

Benefits of Chess Activities for Students in Higher Learning Institutions

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Abstract

This article is a disclose of chess lesson, its inclusion in co-curriculum and the potential benefits for the undergraduates. Chess can be an excellent activity for students, especially in the tertiary education, offering numerous benefits that can enhance their academic and personal development. This conceptual paper focuses on nine benefits students in higher learning can learn from the game of chess. By learning to play chess, students have the potential to learn strategy development, refine their logical thinking, enhance creativity, build and enhance their social and memory skills, this is due to the fact that, the game's system itself promotes logical and tactical thinking in order to make your move instead of making decision solely influenced by emotion. This article also further aims to discuss relationship with theoretical issues and recent academia research.

Keywords: Chess, Benefits, Co-Curriculum, Higher Education, Students

Introduction

Chess is a type of board game, which has been around for more than 500 years old. Queen Gambit, a popular series by Netflix, and the recent pandemic era, have given rise to several chess players, whether new or those returning to the game after a long absence. Playing chess is affordable for everyone. It can be play on a physical chessboard or online.

Chess is a board game of strategic skills, conventionally played by two players. The game is play on a chequered board on which each playing piece is move according to specific rules and regulations. The chess pieces are traditionally white and black, representing two opposing teams. The end game is to put the opponent's king under a direct attack from which escape is impossible, also known as 'checkmate'. The game is play on a chessboard with 64 squares arranged in an eight-by-eight grid. The illustration of the board game is picture in Figure 1.



Figure 1 Chessboard and positions

Chess strategy can be make-up of evaluation of chess positions, goals set up and long-term plans for further moves. During the evaluation, players must take into account numerous factors such as the value of the pieces on the board, control of the centre and centralization, the pawn structure, king safety, and the control of key squares or groups of squares (for example, diagonals, open files, and dark or light squares).

Chess can be an excellent activity for students especially in tertiary education, offering numerous benefits that can enhance their academic and personal development. It can be played both as a fun pastime and as a competitive sport, making it a versatile activity for students of all ages and skill levels. In Malaysia, chess course can only be offered through co-curriculum in students' academic syllabus.

Objectives:

- This article is to disclose the benefit of chess lesson,
- This article also analyses its inclusion in co-curriculum activities and the potential of other benefits for the undergraduates in Malaysia.

Relationship with the Theoretical Issues and Recent Academia Research

There is a growing body of research that suggests playing chess can have positive effects on cognitive development and academic performance among students.

Overall, research on the history of chess has provided valuable insights into the development and significance of this ancient game into a modern game.

Garcia (2020), has examined the effects of a chess program on the cognitive and academic performance of primary school students. The study found that students that participated in the chess program showed significant improvements in their cognitive abilities, such as problem-solving and spatial reasoning, as well as their academic performance in mathematics and languages.

Morris-Singer, & Smolkowski,. (2020) also have published an article disclosing that playing chess can improve working memory capacity, which is essential for tasks such as learning, reasoning, and decision-making. The study also found that playing chess could improve

cognitive flexibility, which is the ability to switch between different modes of thinking and solve problems in creative ways.

Meanwhile, Bukaci & Gliga (2020), studied that chess can improve cognitive function. They found that regular chess players had better performance on tests of cognitive function compared to non-players. The study suggested that playing chess may improve skills such as working memory, attention, and problem-solving. Chess can be used in cognitive training programs, and it can be an effective component of cognitive training programs for older adults. The review suggested that chess can help improve cognitive function and may even have a protective effect against cognitive decline.

The Benefits of Chess Activities for Students in Higher Learning Institutions

Overall, these studies suggest that playing chess can have positive effects on cognitive development and academic performance in students, making it a valuable educational tool for educators to consider.

1. Chess activities enhance students' capability to develop a strategy.

Chess is a game of strategy that requires players to think ahead and plan their moves. When playing chess, students must consider the potential consequences of each move they make and anticipate their opponent's response. This encourages them to think strategically and develop a long-term plan to achieve their goals. Playing chess helps students improve their way of making strategies in their daily life. By setting up goals and analysing the situation in their academic matters, they can learn to develop effective strategies for problem-solving, decision-making, and achieving their goals.

