-based medicine (EBM) principles within PBL curricula. It demonstrates how PBL can be used to teach students to critically appraise literature and apply evidence in clinical decision-making. The text offers practical examples of combining PBL cases with EBM teaching to enhance medical education quality.

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medical schools with problem based learning: Lessons from Problem-based Learning H. J. M. van Berkel, 2010 Problem-based learning (PBL) has excited interest among educators around the world for several decades. Among the most notable applications of PBL is the approach taken at the Faculty of Health, Medicine and Life sciences (FHML) at Maastricht University, the Netherlands. Starting in 1974 as a medical school, the faculty embarked on the innovative pathway of problem-based learning, trying to establish a medical training program which applied recent insights of education which would be better adapted to the needs of the modem physician. The medical school, currently part of the FHML, can be considered as an 'established' school, where original innovations and educational changes have become part of a routine. The first book to bring this wealth of information together, Lessons from Problem-based Learning documents those findings and shares the experiences of those involved, to encourage further debate and refinement of problem-based learning in specific applications elsewhere and in general educational discussion and

thought. Each chapter provides a description of why and what has been done in the Maastricht program, followed by reflection on the benefits and issues that have arisen for these developments. The final section of the book examines the application of PBL in the future, and how it is likely to develop further.

medical schools with problem based learning: Global Perspectives on Fostering Problem-Based Learning in Chinese Universities Zhu, Zhiliang, Zhou, Chunfang, 2019-05-03 Future generations are being faced with the potential challenge of having to solve professional problems in a hybrid world in which there is no clear boundary between autonomous, non-human nature, and human-generated processes. This requires young students to effectively prepare themselves for managing issues of complexity, uncertainty, and ambiguity in their professional practice. Global Perspectives on Fostering Problem-Based Learning in Chinese Universities is a comprehensive reference source that provides insight into the growing need for problem-based learning within higher education environments. Featuring a wide range of topics such as curriculum design, STEM education, and cross-cultural communication, this reference source is ideal for educators, instructional designers, academicians, administrators, and researchers.

medical schools with problem based learning: Problem-based Learning Dorothy H. Evensen, Cindy E. Hmelo, Cindy E. Hmelo-Silver, 2000-01-01 This volume collects recent studies conducted within the area of medical education that investigate two of the critical components of problem-based curricula--the group meeting and self-directed learning--and demonstrates that understanding these complex phenomena is critical to the operation of this innovative curriculum. It is the editors' contention that it is these components of problem-based learning that connect the initiating problem with the process of effective learning. Revealing how this occurs is the task taken on by researchers contributing to this volume. The studies include use of self-reports, interviews, observations, verbal protocols, and micro-analysis to find ways into the psychological processes and sociological contexts that constitute the world of problem-based learning.

medical schools with problem based learning: *Problem-Based Learning* Howard S. Barrows, Robyn M. Tamblyn, 1980-03-15 In this book, the authors address some basic problems in the learning of biomedical science, medicine, and the other health sciences. Students in most medical schools, especially in basic science courses, are required to memorize a large number of facts, facts which may or may not be relevant to medical practice. Problem-based learning has two fundamental postulates--the learning through problem-solving is much more effective for creating a body of knowledge usable in the future, and that physician skills most important for patients are problem-solving skills, rather than memory skills. This book presents the scientific basis of problem-based learning and goes on to describe the approaches to problem-based medical learning that have been developed over the years at McMaster University, largely by Barrows and Tamblyn.

medical schools with problem based learning: New Approaches to Problem-based Learning Terry Barrett, Sarah Moore, 2010-10-04 Problem-based learning (PBL) is a pedagogical approach that has the capacity to create vibrant and active learning environments in higher education. However, both experienced PBL practitioners and those new to PBL often find themselves looking for guidance on how to engage and energise a PBL curriculum. New Approaches to Problem-based Learning: Revitalising your Practice in Higher Education provides that guidance from a range of different, complementary perspectives. Leading practitioners in the field as well as new voices in PBL teaching and learning have collaborated to produce this text. Each chapter provides practical and experienced accounts of issues and ideas for PBL, as well as a strong theoretical and evidence base. Whether you are an experienced PBL practitioner, or new to the processes and principles of PBL, this book will help you to find ways of revitalising and enriching your practice and of enhancing the learning experience in a range of higher education contexts.

medical schools with problem based learning: Navigating Problem-based Learning Samy Azer, 2008 This complete guide to problem-based learning (PBL) in medicine and health professions explains the aims and essential elements of PBL and provides keys for successfully working in small groups.

medical schools with problem based learning: How to Use Problem-Based Learning in the Classroom Robert Delisle, 1997-11-15 Engaging and motivating students--especially the least motivated learners--is a daily challenge. But with the process of problem-based learning (PBL), any teacher can create an exciting, active classroom where students themselves eagerly build problem-solving skills while learning the content necessary to apply them. With problem-based learning, students' work begins with an ill-defined problem. Key to this problem is how it explicitly links something important in students' daily lives to the classroom. This motivational feature is vital as students define the what, where, and how of resolving the problem situation. Problem-based learning may sound potentially chaotic and haphazard, but it rests on the firm foundation of a teacher's work behind the scenes. The teacher develops a problem long before students see it, specifically choosing the skills and content the problem will emphasize and matching those to curriculum and standards. Though a PBL problem will have no right answer, the teacher structures the experience so that specific learning takes place as students generate the problem-solving steps, research issues, and produce a final product. The teacher guides without leading, assists without directing. Note: This product listing is for the Adobe Acrobat (PDF) version of the book.

medical schools with problem based learning: Problem-Based Learning in Clinical Education Susan Bridges, Colman McGrath, Tara L. Whitehill, 2012-01-05 Developed in the context of health sciences education in the late 1960s, problem-based learning (PBL) is now widely deployed as an education methodology. Its problem-solving, collaborative, student-centred ethos is seen as a more appropriate system of pedagogy than earlier 'chalk-and-talk' modes. Focusing on its use in clinical education, this collection of recent scholarship on PBL examines the ways in which PBL is both conceived and implemented in clinical education. The work has a dual emphasis, research-driven on the one hand, while on the other assessing new methodologies to explore how problem-based curricula support the achievement of students' learning outcomes in the context of clinical education. The chapters draw on studies that explore PBL both theoretically and empirically. The volume's eclecticism capitalises on the growing body of empirical research into PBL evaluations. It balances this with studies analysing the relatively new area of discourse-based research on PBL-in-action, whose focus has been to interrogate the 'how' of student learning in curricula with PBL content. This publication will be of interest to clinical teachers, curriculum designers and those interested in innovations in the scholarship of teaching and learning in PBL curricula.

medical schools with problem based learning: Problem-Based Learning in Middle and High School Classrooms Ann Lambros, 2004-02-19 Lambros gives teachers all the tools they need for PBL instruction to boost reading comprehension, social skill development, content retention, and student motivation.

medical schools with problem based learning: Guide to Integrating Problem-Based Learning Programs in Higher Education Classrooms: Design, Implementation, and Evaluation Epler, Pam, Jacobs, Jodee, 2022-06-24 Recently, there has been an increase in businesses and schools that are using some form of problem-based learning daily. By educating undergraduate and graduate students using this service delivery model, they will be better prepared to enter the workforce and increase their marketability. Further study is required to ensure students and faculty utilize this model to its full potential. Guide to Integrating Problem-Based Learning Programs in Higher Education Classrooms: Design, Implementation, and Evaluation provides college and university faculty with ways to establish, use, and evaluate a successful problem-based undergraduate or graduate program. Covering key topics such as peer tutors, evaluation, technology, and project-based learning, this reference work is ideal for higher education faculty, teachers, instructional designers, curriculum developers, school administrators, university leaders, researchers, practitioners, and students.

medical schools with problem based learning: Problem-Based Learning in Elementary School Samantha S. Reed, Carol A. Mullen, Emily T. Boyles, 2021-03-13 This book addresses Problem-based Learning (PBL) in elementary schools and reveals how this can promote elementary students' development in critical thinking, creativity, communication, collaboration, and citizenship,

also known as the 5 Cs. Through teachers' interviews, the book explores which PBL strategies promote skills and knowledge gains when students collaboratively investigate authentic open-ended problems. It also uncovers peer-to-peer relational learning and other strategies used in PBL classrooms, and it examines their importance to public education. The book paints a lively picture of student-centered learning, drawing upon frameworks, best practices, experiences, processes, strategies, and research results. Firsthand accounts of best practices in PBL instruction connect this pedagogy to theory, research, practice, and policy. It explores teacher instruction in the early years of schooling that purposefully fosters student-centered learning, real-world relevance, and collaboration in accordance with capacities expected of successful 21st century graduates. This book supports the implementation of PBL in elementary schools and promotes increased student engagement and achievement, as well as college and career readiness. This book is of interest to practitioners seeking information about PBL pedagogies for elementary grades, such as teachers, teacher mentors and trainers, (school) leaders, and policymakers, as well as anyone interested in pedagogic strategies that advance critical thinking, creativity, communication, collaboration, and citizenship capacities.