Through playing chess, students can develop their analytical and critical thinking skills, as well as their problem-solving abilities. They learn how to evaluate different options and make decisions based on the information available to them.

Furthermore, the skills that students learn through playing chess can be applied to other areas of their life. They can use the strategies they learn to plan and organize their work, solve problems, and make better decisions. Overall, playing chess can be an effective way to teach students to develop a strategy and improve their critical thinking and problem-solving skills.

2. Chess teaches students to think well in logical thinking.

A good chess player makes use of concrete variations and logical reasoning to make decisions on the board. The structure of the position on the board should dictate what kinds of moves the player chooses.

A sharp position should dictate the player to make active moves, whereas in a slower position, the player must try to creatively move his pieces. Playing good positional chess, it is essential to have a working knowledge of the main chess principles at the player's potential disposal to use in different circumstances.

The principles for playing with a good pawn structure include capitalizing on weak squares and pawns, exploiting our opponent's bad bishop, playing with the bishop pair, handling minor pieces in the endgame, winning with a passed pawn, conducting attack and defence,

and countless others. After playing a tough game in a tournament, the players show the game to a stronger player and immediately comes up with better suggestions that the players never even considered for the game. For example, how does the opponent calculate so quickly and eliminate irrelevant moves and winning. So, to become a good chess player, the player must think logically for every move they make.

Research also indicates that chess players develop superior problem-solving abilities due to the game's requirement for critical thinking and foresight (De Silva & de Silva, 2020). Studies show that players often analyse multiple scenarios and outcomes, improving their decision-making skills (Franco, 2018).

3. Chess can enhance creative thinking.

Chess is a game that requires a lot of creativity and strategic thinking. It challenges players to constantly come up with new and innovative ways to out manoeuvre their opponents. As such, it can be an excellent tool for teaching students to be creative.

One way that chess fosters creativity is by encouraging players to think outside the box. When facing a difficult position, players are forced to come up with new and creative ways to get out of trouble. This can help students develop their problem-solving skills and think critically about complex situations.

Another way that chess promotes creativity is by requiring players to develop their own unique playing style. While there are certain strategies and openings that are commonly used in chess, there is no one-size-fits-all approach to the game. Each player must develop their own approach based on their strengths, weaknesses, and preferences. This encourages students to think creatively and develop their own unique approach to problem-solving.

Finally, chess can also help students develop their creativity by providing them with a platform for self-expression. As students become more experienced in the game, they can experiment with different tactics and strategies and develop their own unique playing style. This can help them build confidence in their abilities and express themselves in a positive and constructive way.

Overall, chess is an excellent tool for teaching students to be creative. By challenging them to think outside the box, develop their own unique playing style, and express themselves in a positive and constructive way, chess can help students develop the skills they need to be successful in all aspects of their lives

4. Students can develop social skills by playing chess.

Chess can be played with friends, classmates, or in tournaments, offering opportunities for students to build social skills and develop new friendships. Chess also promotes good sportsmanship and respect for opponents.

In addition, participating in sports can help develop social skills in several ways. Firstly, sports provide opportunities for individuals to interact with others and work collaboratively towards a common goal, especially for team chess tournament. This teamwork fosters communication and cooperation skills, which are essential for effective social interactions.

Secondly, playing chess involves following rules and respecting authority figures, such as coaches and arbitrators. This helps develop discipline, respect, and sportsmanship, all of which are crucial in social situations.

Thirdly, chess often involve competition, which can help individuals learn how to handle both success and failure. This can teach important social skills such as humility, resilience, and good sportsmanship.

Finally, chess provide opportunities for individuals to meet new people and form relationships with others who share similar interests. This can be particularly beneficial for children and teenagers, as it can help them develop social networks and build their self-esteem.

Overall, participating in sports can be an effective way to develop a range of social skills, from communication and cooperation to discipline and sportsmanship. In addition, for Malaysia community, chess is one of the sports that can build up a unity among multiracial society.

5. Students can easily memorize and spot patterns.

The Oxford Companion to Chess lists 1,327 named openings and variants, and there are many others with varying degrees of common usage. A great player must memorize a lot of opening theory in chess but not all of them. Professional chess players spend years studying openings, and continue doing so throughout their careers, as opening theory continues to evolve. Players at the club level also study openings but the importance of the opening phase is smaller there since games are rarely decided in the opening. A chess opening theory table or ECO (Encyclopaedia of Chess Openings) table presents lines of moves, typically (but not always) from the starting position. Notated chess moves are presented in the table from left to right. Variations on a given line are given horizontally below the parent line.

In chess, a spot pattern refers to a recurring arrangement of pieces on the board that can be recognized as a specific formation or configuration. Spot patterns are important in chess because they can be used to identify potential threats or opportunities on the board and can help players make strategic decisions. For example, by doing and practising chess tactics such as fork, pin, double attack and skewer can help them identify potential threats and opportunities on the board and make better strategic decisions. By using chess notation, players can record their games and analyse them later, as well as communicate their moves to others. It is an important skill for anyone interested in studying or playing chess competitively.

6. Chess can develop students to be decisive and take risks.

Chess is a game that requires strategic thinking, planning, and decision-making. Playing chess can help develop skills that are important in many aspects of life, including decisiveness and risk-taking. In chess, players must make decisions based on the current state of the game and anticipate the possible outcomes of their moves. This requires a certain level of decisiveness, as players need to be able to make a move confidently and commit to their strategy. Additionally, players often must take risks in order to gain an advantage over their opponent. They may sacrifice a piece or expose their king to gain a strategic advantage.

These skills can be applied to many aspects of life beyond the chessboard. Decisiveness is important in making important life decisions, such as choosing a career path or making a significant purchase. Being able to make decisions confidently and without hesitation can help individuals achieve their goals more effectively. This is good for developing future leader characteristics among students.

Similarly, taking calculated risks is often necessary to achieve success. It's important to weigh the potential risks and benefits before deciding, just as chess players must evaluate the potential outcomes of their moves.

Overall, while chess may not be the only way to develop decisiveness and risk-taking skills, it certainly provides a challenging and engaging way to practice and refine these abilities.

7. Chess teaches students not to let emotions guide their actions.

Playing chess can be an excellent way to teach students how to control their emotions and make rational decisions. In chess, each move can have consequences that may affect the rest of the game, so players must learn to think strategically and remain calm under pressure.

When a player makes a mistake or loses a piece, it can be tempting to act impulsively and try to make up for the loss quickly. However, this approach often leads to further mistakes and ultimately a worse position on the board. Instead, chess players must learn to control their emotions and focus on making the best move possible, even if it means sacrificing another piece or losing ground.

By learning to think critically and control their emotions in a chess game, students can develop valuable life skills that will serve them well in many situations. They will be better equipped to make rational decisions, handle stressful situations calmly, and think ahead to anticipate the consequences of their actions.

Overall, playing chess can be an excellent way to teach students the importance of staying calm and rational, even in difficult situations, and help them develop the emotional intelligence they need to succeed in life.

8. Chess teaches students to get knowledge the system in gaming.

Chess teaches students to get knowledge by analysing the games to identify the openings and positions that they are most comfortable playing. Look for patterns in opponents' responses and try to understand the underlying principles behind those moves.

Another way is study games played by grandmasters to see how they handle different openings and positions. Look for patterns and recurring themes in their play by using chess books and online resources: There are many resources available to help players learn about different openings and variations. Chess books and online resources can provide in-depth analysis and explanations of key opening concepts.

Conclusion

Throughout history, chess has played an important role in society. Chess can be a tool for education, and even a symbol of leadership. Recent research has explored the cultural and social significance of chess in different regions and times. This article gave a basic introduction

for the importance of life and the relationship with chess game among students in higher learning institutions. Playing chess also nurtures creativity by enhancing cognitive flexibility, encouraging innovative strategies, and fostering emotional expression.

As both a mental exercise and a social activity, chess serves as a powerful tool for developing creative thinking skills in individuals of all ages. It is also recommended that various studies will be conducted soon due to the growing interest in the educational, cognitive, and social benefits of chess. Several avenues for future research can be explored to deepen our understanding of the game's impact by doing Longitudinal Studies.

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