medical schools with problem based learning: The Wiley Handbook of Problem-Based Learning Mahnaz Moallem, Woei Hung, Nada Dabbagh, 2019-04-23 The first book to offer an in-depth exploration of the topic of problem-based learning with contributions from international experts The Wiley Handbook of Problem-Based Learning is the first book of its kind to present a collection of original essays that integrate the research and practice of problem-based learning in one comprehensive volume. With contributions from an international panel of leading scholars, researchers, practitioners and educational and training communities, the handbook is an authoritative, definitive, and contemporary volume that clearly demonstrates the impact and scope of research-based practice in problem-based learning (PBL). After many years of its successful implementation in medical education curricula, problem-based learning is now being emphasized and practiced more widely in K-12, higher education, and other professional fields. The handbook provides timely and stimulating advice and reflection on the theory, research, and practice of PBL. Throughout the book the contributors address the skills needed to implement PBL in the classroom and the need for creating learning environments that are active, collaborative, experiential, motivating and engaging. This important resource: Addresses the need for a comprehensive resource to problem-based learning research and implementation Contains contributions from an international panel of experts on the topic Offers a rich collection of scholarly writings that challenge readers to refresh their knowledge and rethink their assumptions Takes an inclusive approach that addresses the theory, design, and practice of problem-based learning Includes guidelines for instructional designers, and implementation and assessment strategies for practitioners Written for academics, students, and practitioners in education, The Wiley Handbook of Problem-Based Learning offers a key resource to the most recent information on the research and practice of problem-based learning.

medical schools with problem based learning: Essential Readings in Problem-based Learning Andrew Elbert Walker, Heather Leary, Cindy E. Hmelo-Silver, Peggy A. Ertmer, 2015 This book surveys the state of problem-based learning and assesses the impact of this innovative educational methodology on teaching and research effectiveness across a range of disciplines and in a variety of organizational contexts.

medical schools with problem based learning: Introducing Problem-Based Learning (PBL) for Creativity and Innovation in Chinese Universities: Emerging Research and Opportunities Zhou, Chunfang, 2020-10-16 Chinese universities are striving to integrate new educational elements such as student-centered learning, group learning, active learning, and learning by doing into current traditional curriculum systems for creativity development among young generations. However, the concept of creativity by its very nature is a complex term of many perspectives. It is necessary to clarify what creativity is, how creativity can be fostered in learning environments, and what universities should do in order to foster creative young talents. Introducing Problem-Based Learning

(PBL) for Creativity and Innovation in Chinese Universities: Emerging Research and Opportunities is a critical scholarly resource that provides a multidimensional understanding on both challenges and opportunities of fostering creativity and PBL in Chinese universities and particularly discusses this implementation in a Chinese cultural context. Though related to a Chinese cultural context, the book can inspire other universities in other cultures, particularly in Asian areas, to learn why PBL is a potential strategy for creativity development and to rethink how to facilitate the innovation capability of universities in the future. Featuring a wide range of topics such as course design, educational technology, and curriculum development, this book is ideal for education professionals, academicians, teaching professors, researchers, administrators, and students.

medical schools with problem based learning: <u>Constructivist Learning Environments</u> Brent Gayle Wilson, 1996

medical schools with problem based learning: Energizing Teacher Education and Professional Development with Problem-based Learning Barbara B. Levin, 2001 How can we help both beginning and experienced teachers engage students in today's diverse classrooms? How can we focus on actual problems that teachers face? This book offers a learning tool--problem-based learning (PBL). PBL is an instructional method that encourages learners to use critical thinking and problem solving as they apply content knowledge to real-world problems and issues. Editor Barbara Levin and the book's contributing authors believe that if teachers are to use PBL effectively with their K-12 students, they need to personally experience PBL themselves. Levin provides field-tested examples of how teacher educators have used PBL in many professional development settings. Based on actual PBL units and activities contributed by various authors, the book describes how teachers tackled authentic problems that required them to find, evaluate, and use resources to learn, just as they expect their students to do when using PBL. A brief introduction explains why and how to use PBL with teachers. Chapters 1-5 focus on how the chapter authors used PBL in different teacher preparation courses at several universities. Chapters 6 and 7 show how the authors, working with experienced teachers, used PBL in inservice and staff development settings. The final chapter offers answers to frequently asked questions about using PBL with teachers.

medical schools with problem based learning: Successfully Implementing Problem-Based Learning in Classrooms Thomas Brush, John W. Saye, 2017-03-15 Problem-based learning (PBL) represents a widely recommended best practice that facilitates both student engagement with challenging content and students' ability to utilize that content in a more flexible manner to support problem-solving. This edited volume includes research that focuses on examples of successful models and strategies for facilitating preservice and practicing teachers in implementing PBL practices in their current and future classrooms in a variety of K-12 settings and in content areas ranging from the humanities to the STEM disciplines. This collection grew out of a special issue of the Interdisciplinary Journal of Problem-Based Learning. It includes additional research and models of successful PBL implementation in K-12 teacher education and classroom settings.

medical schools with problem based learning: <u>The Challenge of Problem-based Learning</u> David Boud, Grahame Feletti, 1998 First Published in 1998. Routledge is an imprint of Taylor & Francis, an informa company.

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